

Alaska Clean Seas Technical Manual

Volume 2

Map Atlas

Revision 15, June 2021





ALASKA CLEAN SEAS TECHNICAL MANUAL

VOLUME 2

MAP ATLAS

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DISCLAIMER

In producing this manual, Alaska Clean Seas has endeavored to provide the best available information based on the latest technological and engineering advancements. ACS believes that the information and procedures contained herein are well founded, and utilize information obtained from actual experiences in the environments where these procedures are intended to apply. Nonetheless, ACS and its members expressly disclaim that the procedures provided in this manual, even if followed correctly and competently, will necessarily produce any specific results. Implementation of the recommendations and procedures contained herein is at the sole risk of the user.

The base maps in this atlas were provided by BP Exploration (Alaska) Inc. (BPXA), and ConocoPhillips Alaska, Inc. (CPAI). While every effort was made to ensure an accurate depiction of surface features, neither BPXA or CPAI warrant that the data is accurate or fit for any particular purpose.

The *Alaska Clean Seas Technical Manual* provides a detailed source of information pertaining to spill response variables on the North Slope of Alaska. This information includes:

- Spill response tactics in a variety of conditions and seasonal variations.
- Maps of resources at risk from a spill.

The *Technical Manual* is generally applicable to all operators on the North Slope. Facility-specific information is provided in operator oil discharge prevention and contingency plans. The information provided in this manual, in conjunction with the individual operator contingency plans, is intended to meet the requirements of Alaska Department of Environmental Conservation spill planning regulations (18 AAC 75).

There are always variables beyond the control of any response organization that affect response performance. These variables include personnel safety considerations, weather, visibility, sea conditions, location of spill, type of oil spilled, rate of discharge, condition of the equipment or facility causing the spill, and for a vessel, position of discharging vessel and condition of remaining cargo. In addition, site-specific conditions such as the amount and type of wildlife and sea mammals in or around the site, or the amount and nature of debris present, could interfere with response performance. Accordingly, it is not possible to guarantee response performance in exact accordance with the estimates, strategies or scenarios presented in this *Technical Manual* for planning purposes. For example, the safety of employees, contractor personnel, government representatives, and the public is of paramount importance and will override all other considerations in response operations.

FOREWORD

This map atlas is the second volume of two manuals that make up the *Alaska Clean Seas Technical Manual* providing ACS member companies with a unified response plan for spills in the North Slope oil fields, onshore or offshore, and from Pump Station 1 to Pump Station 4 (Milepost 167) of the Trans-Alaska Pipeline System:

Volume 1: Tactics Descriptions

Volume 2: Map Atlas

The *Technical Manual* grew out of the work of the Industry/Agency North Slope Spill Response Project Team, which consists of government and industry personnel representing the following organizations: Alaska Clean Seas, Alaska Department of Environmental Conservation, Alyeska Pipeline Service Company, ARCO Alaska, Inc. (now ConocoPhillips Alaska, Inc.), BP Exploration (Alaska) Inc., North Slope Borough, U.S. Coast Guard, U.S. Environmental Protection Agency, and U.S. Minerals Management Service. This team was formed in the spring of 1997 in response to the concerns of both agencies and industry that spill response capability for the North Slope needed to be re-evaluated in light of proposed new offshore development such as Northstar and Liberty. Also, both agency and industry felt that industry should develop a unified North Slope response plan under the auspices of Alaska Clean Seas. The Project Team was supported by the Tactics Team, consisting of technical representatives from agencies and industry. The Project Team developed nine

This manual contains maps covering the North Slope oil fields and their environs at scales of either 1:26,000 or 1:63,360. A map index and overall legend are provided. The region was windowed to fit on 11" x 17" pages, and efforts were made to cover all facilities as completely as possible.

The following information is shown on these maps:

- Facilities, roads, and pipelines
- Culvert locations
- Pre-staged response equipment
- Priority protection sites
- Topography
- Hydrography, including drainage divides and flow directions interpreted from aerial photography
- Shoreline types

Each map also has a corresponding legend page providing information on:

- Priority protection sites
- General sensitivity information



NOTE: All values given on these pages are for planning purposes only.

LIST OF REVISIONS (CONT.)

SHEET	LEGEND	MAP
212	Revised 06/21	Revised 07/16
213	Revised 06/21	Revised 01/15
214	Revised 06/21	Revised 01/15
215	Revised 06/21	Revised 01/15
216	Revised 06/21	Revised 01/15
217	Revised 06/21	Revised 01/15
218	Revised 06/21	Revised 01/15
219	Revised 06/21	Revised 01/15
220	Revised 06/21	Revised 01/15
221	Revised 06/21	Revised 01/15
222	Revised 06/21	Revised 01/15
223	Revised 03/12	Revised 01/15
224	Revised 03/12	Revised 01/15
225	Revised 03/12	Revised 01/15
226	Revised 03/12	Revised 01/15
227	Revised 03/12	Revised 01/15
228	Revised 03/12	Revised 01/15
229	Revised 03/12	Revised 01/15
230	Revised 03/12	Revised 01/15
231	Revised 03/12	Revised 01/15
232	Revised 03/12	Revised 01/15
233	Revised 03/12	Revised 01/15
234	Revised 03/12	Revised 01/15
235	Revised 03/12	Revised 01/15
236	Revised 03/12	Revised 01/15
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242	Revised 03/12	Revised 01/15
243	Revised 03/12	Revised 01/15
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253	Revised 03/12	Revised 01/15
254	Revised 03/12	Revised 01/15
255	Revised 03/12	Revised 01/15

SHEET	LEGEND	MAP
256	Revised 03/12	Revised 01/15
257	Revised 03/12	Revised 01/15
258	Revised 03/12	Revised 01/15
259	Revised 12/19	Revised 01/15
260	Revised 03/12	Revised 01/15
261	Revised 03/12	Revised 01/15
262	Revised 12/19	Revised 01/15
263	Revised 03/12	Revised 01/15
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273	Revised 03/12	Revised 01/15
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275	Revised 03/12	Revised 01/15
276	Revised 03/12	Revised 01/15
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296	Revised 03/12	Revised 01/15
297	Revised 03/12	Revised 01/15
298	Revised 03/12	Revised 01/15
299	Revised 03/12	Revised 01/15

SHEET	LEGEND	MAP
300	Revised 03/12	Revised 01/15
301	Revised 03/12	Revised 01/15
302	Revised 03/12	Revised 01/15
303	Revised 03/12	Revised 01/15
304	Revised 03/12	Revised 01/15
305	Revised 03/12	Revised 01/15
306	Revised 03/12	Revised 01/15
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308	Revised 03/12	Revised 01/15
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318	Revised 03/12	Revised 01/15
319	Revised 03/12	Revised 01/15
320	Revised 03/12	Revised 01/15
321	Revised 03/12	Revised 01/15
322	Initial 01/15	Original 01/15
323	Initial 01/15	Original 01/15
324	Initial 01/15	Original 01/15
325	Initial 01/15	Original 01/15
326	Initial 01/15	Original 01/15
327	Initial 01/15	Original 01/15
328	Initial 01/15	Original 01/15
329	Initial 01/15	Original 01/15
330	Initial 01/15	Original 01/15
331	Initial 01/15	Original 01/15
332	Initial 01/15	Original 01/15
333	Initial 01/15	Original 01/15
334	Initial 01/15	Original 01/15
335	Initial 01/15	Original 01/15
336	Initial 01/15	Original 01/15
337	Initial 01/15	Original 01/15
338	Initial 01/15	Original 01/15
339	Initial 01/15	Original 01/15
340	Initial 01/15	Original 01/15



Alaska Clean Seas Technical Manual
Volume 2, Map Atlas
REVISION FORM

Alaska Clean Seas requests users of this manual bring to its attention any errors discovered or suggested revisions. To submit your comments, please photocopy and fill out the form below. Mail your completed form to:

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Phone: (907) 659-3207
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Map: _____

Change: _____

Source of Information for Change: _____

Name of Person Submitting Change: _____

Organization: _____ Telephone: _____

Date: _____

Thank you for helping ACS maintain its Technical Manual up-to-date!

HOW TO USE ***THE ACS TECHNICAL MANUAL VOLUME 2, MAP ATLAS***

The purpose of the ACS *Technical Manual* is to provide comprehensive response information in a uniform, user-friendly format accessible to both operations planning staff and regulatory agency Oil Discharge Prevention and Contingency Plan (ODPCP, or “C-Plan”) reviewers. This information is designed to be the basic building blocks upon which member company planners develop facility-specific C-Plans.

Volume 2, Map Atlas, contains 11" x 17" maps (scales 1:26,000 or 1:63,360) and legend pages covering the developed areas of the North Slope and providing detailed geographic, biological, and civil information on the region. The following two pages contain a sample map and corresponding legend page. As shown on these samples, each color map contains the following information: facilities, roads, and pipelines; culvert locations; prestaged response equipment locations; priority protection sites; topographic information; hydrographic information, including drainage divides and flow direction; and shoreline types. For each map there is a corresponding legend page that provides written data on the information shown on the maps, including priority protection sites, general sensitivity data, cultural sites, air access, vessel access, hydrographic conditions, countermeasures considerations, staging areas, and prestaged equipment.

The illustrations of the priority protection sites have been reviewed and accepted by state and federal agency biologists. Environmental sensitivity information provided by the Alaska Regional Response Team Sensitive Areas Working Group is included on the map legend pages under “General Sensitivities.” The purpose of this information is to alert responders that certain animals may be present at certain times of the year and that some regions are more sensitive than others.



SAMPLE MAP LEGEND PAGE

The sheet number matches the appropriate map

Environmental sensitivity information is provided on the left side of the page

Response considerations are presented on the right side of the page (in some cases, they start at the bottom of the left side of the page).

Information on airstrips was taken from the Supplement Alaska, a compilation of airport data published bimonthly by the Federal Aviation Administration. Consult the latest edition for the most up-to-date information. Other, uncontrolled potential landing sites have also been included, as appropriate.

The priority protection sites are discrete locations along the coast that can be defended from a spill by means of mechanical containment and recovery equipment. Industry biologists identified these sites from available data. They may be superseded at the time of a spill by decision of the Unified Command.

Most environmental sensitivity information was provided by the Alaska Regional Response Team Sensitive Areas Working Group. The purpose of this information is to alert responders that certain animals may be present at certain times of the year and that some regions are more sensitive than others.

Information on cultural sites is intentionally vague in order to protect the sites. The purpose of this information is to alert responders they need to check the actual location.

SHEET 35

Sensitivity Information



PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS24A	Salt marsh 1 mile NE of Ugnuravik River mouth	Most sensitive during open water season. Keep oil from entering salt marsh.	C-13 or C-14	4,500'
PS25	Ugnuravik River mouth	Most sensitive during open water season. Keep oil from entering river. Peat shorelines are present on west shore of river.	C-13 or C-14	1,500'
PS27	Creek mouth west of Oliktok Pt. airstrip	Most sensitive during open water season. Keep oil from entering river.	C-13 or C-14	100'

GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Simpson Lagoon has large flocks of molting male Oldsquaw in July and early August, especially in the lee shores of the barrier islands.
- Shoreline and offshore areas support molting and brood-rearing eiders. This is also a staging area for migrating Phalaropes (shorebirds). Birds are present in June through September.
- This is a Brant nesting, brood-rearing, and molting area. Birds are present from May through August.
- This is a Spectacled Eider breeding and nesting area. Birds may be present in June to September.
- Plan to deploy bird-hazing systems during the open-water season.
- The Ugnuravik River provides habitat for anadromous whitefish and for resident fish.
- There is a seawater intake on the north wall of the Oliktok Seawater Treatment Plant approximately 8 ft below the surface. Precautions should be taken to keep oil away from this area.
- Polar bears may be present November to April.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.

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NOTE: All values given on these pages are for planning purposes only.

Response Considerations



AIR ACCESS*

- Helmericks (Sheet 14), an unattended, 2,500 ft. dirt airstrip, is located approximately 12 miles southwest of Oliktok Point. It is situated west of the main channel of the Colville River near the mouth, and should be considered for emergency use only. Ditches line both sides of runway, which gets soft when wet.
- Ugnu-Kuparuk (Sheet 51) is a continuously attended, 6,000 ft. gravel private airstrip serving the Kuparuk facilities. It is located approximately 15 miles south-southeast of Oliktok Point.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- Simpson Lagoon water depths range from 3 to 7 ft.
- Bars and shoals obstruct the passages between Pingok Island and Cottle Island (Sheets 33 and 34, respectively).
- There is small boat shelter from east winds behind the small sand spit west of Oliktok Point. It provides excellent moorage but is limited to 5 ft of water. This shelter is exposed to southwest winds. Shelter from southwest winds is available on the east side of Oliktok Point.
- There is a boat launch at Oliktok Dock.
- Simpson Lagoon currents are generally to the west at 10 to 30 cm/sec.

COUNTERMEASURES CONSIDERATIONS

- Sand-silt shores are very narrow (less than 20 ft wide) and interrupted by small creek mouths and areas of thick peat deposits. Large areas of potential overwash between Oliktok Point and Kalubik Creek (to the west) may make cleanup difficult. Backshore areas are wet tundra.
- Vegetated shorelines in this area may preclude the use of heavy equipment. Sand-silt washed over on the vegetated shorelines is mixed with large peat blocks, making mechanized travel difficult.
- West and north winds and Colville River discharge will cause floating oil to impinge on the shoreline west of Oliktok Point. There is some restricted access to beaches by shallow water.

STAGING AREAS AND PRESTAGED EQUIPMENT

- There are staging areas at Oliktok Dock and approximately 2 miles southeast of Oliktok Dock.

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
KUP-11	DS-3R	Boom	500'	8" x 6" river
KUP-12	Oliktok Dock	Boom	3,400'	8" x 6" river
KUP-12 Cont'd	Additional equipment stored seasonally at Oliktok	Boom	1,300'	Shore Seal (with floating pump and blower)
		Boom	1,100'	14" x 24" Inflatable ocean
		Boom	492'	14" x 20" Nofi rapid deploy
		Mini-barges	2	249 bbl
		HYPUs	1	For boom deployment
		Anchor Systems	Various	Various

*See the latest Supplement, Alaska and United States Coast Pilot for current information on air and vessel access, respectively.

NOTE: All values given on these pages are for planning purposes only.

Much of the information on marine access was taken from the United States Coast Pilot, Pacific and Arctic Coasts Alaska: Cape Spencer to Beaufort Sea, published biannually by the National Oceanic and Atmospheric Administration as a supplement to NOAA nautical charts. Consult the latest edition for the most up-to-date information.

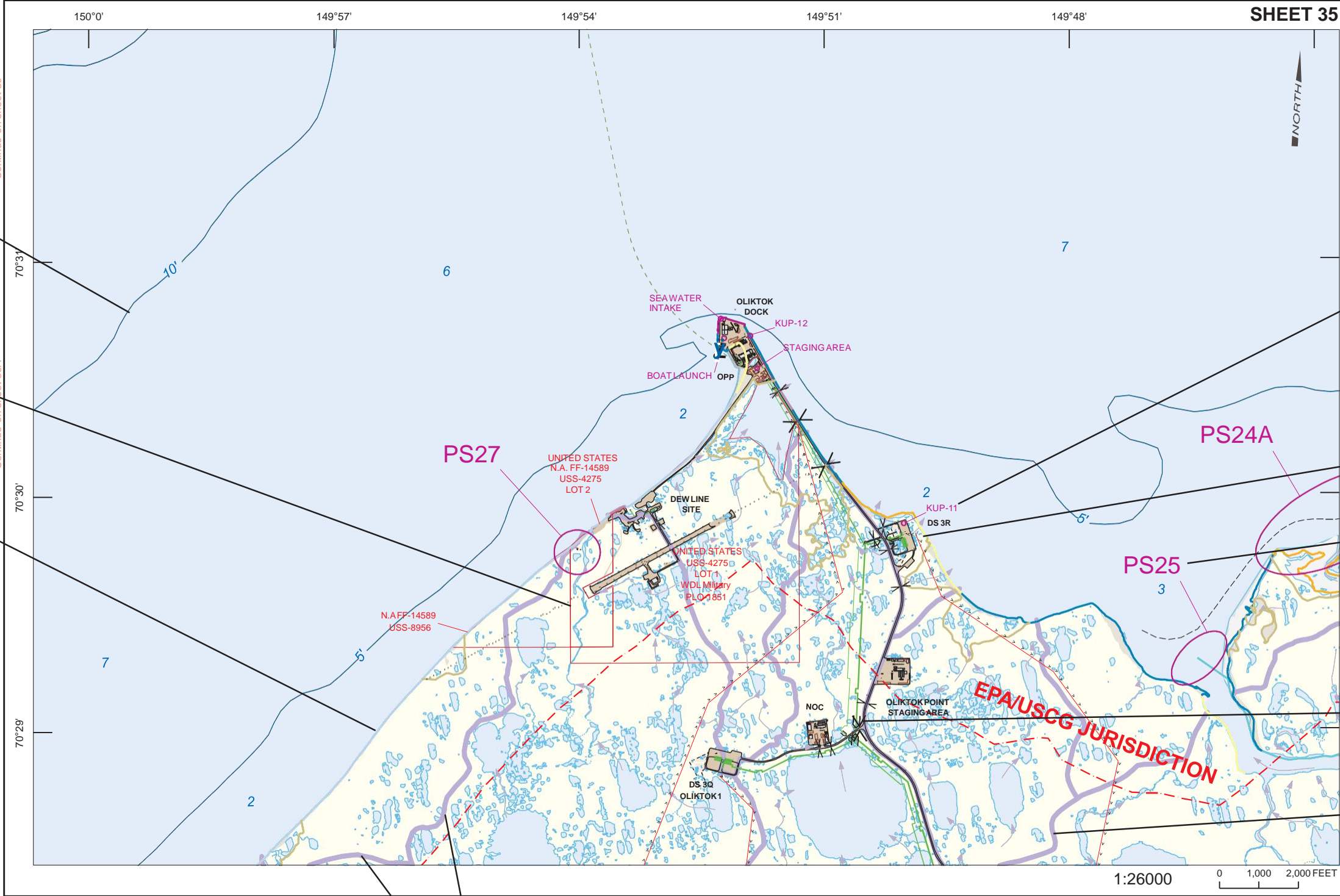
Information is provided on how environmental conditions might affect a response.

Information is provided on potential staging areas and/or prestaged response equipment.



SAMPLE MAP

SHEET 35



Maps are numbered for easy reference to the index sheets (see Map Legend & Index section) and for use in contingency plans.

Locations of potential staging areas and prestaged equipment for spill response are shown on the map and described on the facing page.

Detail is provided on oil field facilities and infrastructure.

“PS” sites are priority protection sites identified on the facing page.

Culverts are identified on roads.

Drainage divides and generalized flow directions are shown as interpreted from aerial photography.

Adjacent atlas maps are indicated where appropriate.

Bathymetric data are provided for the near-shore Beaufort Sea.

Areas labeled in red are private lands or military sites.

Shorelines are color-coded to indicate shoreline type (see Map Legend & Index section).

Drainage divides and generalized flow directions are shown as interpreted from aerial photography.

Adjacent atlas maps are indicated where appropriate.

NOTE: All values given on these pages are for planning purposes only.

LEGEND

INFRASTRUCTURE

- Gravel Road
- Pipeline
- Gravel Well Pad/Facility
- Overhead Power Lines
(Buried Power Lines are not shown)
- Tractor Tracks or Winter Trails
(Not functional roads)
- Airstrip

SURFACE WATER

- Surface Drainage
Interpreted From Aerial Photography
- Primary Surface Watershed Boundary
- Secondary Surface Watershed Boundary

RESPONSE ITEMS

- Single/Multiple Culvert(s)
- Single/Multiple Casing(s)
- PS18
Priority Protection Sites
- EOA-4
Approximate location of
Pre-Staged Equipment in Conex
Alaska Clean Seas
- KUP-1
Potential Spill Control Site
- Drinking Water Intake
(Public Water System information has been
provided by the Drinking Water Program
of the Alaska Department of Environmental
Conservation. The information provided
is a data snapshot as of 9/2/14. There may
be errors in well location information as well as
other information provided.)

CULTURAL RESOURCES

- Private Property/Military Site/Selected Land
- Fish Stream
Alaska Department of Fish and Game
- Environmental Protection Agency/
U.S. Coast Guard Jurisdiction

SENSITIVE SHORELINE AND RIVER BANK TYPES

(Shoreline location updated 2004, shoreline type updated 1997)
EML Environmental Mapping Ltd., Saanichton, BC and
Owens Coastal Consultants, Bainbridge Island, WA

- Man-Made Solid Structures
- Pebble-Cobble Beaches
- Mixed Sand-Gravel Beaches
- Sand Beaches
- Sand Flats
- Mud Flats
- Salt Marshes
Polygons were generated by photointerpretation from 1:7,200
CIR photography and 1:6,000 topo maps. Coverage is limited
to Kalubik Creek on the west to Staines River on the east.
Interpretation by AeroMetric-AK.
- Peat Shorelines
- Inundated Low-Lying
Tundra Shorelines
- Tundra Cliffs
Vegetated low banks
- Vegetated low banks
and slopes

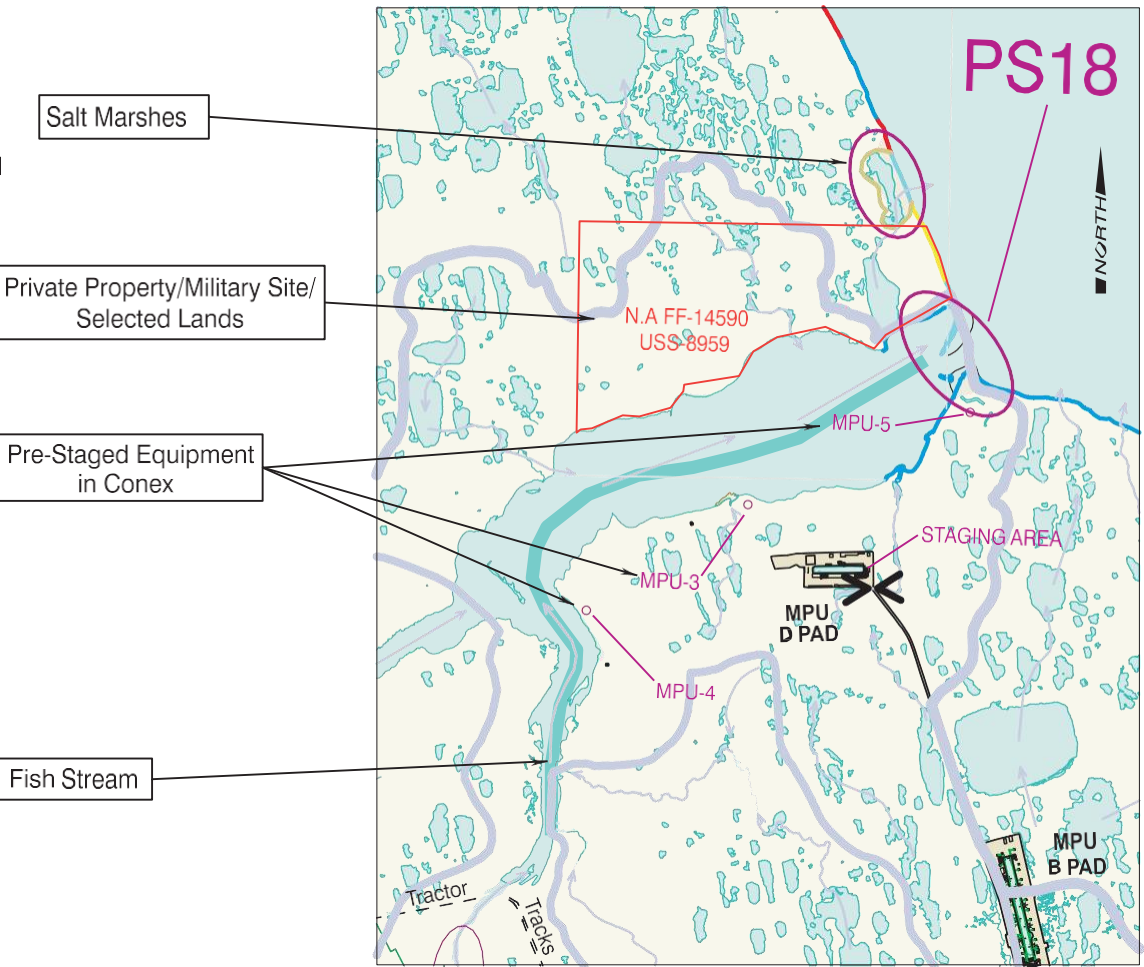
SHORE FEATURES

- Naturally Occurring Nonvegetated Areas
(Gravel Bars, Beaches, and Mud Flats)
- Tidal Flats
(Mud or Gravel Bars, below Mean Sea Level)

Shoreline for large scale (1:26,000) map series is
Mean Sea Level as established by
limited tidal observations in 1968 at East Dock.

Bathymetry interpreted from 1949-50 NOAA soundings,
depth in feet.

Map sheets or portions of map sheets 1-7, 9-15, 17-28C, 45A, 49A,
112-183, 213-222, 257-280 and 283-340 are based on
USGS 1:63,360 quad maps.
Map sheets or portions of map sheets 7-9, 12, 15-17, 20-21, 23B-105,
121, 175-176, and 281-282 are based on ConocoPhillips Alaska,
Inc. and BP Exploration Alaska, Inc. topographic maps 1:6,000.
Map sheets 184-193 are based on USFWA satellite interpretation of
coastline and USGS 1:63,360 quad maps.
Map sheets 194-211, 223-256 and 321-340 are derived from National
Hydrography Dataset stream, river, lake and coastline locations with
USGS 1:63,360 quad maps for topographic interpretation of surface flow



1:26000

0 1000 2000 FEET

ALASKA REGIONAL RESPONSE TEAM (ARRT) SENSITIVE AREAS WORKING GROUP CRITERIA FOR RELATIVE PRIORITY RATING OF SENSITIVE AREAS

This volume of the *Alaska Clean Seas Technical Manual* contains a map atlas of the North Slope oil fields and vicinity. These maps and their accompanying legend pages identify sensitive-area locations for priority protection in the event of a spill. The locations on these maps are ones that can be defended by exclusion or deflection tactics. Also included on the map legend pages are general statements of environmental sensitivity — e.g., presence of birds or marine mammals — provided by the Alaska Regional Response Team (ARRT) Sensitive Areas Working Group.

It is important to remember that detailed protection strategies and incident-specific protection priorities will be developed by the Unified Command at the time of the spill. In evaluating the sites that must be protected, the Unified Command will apply criteria developed by the ARRT Sensitive Areas Working Group with representatives from State and Federal agencies and the private sector. The following relative priority listing prioritizes resources into designations of major, moderate, and lesser concern. Resources are not prioritized within each designation. These designations are for consideration in initial spill response activities; they are not applicable to extended cleanup activities. Specific guidance to On-Scene Coordinators for protecting cultural resources is contained in Part Five – Historic Properties Protection Guidelines for Federal On-Scene Coordinators, of the Alaska Regional Contingency Plan.

The following criteria were developed as a tool to establish levels of concern.* These criteria are not listed in a priority order.

- Human economic disruption — economic/social value; human food source disruption
- Mortality — wildlife, fish, other organisms (how many potentially killed in relation to abundance)
- Animal displacement and sensitivity to displacement
- Aesthetic degradation
- Habitat availability and rarity
- Sublethal effects, including sensitivity to physical or toxic effects of oil or hazardous substances and long-term effects to habitat, species, or both
- Threatened and endangered species, and/or other legal designation
- Persistent concentration of oil or hazardous substances
- Reproduction rate or recolonizing potential
- Relative importance to ecosystem
- Potential for physical contact with spill — pathway of oil or hazardous substance
- Resource sensitivity to response countermeasures

*NOTE: The information here, including the sensitivity graphs on the following pages, was excerpted from the Sensitive Areas section of the *Alaska Regional Response Team North Slope Subarea Contingency Plan*. This plan has been replaced by the *Arctic and Western Alaska Area Contingency Plan*. Please refer to the latest version of that publication for any revisions that may have occurred since this *ACS Technical Manual* was printed.

AREAS OF MAJOR CONCERN

- Shoreline Geomorphology - Coastal Habitat Types:
 - River deltas
 - Sheltered lagoons
 - Open lagoons
 - Salt marshes
 - Mud flats
 - Barrier islands
 - Spit beaches
 - Protected bays
- Inland Habitat Types: Riparian willow Connected lakes Freshwater springs
- Threatened or Endangered Species Habitat
- Spotted Seal Haulout Areas (>10 animals)
- Ringed Seal Lairs and Popping Areas
- Walrus Haulout Areas
- Beluga Whale Concentration Areas
- Bowhead Whale Nearshore Migration Routes
- Polar Bear Denning and Feeding Areas
- Bear Concentration Areas (marine mammal/carcasses;salmon)
- Caribou Calving and Insect Relief Areas
- Large Seabird Colonies (>100 birds)
- Waterfowl and Shorebird Spring and Fall Concentration and Staging Areas
- Waterfowl Molting Concentration Areas
- Anadromous Fish Spawning and/or Rearing Streams (i.e., salmon, Dolly Varden, whitefish)
- Land Management Designations Federal: Wilderness
 - Wild and Scenic Rivers
 - National Natural Landmarks
 - Research Natural Areas (Toolik Lake, Galbraith Lake)
- Cultural Resources/Archaeological Sites: National Historic Landmarks Burial Sites National Register Eligible Village Sites Intertidal Sites
- Subsistence Harvest Areas
- High Commercial Use Areas
- High Recreational Use Areas
- River Floodplains

AREAS OF MODERATE CONCERN

- Shoreline Geomorphology - Coastal Habitat Types:
 - Beaded tundra streams
- Upland Habitat Types: Drained lake basins
- Recurring Leads and Polynyas in Sea Ice
- Spotted Seal Haulout Areas (< 10 animals)
- Ringed Seal Shorefast Ice Concentration Areas
- Seabird Colonies (10 - 100 birds)
- Waterfowl and Shorebird Nesting Concentration Areas
- Shorebird Molting Concentration Areas
- Polar Bear General Distribution
- Walrus General Distribution
- Caribou Migration Routes
- Muskox Riparian Habitat
- Commercial Harvest Areas
- Recreational Use Areas
- Land Management Designations
 - Federal: National Parks
 - National Wildlife Refuges
- Cultural Resources/Archaeological Sites
 - National Register Eligible Sites (Other Than Village Sites)
 - Sites Adjacent To Shorelines

AREAS OF LESSER CONCERN

- Upland Habitat Types:
 - Mesic/dry tussock tundra
 - Alpine tundra
- Bearded Seal General Distribution
- Bowhead Whale General Distribution
- Gray Whale Nearshore Migration and Feeding Areas
- Seabird Colonies (<10 birds)
- Waterfowl and Shorebird General Distribution
- General Freshwater Fish Habitat
- Land Management Designations
 - Federal: Public Lands
 - National Forests
 - National Preserves
 - State: General Public Lands



INFORMATION ON SEASONAL SENSITIVITIES

The following information on seasonal sensitivities of various fish and wildlife on the North Slope and adjacent Beaufort Sea has been provided by the Alaska Regional Response Team (ARRT) Sensitive Areas Working Group.

Ringed Seals

CATEGORY	LEAST	MEDIUM	MOST
Abundance		Pack ice	Shorefast ice
Susceptibility		Year around	
Human Harvest			Year around

The shorefast ice between Cape Lisburne and Point Lay has one of the highest densities of ringed seals.

Critical Life Periods	J	F	M	A	M	J	J	A	S	O	N	D
Nearshore concentrations in shorefast ice												
Pupping and weaning												
Molting												
Present in area												

Bearded Seals

CATEGORY	LEAST	MEDIUM	MOST
Abundance			Ice-edge
Susceptibility		Year around	
Human Harvest			Year around

Critical Life Periods	J	F	M	A	M	J	J	A	S	O	N	D
Pupping in Chukchi Sea												
Present in Beaufort Sea												
Present in Chukchi Sea												

Spotted Seals

CATEGORY	LEAST	MEDIUM	MOST
Abundance (on haulouts)	< 10	10-100	> 100
Susceptibility		Year around	
Human Harvest			May 1-Nov 30

The largest known concentration of spotted seals in Alaska haulout at Kasegaluk Lagoon from mid-July until late October or early November.

Critical Life Periods	J	F	M	A	M	J	J	A	S	O	N	D
Coastal haulouts/ Concentration areas												
Chukchi Sea												
Beaufort Sea												

Beluga Whales

CATEGORY	LEAST	MEDIUM	MOST
Abundance ¹	< 10	10-100	> 100
Susceptibility	Aug 1-Mar 31	Apr 1-May 20 (Chukchi Sea) May 15-Aug 31 (Beaufort Sea)	May 20-July 31 (Chukchi Sea)
Human Harvest	Sept 10-Mar 31 (Chukchi Sea) Oct 20-July 31 (Beaufort Sea)		Apr 1-Sept 10 (Chukchi Sea) Aug 1-Oct 20 (Beaufort Sea)

¹ Between June 20 and August 15, large numbers of beluga whales concentrate in Kasegaluk Lagoon.

Critical Life Periods	J	F	M	A	M	J	J	A	S	O	N	D
Nearshore migration												
Chukchi Sea												
Beaufort Sea												
Calving												

Bowhead Whales

CATEGORY	LEAST	MEDIUM	MOST
Susceptibility	Nov 1-Mar 20	July 1-Oct 31 (Chukchi Sea) July 1- July 31 (Beaufort Sea)	Mar 20-June 30 (Chukchi Sea) Apr 15-June 30; Aug 1-Oct 31 (Beaufort Sea)
Human Harvest ²	June 16-Nov 1 (Chukchi Sea)		Apr 1-June 15 (Chukchi Sea) Aug 1-Oct 20 (Beaufort Sea)

² During the ice-covered months in the Beaufort and Chukchi seas, whales are unavailable for harvest.

Critical Life Periods	J	F	M	A	M	J	J	A	S	O	N	D
Nearshore migration												
Chukchi Sea												
Beaufort Sea												
Calving												

Gray Whales

CATEGORY	LEAST	MEDIUM	MOST
Abundance	Jun 1-July 31; Oct 1-Oct 31 (Chukchi Sea) Jun 1-Oct 31 (Beaufort Sea)	Aug 1-Sep 30 (Chukchi Sea)	
Susceptibility		When present	

Critical Life Periods	J	F	M	A	M	J	J	A	S	O	N	D
Nearshore migration & feeding												
Chukchi Sea												

Walrus

CATEGORY	LEAST	MEDIUM	MOST
Abundance	Nov 1-May 1	May 1-June 15 Oct 1-Oct 31	June 15-Sept 30
Susceptibility		Year around	
Human Harvest	May 1-May 15 Sep 1-Oct 30		May 15-Aug 20

Critical Life Periods	J	F	M	A	M	J	J	A	S	O	N	D
Present on haulouts or in nearshore waters												

Polar Bears

CATEGORY	LEAST	MEDIUM	MOST
Abundance	Pack ice	Shorefast ice and active ice areas	Denning areas during entrance/emergence; feeding areas such as leads/polynyas; coastal beaches and barrier islands
Susceptibility	Summer (June-August)		Fall, winter, spring (September-May)
Human Harvest	June-Sept. (Chukchi Sea) June-Aug. (Beaufort Sea)	October, February (Chukchi Sea) Sept., Jan.-March (Beaufort Sea)	Nov.-Jan., March-May (Chukchi Sea) Oct.-Dec., April-May (Beaufort Sea)

Critical Life Periods	J	F	M	A	M	J	J	A	S	O	N	D
Denning of pregnant females*												
Along or on the coastline												

* Concentration areas for pregnant females occur at Icy Cape, Pt. Franklin, and in the ANWR 1002 area

Brown Bear

CATEGORY	LEAST	MEDIUM	MOST
Susceptibility	Nov 15-Apr 30		May 1- Nov 15
Human Harvest	June 1-Aug 30		Sept 1-May 31

Critical Life Periods	J	F	M	A	M	J	J	A	S	O	N	D
Denning												
Concentration associated w/ Mammalian food sources												
Salmon streams												



INFORMATION ON SEASONAL SENSITIVITIES (CONT.)

Caribou

CATEGORY	LEAST	MEDIUM	MOST
Abundance ³			
Susceptibility	Nov 1-Mar 15	May 15-May 20 June 10-June 30 Aug 15-Sept 15	May 20-June 10 July 1-Aug 15
Human Harvest			Year around

³ There are four caribou herds that utilize various portions of this region. Depending on the herd and the climatic conditions, abundance may vary widely. As a result, specific abundance figures will not be established for use in prioritizing the importance of an area.



Muskoxen

CATEGORY	LEAST	MEDIUM	MOST
Abundance	Three groups of muskoxen reside in this region of the state. Their range is currently expanding with major concentrations occurring along the river systems.		
Susceptibility		Year around	
Human Harvest	Muskox are harvested from the Itkillik River to the Canadian border.		



Seabirds

CATEGORY	LEAST	MEDIUM	MOST
Abundance	< 10	10-100	> 100
Susceptibility	Nov 1-Jan 31	Feb 1-Mar 31	May 1-Sept 30
Species Diversity	1-3	4-6	> 6
Human Harvest ⁹			May 1-July 30

⁹ Seabird eggs utilized by Native communities from late June through July.

Most of the world's population of Ross' Gull is found in nearshore areas of the Barrow area from September through October.



Waterfowl and Shorebirds

CATEGORY	LEAST	MEDIUM	MOST
Abundance	In prep.		
Susceptibility ⁴⁻⁸	Oct 1-May 15	May 15-June 20	June 20-Sept 30
Human Harvest		July 1-Aug 15 (Chukchi Sea) July 10-Aug 1; Oct 1-Nov 15 (Beaufort Sea)	Apr 1-Jun 30; Aug 15-Sept 30 (Chukchi Sea) May 1- July 10; Aug 1-Sept 30 (Beaufort Sea)

⁴ Spectacled Eider – are in the area from late May through late September.

⁵ Steller's Eider – are concentrated in the Barrow area from early June to September.

⁶ Common Eider – nesting and brood-rearing on barrier islands from late June to mid-August.

⁷ Snow Geese – brood-rearing is concentrated at Putuligayuk, Sagavanirktok, Kadleroshilik, and Shaviovik river deltas; Howe Island; and Foggy Island Bay from early July to mid-August.

⁸ Brant – brood-rearing is concentrated at Putuligayuk, Kuparuk and eastern Colville River deltas; mouth of East Creek to Oliktok Point from early July to mid-August.



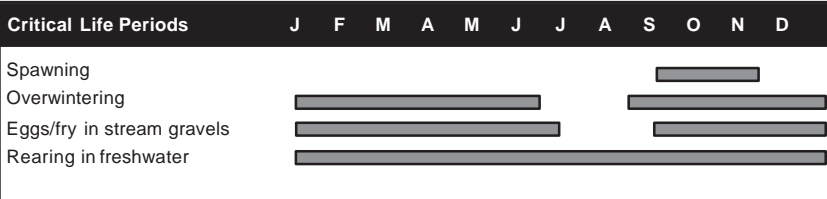
Salmon

CATEGORY	LEAST	MEDIUM	MOST
Abundance	Due to limited information and the finite number of fishbearing streams in the area, all anadromous fish streams in this area are considered important.		
Susceptibility	June 15-Aug 1		Aug 1-June 15
Human Harvest			June 15-Aug 30



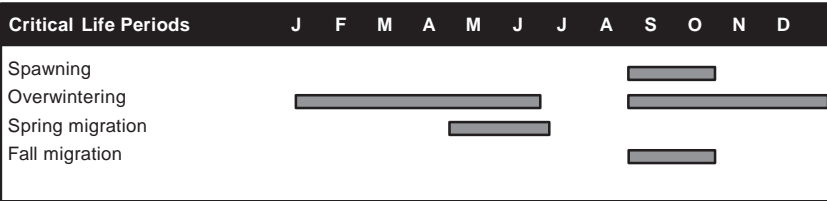
Dolly Varden/Arctic Char

CATEGORY	LEAST	MEDIUM	MOST
Abundance	Due to limited information and the finite number of fishbearing streams in the area, all anadromous fish streams in this area are considered important.		
Susceptibility		June 16-Sept 15	Sept 15-June 15
Human Harvest	Oct 1-June 15		June 16-Sept 30



Anadromous Whitefish

CATEGORY	LEAST	MEDIUM	MOST
Abundance	Limited data are currently available on fish populations within North Slope streams.		
Susceptibility		June 15-Aug 31	Sept 1-June 15
Human Harvest			July 1-Sept 15 Oct 1-Nov 15



Freshwater Fish

CATEGORY	LEAST	MEDIUM	MOST
Abundance	Limited data are currently available on fish populations within North Slope streams.		
Susceptibility		June 15-Aug 31	Sept 1-July 15
Human Harvest	Oct 1-May 30	June 1-Sept 30	





CULTURAL RESOURCE CONSIDERATIONS

DEFINITION OF “CULTURAL RESOURCES”

Federal and state law requires protection of cultural resources in the vicinity of the spill or response.

“Cultural resources” is a broad term used to refer to ruins, structures, sites, graves, artifacts, deposits, and/or objects that pertain to history or prehistory. The question is not whether someone thinks a resource has value, but whether the resource meets the criteria of federal or state law.

There are two kinds of impacts of concern during a spill responseoperation::

- *Direct impact* from spilled substances
- *Indirect impacts* from ground-disturbing activities, vandalism, and theft

RESPONSIBILITIES

Cultural resource protection is primarily an agency responsibility. Duties of the responsible party in an oil spill are to:

- Be aware cultural resources may exist in the response area.
- Recognize their existence may affect how response is conducted.
- Cooperate with state and federal officials charged with cultural resource protection.
- Ensure response personnel do not collect, remove or disturb cultural resources encountered in a response.
- Consider retaining a cultural resources specialist as a consultant to Planning Section in case of a significant spill.

SITE LOCATIONS

As a means of protection, federal law and state policy restrict access to the exact known locations of cultural resource sites. Accordingly, such locations are not shown on ACS or member company maps. Instead, known cultural resource sites on the North Slope have been mapped and are contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Responders should consult SHPO for the latest, updated information on possible cultural sites in the area prior to carrying out response actions.

Non-site-specific information on known cultural resources sites can found in the Area Contingency Plans. In a responsible party-funded response to a spill, the FOSC will consult with appropriate ARRT members regarding cultural resources which may be at risk from a spill or response. Site-specific cultural resource surveys will be required in areas the State Historic Preservation Officer believes are not well-surveyed forsites.

Responsible parties and response teams should be particularly attentive to the possible existence of cultural resource sites at/on:

- Coastal barrier islands
- Elevated terraces or cut-bank bluffs along rivers
- Pingos
- Most shoreline areas, particularly near embayments or promontories
- Prominent hills inland

For additional detail, consult the *ARRT Historic Properties Protection Guidelines for Federal On-Scene Coordinators (Alaska Regional Contingency Plan, Part Five)*.

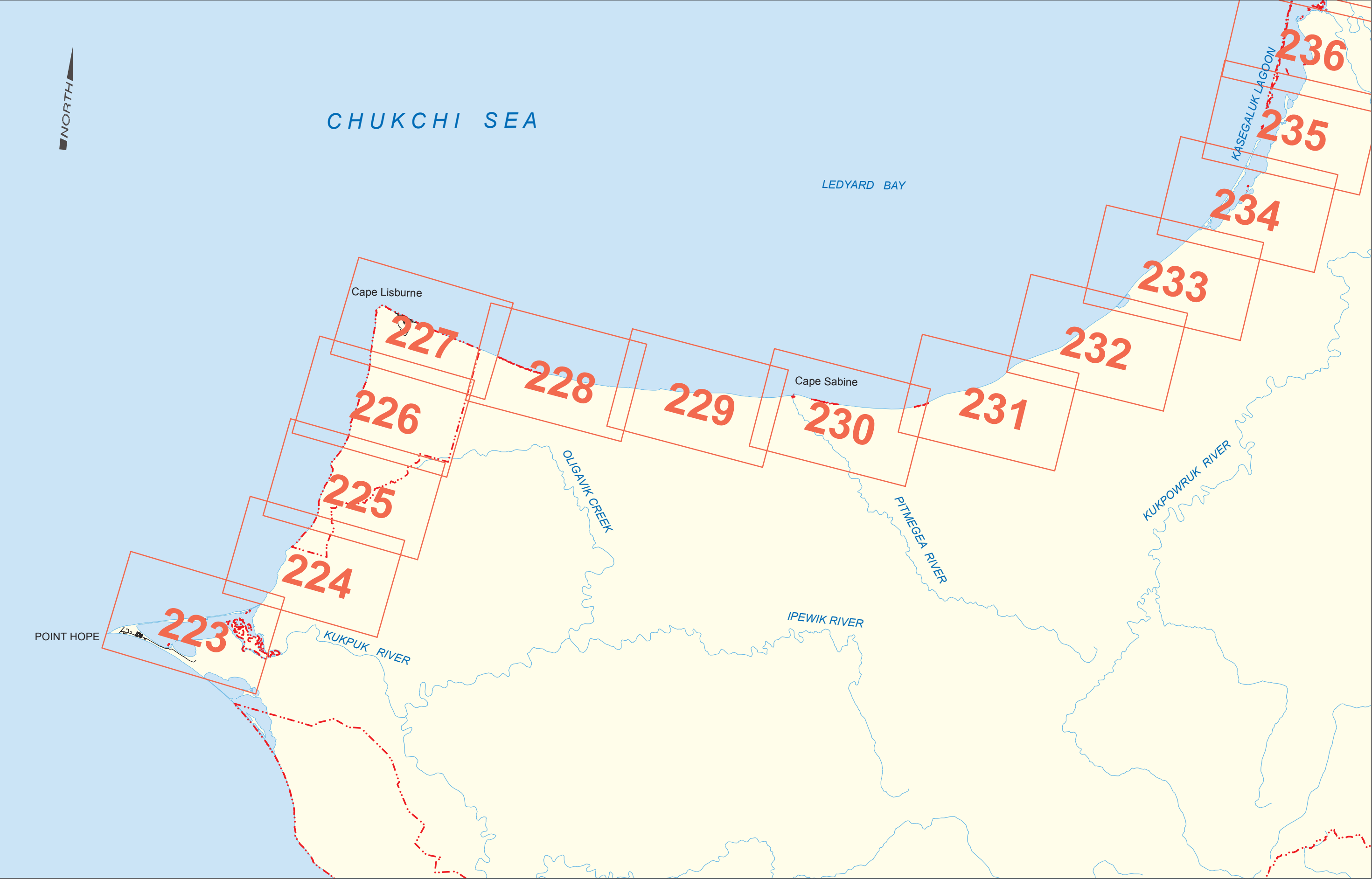
INDEX OF PRIORITY PROTECTION SITES

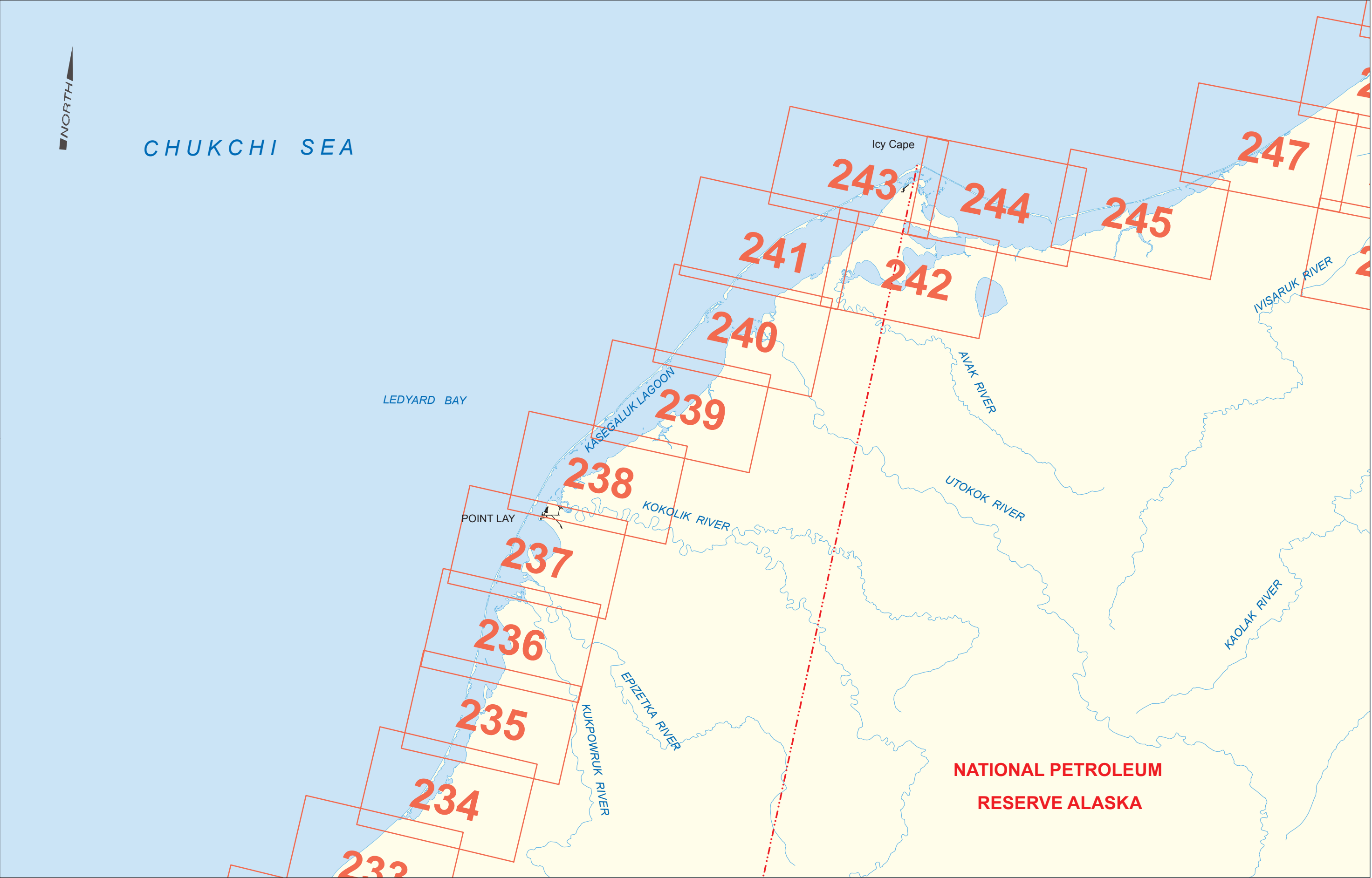
Site	Sheet(s)	PS38	6, 7	PS80	185	PS122	141	PS160	194, 195
PS2	91	PS39	6	PS81	185	PS123	141	PS161	194, 195
PS3	89, 90, 91	PS40	6	PS82	185	PS124	141	PS162	195
PS3A	89	PS41	6	PS83	185	PS125	140	PS163	198
PS3B	87, 89	PS42	15	PS84	185, 186	PS126	140	PS164	198, 202
PS3C	87	PS43	14, 15	PS85	186	PS127	139	PS165	202
PS3D	85, 86, 87	PS44	6	PS86	186	PS128	139	PS166	202
PS4	85, 86	PS45	5, 6	PS87	186	PS129	206	PS167	202
PS4A	83, 85	PS46	5	PS88	186	PS130	206	PS168	255
PS4B	83	PS47	4	PS89	186	PS131	206	PS169	255
PS5	73, 74	PS48	4	PS90	186	PS132	201	PS170	254
PS6	73	PS49	3, 4	PS91	186, 187	PS133	201	PS171	254
PS7	74	PS50	3	PS92	187	PS134	201	PS172	253
PS8	71	PS51	2	PS93	187	PS135	201	PS173	253
PS9	71	PS52	2	PS93A	187	PS136	205	PS174	251
PS10	65	PS53	1, 152	PS94	187	PS137	208	PS175	250
PS11	62, 65	PS54	3	PS95	187	PS138	208	PS176	250
PS12	80	PS55	91	PS96	188	PS139	208	PS177	250
PS14	62	PS56	100	PS97	188	PS140	208, 209	PS178	250
PS15	62	PS57	100	PS98	188	PS141	208	PS179	247, 250
PS16	60, 62	PS59	101	PS99	188	PS142	208	PS180	247
PS16A	61	PS60	102	PS100	188, 189	PS143	208	PS181	245
PS16B	57, 61	PS61	102	PS101	189	PS144	204, 207, 208	PS182	245
PS16C	57	PS62	102	PS102	189	PS145	204, 207	PS183	244, 245
PS17	38, 56	PS63	102	PS103	190	PS146	204, 205	PS184	243
PS17A	38, 56	PS64	102	PS104	190	PS147	205	PS185	243
PS17B	38	PS65A	102, 103	PS105	190, 191	PS148	200	PS186	240
PS17C	38	PS65B	102, 103	PS106	191	PS149	200	PS187	239
PS17D	38	PS66	102, 103	PS107	191	PS149A	200	PS188	238
PS17E	38	PS66A	103	PS108	191, 192	PS150	197, 200	PS189	237, 238
PS18	37	PS67	103	PS109	192	PS151	197	PS190	237
PS18A	37	PS68	103	PS110	192, 193	PS152	197	PS191	235
PS19	37	PS69	103	PS111	193	PS152A	197, 200	PS192	235
PS24	36, 40	PS70	103, 104	PS112	1, 152	PS153	196, 197, 200	PS193	233
PS24A	35, 36, 40	PS71	103, 104	PS113	152	PS153A	196	PS194	233
PS25	35, 36, 40	PS72	104	PS114	152	PS154	196	PS195	233
PS27	35, 39, 40	PS73	104	PS115	147	PS155	196	PS196	233
PS29	15	PS74	100, 184	PS116	147	PS155A	196	PS197	230
PS31	14	PS75	184	PS117	142	PS156	196	PS198	229
PS34	7	PS76	184	PS118	142	PS157	196	PS199	228
PS35	7	PS77	184	PS119	141, 142	PS157A	194, 196	PS200	223
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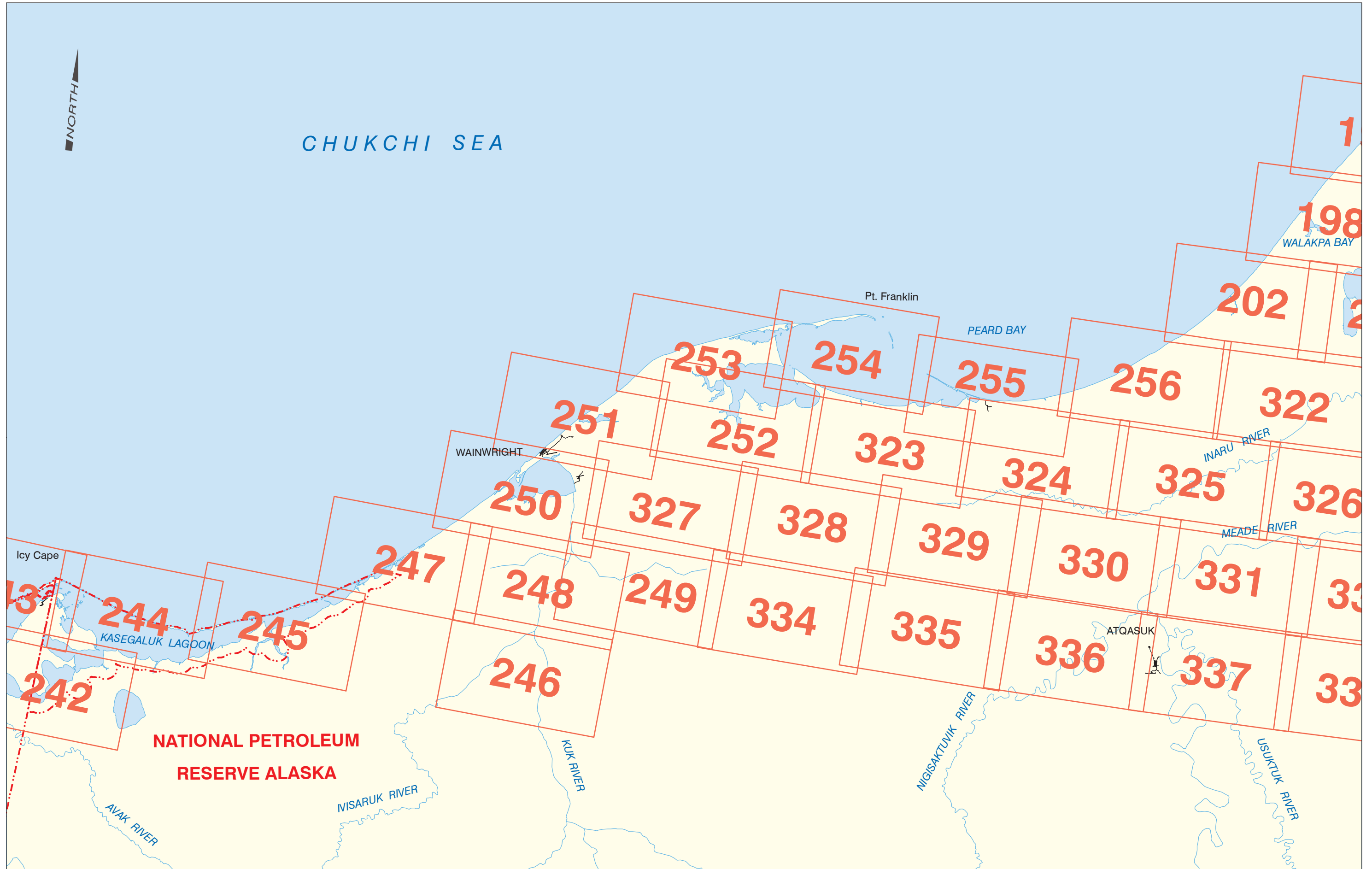


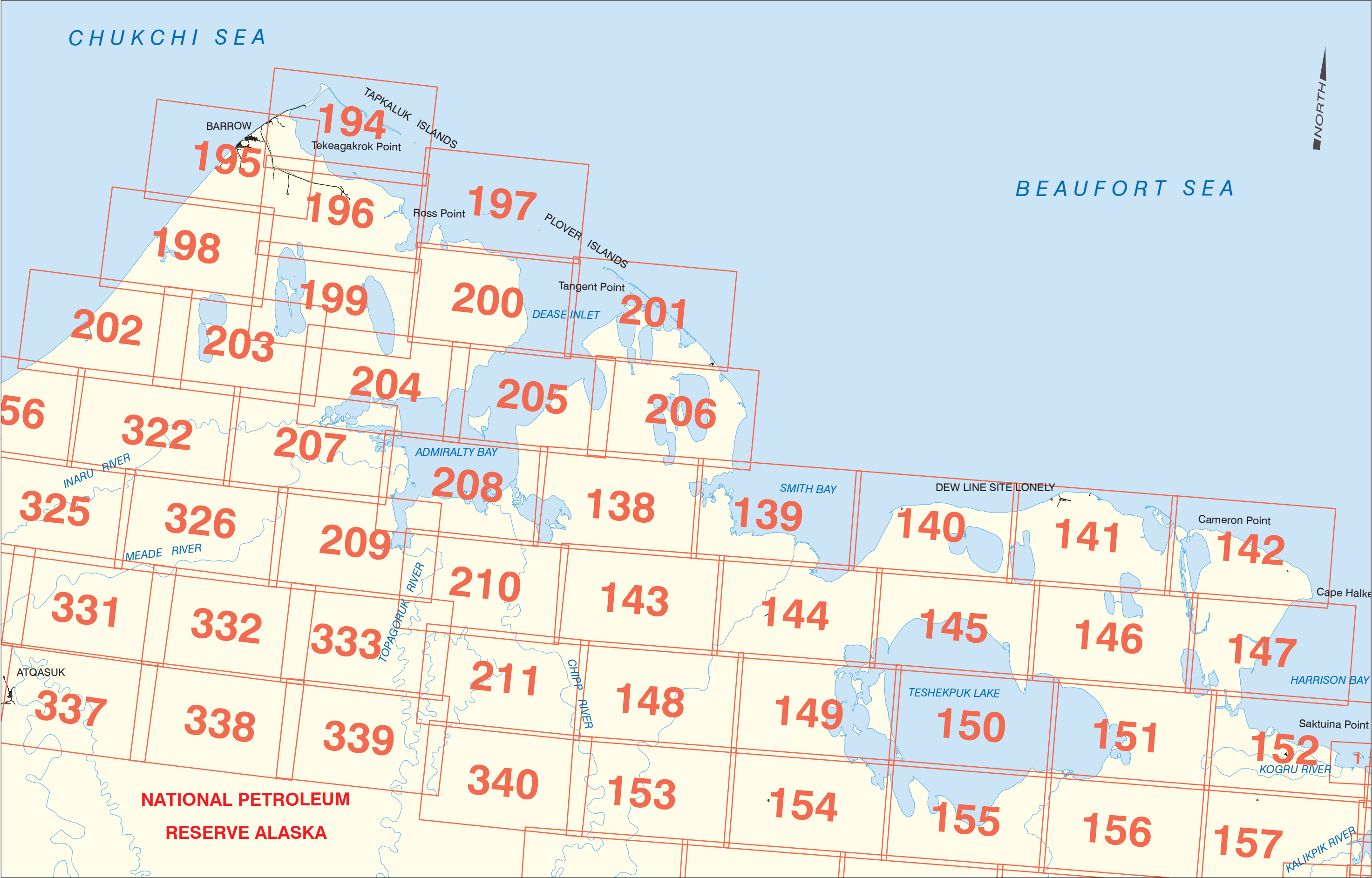
MAPS

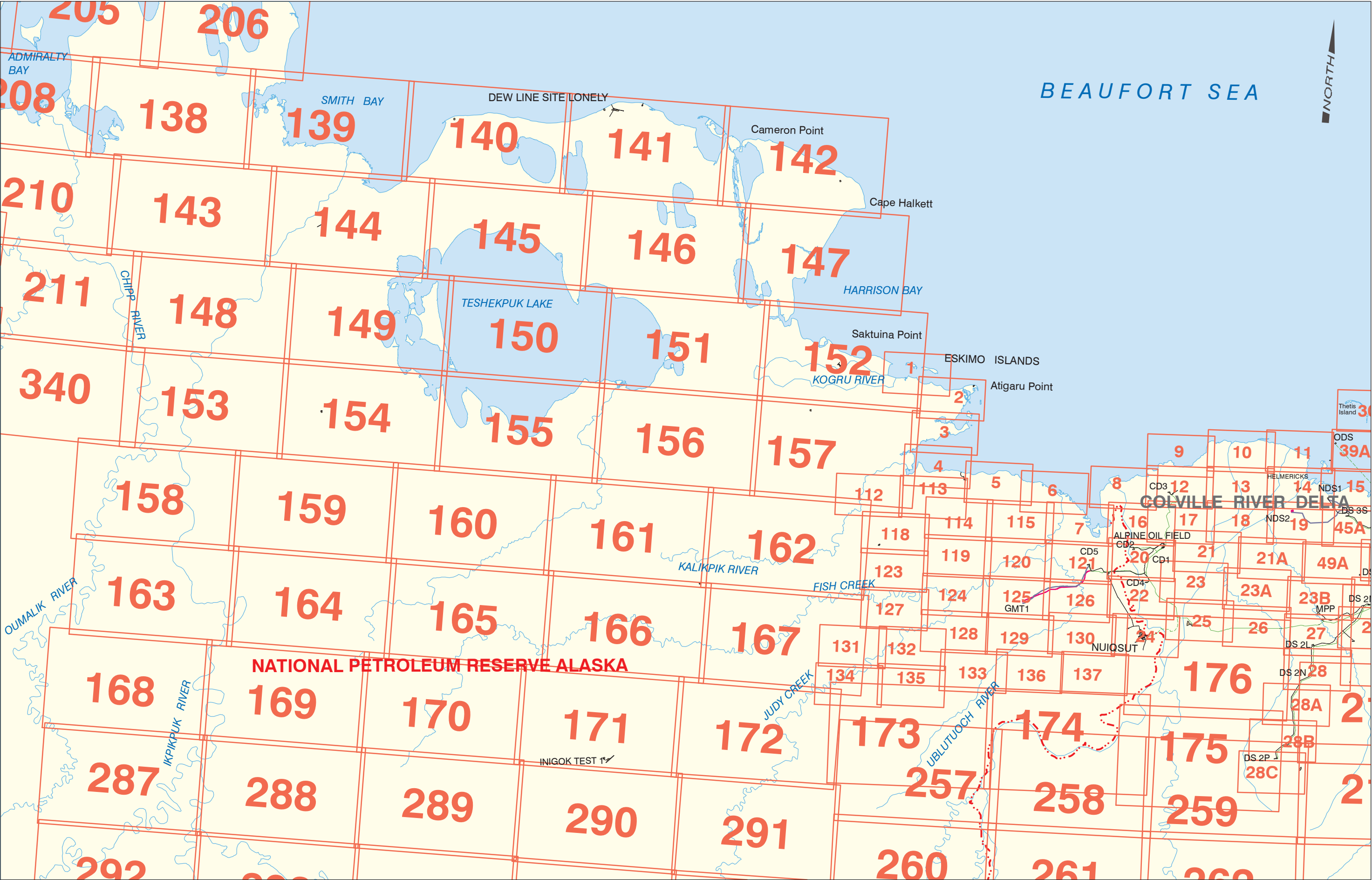
The following pages contain the maps that make up the *Alaska Clean Seas Technical Manual Volume 2 Map Atlas*. Please refer to the Map Legend and Index tab to see what the map symbols mean and where these maps fit into the North Slope.

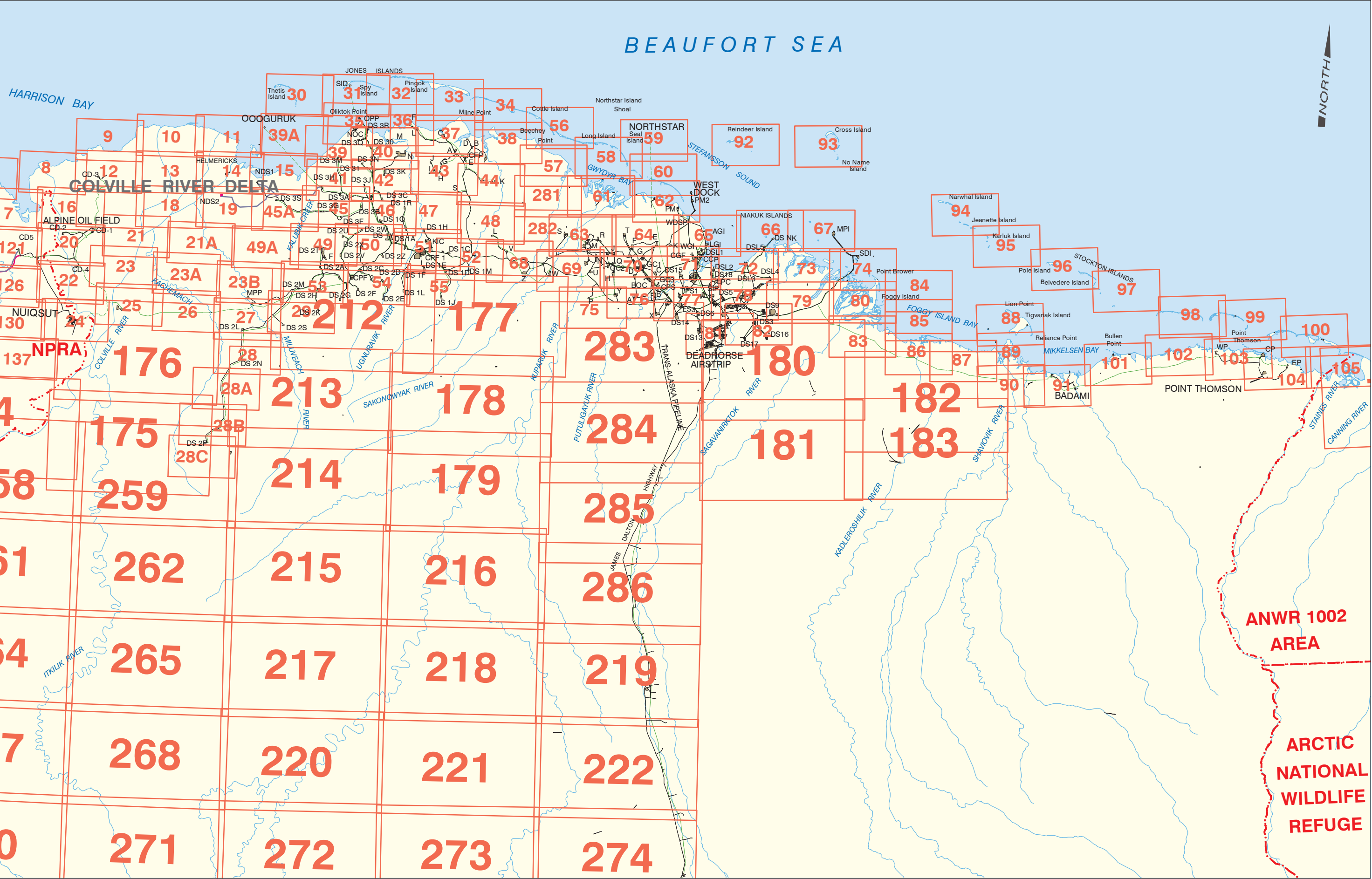


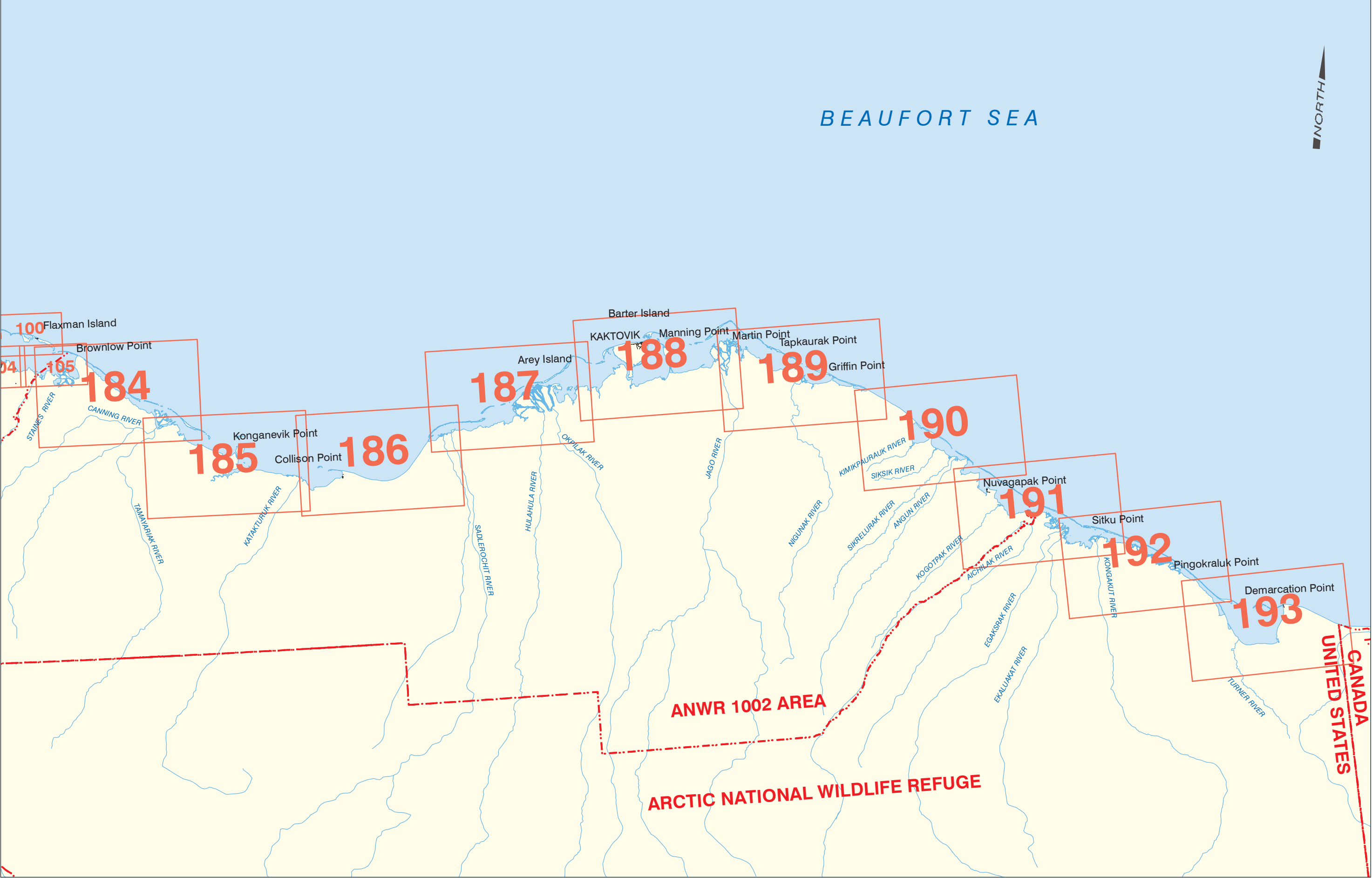


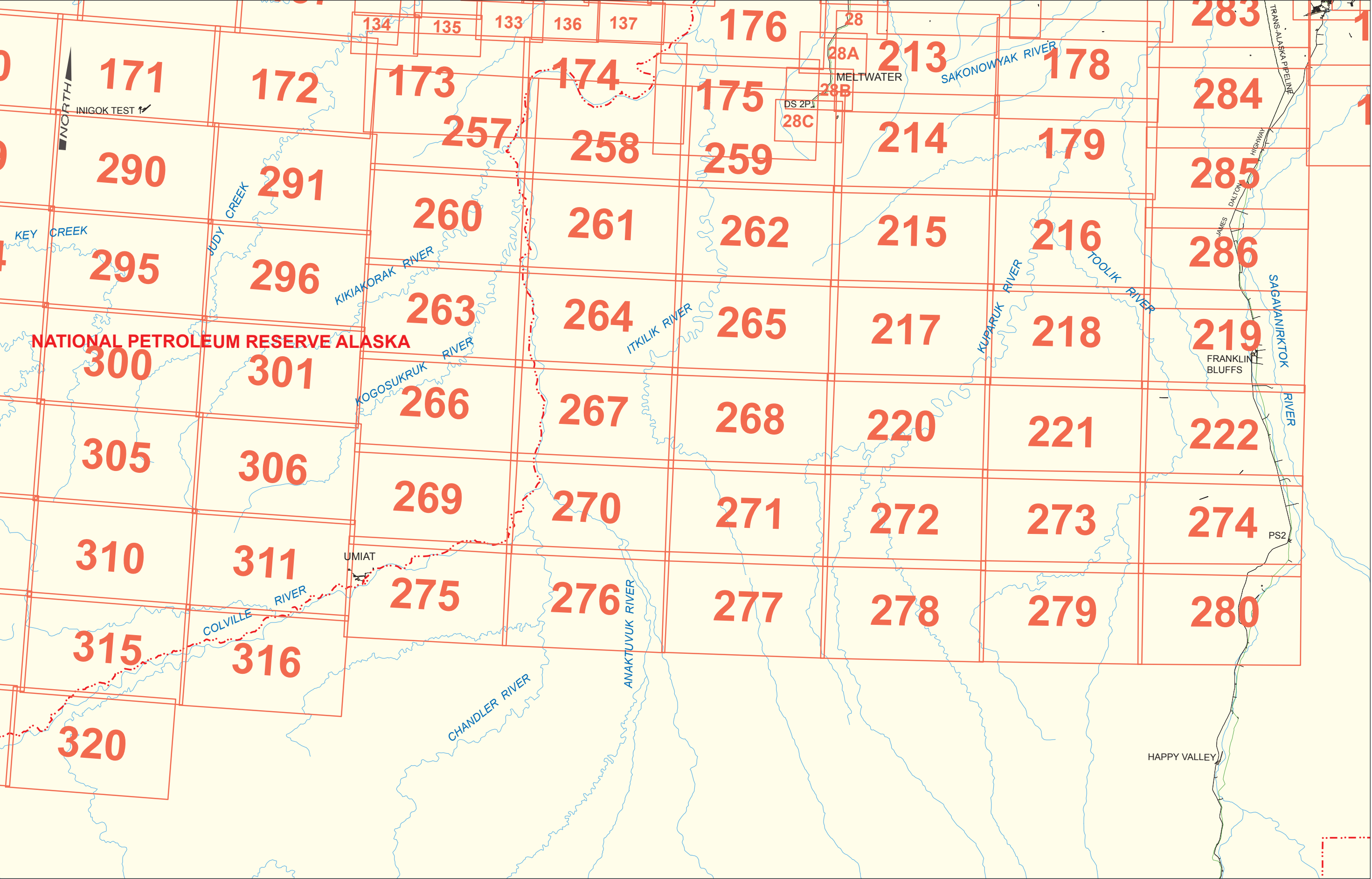


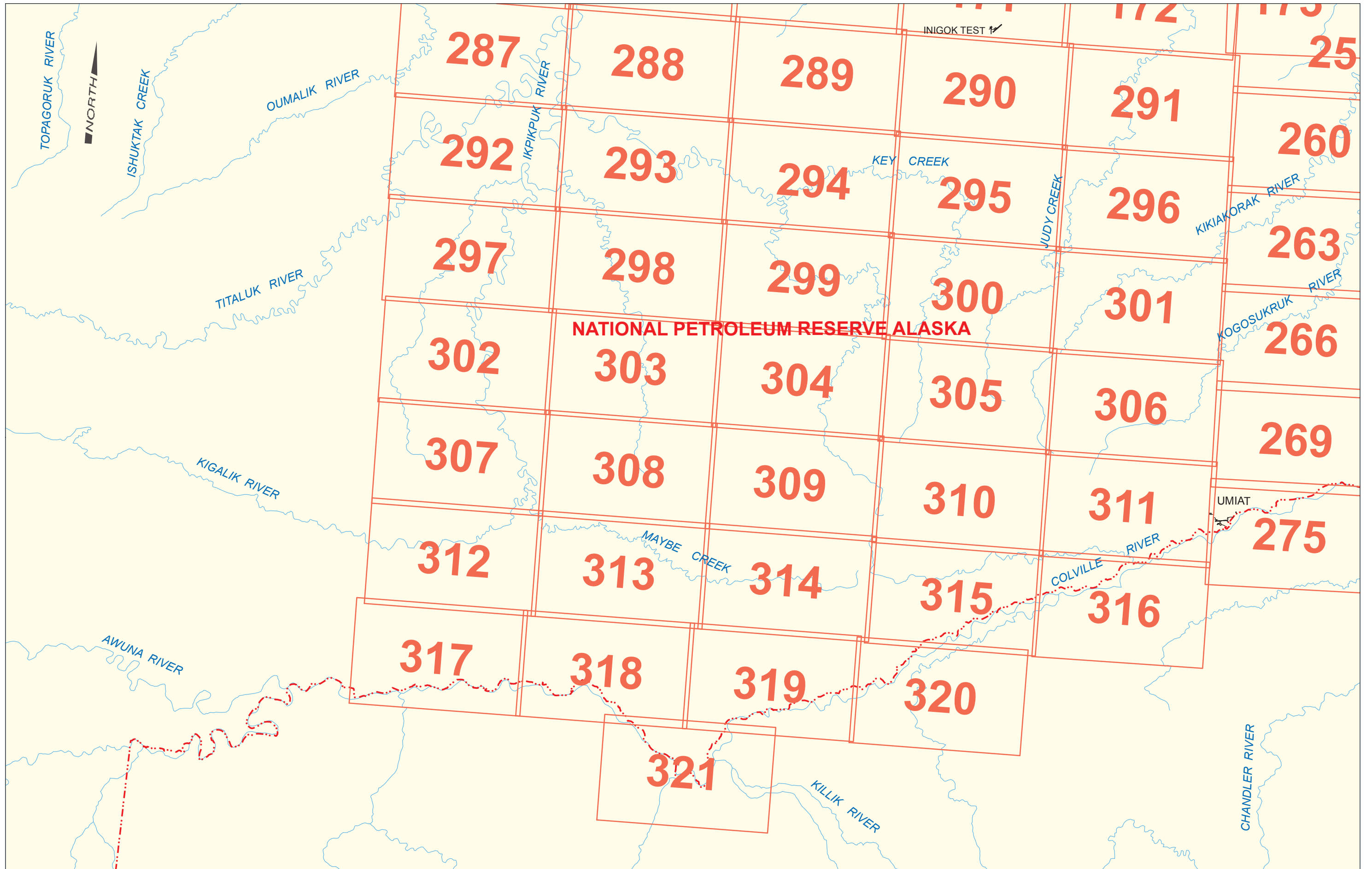


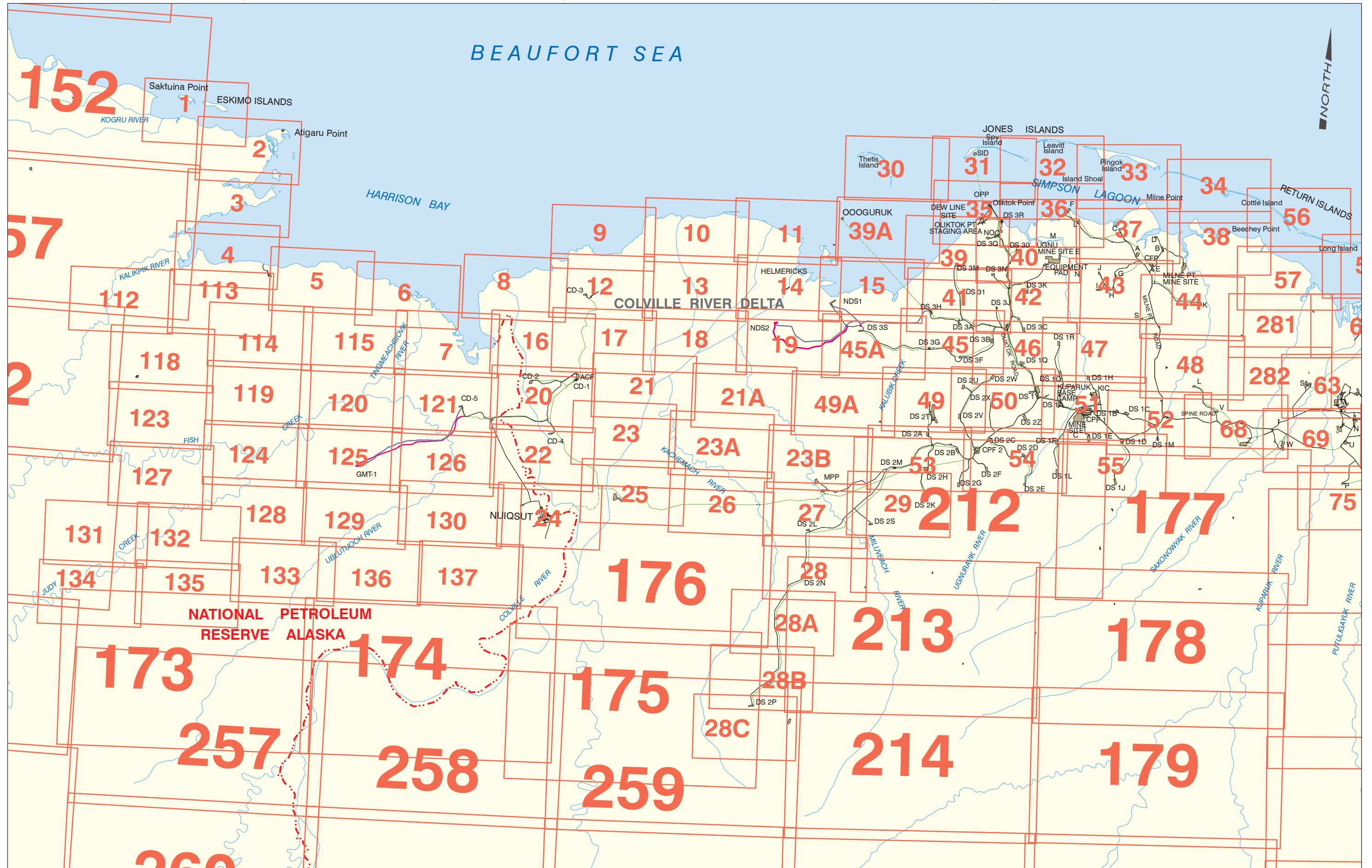


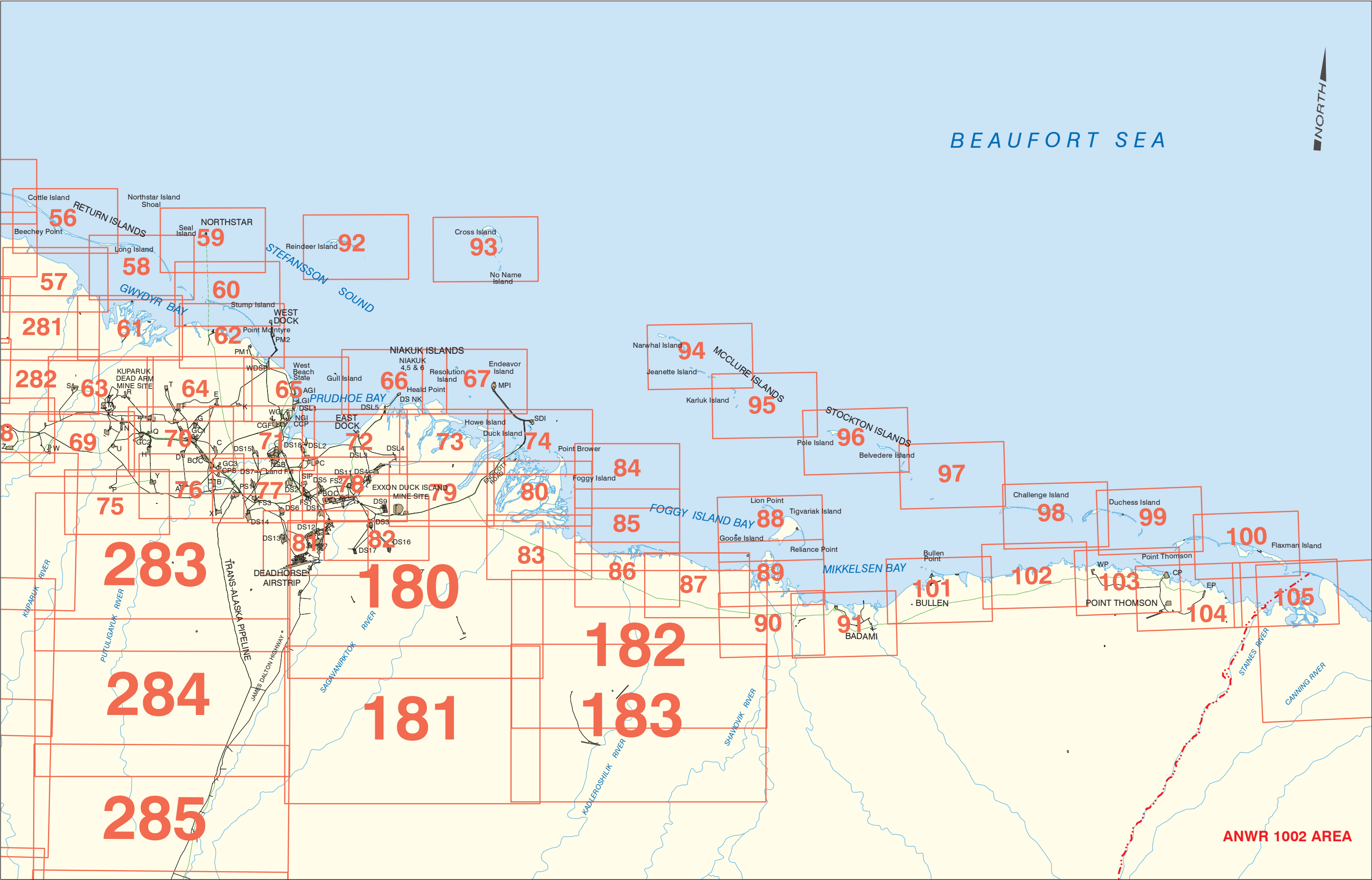








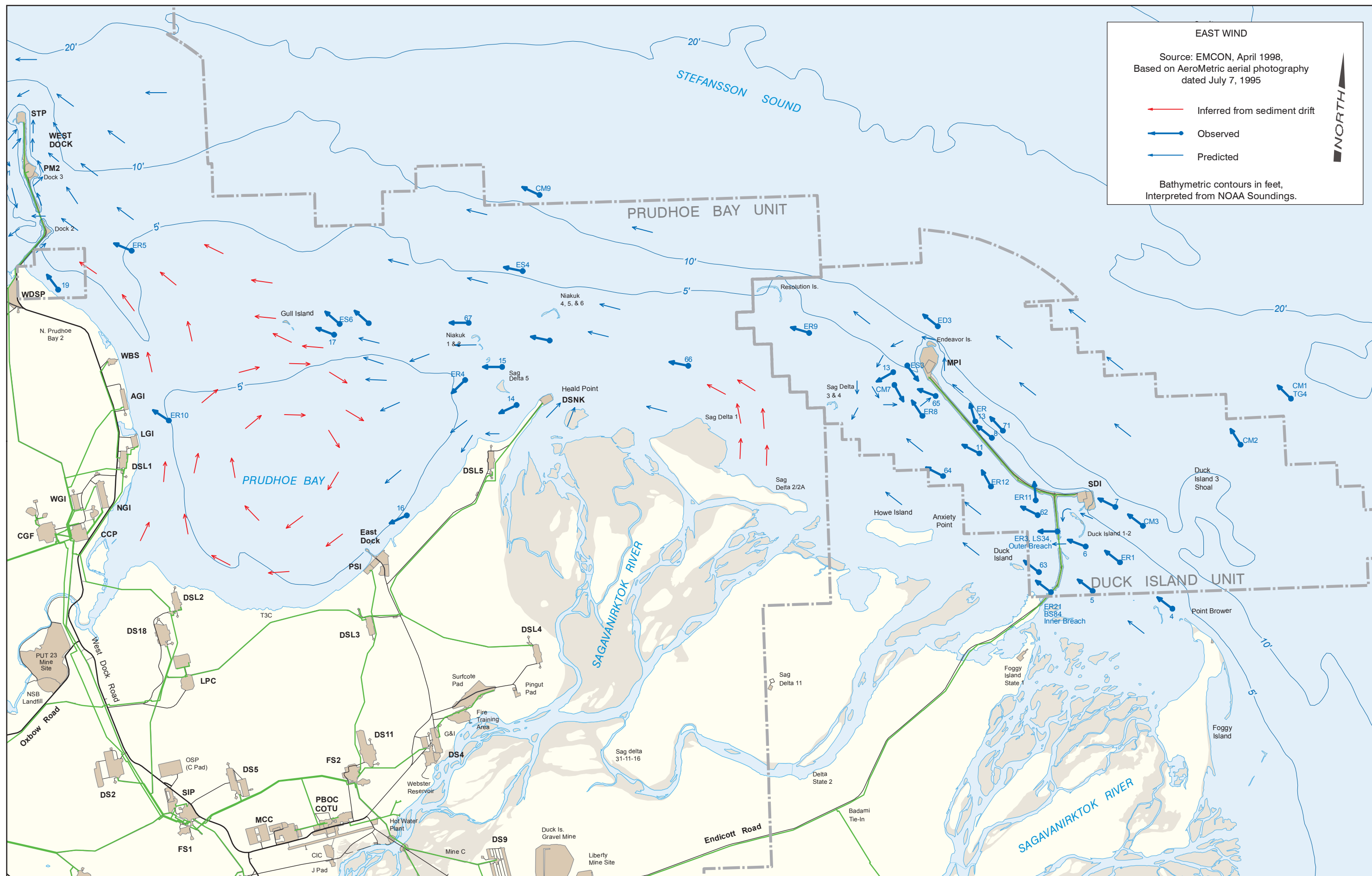




NEARSHORE CIRCULATION

Detailed information on nearshore circulation is currently available only for the immediate Prudhoe Bay area.

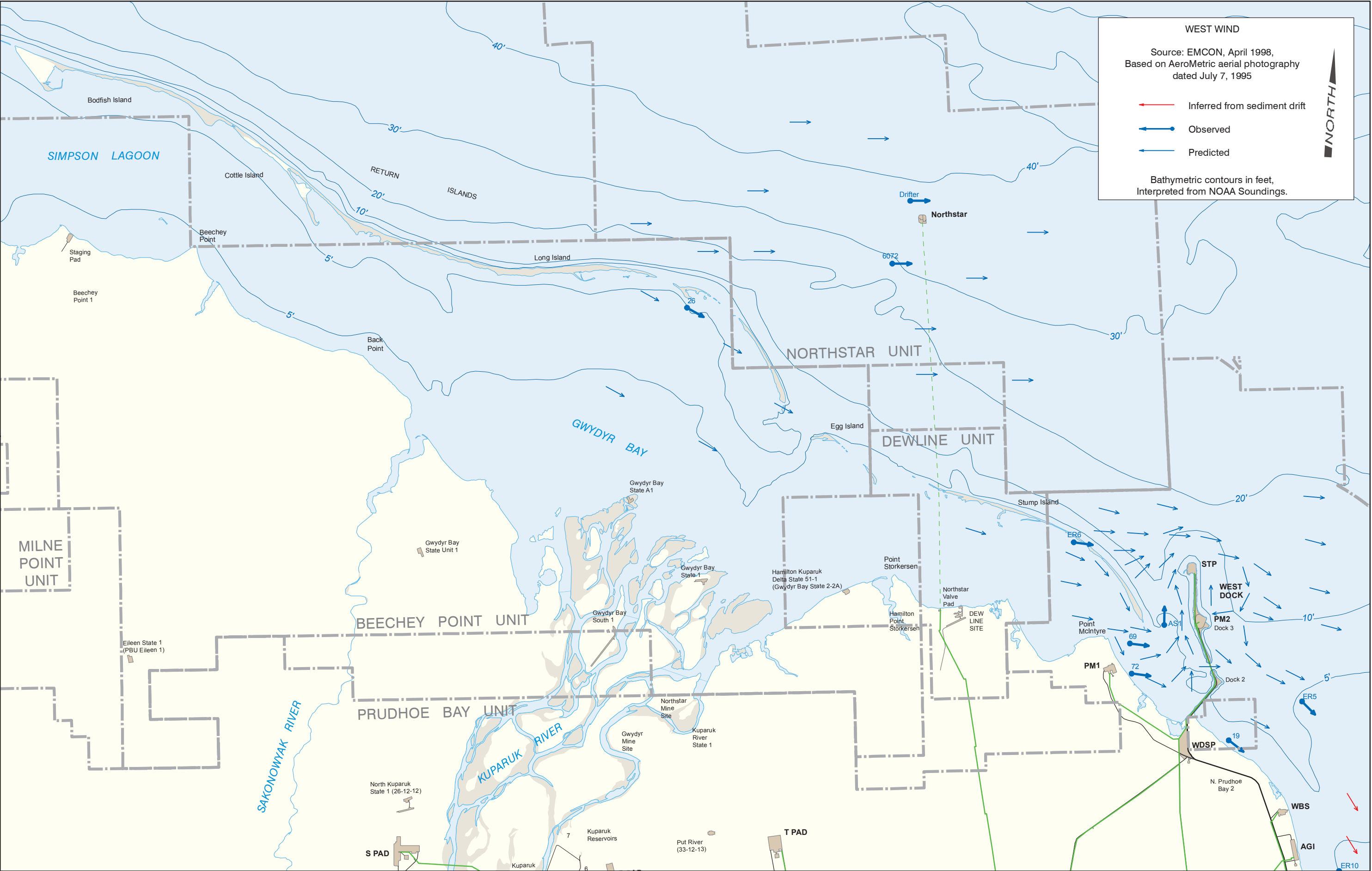
Ocean surface currents in the vicinity of Prudhoe Bay oil production facilities are primarily wind driven. Wind shifts can reverse surface water currents within a few hours. The following maps show surface current patterns under two wind conditions: an east wind and a west wind. This information is a compilation of observed current measurement data, as well as inferred currents from sediment drift and predicted currents. Note that a great deal of data has been collected on the surface water currents in the vicinity of both the Endicott and West Dock causeways.

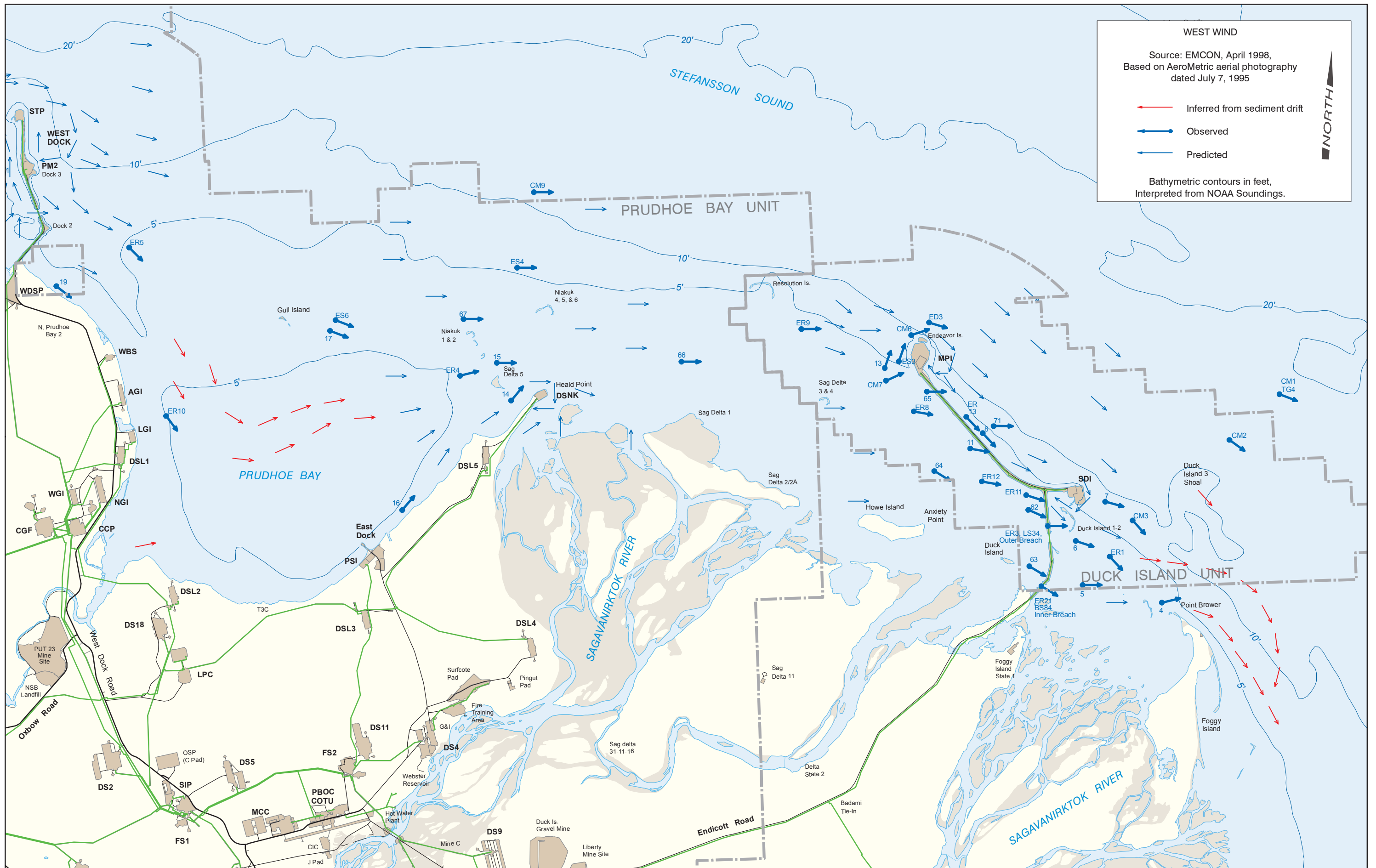


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SHEET 2 OF 2





ALASKA REGIONAL RESPONSE TEAM (ARRT) SENSITIVE AREAS WORKING GROUP CRITERIA FOR RELATIVE PRIORITY RATING OF SENSITIVE AREAS

This volume of the *Alaska Clean Seas Technical Manual* contains a map atlas of the North Slope oil fields and vicinity. These maps and their accompanying legend pages identify sensitive-area locations for priority protection in the event of a spill. The locations on these maps are ones that can be defended by exclusion or deflection tactics. Also included on the map legend pages are general statements of environmental sensitivity — e.g., presence of birds or marine mammals — provided by the Alaska Regional Response Team (ARRT) Sensitive Areas Working Group.

It is important to remember that detailed protection strategies and incident-specific protection priorities will be developed by the Unified Command at the time of the spill. In evaluating the sites that must be protected, the Unified Command will apply criteria developed by the ARRT Sensitive Areas Working Group with representatives from State and Federal agencies and the private sector. The following relative priority listing prioritizes resources into designations of major, moderate, and lesser concern. Resources are not prioritized within each designation. These designations are for consideration in initial spill response activities; they are not applicable to extended cleanup activities. Specific guidance to On-Scene Coordinators for protecting cultural resources is contained in Part Five – Historic Properties Protection Guidelines for Federal On-Scene Coordinators, of the Alaska Regional Contingency Plan.

The following criteria were developed as a tool to establish levels of concern.* These criteria are not listed in a priority order.

- Human economic disruption — economic/social value; human food source disruption
- Mortality — wildlife, fish, other organisms (how many potentially killed in relation to abundance)
- Animal displacement and sensitivity to displacement
- Aesthetic degradation
- Habitat availability and rarity
- Sublethal effects, including sensitivity to physical or toxic effects of oil or hazardous substances and long-term effects to habitat, species, or both
- Threatened and endangered species, and/or other legal designation
- Persistent concentration of oil or hazardous substances
- Reproduction rate or recolonizing potential
- Relative importance to ecosystem
- Potential for physical contact with spill — pathway of oil or hazardous substance
- Resource sensitivity to response countermeasures

*NOTE: The information here, including the sensitivity graphs on the following pages, was excerpted from the Sensitive Areas section of the *Alaska Regional Response Team North Slope Subarea Contingency Plan*. This plan has been replaced by the *Arctic and Western Alaska Area Contingency Plan*. Please refer to the latest version of that publication for any revisions that may have occurred since this *ACS Technical Manual* was printed.

AREAS OF MAJOR CONCERN

- Shoreline Geomorphology - Coastal Habitat Types:
 - River deltas
 - Sheltered lagoons
 - Open lagoons
 - Salt marshes
 - Mud flats
 - Barrier islands
 - Spit beaches
 - Protected bays
- Inland Habitat Types: Riparian willow Connected lakes Freshwater springs
- Threatened or Endangered Species Habitat
- Spotted Seal Haulout Areas (>10 animals)
- Ringed Seal Lairs and Popping Areas
- Walrus Haulout Areas
- Beluga Whale Concentration Areas
- Bowhead Whale Nearshore Migration Routes
- Polar Bear Denning and Feeding Areas
- Bear Concentration Areas (marine mammal/carcasses;salmon)
- Caribou Calving and Insect Relief Areas
- Large Seabird Colonies (>100 birds)
- Waterfowl and Shorebird Spring and Fall Concentration and Staging Areas
- Waterfowl Molting Concentration Areas
- Anadromous Fish Spawning and/or Rearing Streams (i.e., salmon, Dolly Varden, whitefish)
- Land Management Designations Federal: Wilderness
 - Wild and Scenic Rivers
 - National Natural Landmarks
 - Research Natural Areas (Toolik Lake, Galbraith Lake)
- Cultural Resources/Archaeological Sites: National Historic Landmarks Burial Sites National Register Eligible Village Sites Intertidal Sites
- Subsistence Harvest Areas
- High Commercial Use Areas
- High Recreational Use Areas
- River Floodplains

AREAS OF MODERATE CONCERN

- Shoreline Geomorphology - Coastal Habitat Types:
 - Beaded tundra streams
- Upland Habitat Types: Drained lake basins
- Recurring Leads and Polynyas in Sea Ice
- Spotted Seal Haulout Areas (< 10 animals)
- Ringed Seal Shorefast Ice Concentration Areas
- Seabird Colonies (10 - 100 birds)
- Waterfowl and Shorebird Nesting Concentration Areas
- Shorebird Molting Concentration Areas
- Polar Bear General Distribution
- Walrus General Distribution
- Caribou Migration Routes
- Muskox Riparian Habitat
- Commercial Harvest Areas
- Recreational Use Areas
- Land Management Designations
 - Federal: National Parks
 - National Wildlife Refuges
- Cultural Resources/Archaeological Sites
 - National Register Eligible Sites (Other Than Village Sites)
 - Sites Adjacent To Shorelines

AREAS OF LESSER CONCERN

- Upland Habitat Types:
 - Mesic/dry tussock tundra
 - Alpine tundra
- Bearded Seal General Distribution
- Bowhead Whale General Distribution
- Gray Whale Nearshore Migration and Feeding Areas
- Seabird Colonies (<10 birds)
- Waterfowl and Shorebird General Distribution
- General Freshwater Fish Habitat
- Land Management Designations
 - Federal: Public Lands
 - National Forests
 - National Preserves
 - State: General Public Lands



INFORMATION ON SEASONAL SENSITIVITIES

The following information on seasonal sensitivities of various fish and wildlife on the North Slope and adjacent Beaufort Sea has been provided by the Alaska Regional Response Team (ARRT) Sensitive Areas Working Group.

Ringed Seals

CATEGORY	LEAST	MEDIUM	MOST
Abundance		Pack ice	Shorefast ice
Susceptibility		Year around	
Human Harvest			Year around

The shorefast ice between Cape Lisburne and Point Lay has one of the highest densities of ringed seals.

Critical Life Periods	J	F	M	A	M	J	J	A	S	O	N	D
Nearshore concentrations in shorefast ice												
Pupping and weaning												
Molting												
Present in area												

Bearded Seals

CATEGORY	LEAST	MEDIUM	MOST
Abundance			Ice-edge
Susceptibility		Year around	
Human Harvest			Year around

Critical Life Periods	J	F	M	A	M	J	J	A	S	O	N	D
Pupping in Chukchi Sea												
Present in Beaufort Sea												
Present in Chukchi Sea												

Spotted Seals

CATEGORY	LEAST	MEDIUM	MOST
Abundance (on haulouts)	< 10	10-100	> 100
Susceptibility		Year around	
Human Harvest			May 1-Nov 30

The largest known concentration of spotted seals in Alaska haulout at Kasegaluk Lagoon from mid-July until late October or early November.

Critical Life Periods	J	F	M	A	M	J	J	A	S	O	N	D
Coastal haulouts/ Concentration areas												
Chukchi Sea												
Beaufort Sea												

Beluga Whales

CATEGORY	LEAST	MEDIUM	MOST
Abundance ¹	< 10	10-100	> 100
Susceptibility	Aug 1-Mar 31	Apr 1-May 20 (Chukchi Sea) May 15-Aug 31 (Beaufort Sea)	May 20-July 31 (Chukchi Sea)
Human Harvest	Sept 10-Mar 31 (Chukchi Sea) Oct 20-July 31 (Beaufort Sea)		Apr 1-Sept 10 (Chukchi Sea) Aug 1-Oct 20 (Beaufort Sea)

¹ Between June 20 and August 15, large numbers of beluga whales concentrate in Kasegaluk Lagoon.

Critical Life Periods	J	F	M	A	M	J	J	A	S	O	N	D
Nearshore migration												
Chukchi Sea												
Beaufort Sea												
Calving												

Bowhead Whales

CATEGORY	LEAST	MEDIUM	MOST
Susceptibility	Nov 1-Mar 20	July 1-Oct 31 (Chukchi Sea) July 1- July 31 (Beaufort Sea)	Mar 20-June 30 (Chukchi Sea) Apr 15-June 30; Aug 1-Oct 31 (Beaufort Sea)
Human Harvest ²	June 16-Nov 1 (Chukchi Sea)		Apr 1-June 15 (Chukchi Sea) Aug 1-Oct 20 (Beaufort Sea)

² During the ice-covered months in the Beaufort and Chukchi seas, whales are unavailable for harvest.

Critical Life Periods	J	F	M	A	M	J	J	A	S	O	N	D
Nearshore migration												
Chukchi Sea												
Beaufort Sea												
Calving												

Gray Whales

CATEGORY	LEAST	MEDIUM	MOST
Abundance	Jun 1-July 31; Oct 1-Oct 31 (Chukchi Sea) Jun 1-Oct 31 (Beaufort Sea)	Aug 1-Sep 30 (Chukchi Sea)	
Susceptibility		When present	

Critical Life Periods	J	F	M	A	M	J	J	A	S	O	N	D
Nearshore migration & feeding												
Chukchi Sea												

Walrus

CATEGORY	LEAST	MEDIUM	MOST
Abundance	Nov 1-May 1	May 1-June 15 Oct 1-Oct 31	June 15-Sept 30
Susceptibility		Year around	
Human Harvest	May 1-May 15 Sep 1-Oct 30		May 15-Aug 20

Critical Life Periods	J	F	M	A	M	J	J	A	S	O	N	D
Present on haulouts or in nearshore waters												

Polar Bears

CATEGORY	LEAST	MEDIUM	MOST
Abundance	Pack ice	Shorefast ice and active ice areas	Denning areas during entrance/emergence; feeding areas such as leads/polynyas; coastal beaches and barrier islands
Susceptibility	Summer (June-August)		Fall, winter, spring (September-May)
Human Harvest	June-Sept. (Chukchi Sea) June-Aug. (Beaufort Sea)	October, February (Chukchi Sea) Sept., Jan.-March (Beaufort Sea)	Nov.-Jan., March-May (Chukchi Sea) Oct.-Dec., April-May (Beaufort Sea)

Critical Life Periods	J	F	M	A	M	J	J	A	S	O	N	D
Denning of pregnant females*												
Along or on the coastline												

* Concentration areas for pregnant females occur at Icy Cape, Pt. Franklin, and in the ANWR 1002 area

Brown Bear

CATEGORY	LEAST	MEDIUM	MOST
Susceptibility	Nov 15-Apr 30		May 1- Nov 15
Human Harvest	June 1-Aug 30		Sept 1-May 31

Critical Life Periods	J	F	M	A	M	J	J	A	S	O	N	D
Denning												
Concentration associated w/ Mammalian food sources												
Salmon streams												

INFORMATION ON SEASONAL SENSITIVITIES (CONT.)

Caribou

CATEGORY	LEAST	MEDIUM	MOST
Abundance ³			
Susceptibility	Nov 1-Mar 15	May 15-May 20 June 10-June 30 Aug 15-Sept 15	May 20-June 10 July 1-Aug 15
Human Harvest			Year around

³ There are four caribou herds that utilize various portions of this region. Depending on the herd and the climatic conditions, abundance may vary widely. As a result, specific abundance figures will not be established for use in prioritizing the importance of an area.

Critical Life Periods	J	F	M	A	M	J	J	A	S	O	N	D
Calving period												
Insect relief habitat												
Migrations												

Muskoxen

CATEGORY	LEAST	MEDIUM	MOST
Abundance	Three groups of muskoxen reside in this region of the state. Their range is currently expanding with major concentrations occurring along the river systems.		
Susceptibility		Year around	
Human Harvest	Muskox are harvested from the Itkillik River to the Canadian border.		

Critical Life Periods	J	F	M	A	M	J	J	A	S	O	N	D
Calving												

Seabirds

CATEGORY	LEAST	MEDIUM	MOST
Abundance	< 10	10-100	> 100
Susceptibility	Nov 1-Jan 31	Feb 1-Mar 31	May 1-Sept 30
Species Diversity	1-3	4-6	> 6
Human Harvest ⁹			May 1-July 30

⁹ Seabird eggs utilized by Native communities from late June through July.

Most of the world's population of Ross' Gull is found in nearshore areas of the Barrow area from September through October.

Critical Life Periods	J	F	M	A	M	J	J	A	S	O	N	D
At breeding colonies												
Feeding near colonies												

Waterfowl and Shorebirds

CATEGORY	LEAST	MEDIUM	MOST
Abundance	In prep.		
Susceptibility ⁴⁻⁸	Oct 1-May 15	May 15-June 20	June 20-Sept 30
Human Harvest		July 1-Aug 15 (Chukchi Sea) July 10-Aug 1; Oct 1-Nov 15 (Beaufort Sea)	Apr 1-Jun 30; Aug 15-Sept 30 (Chukchi Sea) May 1- July 10; Aug 1-Sept 30 (Beaufort Sea)

⁴ Spectacled Eider – are in the area from late May through late September.

⁵ Steller's Eider – are concentrated in the Barrow area from early June to September.

⁶ Common Eider – nesting and brood-rearing on barrier islands from late June to mid-August.

⁷ Snow Geese – brood-rearing is concentrated at Putuligayuk, Sagavanirktok, Kadleroshilik, and Shaviovik river deltas; Howe Island; and Foggy Island Bay from early July to mid-August.

⁸ Brant – brood-rearing is concentrated at Putuligayuk, Kuparuk and eastern Colville River deltas; mouth of East Creek to Oliktok Point from early July to mid-August.

Critical Life Periods	J	F	M	A	M	J	J	A	S	O	N	D
Arrival/nesting/brood-rearing												
Molting/feeding concentrations												
Fall migration												

Salmon

CATEGORY	LEAST	MEDIUM	MOST
Abundance	Due to limited information and the finite number of fishbearing streams in the area, all anadromous fish streams in this area are considered important.		
Susceptibility	June 15-Aug 1		Aug 1-June 15
Human Harvest			June 15-Aug 30

Critical Life Periods	J	F	M	A	M	J	J	A	S	O	N	D
Spawning												
Eggs/fry in gravels												

Dolly Varden/Arctic Char

CATEGORY	LEAST	MEDIUM	MOST
Abundance	Due to limited information and the finite number of fishbearing streams in the area, all anadromous fish streams in this area are considered important.		
Susceptibility		June 16-Sept 15	Sept 15-June 15
Human Harvest	Oct 1-June 15		June 16-Sept 30

Critical Life Periods	J	F	M	A	M	J	J	A	S	O	N	D
Spawning												
Overwintering												
Eggs/fry in stream gravels												
Rearing in freshwater												

Anadromous Whitefish

CATEGORY	LEAST	MEDIUM	MOST
Abundance	Limited data are currently available on fish populations within North Slope streams.		
Susceptibility		June 15-Aug 31	Sept 1-June 15
Human Harvest			July 1-Sept 15 Oct 1-Nov 15

Critical Life Periods	J	F	M	A	M	J	J	A	S	O	N	D
Spawning												
Overwintering												
Spring migration												
Fall migration												

Freshwater Fish

CATEGORY	LEAST	MEDIUM	MOST
Abundance	Limited data are currently available on fish populations within North Slope streams.		
Susceptibility		June 15-Aug 31	Sept 1-July 15
Human Harvest	Oct 1-May 30	June 1-Sept 30	

Critical Life Periods	J	F	M	A	M	J	J	A	S	O	N	D
Spawning												
Spring												
Fall												
Overwintering												



CULTURAL RESOURCE CONSIDERATIONS

DEFINITION OF “CULTURAL RESOURCES”

Federal and state law requires protection of cultural resources in the vicinity of the spill or response.

“Cultural resources” is a broad term used to refer to ruins, structures, sites, graves, artifacts, deposits, and/or objects that pertain to history or prehistory. The question is not whether someone thinks a resource has value, but whether the resource meets the criteria of federal or state law.

There are two kinds of impacts of concern during a spill responseoperation::

- *Direct impact* from spilled substances
- *Indirect impacts* from ground-disturbing activities, vandalism, and theft

RESPONSIBILITIES

Cultural resource protection is primarily an agency responsibility. Duties of the responsible party in an oil spill are to:

- Be aware cultural resources may exist in the response area.
- Recognize their existence may affect how response is conducted.
- Cooperate with state and federal officials charged with cultural resource protection.
- Ensure response personnel do not collect, remove or disturb cultural resources encountered in a response.
- Consider retaining a cultural resources specialist as a consultant to Planning Section in case of a significant spill.

SITE LOCATIONS

As a means of protection, federal law and state policy restrict access to the exact known locations of cultural resource sites. Accordingly, such locations are not shown on ACS or member company maps. Instead, known cultural resource sites on the North Slope have been mapped and are contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Responders should consult SHPO for the latest, updated information on possible cultural sites in the area prior to carrying out response actions.

Non-site-specific information on known cultural resources sites can found in the Area Contingency Plans. In a responsible party-funded response to a spill, the FOSC will consult with appropriate ARRT members regarding cultural resources which may be at risk from a spill or response. Site-specific cultural resource surveys will be required in areas the State Historic Preservation Officer believes are not well-surveyed forsites.

Responsible parties and response teams should be particularly attentive to the possible existence of cultural resource sites at/on:

- Coastal barrier islands
- Elevated terraces or cut-bank bluffs along rivers
- Pingos
- Most shoreline areas, particularly near embayments or promontories
- Prominent hills inland

For additional detail, consult the *ARRT Historic Properties Protection Guidelines for Federal On-Scene Coordinators (Alaska Regional Contingency Plan, Part Five)*.

INDEX OF PRIORITY PROTECTION SITES

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MAPS

The following pages contain the maps that make up the *Alaska Clean Seas Technical Manual Volume 2 Map Atlas*. Please refer to the Map Legend and Index tab to see what the map symbols mean and where these maps fit into the North Slope.



Response Considerations



SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS53	Tidal pond	Most sensitive during open water season. Peat shoreline. Keep oil from entering pond.	C-13 or C-14	500'
PS112	Shore to shore across the mouth of the Kogru River	Most sensitive during open water season. Tundra cliffs and vegetated low banks. Prevent oil from entering the river.	C-13 or C-14	4,000"

GENERAL SENSITIVITIES

- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- Plan to deploy bird-hazing systems during the open-water season.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pings, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.

AIR ACCESS*

- There is a landing strip near the Kogru River inlet approximately 5 miles west of Saktuina Point (west of the area covered by this sheet).

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

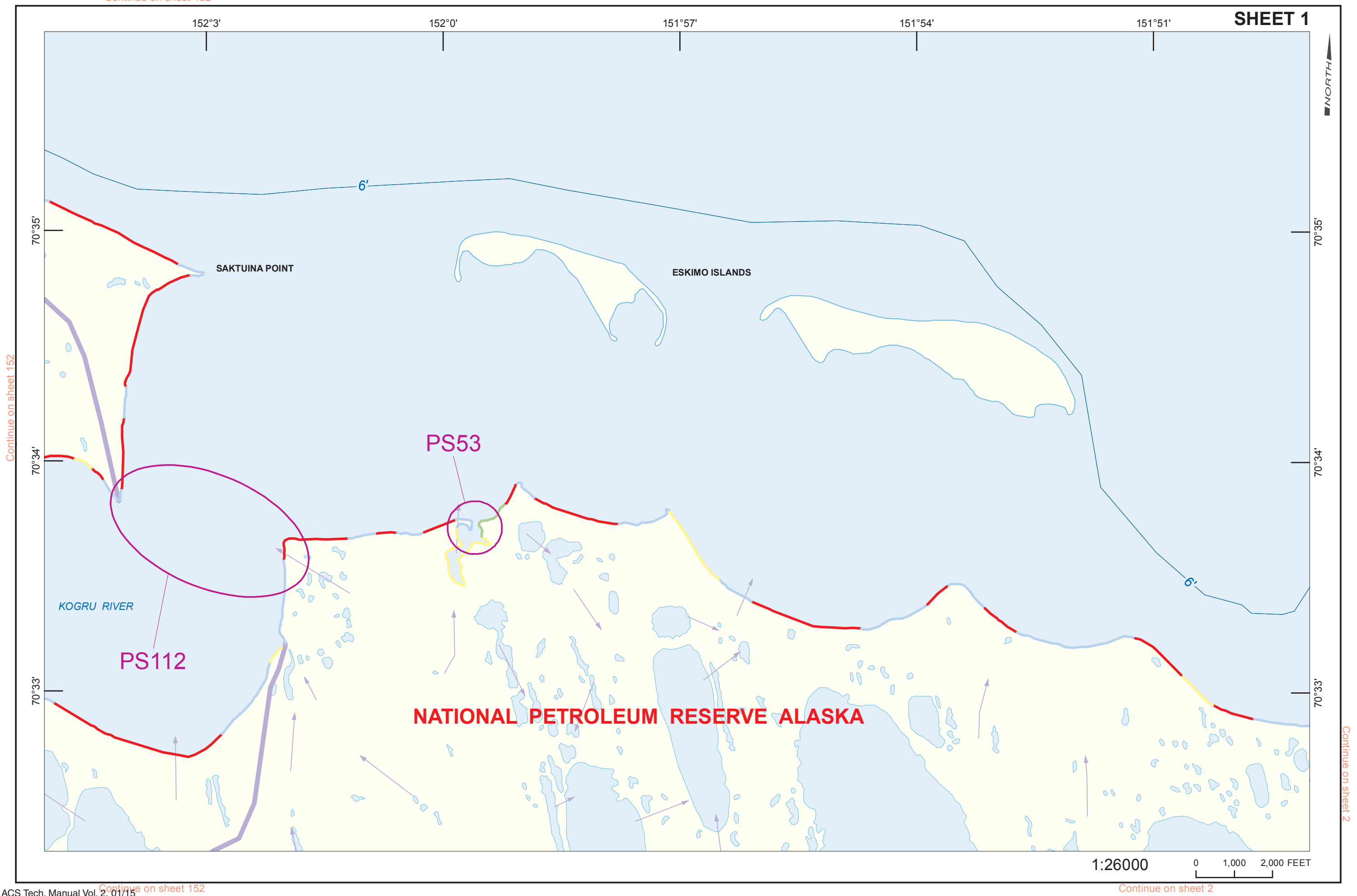
- There is extensive shoaling within 1 mile of shoreline. Water depths range from 1 to 4 ft.
- Navigation is unlikely between the Eskimo Islands and the coast due to shoals.

COUNTERMEASURES CONSIDERATIONS

- Silt is present along many shoreline areas and is layered with peat, making load-bearing capacity minimal. Water depths are very shallow.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

NOTE: All values given on these pages are for planning purposes only.



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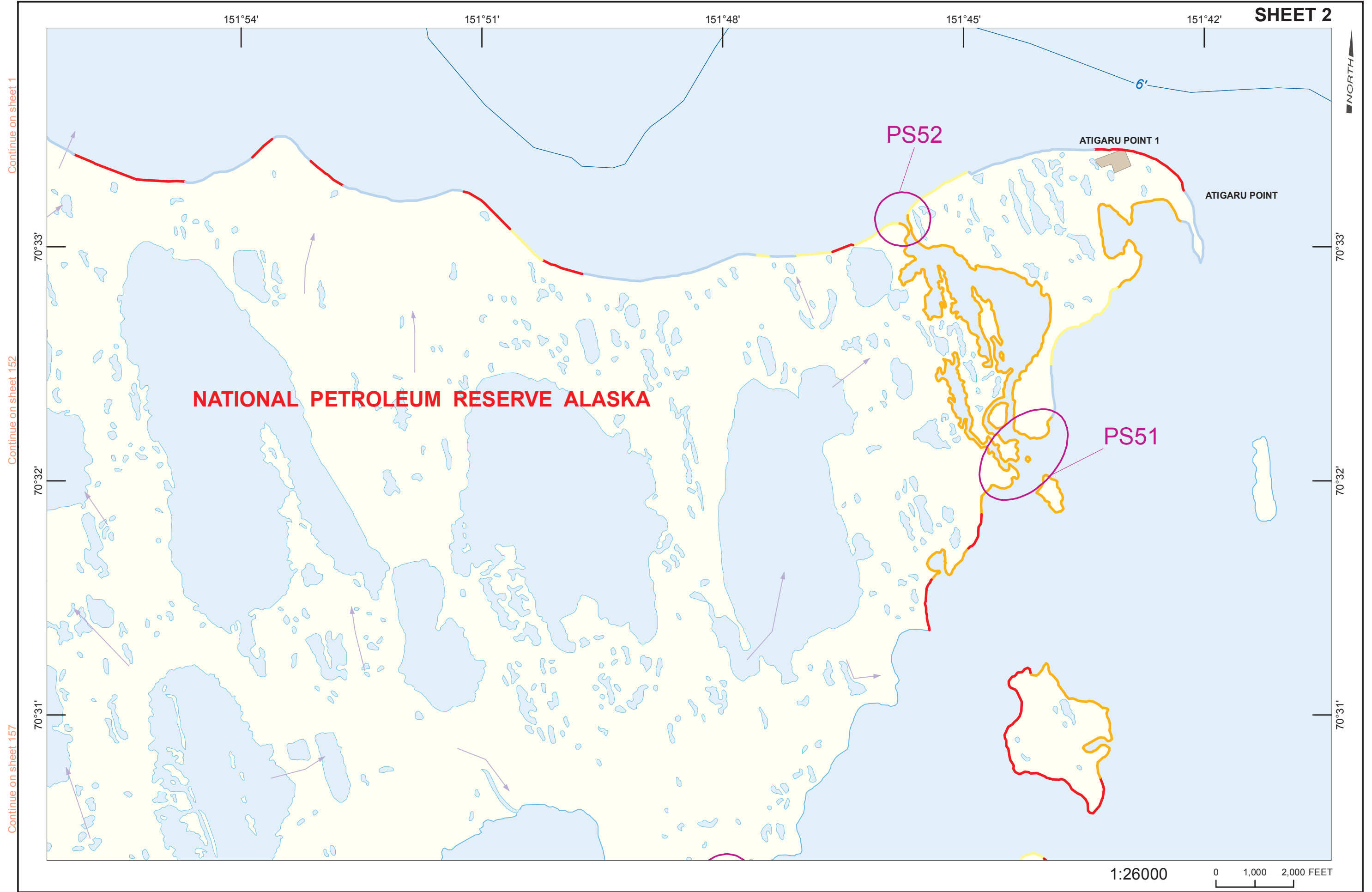
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Continue on sheet 1

SHEET 2



Continue on sheet 3



GENERAL SENSITIVITIES

- ## CULTURAL SITES

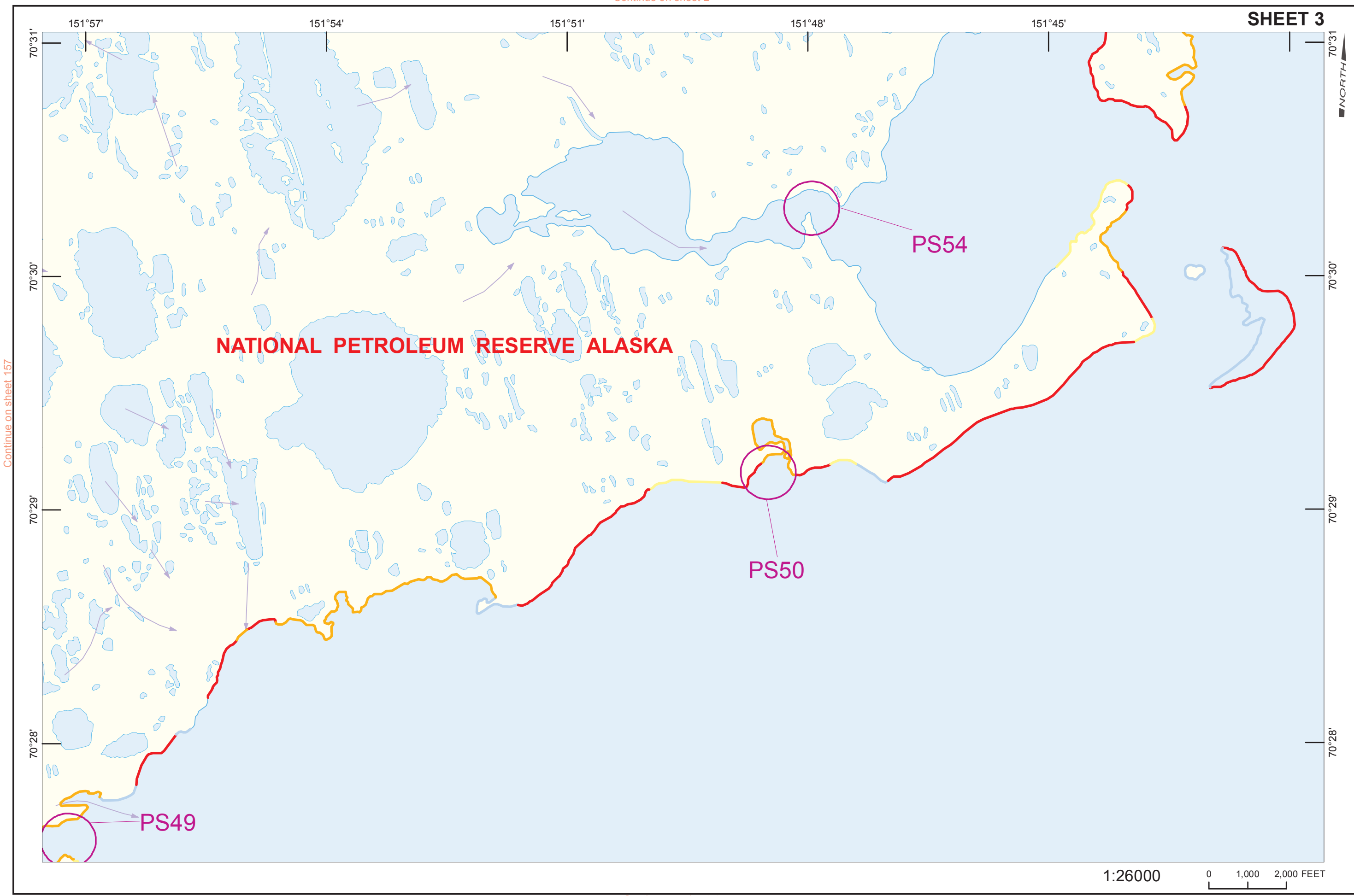
Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



- ## VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- ## COUNTERMEASURES CONSIDERATIONS

- *See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.



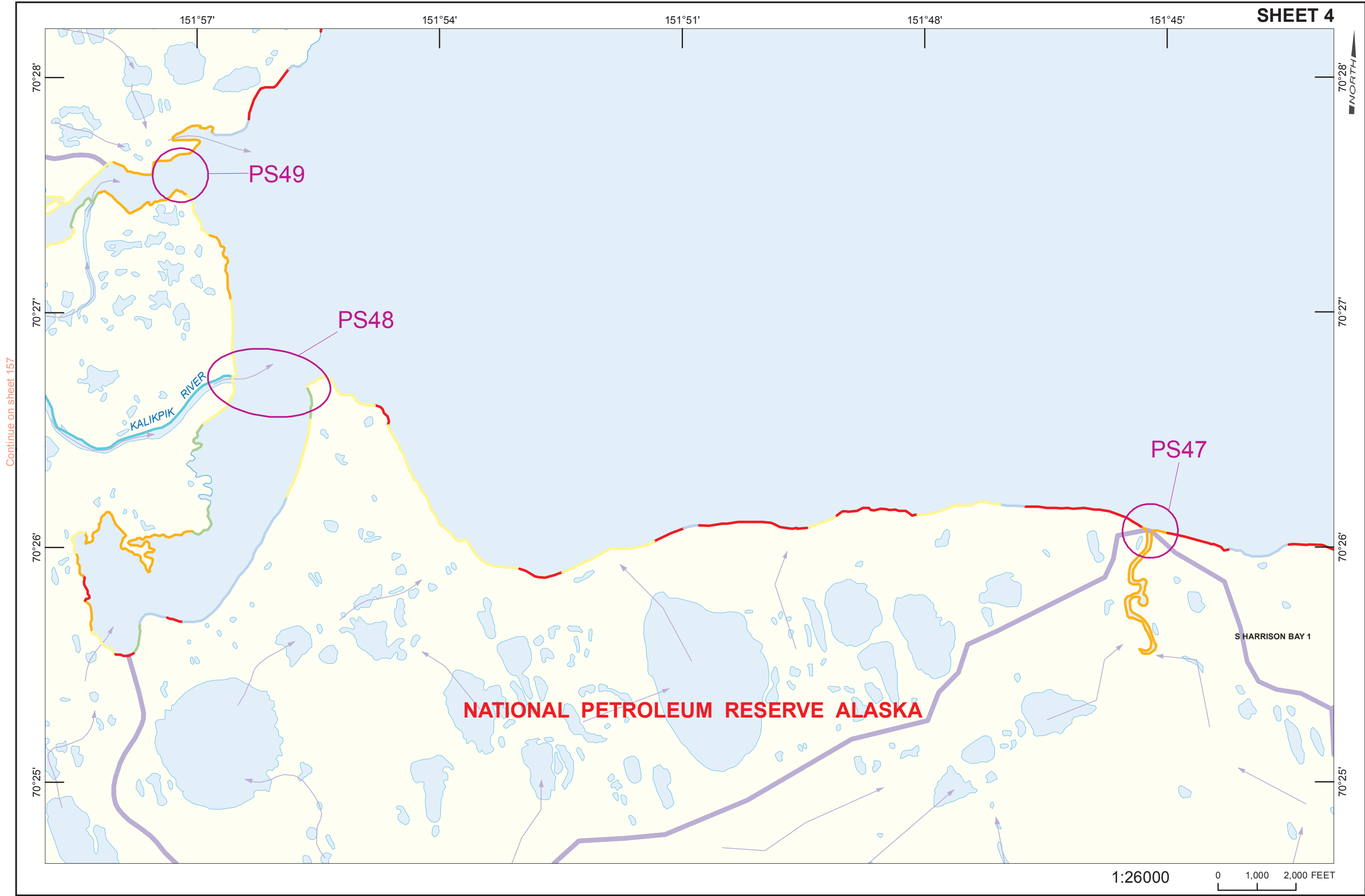
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Continue on sheet 157

Continue on sheet 5



PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS45	Stream mouth	Most sensitive during open water season. Inundated low-lying tundra shoreline. Keep oil from entering stream.	C-13 or C-14	300'
PS46	Stream mouth	Most sensitive during open water season. Inundated low-lying tundra shoreline. Keep oil from entering stream.	C-13 or C-14	800'


GENERAL SENSITIVITIES

- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- Plan to deploy bird-hazing systems during the open-water season.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

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AIR ACCESS*

- Emergency landing for fixed-wing aircraft is available on the sand flats near the mouth of the Tingmeachsiovik River (Sheet 6).
- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 15 miles to the southeast. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.

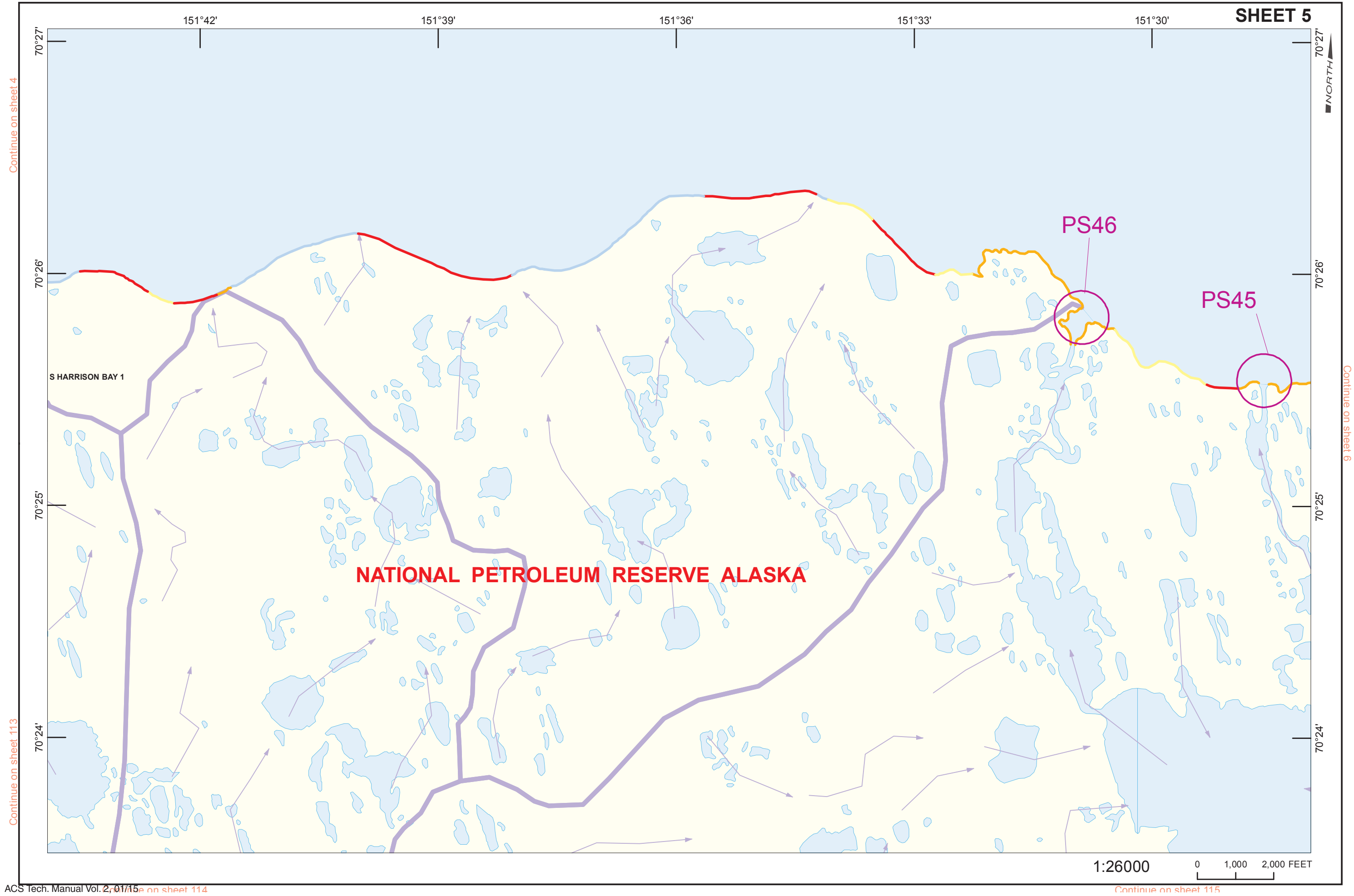
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- Extensive shoaling and high sediment transport limit or restrict navigation by sea. Water depths ranging from 2 to 3 ft restrict or preclude marine access.
- Water depths are very shallow in the nearshore areas.

COUNTERMEASURES CONSIDERATIONS

- Sand-silt beaches are very narrow (less than 20 ft wide). Bluffs are often too high for backshore access.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.





PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS38	Tingmeachsiovik River Delta	Most sensitive during open water season. Keep oil from entering river.	C-13 or C-14	300'
PS39	Tingmeachsiovik River Delta	Most sensitive during open water season. Keep oil from entering river.	C-13 or C-14	300'
PS40	Tingmeachsiovik River Delta	Most sensitive during open water season. Keep oil from entering river.	C-13 or C-14	600'
PS41	Tingmeachsiovik River Delta	Most sensitive during open water season. Keep oil from entering river.	C-13 or C-14	400'
PS44	Tidewater ponds	Most sensitive during open water season. Inundated low-lying tundra shoreline. Keep oil from entering ponds.	C-13 or C-14	800'
PS45	Stream mouth	Most sensitive during open water season. Inundated low-lying tundra shoreline. Keep oil from entering stream.	C-13 or C-14	300'

GENERAL SENSITIVITIES

- The Colville River delta (to the east) supports very high numbers of breeding waterfowl in July. Birds may also be present in the freshwater overflow during the spring before breakup elsewhere.
- The Tingmeachsiovik River and Fish Creek deltas provide important brood-rearing habitat for brant and other waterfowl species.
- Waterbirds, particularly eiders and loons, use the Tingmeachsiovik River delta for nesting, rearing, and staging from June to September.
- Plan to deploy bird-hazing systems during spring and the open-water season.
- The Tingmeachsiovik River and Fish Creek provide habitat for anadromous whitefish and resident fish.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

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AIR ACCESS*

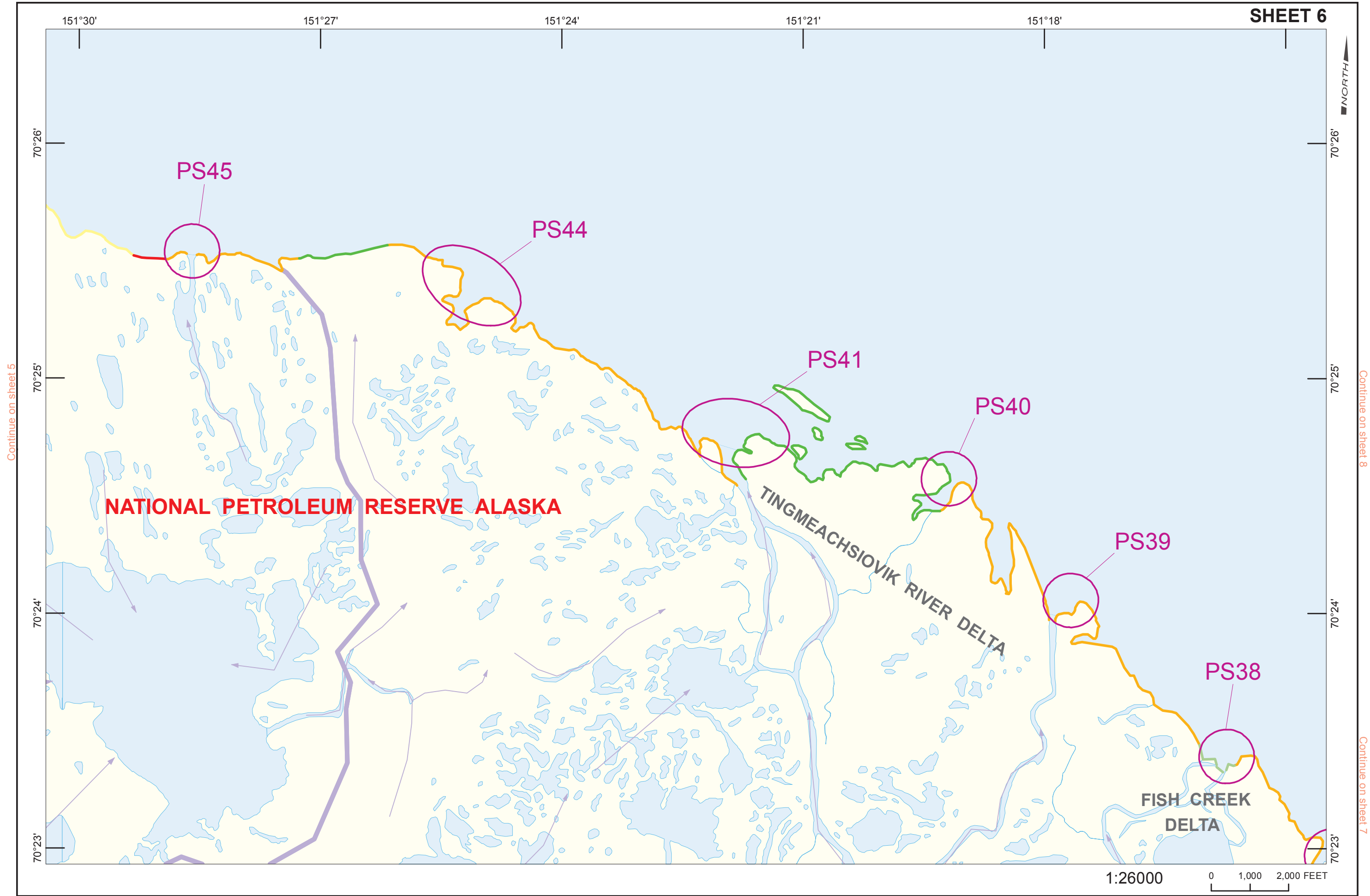
- Emergency landing for fixed-wing aircraft is available on the sand flats near the mouth of the Tingmeachsiovik River and on the sand flats west of the Nechelik Channel (Sheet 7).
- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 10 miles to the southeast. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 13 miles to the southeast. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.


VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There is severe shoaling and continuous sediment transport in the Colville River delta. Water depths are generally less than 4 ft up to 5 miles offshore.
- Water is highly turbid during summer freshet, up to 1,650 mg/l solids. This precludes visual observation of shoals and subsurface obstructions.

COUNTERMEASURES CONSIDERATIONS

- Vegetated shorelines and mud flats in the river delta have minimal load-bearing capacity. Caution should be used to minimize erosion or loss of equipment.





PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS34	Fish Creek mouth	Most sensitive during open water season. Keep oil from entering river. Important area for anadromous fish.	C-13 or C-14	600'
PS35	Fish Creek mouth	Most sensitive during open water season. Keep oil from entering river. Important area for anadromous fish.	C-13 or C-14	500'
PS36	Fish Creek mouth	Most sensitive during open water season. Keep oil from entering river. Important area for anadromous fish.	C-13 or C-14	1,000'
PS37	Fish Creek mouth	Most sensitive during open water season. Keep oil from entering river. Important area for anadromous fish.	C-13 or C-14	300'
PS38	Tingmeachsiovik River Delta	Most sensitive during open water season. Keep oil from entering river.	C-13 or C-14	300'


GENERAL SENSITIVITIES

- The area surrounding Fish Creek is a subsistence use area.
- The Colville River delta (to the east), and the Fish Creek and Tingmeachsiovik River deltas support very high numbers of nesting and brood-rearing waterfowl, waterbirds, and shorebirds from June through September. Molting birds are present in July and August.
- Birds may also be present in the freshwater overflow during the spring before breakup elsewhere.
- The Tingmeachsiovik River and Fish Creek deltas provide important brood-rearing habitat for brant and other waterfowl species.
- Plan to deploy bird-hazing systems during spring and the open-water season.
- The Tingmeachsiovik River and delta provide habitat for anadromous whitefish and resident fish.
- Fish Creek delta is an important area for anadromous fish.
- The Colville River delta is a polar bear denning area.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- Emergency landing for fixed-wing aircraft is available on the sand flats near the mouth of the Tingmeachsiovik River (Sheet 6) and on the sand flats east across the inlet from the Tingmeachsiovik River delta.
- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 7 miles southeast of the Fish Creek delta. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 13 miles southeast of the Fish Creek delta. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- Severe shoaling and continuous sediment transport occur in the Colville River delta (to the east). Water depths are generally less than 4 ft up to 5 miles offshore.
- Water is highly turbid during summer freshet, up to 1,650 mg/l solids. This precludes visual observation of shoals and subsurface obstructions.

COUNTERMEASURES CONSIDERATIONS

- Vegetated shorelines and mud flats in the river deltas have minimal load-bearing capacity. Caution should be used to minimize erosion or loss of equipment.

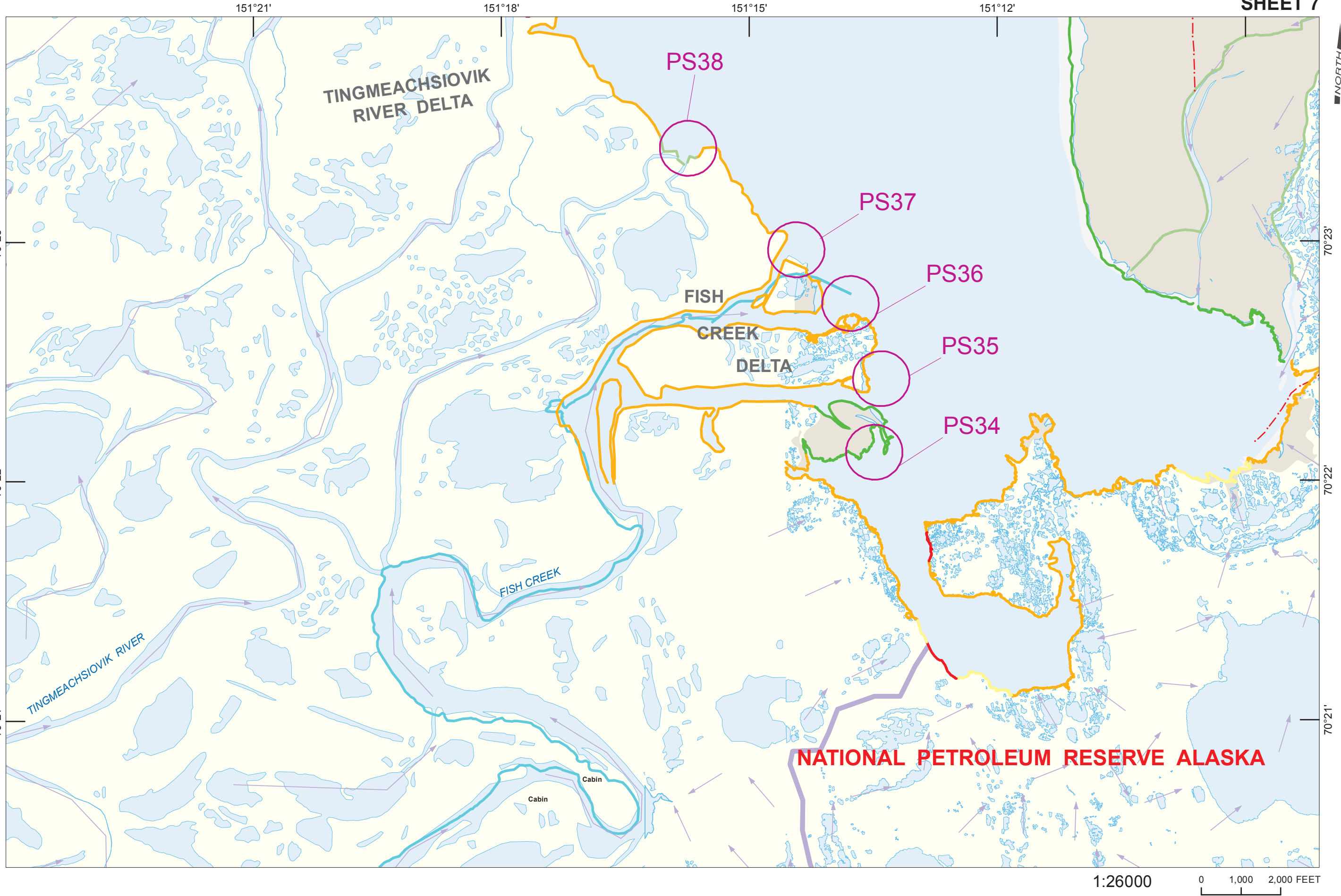
*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 115

Continue on sheet 16

Continue on sheet 20

Continue on sheet 121





PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

- Seals and fish are harvested for subsistence in the Nechelik Channel and at its mouth.
- The Colville River delta supports very high numbers of nesting and brood-rearing waterfowl, waterbirds, and shorebirds from May through September. Molting birds are present in July and August.
- Birds may also be present in the freshwater overflow during the spring before breakup elsewhere.
- The outer portion of the delta is an important migration staging area for shorebirds from July through September and a Pintail molting area in July and August.
- Spectacled Eider nest sites have been found near water in this area. Consult Wildlife Leader in the Incident Command System’s Environment Unit for an advisory regarding protection of these Spectacled Eider nest sites. The Spectacled Eider is listed as threatened by the U.S. Fish and Wildlife Service.
- Plan to deploy bird-hazing systems during spring and the open-water season.
- All waterways and waterbodies within the confines of the Colville River delta (the west bank of the Nechelik Channel to the Colville River’s easternmost bank) are considered habitat for anadromous fish.
- The Nechelik Channel is a migratory pathway for char, cisco and whitefish, and an overwintering area for a number of anadromous and marine fish.
- Polar bear dens have been found in this area. Dens may be in use from October through April.
- Spotted seals may be present July through September.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- Emergency landing for fixed-wing aircraft is available on the sand flats near the mouth of the Tingmeachsiovik River (Sheet 6) and on the sand flats west of the Nechelik Channel of the Colville River (Sheet 7).
- There is an aircraft landing strip located at the CD-3 (Sheet 12) approximately 5 miles to the east. This is a 3,000-ft gravel airstrip operated by ConocoPhillips.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 16 miles south of the mouth of Nechelik Channel. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- Severe shoaling and continuous sediment transport occur in the Colville River delta. Water depths are generally less than 4 ft up to 5 miles offshore.
- The average annual discharge rate of the Colville River is 12,000 cfs.
- Annual river-sediment discharge is 6.5 million tons (more than 300 tons/sq mi).
- Water is highly turbid during summer freshet, up to 1,650 mg/l solids. This precludes visual observation of shoals and subsurface obstructions.

COUNTERMEASURES CONSIDERATIONS

- Voluminous riverine discharge and hydrodynamic circulation will preclude almost any floating oil from contacting shoreline. Circulation will cause oil to drift either to western or eastern shores of Harrison Bay.
- Because of very low relief over extensive mud flats in the Colville River delta, oil may spread over large areas.
- Vegetated shorelines and mud flats in the Colville River delta have minimal load-bearing capacity. Caution should be used to minimize erosion or loss of equipment.

STAGING AREAS AND PRESTAGED EQUIPMENT

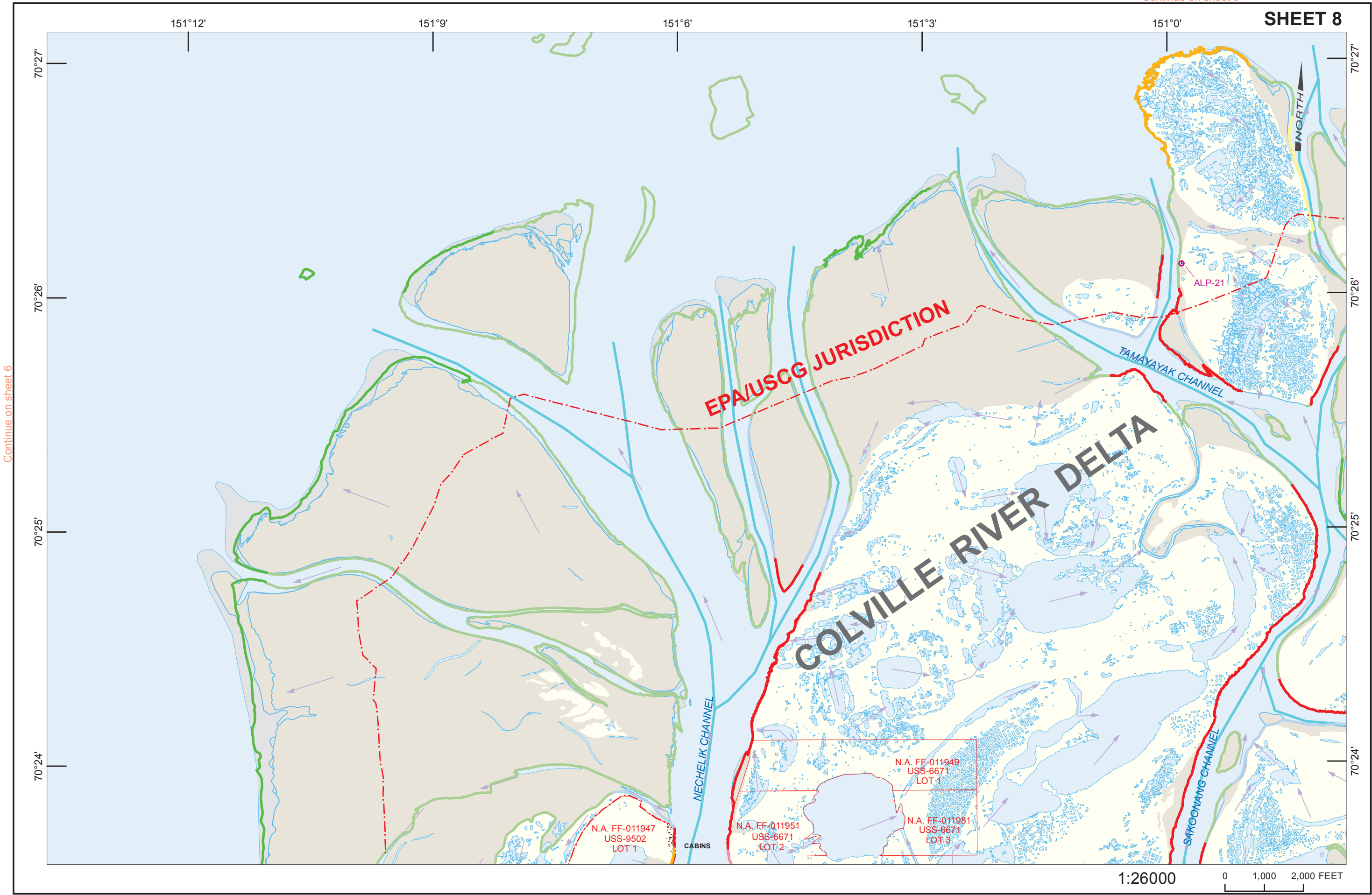
PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
ALP-21	On island at east side of mouth of Tamayayak Channel about 2.2 miles southwest of Tolaktovut Pt.	Boom Anchor System	3,000' 4	8" x 6" harbor 40-lb. Danforth system

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 6

Continue on sheet 12

Continue on sheet 17





PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

- The Colville River delta supports very high numbers of nesting and brood-rearing waterfowl, waterbirds, and shorebirds from May through September. Molting birds are present in July and August.
- Birds may also be present in the freshwater overflow during the spring before breakup elsewhere.
- The outer portion of the delta is an important migration staging area for shorebirds from July through September and a Pintail molting area in July and August.
- Spectacled Eider nest sites have been found in the western side of the Colville River delta.
- Spectacled Eider broods occasionally occupy the Tolaktovut Point area in late summer.
- Plan to deploy bird-hazing systems during spring and the open-water season.
- The Colville River is a migratory pathway for char, cisco, and whitefish. The Elaktoveach Channel is an overwintering area for several marine and anadromous fish.
- All waterways and waterbodies within the confines of the Colville River delta (the west bank of the Nechelik Channel to the Colville River’s easternmost bank) are considered habitat for anadromous fish.
- The Colville River delta is a polar bear denning area.
- Spotted seals may be present July through September.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- There is an aircraft landing strip located at the CD-3 (Sheet 12) approximately 3 miles south of Tolaktovut Point. This is a 3,000-ft gravel airstrip operated by ConocoPhillips.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 17 miles south of the coast. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- Severe shoaling and continuous sediment transport occur in the Colville River delta. Water depths are generally less than 4 ft up to 5 miles offshore.
- The average annual discharge rate of the Colville River is 12,000 cfs.
- Annual river-sediment discharge is 6.5 million tons (more than 300 tons/sq mi).
- Water is highly turbid during summer freshet, up to 1,650 mg/l solids. This precludes visual observation of shoals and subsurface obstructions.

COUNTERMEASURES CONSIDERATIONS

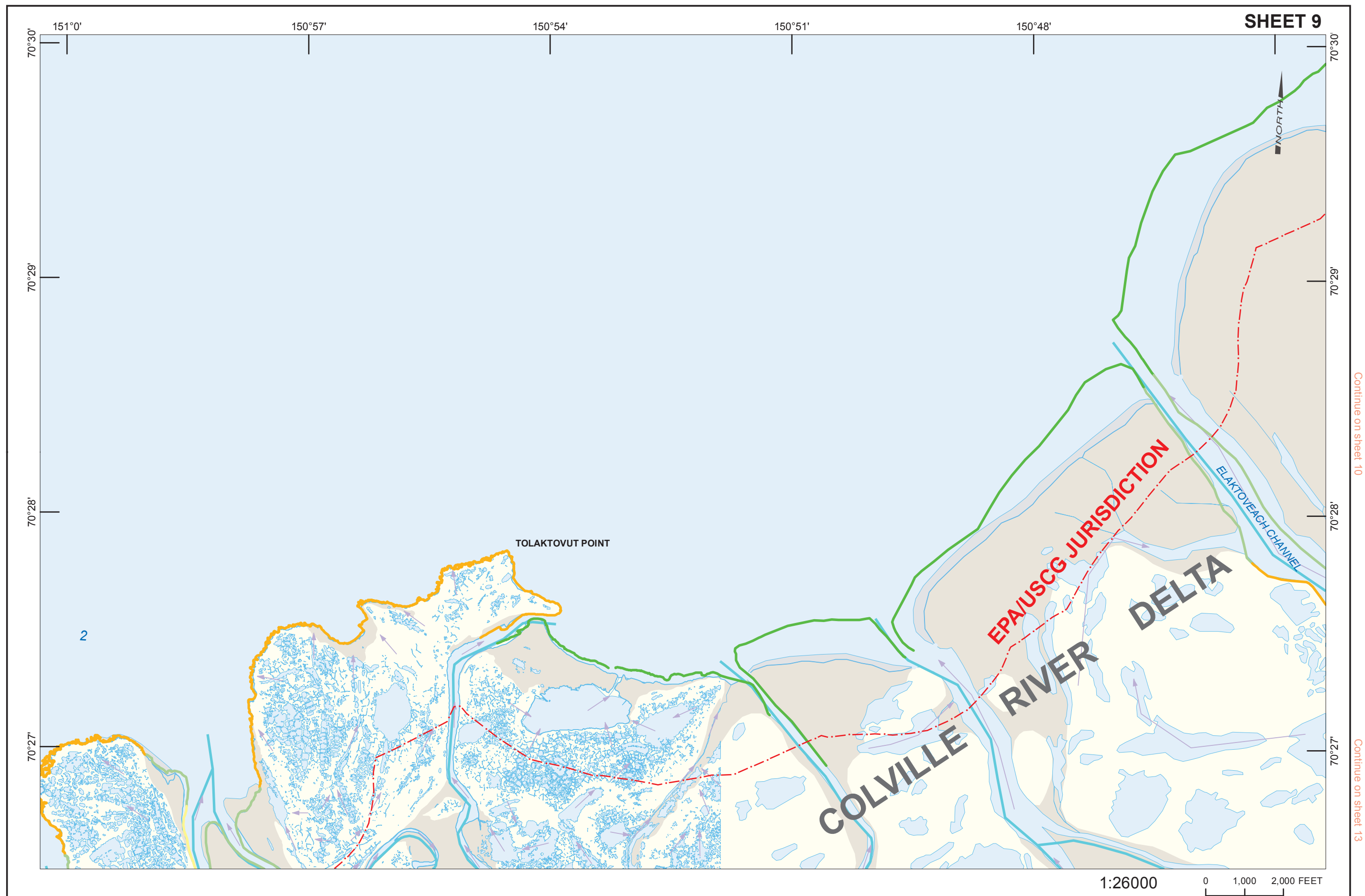
- Voluminous riverine discharge and hydrodynamic circulation will preclude almost any floating oil from contacting shoreline. Circulation will cause oil to drift either to western or eastern shores of Harrison Bay.
- Because of very low relief over extensive mud flats in the Colville River delta, oil may spread over large areas.
- Load-bearing capacity of muddy sediments on the west side of the delta is minimal.

STAGING AREAS AND PRESTAGED EQUIPMENT

- Boom is seasonally prestaged at ALP-20.

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
ALP-20 (Seasonal)	On Tamayayak Channel about 2.5 miles northeast of CD-3	Boom Anchor System	750' 2	8" x 6" river 23-lb. anchor
ALP-21	On island at east side of mouth of Tamayayak Channel about 2.2 miles southwest of Tolaktovut Pt.	Boom Anchor System	3,000' 4	8" x 6" harbor 40-lb. Danforth system

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.





PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

- The Colville River delta supports very high numbers of nesting and brood-rearing waterfowl, waterbirds, and shorebirds from May through September. Molting birds are present in July and August.
- Birds may also be present in the freshwater overflow during the spring before breakup elsewhere.
- The outer portion of the delta is an important migration staging area for shorebirds from July through September and a Pintail molting area in July and August.
- Plan to deploy bird-hazing systems during spring and the open-water season.
- The Colville River is a migratory pathway for char, cisco, and whitefish. The eastern channel is an overwintering area for several marine and anadromous fish.
- All waterways and waterbodies within the confines of the Colville River delta (the west bank of the Nechelik Channel to the Colville River's easternmost bank) are considered habitat for anadromous fish.
- The Colville River delta is a polar bear denning area.
- Spotted seals may be present July through September.

CULTURAL SITES

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AIR ACCESS*

- There is an aircraft landing strip located at the CD-3 (Sheet 12) approximately 8 miles to the southwest. This is a 3,000-ft gravel airstrip operated by ConocoPhillips.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 21 miles south of the mouth of Elaktoveach Channel. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

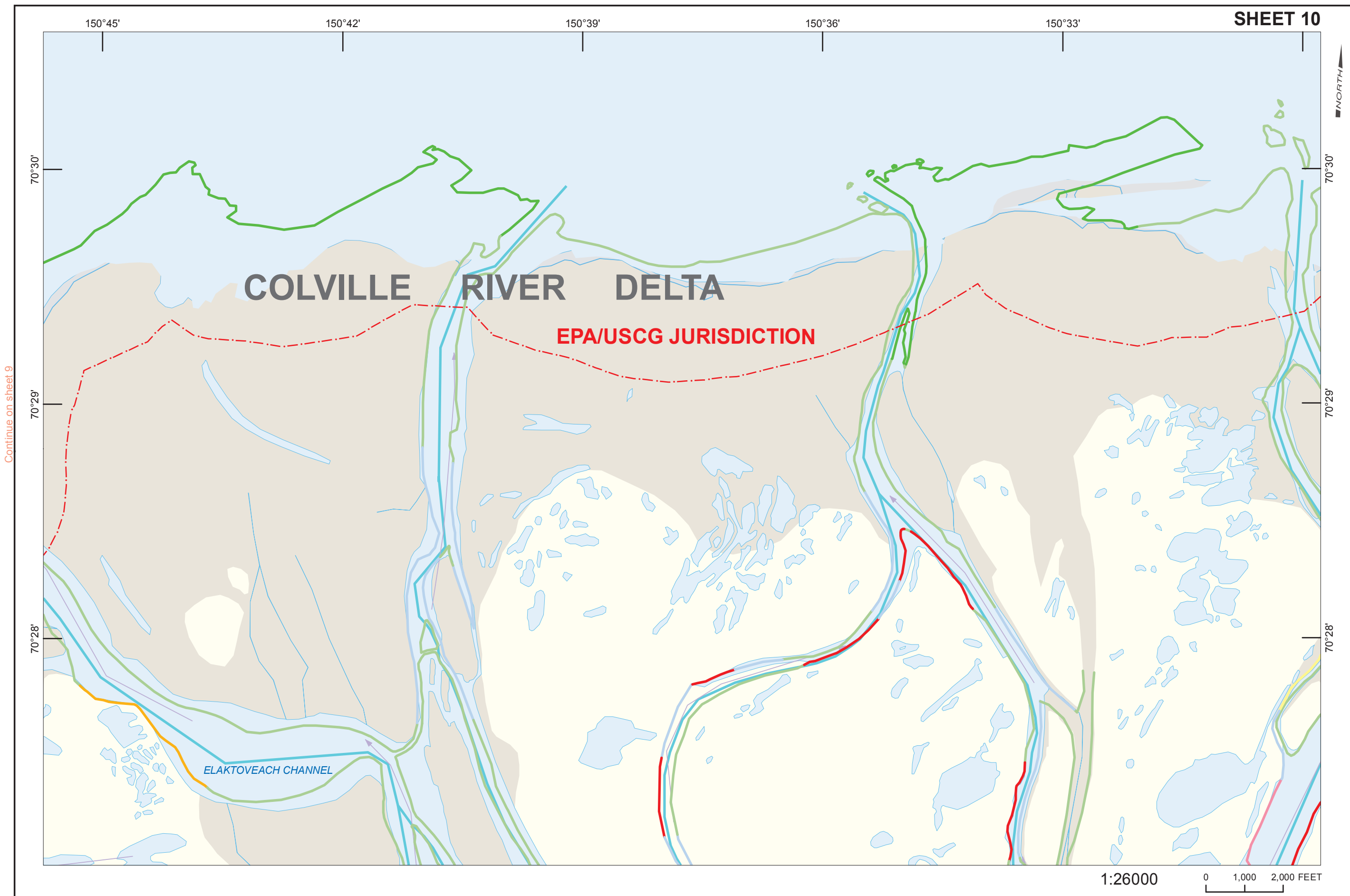
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS


- Severe shoaling and continuous sediment transport occur in the Colville River delta. Water depths are generally less than 4 ft up to 5 miles offshore.
- The average annual discharge rate of the Colville River is 12,000 cfs.
- Annual river-sediment discharge is 6.5 million tons (more than 300 tons/sq mi).
- Water is highly turbid during summer freshet, up to 1,650 mg/l solids. This precludes visual observation of shoals and subsurface obstructions.

COUNTERMEASURES CONSIDERATIONS

- Voluminous riverine discharge and hydrodynamic circulation will preclude almost any floating oil from contacting shoreline. Circulation will cause oil to drift either to western or eastern shores of Harrison Bay.
- Because of very low relief over extensive mud flats in the Colville River delta, oil may spread over large areas.
- Load-bearing capacity of muddy sediments on the west side of the delta is minimal. Sediments at the delta front become more sandy toward the eastern side and therefore more firmly packed.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.





PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

* Priority Protection Area -- The entire delta region of the Colville River is one large Priority Protection Area due to its size and numerous geographical features. On-site conditions may require the use of open water tactics to prevent oil migration into this delta.


GENERAL SENSITIVITIES

- In May and June, before breakup, the freshwater overflow on the ice in front of the Colville River delta is an important area for waterfowl and shorebirds.
- The Colville River delta supports very high numbers of nesting and brood-rearing waterfowl, waterbirds, and shorebirds from May through September. Molting birds are present in July and August.
- The outer portion of the delta is an important migration staging area for shorebirds from July through September and a Pintail molting area in July and August.
- Plan to deploy bird-hazing systems during spring and the open-water season.
- The Colville River is a migratory pathway for char, cisco, and whitefish. The eastern channel is an overwintering area for several marine and anadromous fish.
- All waterways and waterbodies within the confines of the Colville River delta (the west bank of the Nechelik Channel to the Colville River's easternmost bank) are considered habitat for anadromous fish.
- The Colville River delta is a polar bear denning area.
- Spotted seals may be present July through September.

CULTURAL SITES

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AIR ACCESS*

- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 24 miles to the southwest. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.
- There is an unmarked emergency landing strip on the east side of the Colville River delta.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

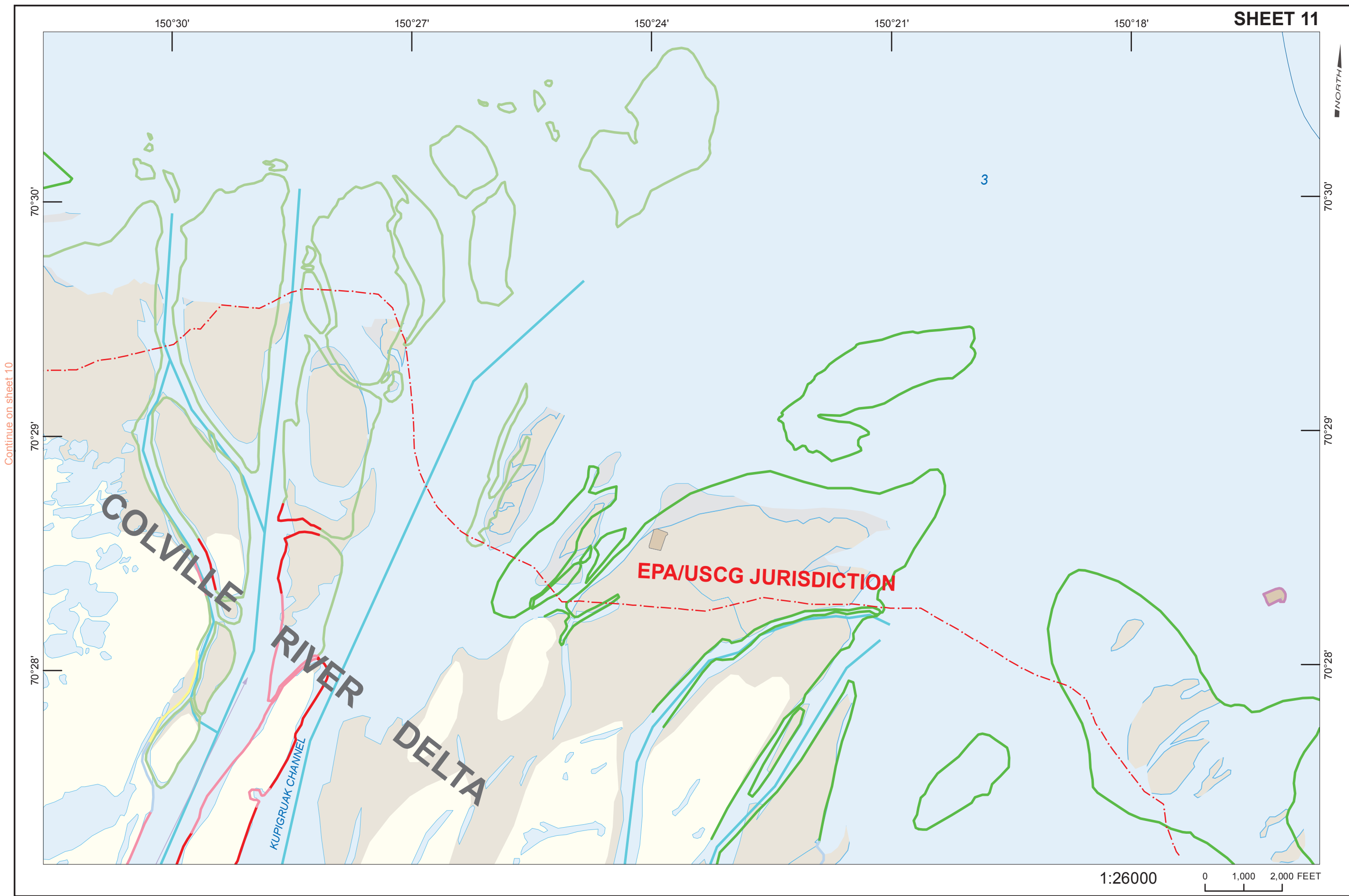
- Severe shoaling and continuous sediment transport occur in the Colville River delta. Water depths are generally less than 4 ft up to 5 miles offshore.
- The main channel of the Colville River generally maintains a 3 ft water depth and is usually navigable 70 miles upriver to the rapids below the mouth of the Anaktuvuk River.
- The average annual discharge rate of the Colville River is 12,000 cfs.
- Annual river-sediment discharge is 6.5 million tons (more than 300 tons/sq mi).
- Water is highly turbid during summer freshet, up to 1,650 mg/l solids. This precludes visual observation of shoals and subsurface obstructions.

COUNTERMEASURES CONSIDERATIONS

- Voluminous riverine discharge and hydrodynamic circulation will preclude almost any floating oil from contacting shoreline. Circulation will cause oil to drift either to western or eastern shores of Harrison Bay.
- Because of very low relief over extensive mud flats in the Colville River delta, oil may spread over large areas.
- Load-bearing capacity of muddy sediments on the west side of the delta is minimal. Sediments at the delta front become more sandy toward the eastern side and therefore more firmly packed.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

NOTE: All values given on these pages are for planning purposes only.



ACS

North Slope Spill Response

A World Class Organization

North Slope Spill Response

A World Class Organization

PRIORITY PROTECTION SITES

• There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

• In May and June, before breakup, the freshwater overflow on the ice in front of the Colville River delta is an important area for waterfowl and shorebirds.

• The Colville River delta supports very high numbers of nesting and brood-rearing waterfowl, waterbirds, and shorebirds from May through September. Molting birds are present in July and August.

• The outer portion of the delta is an important migration staging area for shorebirds from July through September and a Pintail molting area in July and August.

• Spectacled Eider nest sites have been found in the western side of the Colville River delta.

• Plan to deploy bird-hazing systems during spring and the open-water season.

• The Colville River is a migratory pathway for char, cisco, and whitefish. The eastern channel is an overwintering area for several marine and anadromous fish.

• All waterways and waterbodies within the confines of the Colville River delta (the west bank of the Nechelik Channel to the Colville River’s easternmost bank) are considered habitat for anadromous fish.

• The Colville River delta is a polar bear denning area.

• Spotted seals may be present July through September.

CULTURAL SITES

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Response Considerations

ACS

North Slope Spill Response

A World Class Organization

North Slope Spill Response

A World Class Organization

AIR ACCESS*

• There is a 3,000-ft gravel airstrip operated by ConocoPhillips at CD-3 and a 5,000-ft gravel airstrip operated by ConocoPhillips at the Alpine oil field approximately 5 miles south of CD-3.

• Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 15 miles to the south. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

• Severe shoaling and continuous sediment transport occur in the Colville River delta. Water depths are generally less than 4 ft up to 5 miles offshore.

• The average annual discharge rate of the Colville River is 12,000 cfs.

• Annual river-sediment discharge is 6.5 million tons (more than 300 tons/sq mi).

• Water is highly turbid during summer freshet, up to 1,650 mg/l solids. This precludes visual observation of shoals and subsurface obstructions.

COUNTERMEASURES CONSIDERATIONS

• Voluminous riverine discharge and hydrodynamic circulation will preclude most floating oil from shoreline contact.

• During periods of extreme storm surge, some of the bars and islands may be contaminated by oil. Vegetated areas are probably wet tundra. Caution should be exercised.

• Because of very low relief over extensive mud flats in the Colville River delta, oil may spread over large areas.

• Load-bearing capacity of muddy sediments on the west side of the delta is minimal. Sediments at the delta front become more sandy toward the eastern side and therefore more firmly packed.

STAGING AREAS AND PRESTAGED EQUIPMENT

• Boom is seasonally prestaged at ALP-20.

• Boom is seasonally predeployed in vicinity of ALP-17 and ALP-19.

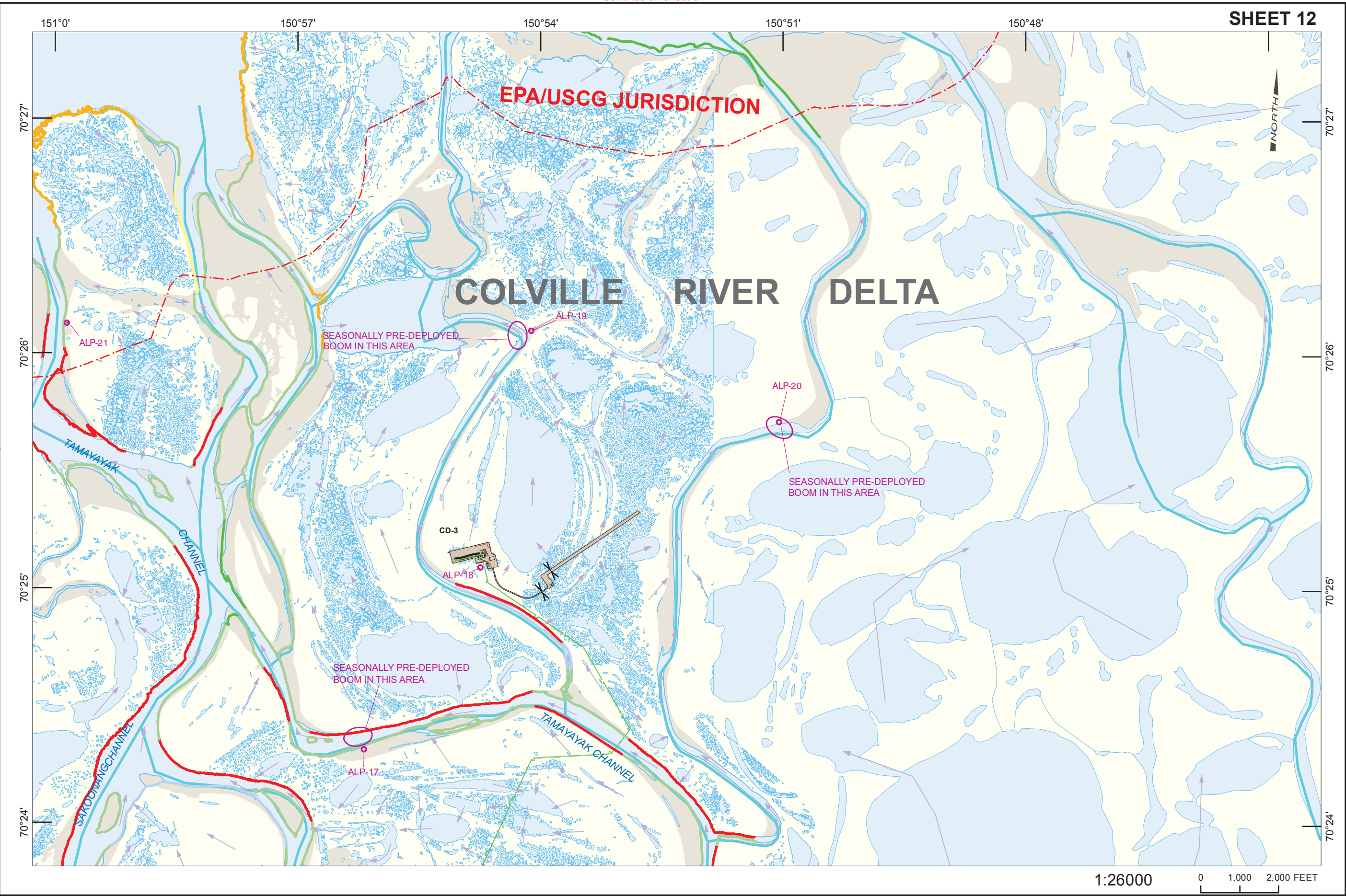
PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
ALP-17	On Tamayayak Channel about 1 mile southwest of CD-3	Boom Pump Skimmer Storage Anchor System	2,000' 1 2 8 4	8" x 6" river 3" trash diesel Drum or brush 2,500-gal. open top 40-lb. Danforth system
ALP-18	On CD-3 pad	Boom Pump Skimmer Storage Anchor System	2,000' 1 2 8 4	8" x 6" river 3" trash diesel Drum or brush 2,500-gal. open top 40-lb. Danforth system
ALP-19	On Tamayayak Channel about 1 mile downstream of CD-3	Boom Pump Skimmer Storage Anchor System	2,000' 1 2 8 4	8" x 6" river 3" trash diesel Drum or brush 2,500-gal. open top 40-lb. Danforth system
ALP-20 (Seasonal)	On Tamayayak Channel about 2.5 miles northeast of CD-3	Boom Anchor System	750' 2	8" x 6" river 23-lb. anchor
ALP-21	On island at east side of mouth of Tamayayak Channel about 2.2 miles southwest of Tolaktovut Pt.	Boom Anchor System	3,000' 4	8" x 6" river 40-lb. Danforth system


*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

NOTE: All values given on these pages are for planning purposes only.

Continue on sheet 8


Continue on sheet 13






PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.



GENERAL SENSITIVITIES


- The Colville River delta supports very high numbers of nesting and brood-rearing waterfowl, waterbirds, and shorebirds from May through September. Molting birds are present in July and August.
- Birds may also be present in the freshwater overflow during the spring before breakup elsewhere.
- The outer portion of the delta is an important migration staging area for shorebirds from July through September and a Pintail molting area in July and August.
- Plan to deploy bird-hazing systems during spring and the open-water season.
- The Colville River is a migratory pathway for char, cisco, and whitefish. The eastern channel is an overwintering area for several marine and anadromous fish.
- All waterways and waterbodies within the confines of the Colville River delta (the west bank of the Nechelik Channel to the Colville River's easternmost bank) are considered habitat for anadromous fish.
- The Colville River delta is a polar bear denning area.



CULTURAL SITES


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Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.




AIR ACCESS*

- There is an aircraft landing strip located at the CD-3 (Sheet 12) approximately 6 miles to the west. This is a 3,000-ft gravel airstrip operated by ConocoPhillips.
- There is 5,000-ft gravel airstrip operated by ConocoPhillips located at the Alpine oil field (Sheet 20) approximately 8 miles to the southwest.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 17 miles to the southwest. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.



VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

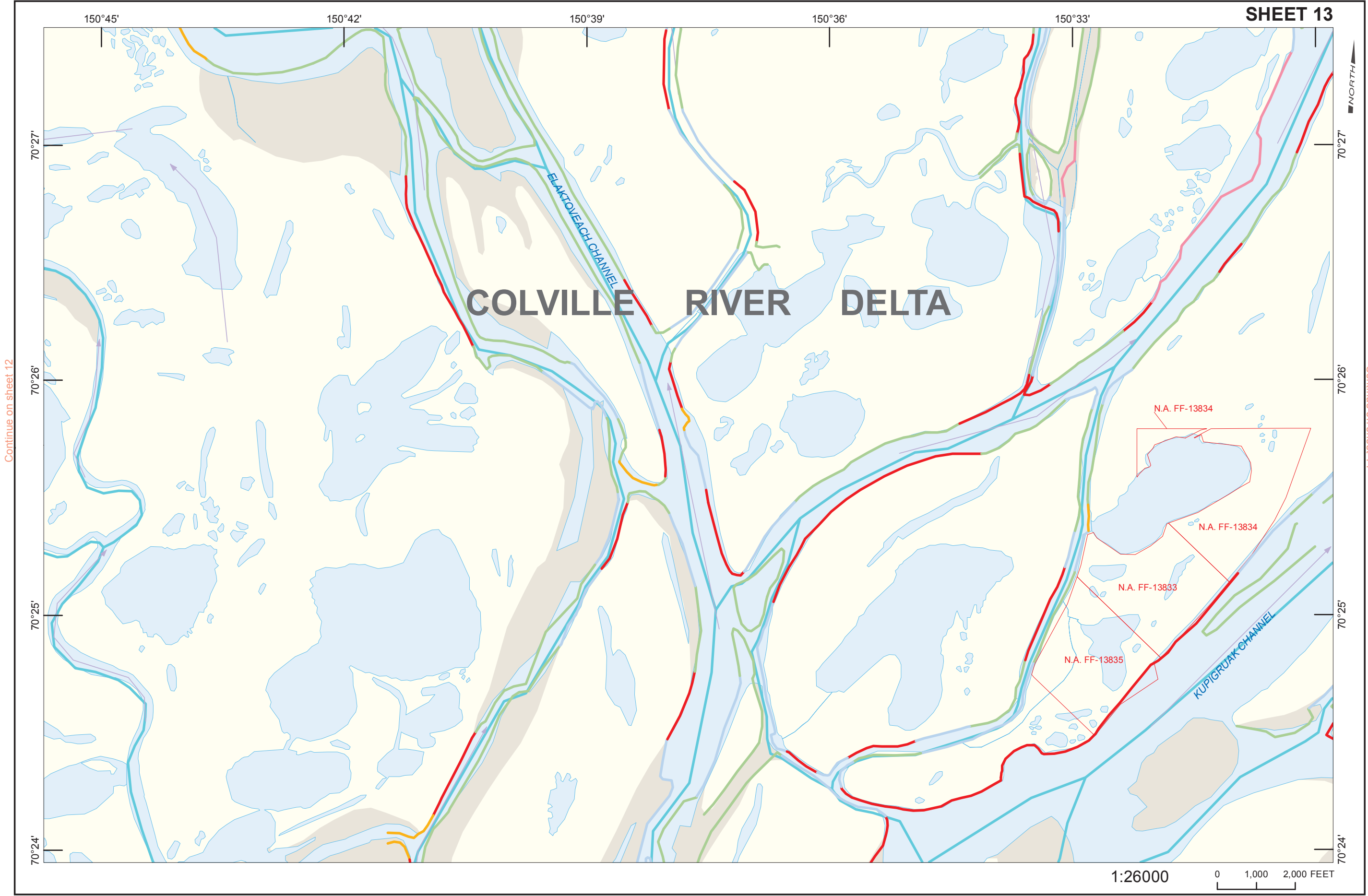
- Severe shoaling and continuous sediment transport occur in the Colville River delta. Water depths are generally less than 4 ft up to 5 miles offshore.
- The main channel of the Colville River generally maintains a 3 ft water depth and is usually navigable 70 miles upriver to the rapids below the mouth of the Anaktuvuk River.
- The average annual discharge rate of the Colville River is 12,000 cfs.
- Annual river-sediment discharge is 6.5 million tons (more than 300 tons/sq mi).
- Water is highly turbid during summer freshet, up to 1,650 mg/l solids. This precludes visual observation of shoals and subsurface obstructions.



COUNTERMEASURES CONSIDERATIONS

- During periods of extreme storm surge, some of the bars and islands may be contaminated by oil. Vegetated areas are probably wet tundra. Caution should be exercised.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.



PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS31	Colville River main channel and sea-facing island shores in its delta.	Most sensitive during open water season. Brant nesting and brood-rearing area	C-13 or C-14	8,000'
PS43	Creek mouth at eastern edge of Colville River delta.	Most sensitive during open water season. Inundated low-lying tundra shoreline. Keep oil from entering creek.	C-13 or C-14	500'

* Priority Protection Area -- The entire delta region of the Colville River is one large Priority Protection Area due to its size and numerous geographical features. On-site conditions may require the use of open water tactics to prevent oil migration into this delta.

GENERAL SENSITIVITIES

- This is a Brant nesting, brood-rearing and molting area. Birds are present from May through August.
- In May and June, before breakup, the freshwater overflow on the ice in front of the Colville River delta is an important area for waterfowl and shorebirds.
- The Colville River delta and coastal areas support very high numbers of nesting and brood-rearing waterfowl, water-birds, and shorebirds from May through September. Molting birds are present in July and August.
- The outer portion of the delta is an important migration staging area for shorebirds from July through September and a Pintail molting area in July and August.
- Plan to deploy bird-hazing systems during spring and the open-water season.
- The Colville River is a migratory pathway for char, cisco, and whitefish. The eastern channel is an overwintering area for several marine and anadromous fish.
- All waterways and waterbodies within the confines of the Colville River delta (the west bank of the Nechelik Channel to the Colville River's easternmost bank) are considered habitat for anadromous fish.
- The Colville River delta is a polar bear denning area.
- Spotted seals may be present July through September.

CULTURAL SITES

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AIR ACCESS*

- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 20 miles to the southwest. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.
- There is an emergency landing strip at Helmricks west of the main channel near the mouth. This is an unattended, 2,500-ft dirt runway, for emergency use only. The runway is soft when wet.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- Severe shoaling and continuous sediment transport occur in the Colville River delta. Water depths are generally less than 4 ft up to 5 miles offshore.
- The main channel of the Colville River generally maintains a 3 ft water depth and is usually navigable 70 miles upriver to the rapids below the mouth of the Anaktuvuk River.
- The average annual discharge rate of the Colville River is 12,000 cfs.
- Annual river-sediment discharge is 6.5 million tons (more than 300 tons/sq mi).
- Water is highly turbid during summer freshet, up to 1,650 mg/l solids. This precludes visual observation of shoals and subsurface obstructions.

COUNTERMEASURES CONSIDERATIONS

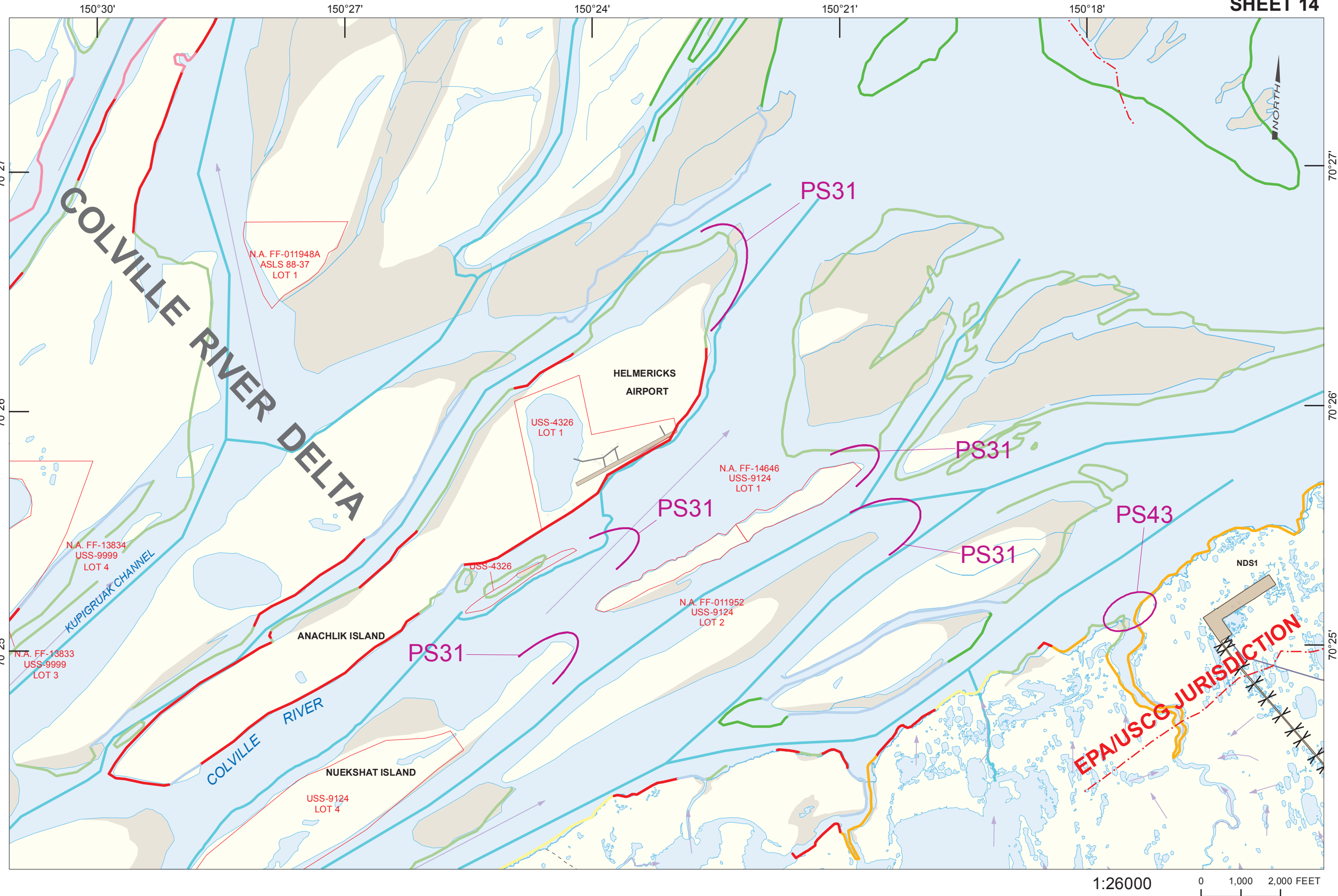
- Voluminous riverine discharge and hydrodynamic circulation will preclude almost any floating oil from contacting shoreline. Circulation will cause oil to drift either to western or eastern shores of Harrison Bay.
- Because of very low relief over extensive mud flats in the Colville River delta, oil may spread over large areas.
- Load-bearing capacity of muddy sediments on the west side of the delta is minimal. Sediments at the delta front become more sandy toward the eastern side and therefore more firmly packed.
- During periods of extreme storm surge, some of the bars and islands may be contaminated by oil. Vegetated areas are probably wet tundra. Caution should be exercised.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.


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Continue on sheet 13

Continue on sheet 15



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PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS29	Kalubik Creek mouth	Most sensitive during open water season. Creek mouth is characterized by peat shoreline or salt marsh.	C-13 or C-14	1,500'
PS42	Creek mouth west of Kalubik Creek	Most sensitive during open water season. Inundated low-lying tundra shoreline. Keep oil from entering creek.	C-13 or C-14	300'
PS43	Creek mouth at eastern edge of Colville River delta	Most sensitive during open water season. Inundated low-lying tundra shoreline. Keep oil from entering creek.	C-13 or C-14	500'

GENERAL SENSITIVITIES

- In May and June, before breakup, the freshwater overflow on the ice in front of the Colville River delta is an important area for waterfowl and shorebirds.
- The Colville River delta and coastal areas support very high numbers of nesting and brood-rearing waterfowl, water-birds, and shorebirds from May through September. Molting birds are present in July and August.
- The outer portion of the delta is an important migration staging area for shorebirds from July through September and a Pintail molting area in July and August.
- This is a Brant nesting, brood-rearing and molting area. Birds are present from May through August.
- Plan to deploy bird-hazing systems during spring and the open-water season.
- The Colville River is a migratory pathway for char, cisco, and whitefish. The eastern channel is an overwintering area for several marine and anadromous fish.
- All waterways and waterbodies within the confines of the Colville River delta (the west bank of the Nechelik Channel to the Colville River's easternmost bank) are considered habitat for anadromous fish.
- Kalubik Creek provides habitat for anadromous whitefish and char and for resident fish.
- Polar bear dens have been found in this area. Dens may be in use from October through April.
- Spotted seals may be present July through September.


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ACS Tech. Manual Vol. 2, 12/17

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Response Considerations

AIR ACCESS*

- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 25 miles southeast of the mouth of Kalubik Creek. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- Severe shoaling and continuous sediment transport occur in the Colville River delta. Water depths are generally less than 4 ft up to 5 miles offshore.
- The main channel of the Colville River generally maintains a 3 ft water depth and is usually navigable 70 miles upriver to the rapids below the mouth of the Anaktuvuk River.
- The average annual discharge rate of the Colville River is 12,000 cfs.
- Annual river-sediment discharge is 6.5 million tons (more than 300 tons/sq mi).
- Water is highly turbid during summer freshet, up to 1,650 mg/l solids. This precludes visual observation of shoals and subsurface obstructions.

COUNTERMEASURES CONSIDERATIONS

- Voluminous riverine discharge and hydrodynamic circulation will preclude almost any floating oil from contacting shoreline. Circulation will cause oil to drift either to western or eastern shores of Harrison Bay.
- Sand-silt shores are very narrow (less than 20 ft wide) and interrupted by small creek mouths and areas of thick peat deposits. Large areas of potential overwash east of Kalubik Creek may make cleanup difficult. Backshore areas are wet tundra.

*See the latest Supplement, Alaska and United States Coast Pilot for current information on air and vessel access, respectively.

NOTE: All values given on these pages are for planning purposes only.

Continue on sheet 11

Continue on sheet 39A

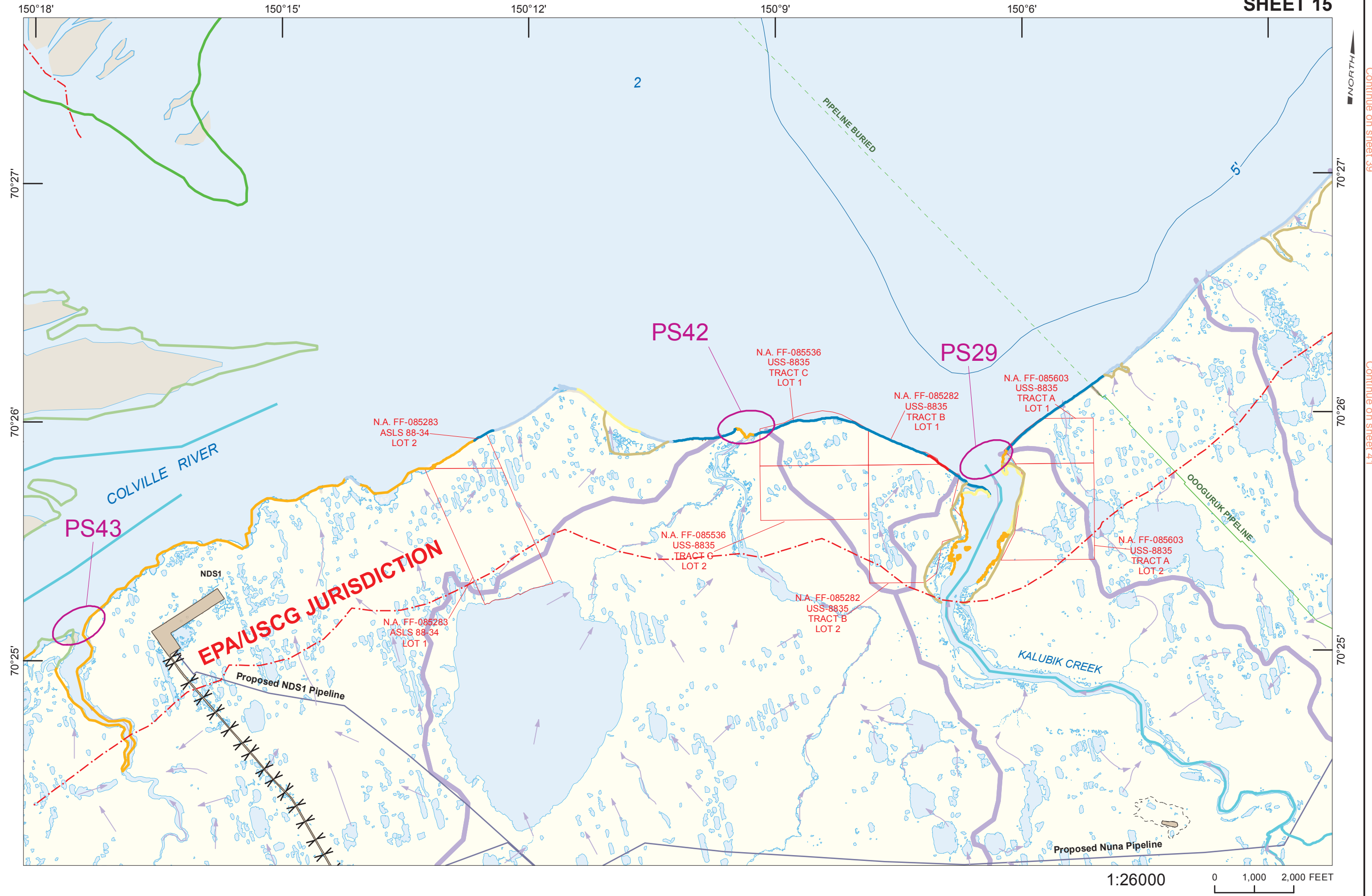
SHEET 15

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Continue on sheet 45A

ACS

Alaska Coast Spill Response

A WORLD CLASS ORGANIZATION

PRIORITY PROTECTION SITES

There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

The Colville River delta supports very high numbers of nesting and brood-rearing waterfowl, waterbirds, and shorebirds from May through September. Molting birds are present in July and August.

Birds may also be present in the freshwater overflow during the spring before breakup elsewhere.

The outer portion of the delta is an important migration staging area for shorebirds from July through September and a Pintail molting area in July and August.

Spectacled Eider nest sites have been found in the western side of the Colville River delta.

Plan to deploy bird-hazing systems during spring and the open-water season.

The Colville River is a migratory pathway for char, cisco, and whitefish. The Nechelik Channel is an overwintering area for several marine and anadromous fish.

All waterways and waterbodies within the confines of the Colville River delta (the west bank of the Nechelik Channel to the Colville River's easternmost bank) are considered habitat for anadromous fish.

Polar bear dens have been found in this area. Dens may be in use from October through April.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.

ACS Tech. Manual Vol. 2, 12/17

NOTE: All values given on these pages are for planning purposes only.

Response Considerations

ACS

Alaska Coast Spill Response

A WORLD CLASS ORGANIZATION

AIR ACCESS*

There is a 5,000-ft gravel airstrip operated by ConocoPhillips at the Alpine oil field and a 3,000-ft gravel airstrip operated by ConocoPhillips at CD-3 approximately 5 miles North of Alpine CD-1.

Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 11 miles to the south. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

Emergency landing for fixed-wing aircraft is available on the sand flats west of the Nechelik Channel.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

Water is highly turbid during summer freshet, up to 1,650 mg/l solids. This precludes visual observation of shoals and subsurface obstructions.

COUNTERMEASURES CONSIDERATIONS

During periods of extreme storm surge, some of the bars and islands may be contaminated by oil. Vegetated areas are probably wet tundra. Caution should be exercised.

Because of very low relief over extensive mud flats in the Colville River delta, oil may spread over large areas.

Load-bearing capacity of muddy sediments on the west side of the delta is minimal. Sediments at the delta front become more sandy toward the eastern side and therefore more firmly packed.

STAGING AREAS AND PRESTAGED EQUIPMENT

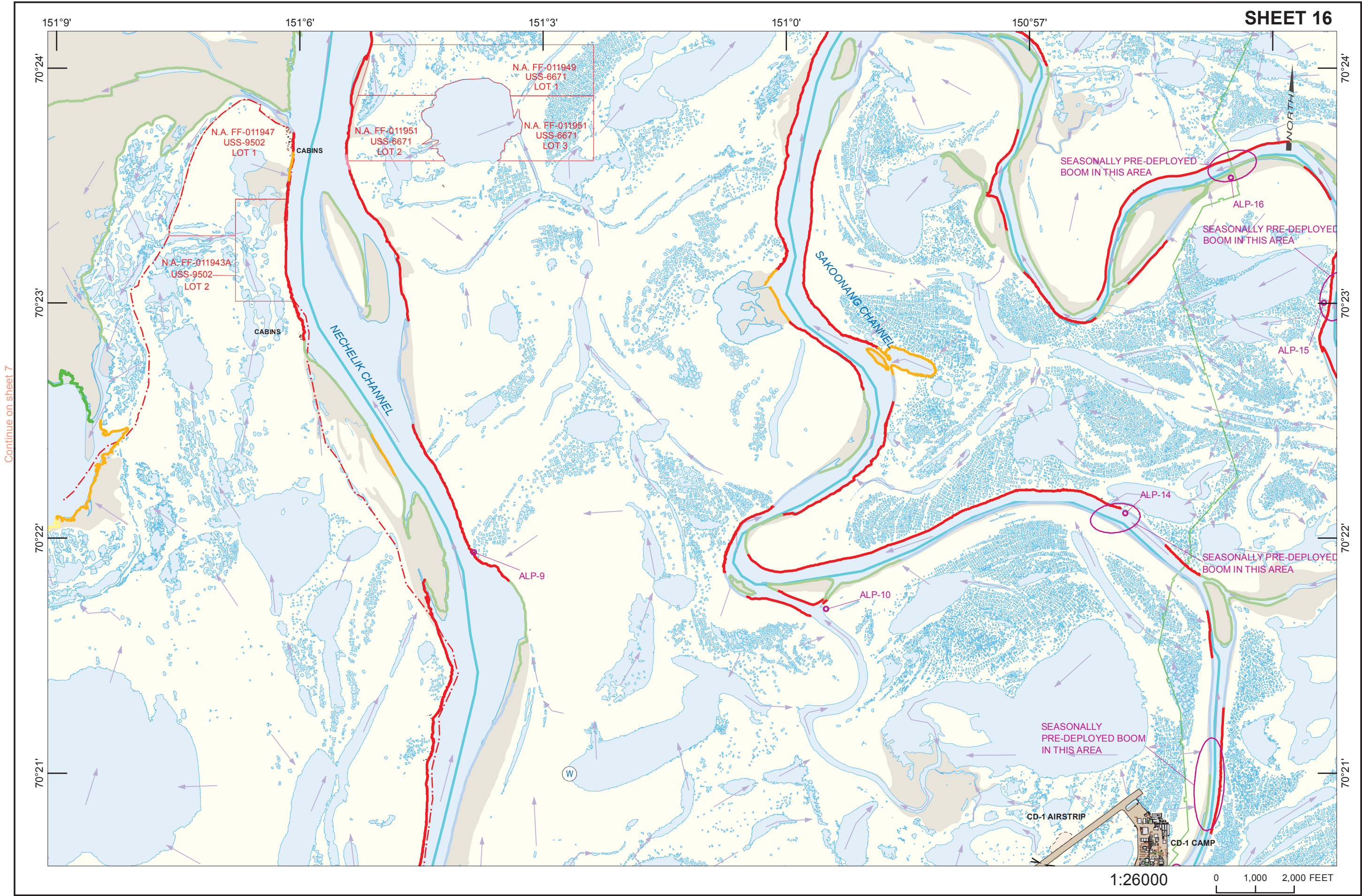
Boom is typically predeployed seasonally east of the Alpine airstrip and near ALP-14, ALP-15, and ALP-16.

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
ALP-9	East of Nechelik Channel, approx. 3.5 miles NW of Alpine production pad	Boom Pump Skimmer Storage Anchor Systems	4,350' 1 1 4 2	8" x 6" river 3" trash, diesel Drum or brush 2,500-gal. open top 40-lb. anchor system
ALP-10	South of Sakoonang Channel, approx. 1.5 miles NW of Alpine production pad	Boom Boom Pump Skimmer Storage Anchor System Anchor System	1,050' 2,000' 1 1 4 1 1	8" x 6" river 8" x 6" foam log 3" trash, diesel Drum or brush 2,500-gal. open top 14-lb. Davis system 18-lb. Davis system
ALP-14	On Sakoonang Channel	Boom Pump Skimmer Storage Anchor System	2,000' 1 2 8 4	8" x 6" river 3" trash diesel Drum or brush 2,500-gal. open top 40-lb. Danforth system
ALP-15 (Seasonal)	On Tamayayak Channel	Boom Anchor System	2,000' 4	8" x 6" river 40-lb. Danforth system
ALP-16	On Tamayayak Channel	Boom Pump Skimmer Storage Anchor System	2,000' 1 2 8 4	8" x 6" river 3" trash diesel Drum or brush 2,500-gal. open top 40-lb. Danforth system

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

NOTE: All values given on these pages are for planning purposes only.

NOTE: All values given on these pages are for planning purposes only.



Continue on sheet 7

Continue on sheet 17



PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

- The Colville River delta supports very high numbers of nesting and brood-rearing waterfowl, waterbirds, and shorebirds from May through September. Molting birds are present in July and August.
- Birds may also be present in the freshwater overflow during the spring before breakup elsewhere.
- Spectacled Eider nest sites have been found in the western side of the Colville River delta.
- Plan to deploy bird-hazing systems during spring and the open-water season.
- The Colville River is a migratory pathway for char, cisco, and whitefish. The eastern channel is an overwintering area for several marine and anadromous fish.
- All waterways and waterbodies within the confines of the Colville River delta (the west bank of the Nechelik Channel to the Colville River's easternmost bank) are considered habitat for anadromous fish.
- The Colville River delta is a polar bear denning area.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- There is an aircraft landing strip located at the CD-3 (Sheet 12) approximately 4 miles north of ALP-10. This is a 3,000-ft gravel airstrip operated by ConocoPhillips.
- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 1 mile southeast of ALP-10. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.

Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 12 miles to the south. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shoreline on this sheet.

STAGING AREAS AND PRESTAGED EQUIPMENT

- Boom is typically predeployed seasonally on Sakoonang Channel near bottom of this sheet and near ALP-14, ALP-15, ALP-16, and ALP-17.

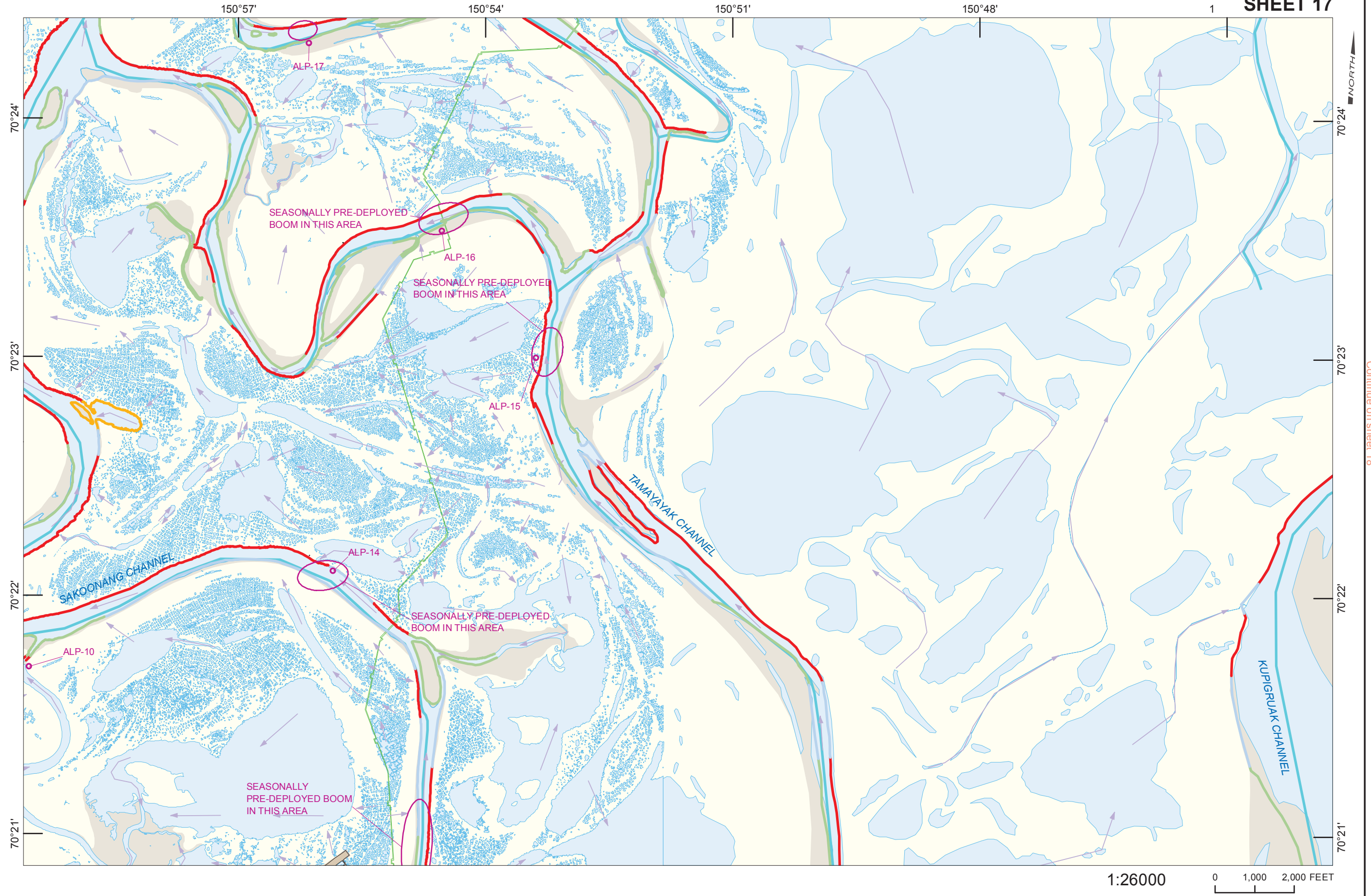
PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
ALP-10	South of Sakoonang Channel approx. 1.5 miles NW of Alpine production pad	Boom	1,050'	8" x 6" river
		Boom	2,000'	8" x 6" foam log
		Pump	1	3" trash, diesel
		Skimmer	1	Drum or brush
		Storage	4	2,500-gal. open top
		Anchor System	1	14-lb. Davis system
		Anchor System	1	18-lb. Davis system
ALP-14	On Sakoonang Channel	Boom	2,000'	8" x 6" river
		Pump	1	3" trash diesel
		Skimmer	2	Drum or brush
		Storage	8	2,500-gal. open top
		Anchor System	4	40-lb. Danforth system
ALP-15 (Seasonal)	On Tamayayak Channel	Boom	2,000'	8" x 6" river
		Pump	1	3" trash diesel
		Skimmer	2	Drum or brush
		Storage	8	2,500-gal. open top
		Anchor System	4	40-lb. Danforth system
ALP-16	On Tamayayak Channel	Boom	2,000'	8" x 6" river
		Pump	1	3" trash diesel
		Skimmer	2	Drum or brush
		Storage	8	2,500-gal. open top
		Anchor System	4	40-lb. Danforth system
ALP-17	On Tamayayak Channel about 1 mile southwest of CD-3	Boom	2,000'	8" x 6" river
		Pump	1	3" trash diesel
		Skimmer	2	Drum or brush
		Storage	8	2,500-gal. open top
		Anchor System	4	40-lb. Danforth system

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 8

Continue on sheet 16

Continue on sheet 18



Continue on sheet 20

Continue on sheet 21



PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

- The Colville River delta and coastal areas support very high numbers of nesting and brood-rearing waterfowl, water-birds, and shorebirds from May through September. Molting birds are present in July and August.
- Birds may also be present in the freshwater overflow during the spring before breakup elsewhere.
- Plan to deploy bird-hazing systems during spring and the open-water season.
- The Colville River is a migratory pathway for char, cisco, and whitefish. The eastern channel is an overwintering area for several marine and anadromous fish.
- All waterways and waterbodies within the confines of the Colville River delta (the west bank of the Nechelik Channel to the Colville River’s easternmost bank) are considered habitat for anadromous fish.
- The Miluveach River provides habitat for anadromous whitefish and char and for resident fish.
- The Colville River delta is a polar bear denning area.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- There is an aircraft landing strip located at the CD-3 (Sheet 12) approximately 9 miles northwest of Pikonik Mound. This is a 3,000-ft gravel airstrip operated by ConocoPhillips.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 13 miles to the southwest. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shoreline on this sheet.
- Main channel of the Colville River generally maintains a 3 ft water depth and is usually navigable 70 miles upriver to the rapids below the mouth of the Anaktuvuk River.

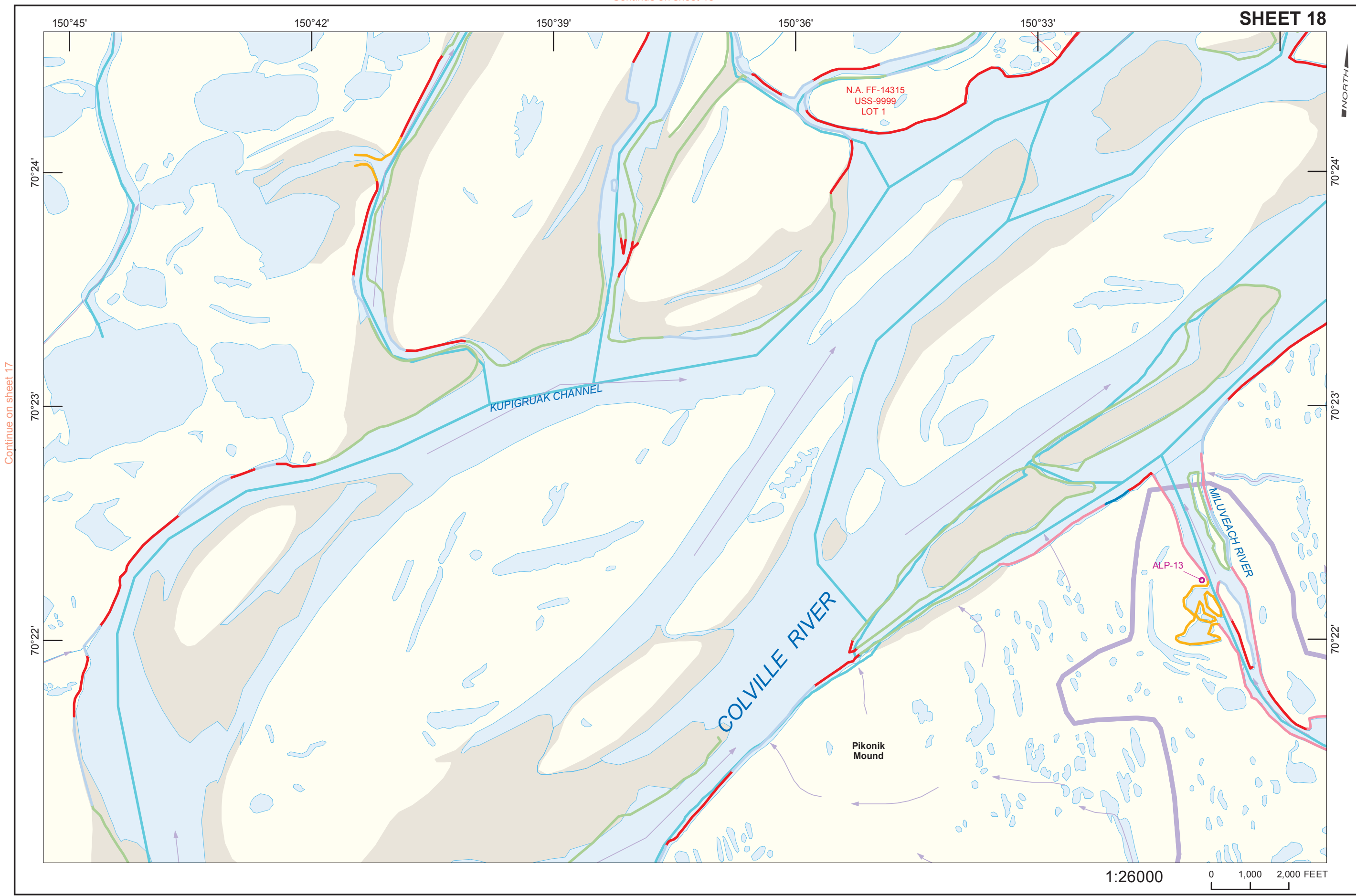
COUNTERMEASURES CONSIDERATIONS

- Voluminous riverine discharge and hydrodynamic circulation will preclude almost any floating oil from contacting shoreline.
- During periods of extreme storm surge, some of the bars and islands may be contaminated by oil. Vegetated areas are probably wet tundra. Caution should be exercised.

STAGING AREAS AND PRESTAGED EQUIPMENT

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
ALP-13	On west bank of Miluveach River south of confluence with Colville River	Boom Anchor Systems	750' 2	8" x 6" river

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.



Continue on sheet 17

Continue on sheet 19

Continue on sheet 21

Continue on sheet 21A



PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

- The Colville River delta and coastal areas support very high numbers of nesting and brood-rearing waterfowl, water-birds, and shorebirds from May through September. Molting birds are present in July and August.
- Birds may also be present in the freshwater overflow during the spring before breakup elsewhere.
- This is a Brant nesting, brood-rearing and molting area. Birds are present from May through August.
- Plan to deploy bird-hazing systems during spring and the open-water season.
- The Colville River is a migratory pathway for char, cisco, and whitefish. The eastern channel is an overwintering area for several marine and anadromous fish.
- All waterways and waterbodies within the confines of the Colville River delta (the west bank of the Nechelik Channel to the Colville River's easternmost bank) are considered habitat for anadromous fish.
- The Miluveach River provides habitat for anadromous whitefish and char and for resident fish.
- The Colville River delta is a polar bear denning area.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 18 miles to the southwest. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shoreline on this sheet.
- Main channel of the Colville River generally maintains a 3 ft water depth and is usually navigable 70 miles upriver to the rapids below the mouth of the Anaktuvuk River.

COUNTERMEASURES CONSIDERATIONS

- Voluminous riverine discharge and hydrodynamic circulation will preclude almost any floating oil from contacting shoreline.
- During periods of extreme storm surge, some of the bars and islands may be contaminated by oil. Vegetated areas are probably wet tundra. Caution should be exercised.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 14

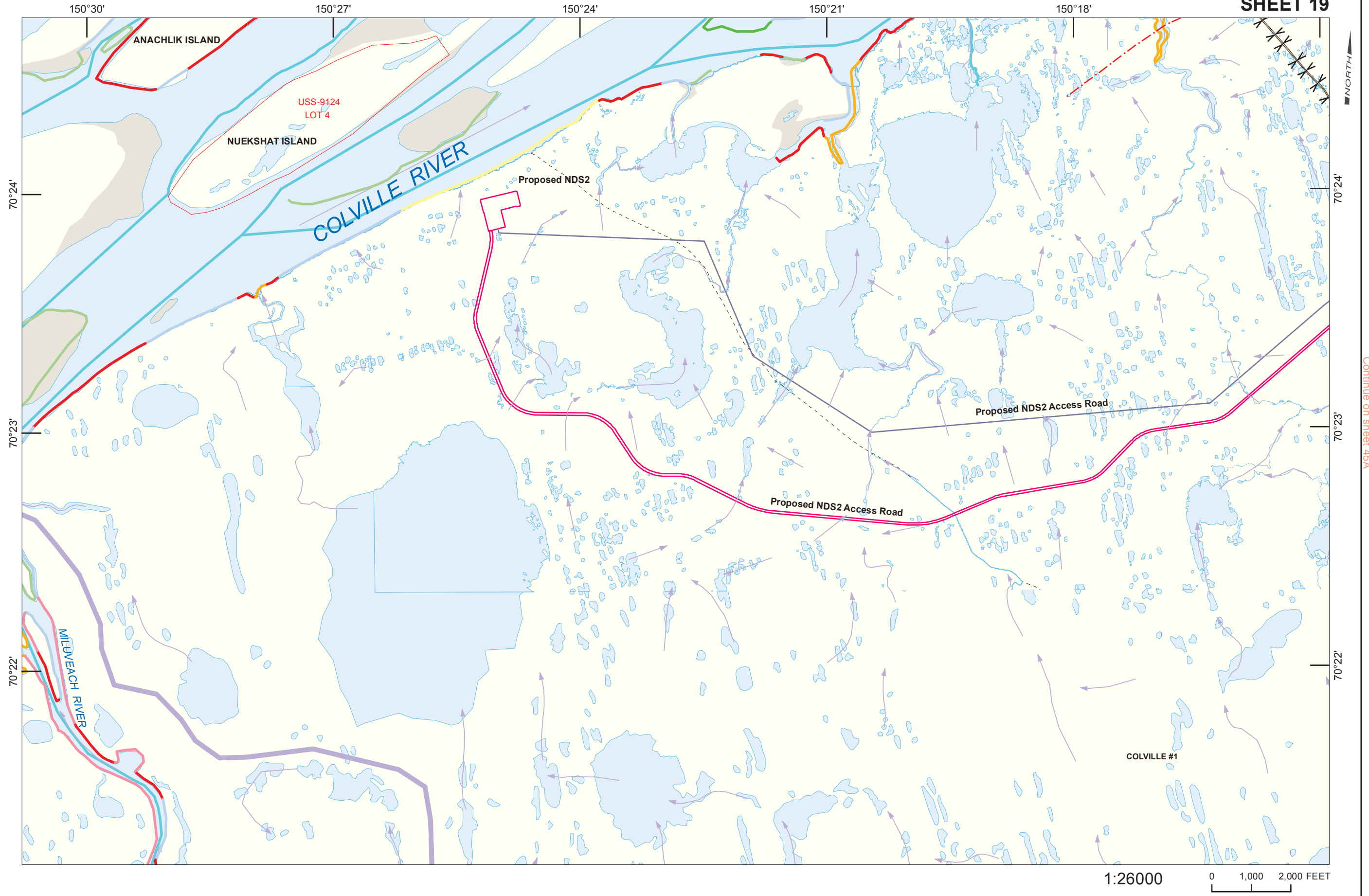
Continue on sheet 15

SHEET 19

Continue on sheet 13

Continue on sheet 18

Continue on sheet 45A



Continue on sheet 21A

Continue on sheet 49A

ACS

ALASKA COAST GUARD

NORTH SLOPE SPILL RESPONSE

A WORLD CLASS ORGANIZATION

PRIORITY PROTECTION SITES

There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

The Colville River delta supports very high numbers of nesting and brood-rearing waterfowl, waterbirds, and shorebirds from May through September. Molting birds are present in July and August.

Birds may also be present in the freshwater overflow during the spring before breakup elsewhere.

Spectacled Eider nest sites have been found near water in this area. Consult Wildlife Leader in the Incident Command System's Environment Unit for an advisory regarding protection of these Spectacled Eider nest sites. The Spectacled Eider is listed as threatened by the U.S. Fish and Wildlife Service.

Plan to deploy bird-hazing systems during spring and the open-water season.

The Colville River is a migratory pathway for char, cisco, and whitefish. The Nechelik Channel is an overwintering area for several marine and anadromous fish.

All waterways and waterbodies within the confines of the Colville River delta (the west bank of the Nechelik Channel to the Colville River's easternmost bank) are considered habitat for anadromous fish.

The Colville River delta is a polar bear denning area.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.

AIR ACCESS*

There is a 5,000-ft gravel airstrip operated by ConocoPhillips located at the Alpine oil field.

Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 11 miles to the south. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

There are no marine waters or shoreline on this sheet.

There is a boat launch on the east side of the Alpine production pad.

COUNTERMEASURES CONSIDERATIONS

Vegetated shorelines in the Colville River delta have minimal load-bearing capacity. Caution should be used to minimize erosion or loss of equipment.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Response Considerations

ACS

ALASKA COAST GUARD

NORTH SLOPE SPILL RESPONSE

A WORLD CLASS ORGANIZATION

STAGING AREAS AND PRESTAGED EQUIPMENT

Boom is typically predeployed seasonally at the inlet from Nanuk Lake to Nechelik Channel.

Boom is typically predeployed at four locations on Sakoonang Channel:

— Southeast of the CD-1 production pad,

— South of the CD-1 production pad,

— East of the CD-1 production pad, and

— East of the CD-1 airstrip.

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QTY	TYPE
CD-1	East-southeast of the airstrip	Vessel Vessel Vessel Vessel Vessel Vessel Skimmer Skimmer Skimmer Skimmer Skimmer Skimmer Boom Boom Boom Storage Storage Storage Storage Storage Storage Storage Storage Storage Storage	5 2 2 4 1 1 3 1 2 3 3 1 600' 5400' 1800' 3 5 5 2 1 11 4 5	14' 19' (airboat) 20/21' 22' (Airboat) 26' 28' Drum/Brush Grooved Drum Rope Mop Manta Ray Brush Disc 6" x 4" Delta Boom 8" x 6" Delta Boom Shore/Tidal Seal Bladder @ 500 gal each Bladder (non-towable) @ 5000 gal each Folding Tank @ 600 gal each Folding Tank @ 1000 gal each Folding Tank @ 1500 gal each Folding Tank @ 3000 gal each Fast Tank @ 2400 gal each Open Top Satchel Tank @ 2500 gal each
CC-1	West of Nigliagvik Channel and approx. 0.5 miles north-east of Kuupik Pad	Boom	300"	8" x 6" river
CC-2	West of Nechelik (Nigliq) Channel and approx. 2 miles northeast of Kuupik Pad	Boom	300"	8" x 6" river
CC-3	West of Nechelik (Nigliq) Channel and approx. 2 miles east of Kuupik Pad	Boom	300"	8" x 6" river
NK-4	East of Nechelik (Nigliq) Channel and approx. 2.5 miles west of CD-1 production pad	Boom	1500"	8" x 6" river
SK-13	East of Sakoonang Channel and approx. 0.5 miles south-east of CD-1 production pad	Boom	4,000'	8" x 6" river

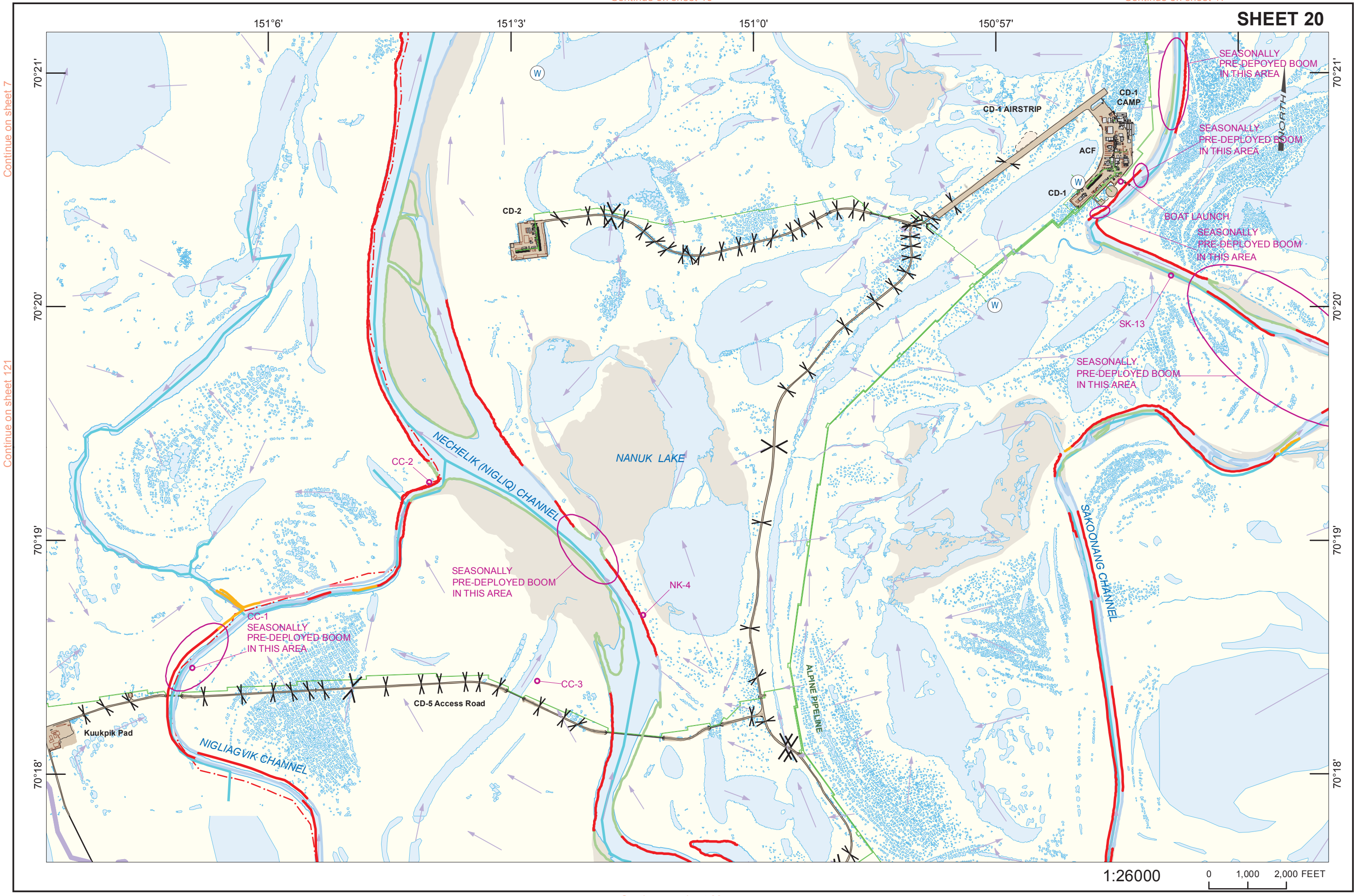
NOTE: All values given on these pages are for planning purposes only.

Continue on sheet 7

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Continue on sheet 21

Continue on sheet 23





- ## GENERAL SENSITIVITIES

- ## CULTURAL SITES

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



- ## VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- ## COUNTERMEASURES CONSIDERATIONS

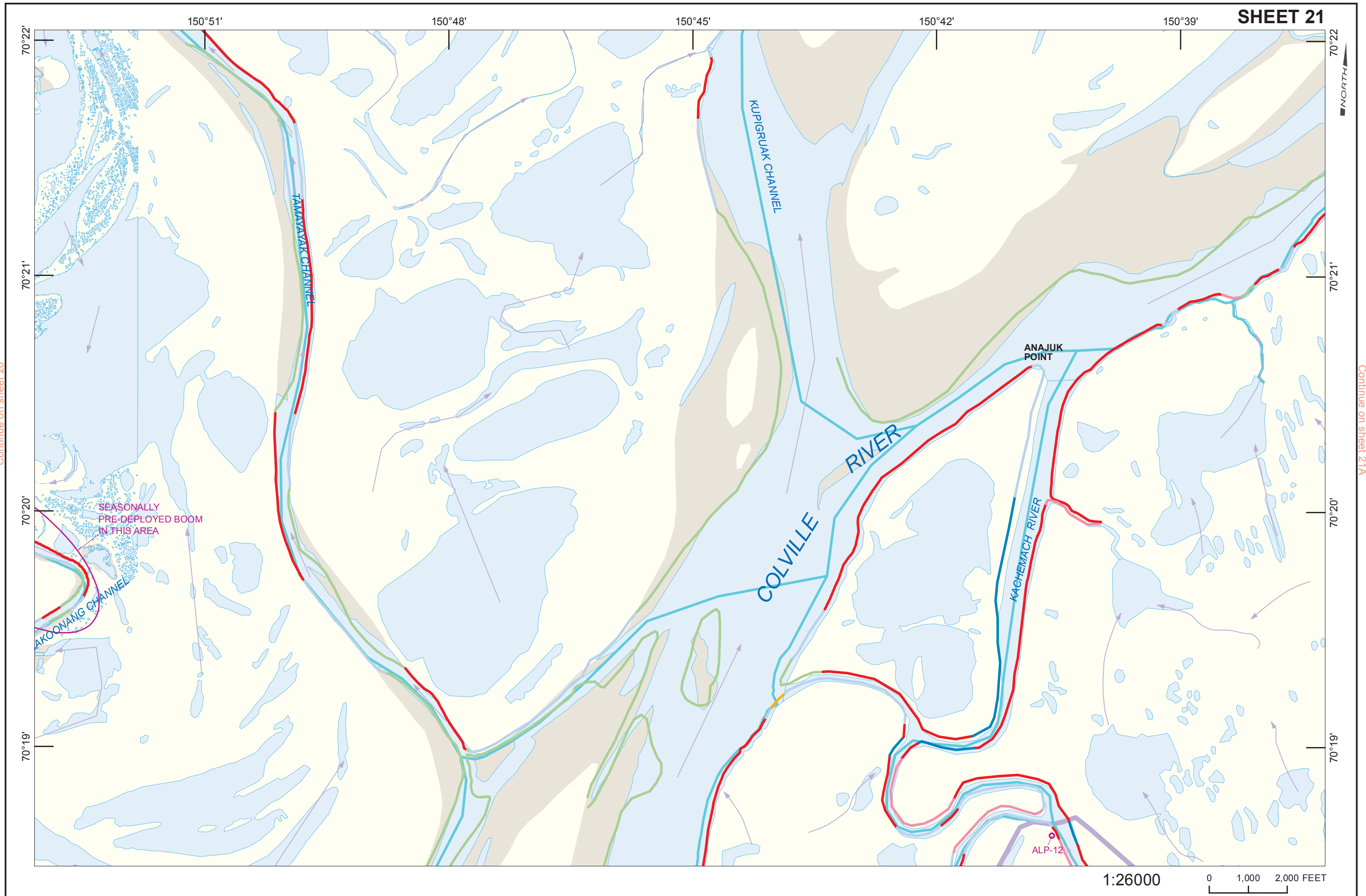
- ## STAGING AREAS AND PRESTAGED EQUIPMENT

- | PRESTAGED EQUIP. AREA | LOCATION | ITEM | QUANTITY | TYPE |
|-----------------------|--|-------------|-----------|--------------------------------|
| ALP-12 | West bank of Kachemach River above three finger fork | Boom Anchor | 750'
2 | 8" x 6" river
23-lb. anchor |

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 20

Continue on sheet 21A





PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

- The Colville River delta and coastal areas support very high numbers of nesting and brood-rearing waterfowl, water-birds, and shorebirds from May through September. Molting birds are present in July and August.
- Birds may also be present in the freshwater overflow during the spring before breakup elsewhere.
- This is a Brant nesting, brood-rearing and molting area. Birds are present from May through August.
- Plan to deploy bird-hazing systems during spring and the open-water season.
- The Colville River is a migratory pathway for char, cisco, and whitefish. The eastern channel is an overwintering area for several marine and anadromous fish.
- All waterways and waterbodies within the confines of the Colville River delta (the west bank of the Nechelik Channel to the Colville River's easternmost bank) are considered habitat for anadromous fish.
- The Miluveach River provides habitat for anadromous whitefish and char and for resident fish.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 14 miles to the southwest. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shoreline on this sheet.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 18

Continue on sheet 19

SHEET 21A

Continue on sheet 21

Continue on sheet 49A



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Continue on sheet 23A

Continue on sheet 23B



PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

- The Colville River delta supports very high numbers of nesting and brood-rearing waterfowl, waterbirds, and shorebirds from May through September. Molting birds are present in July and August.
- Birds may also be present in the freshwater overflow during the spring before breakup elsewhere.
- Plan to deploy bird-hazing systems during spring and the open-water season.
- The Colville River is a migratory pathway for char, cisco, and whitefish. The eastern channel is an overwintering area for several marine and anadromous fish.
- All waterways and waterbodies within the confines of the Colville River delta (the west bank of the Nechelik Channel to the Colville River’s easternmost bank) are considered habitat for anadromous fish.
- The Colville River delta is a polar bear denning area.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 8 miles north of ALP-5. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 4 miles to the south. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shoreline on this sheet.

COUNTERMEASURES CONSIDERATIONS

- Vegetated shorelines in the Colville River delta have minimal load-bearing capacity. Caution should be used to minimize erosion or loss of equipment.

STAGING AREAS AND PRESTAGED EQUIPMENT

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
ALP-5	On west bank of Sakoonang Channel at approx. latitude 70° 17'	Boom Pump Skimmer Storage Anchor Systems	1,050' 1	8" x 6" river 3" trash, diesel Drum or brush 2,500-gal. open top 18-lb. Davis system

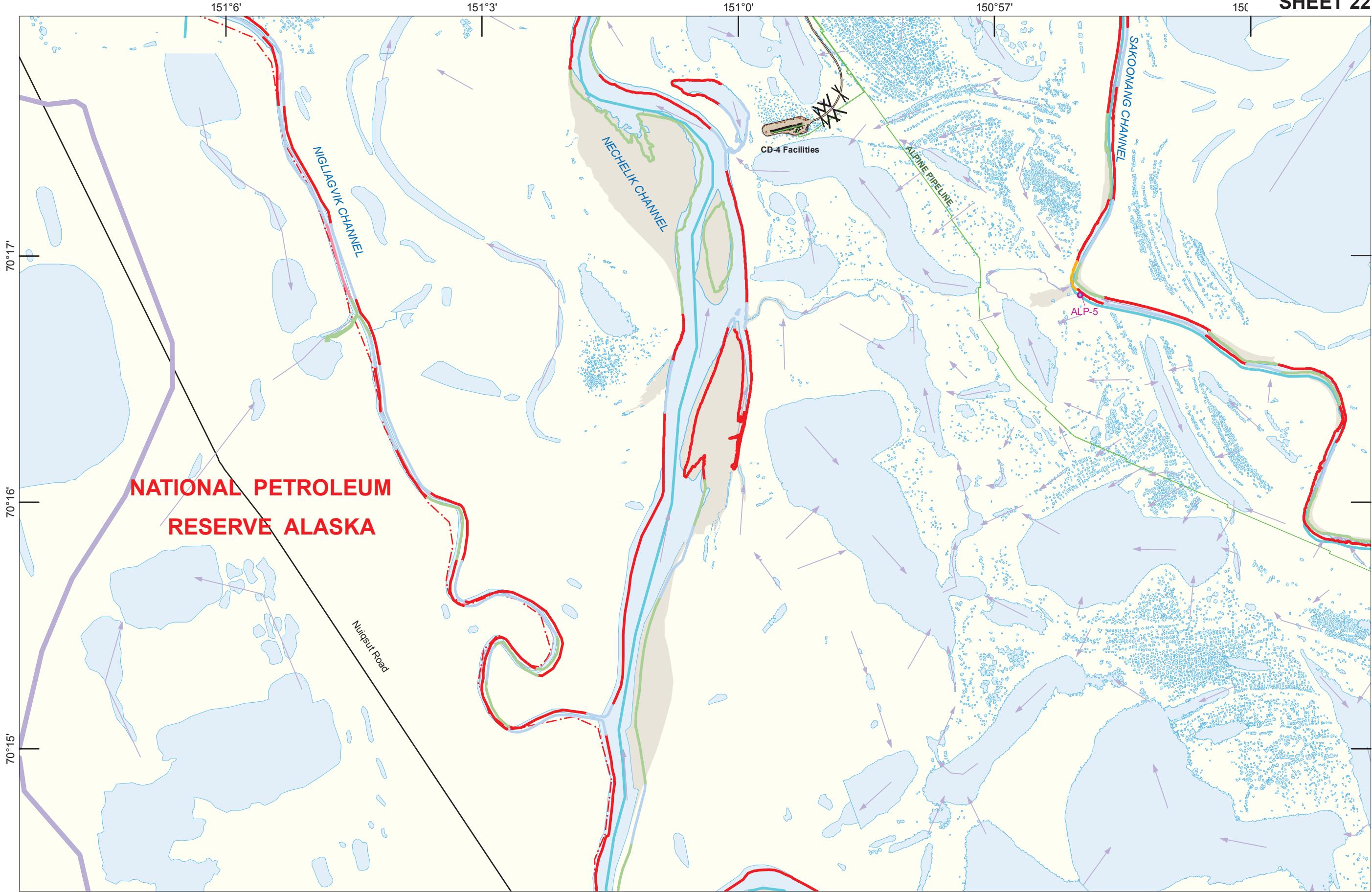
*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 20

Continue on sheet 23

Continue on sheet 25

Continue on sheet 126



1:26000

0 1,000 2,000 FEET

Continue on sheet 176

Continue on sheet 24



PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- The Colville River delta supports very high numbers of nesting and brood-rearing waterfowl, waterbirds, and shorebirds from May through September. Molting birds are present in July and August.
- Birds may also be present in the freshwater overflow during the spring before breakup elsewhere.
- Plan to deploy bird-hazing systems during spring and the open-water season.
- The Colville River is a migratory pathway for char, cisco, and whitefish. The eastern channel is an overwintering area for several marine and anadromous fish.
- All waterways and waterbodies within the confines of the Colville River delta (the west bank of the Nechelik Channel to the Colville River's easternmost bank) are considered habitat for anadromous fish.
- The Kachemach River provides habitat for anadromous whitefish and for resident fish.
- The Colville River delta is a polar bear denning area.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 8 miles north of ALP-5. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 8 miles to the southwest. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shoreline on this sheet.
- Main channel of the Colville River generally maintains a 3 ft water depth and is usually navigable 70 miles upriver to the rapids below the mouth of the Anaktuvuk River.

COUNTERMEASURES CONSIDERATIONS

- Vegetated shorelines in the Colville River delta have minimal load-bearing capacity. Caution should be used to minimize erosion or loss of equipment.

STAGING AREAS AND PRESTAGED EQUIPMENT

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
ALP-5	On west bank of Sakoonang Channel at approx. latitude 70° 17'	Boom Pump Skimmer Storage Anchor Systems	1,050' 1	8" x 6" river 3" trash, diesel Drum or brush 2,500-gal. open top 18-lb. Davis system
ALP-12	West bank of Kachemach River above three finger fork	Boom Anchor	750' 2	8" x 6" river 23-lb. anchor

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 20

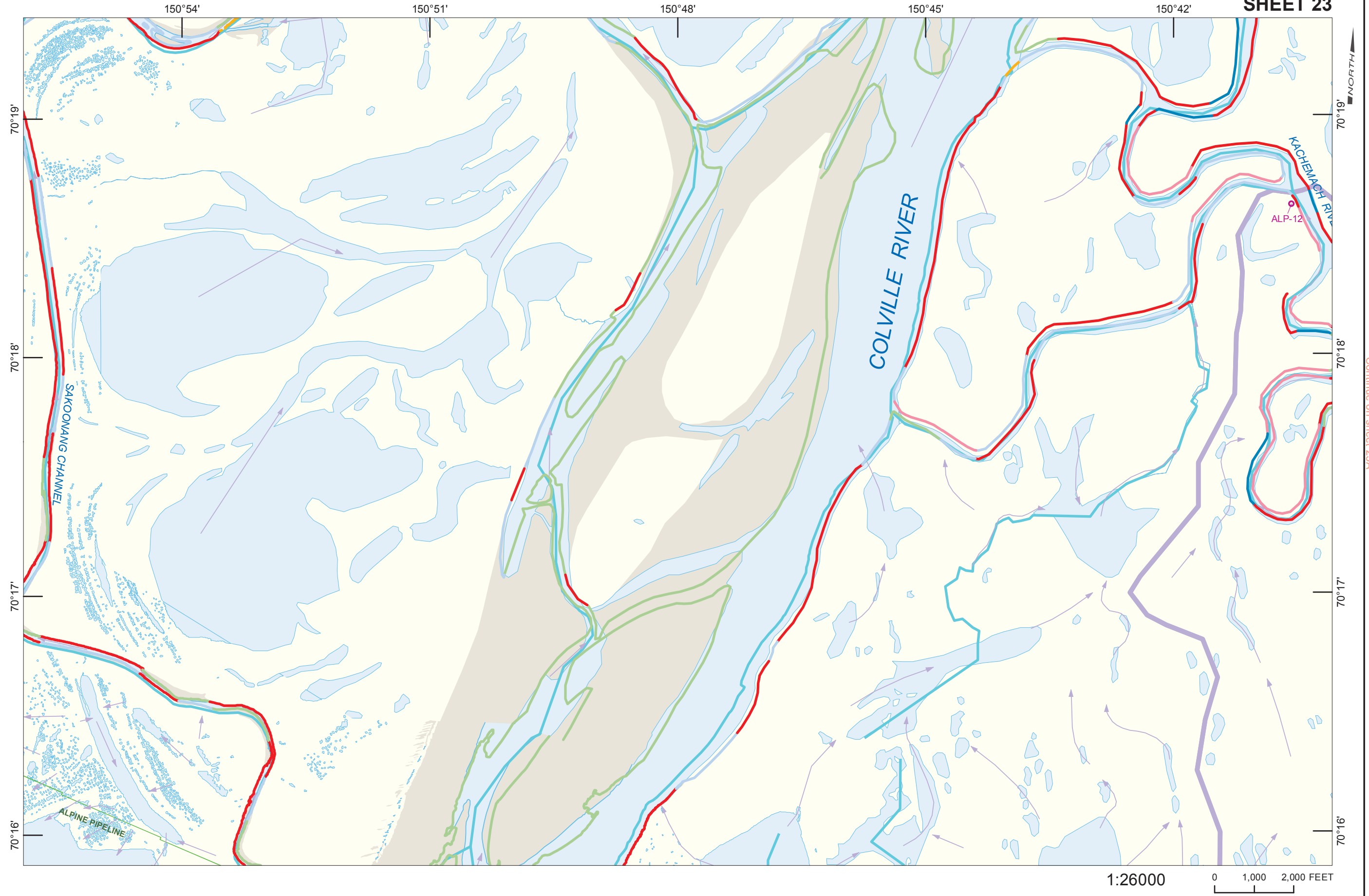
Continue on sheet 21

SHEET 23

Continue on sheet 20

Continue on sheet 22

Continue on sheet 23A



Continue on sheet 25



PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

- This is a Brant nesting, brood-rearing and molting area. Birds are present from May through August.
- Plan to deploy bird-hazing systems during spring and the open-water season.
- The Kachemach River provides habitat for anadromous whitefish and for resident fish.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

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AIR ACCESS*

- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 11 miles to the southwest. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shoreline on this sheet

STAGING AREAS AND PRESTAGED EQUIPMENT

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
ALP-12	West bank of Kachemach River above three finger fork	Boom Anchor	750' 2	8" x 6" river 23-lb. anchor

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 21

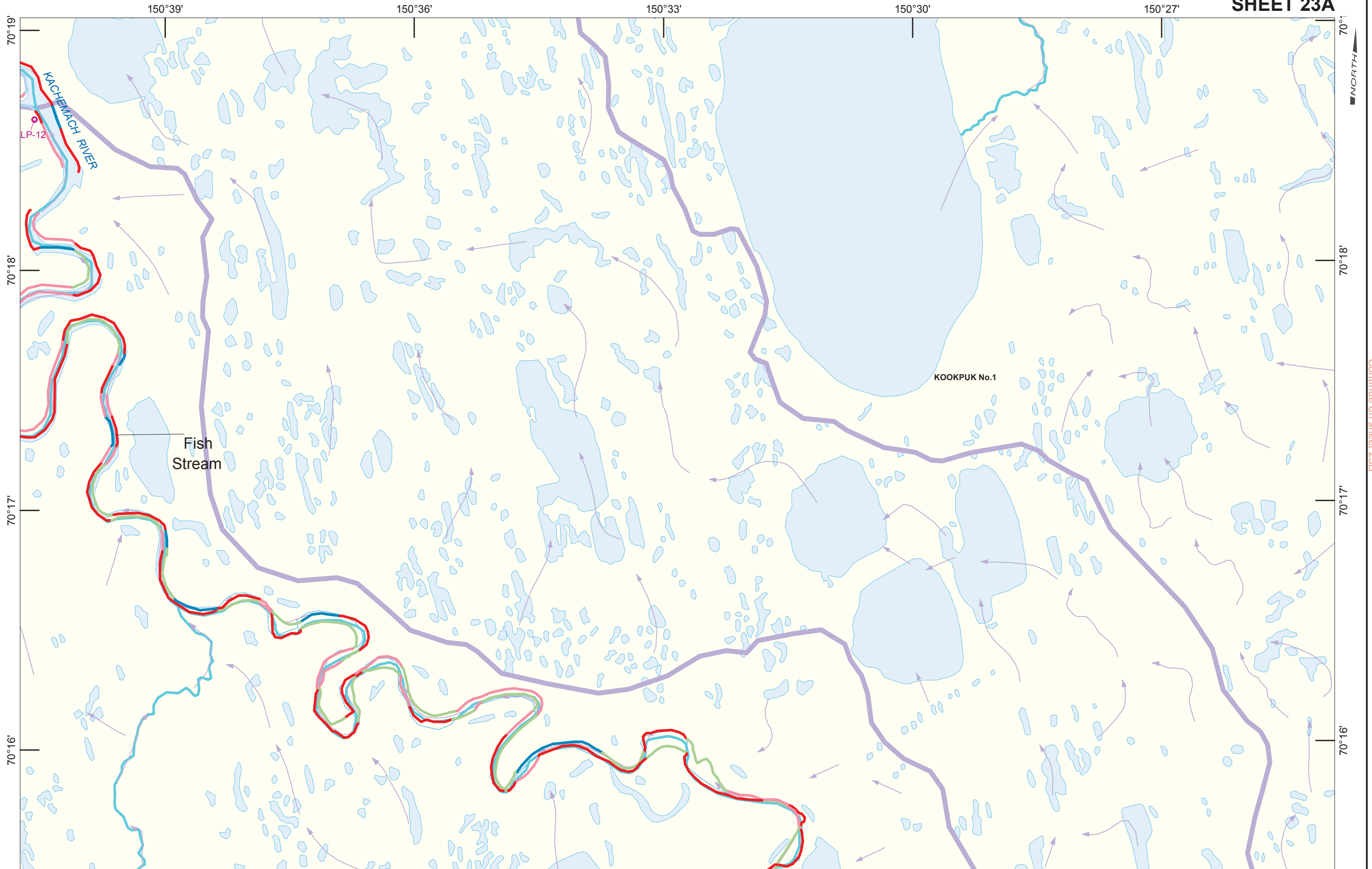
Continue on sheet 21A

Continue on sheet 19

SHEET 23A


Continue on sheet 23

Continue on sheet 23B




Continue on sheet 25

Continue on sheet 26




PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.



GENERAL SENSITIVITIES


- This is a Brant nesting, brood-rearing and molting area. Birds are present from May through August.
- Plan to deploy bird-hazing systems during spring and the open-water season.
- The Miluveach River provides habitat for anadromous whitefish and char and for resident fish.



CULTURAL SITES


The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

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AIR ACCESS*

- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 16 miles to the southwest. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.



VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shoreline on this sheet.



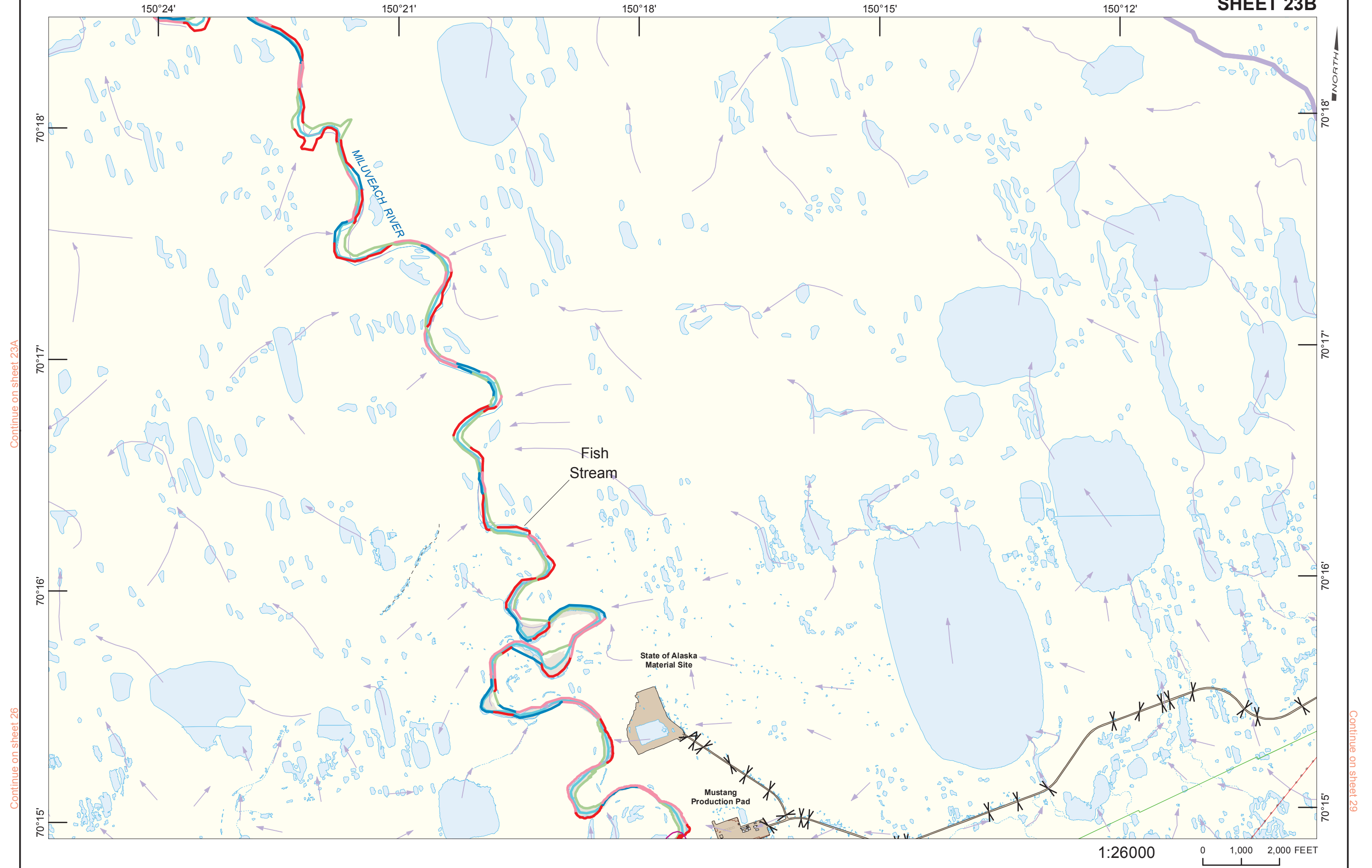
*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

NOTE: All values given on these pages are for planning purposes only.


Continue on sheet 21A

Continue on sheet 49A

SHEET 23B



Continue on sheet 27



PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.


GENERAL SENSITIVITIES

- The Colville River delta supports very high numbers of nesting and brood-rearing waterfowl, waterbirds, and shorebirds from May through September. Molting birds are present in July and August.
- Birds may also be present in the freshwater overflow during the spring before breakup elsewhere.
- Plan to deploy bird-hazing systems during spring and the open-water season.
- The Colville River is a migratory pathway for char, cisco, and whitefish. The eastern channel is an overwintering area for several marine and anadromous fish.
- All waterways and waterbodies within the confines of the Colville River delta (the west bank of the Nechelik Channel to the Colville River's easternmost bank) are considered habitat for anadromous fish.
- Polar bear dens have been found in this area. Dens may be in use from October through April.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- There is a 5,000-ft gravel airstrip operated by ConocoPhillips at the Alpine oil field approximately 10 miles northeast of Nuiqsut.
- Commercial and air freight services are available at the City of Nuiqsut airport. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shoreline on this sheet.
- Main channel of the Colville River generally maintains a 3 ft water depth and is usually navigable 70 miles upriver to the rapids below the mouth of the Anaktuvuk River.

COUNTERMEASURES CONSIDERATIONS

- Voluminous riverine discharge and hydrodynamic circulation will preclude almost any floating oil from contacting shoreline.
- Vegetated shorelines in the Colville River delta have minimal load-bearing capacity. Caution should be used to minimize erosion or loss of equipment.
- The community of Nuiqsut is west of the Nechelik Channel.

STAGING AREAS AND PRESTAGED EQUIPMENT

- Boom is typically predeployed seasonally on Nechelik Channel at Nuiqsut.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

NOTE: All values given on these pages are for planning purposes only.

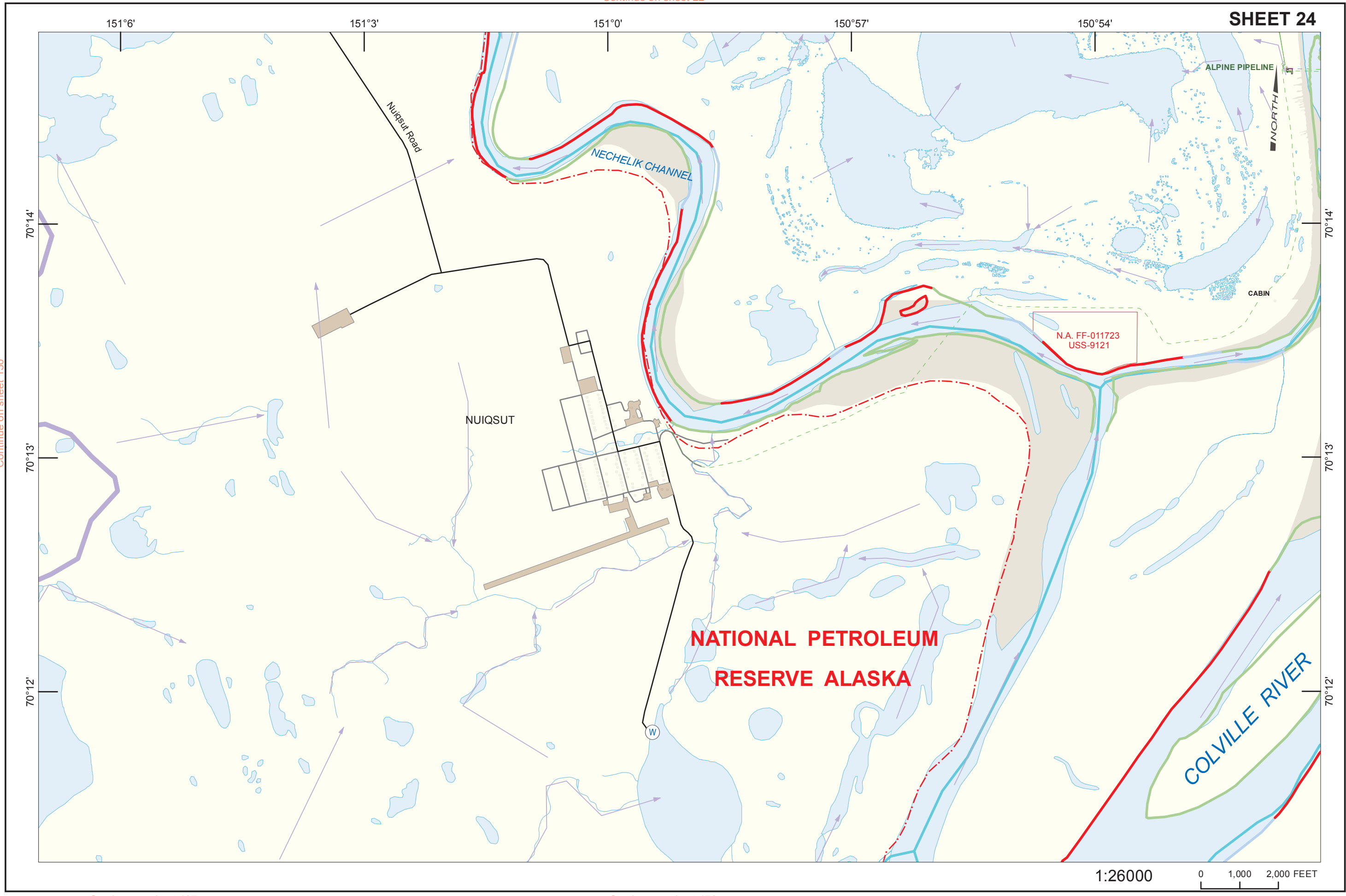
Continue on sheet 22

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Continue on sheet 176





PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

- The Colville River delta supports very high numbers of nesting and brood-rearing waterfowl, waterbirds, and shorebirds from May through September. Molting birds are present in July and August.
- Birds may also be present in the freshwater overflow during the spring before breakup elsewhere.
- Plan to deploy bird-hazing systems during spring and the open-water season.
- The Colville River is a migratory pathway for char, cisco, and whitefish. The eastern channel is an overwintering area for several marine and anadromous fish.
- All waterways and waterbodies within the confines of the Colville River delta (the west bank of the Nechelik Channel to the Colville River’s easternmost bank) are considered habitat for anadromous fish.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 4 miles southwest of the Alpine Pipeline crossing over the Colville River. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shoreline on this sheet.
- Main channel of the Colville River generally maintains a 3 ft water depth and is usually navigable 70 miles upriver to the rapids below the mouth of the Anaktuvuk River.

COUNTERMEASURES CONSIDERATIONS

- Voluminous riverine discharge and hydrodynamic circulation will preclude almost any floating oil from contacting shoreline.
- Vegetated shorelines in the Colville River delta have minimal load-bearing capacity. Caution should be used to minimize erosion or loss of equipment.

STAGING AREAS AND PRESTAGED EQUIPMENT

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
ALP-3	On east bank of Colville River north of Alpine pipeline crossing	Boom Pump Skimmer Storage Anchor Systems	2,000' 1 2 8 4	10" x 20" harbor 3" trash, diesel Drum or brush 2,500-gal. open top 40-lb. Danforth system

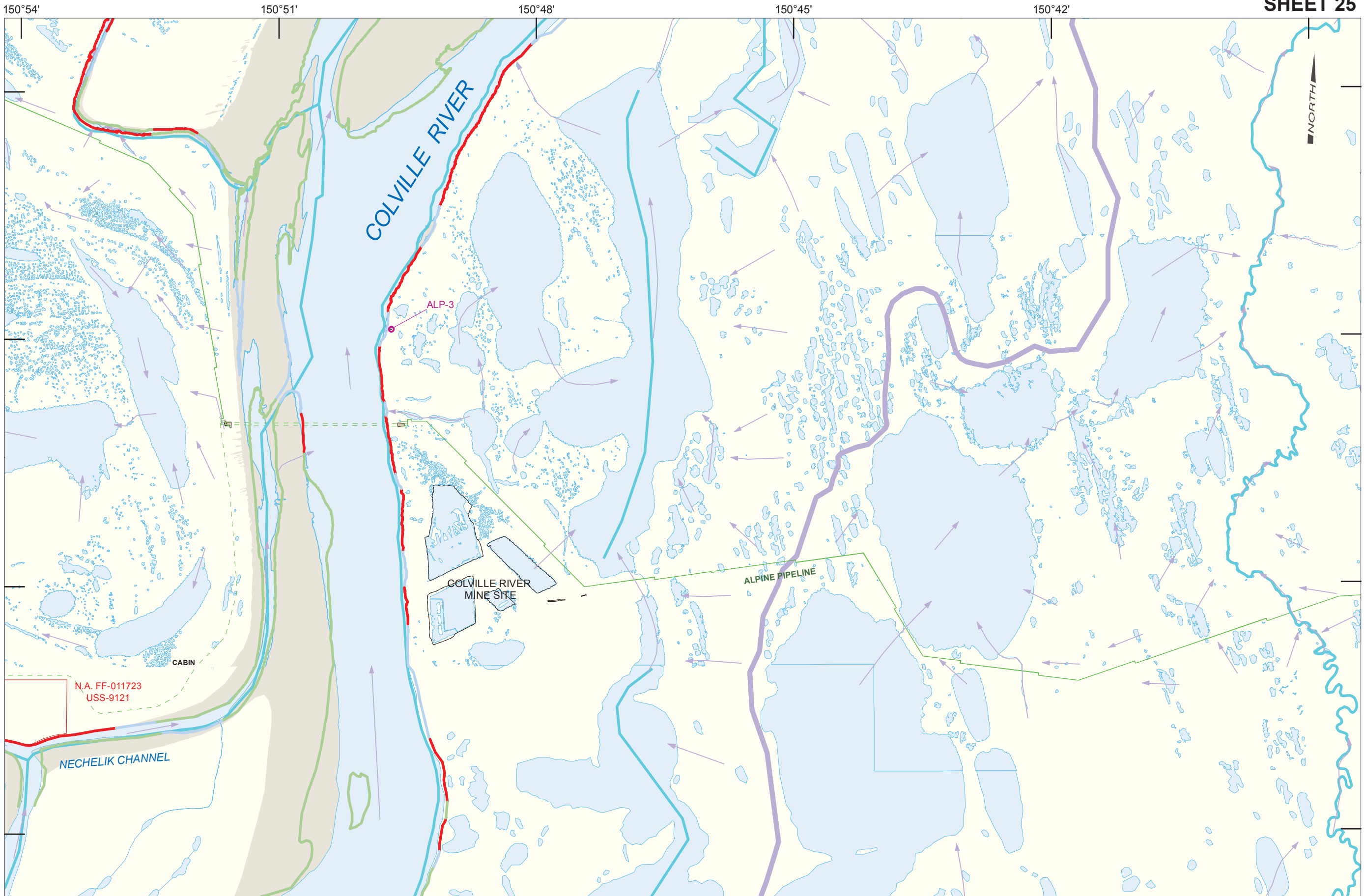
*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 22

Continue on sheet 23A

Continue on sheet 26

Continue on sheet 24



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PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- The Kachemach River provides habitat for anadromous whitefish and for resident fish.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 13 miles to the west. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

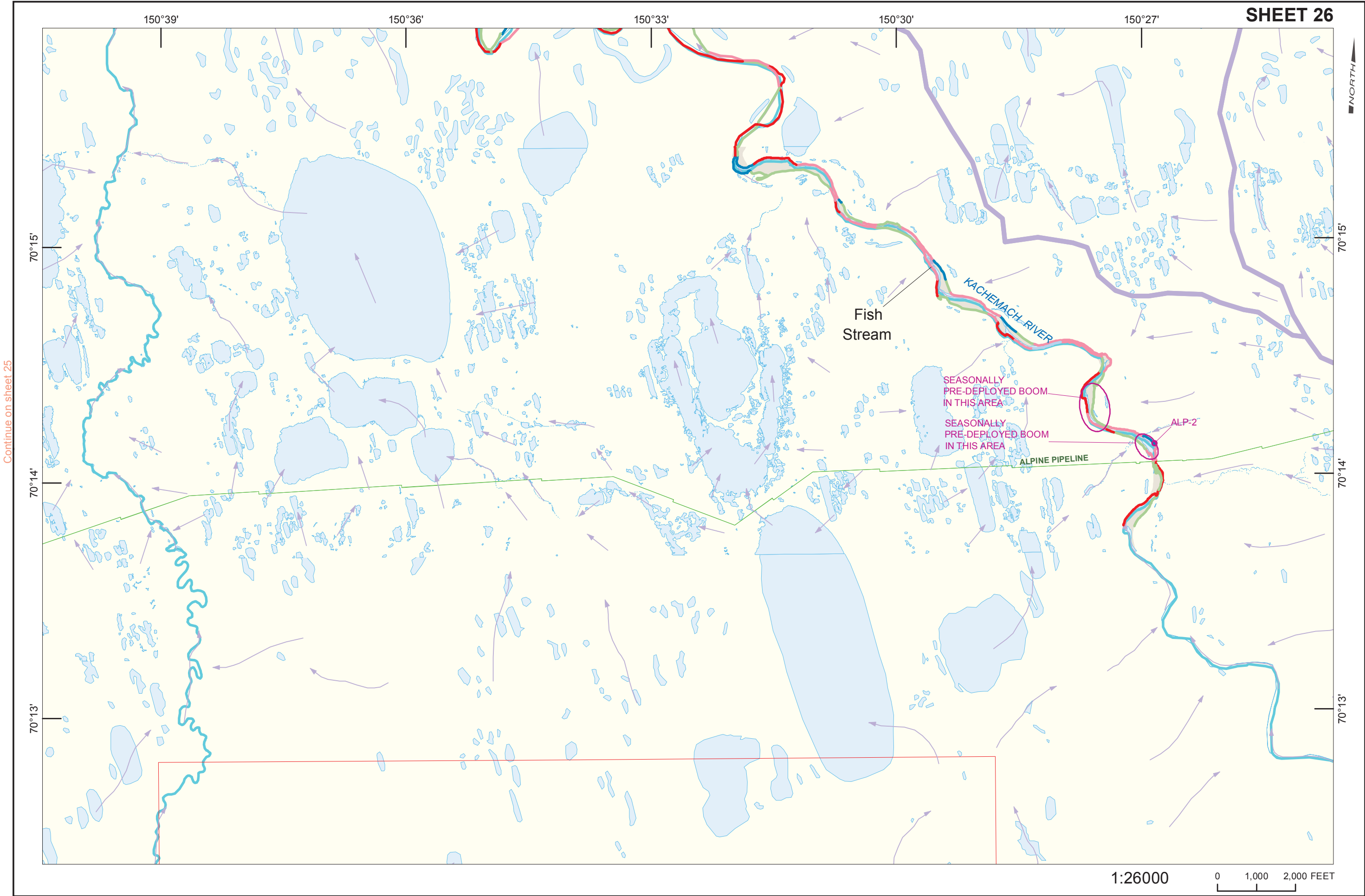
- There are no marine waters or shoreline on this sheet.

STAGING AREAS AND PRESTAGED EQUIPMENT

- Boom is typically predeployed seasonally on the Kachemach River immediately north of the Alpine pipeline crossing and approximately 1/4 mile northwest of the pipeline crossing.

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
ALP-2	On east bank of Kachemach River north of Alpine pipeline crossing	Boom	1,425'	8" x 6" river
		Pump	1	3" trash, diesel
		Skimmer	2	Drum or brush
		Skimmer	1	Rope mop
		Storage	1	500-gal. bladder, helicopter
		Storage	1	500-gal. bladder, liftable
		Storage	4	2,500-gal. open top
		Anchor System	1	18-lb. Davis system

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.



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PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- The Miluveach River provides habitat for anadromous whitefish and char and for resident fish.
- The Kachemach River provides habitat for anadromous whitefish and for resident fish.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 16 miles west of DS 2L. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shoreline on this sheet.

STAGING AREAS AND PRESTAGED EQUIPMENT

- Boom is typically predeployed seasonally on the Miluveach River immediately north of the Alpine pipeline crossing and approximately 1/4 mile northwest of the pipeline crossing.

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
ALP-1	On west bank of Miluveach River north of Alpine pipeline crossing	Boom	1,500'	8" x 6" river
		Pump	1	3" trash, diesel
		Skimmer	2	Drum or brush
		Storage	2	500-gal. bladder, helicopter
		Storage	8	2,500-gal. open top
		Anchor System	1	10-lb. anchor system

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

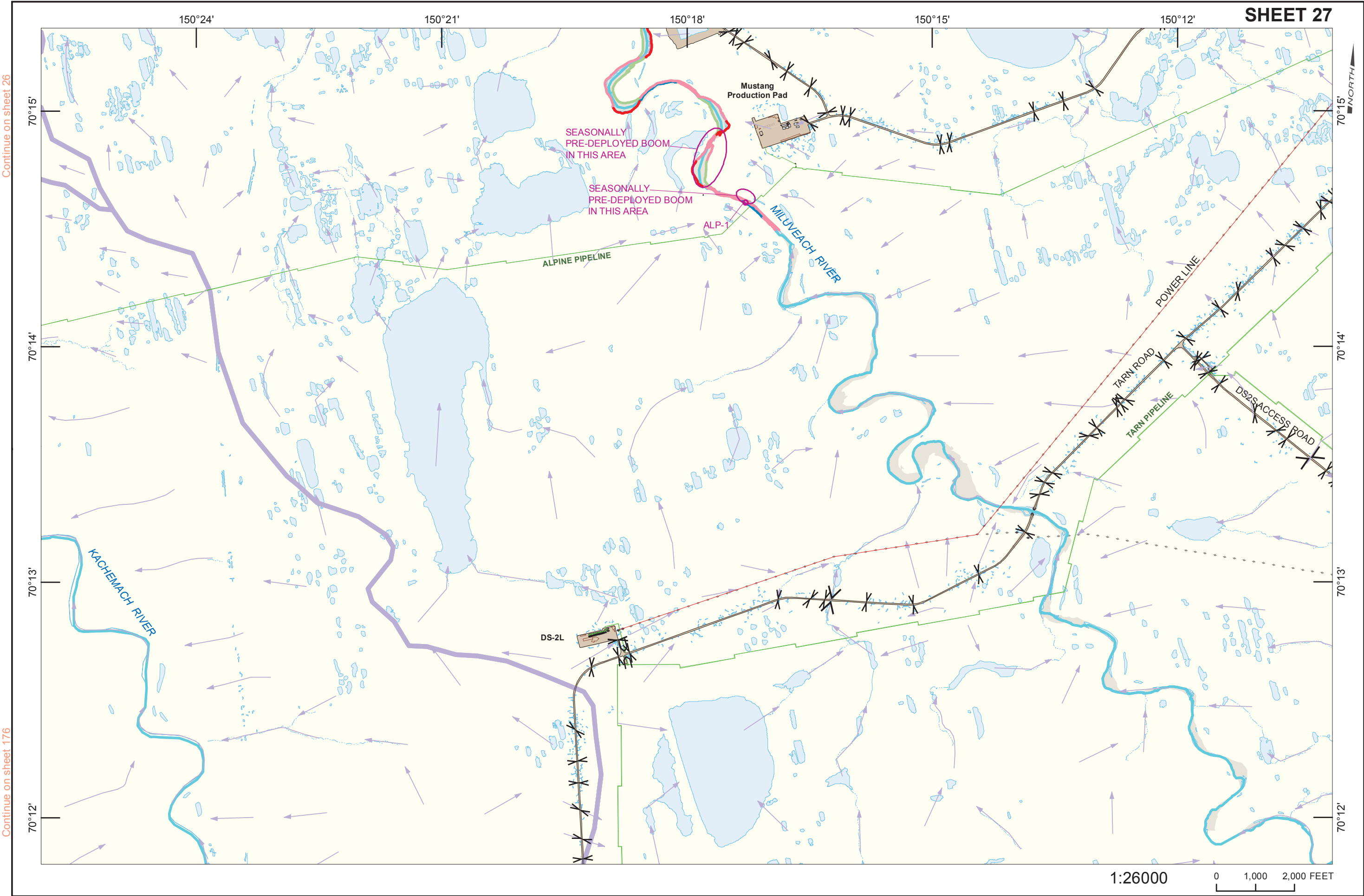
Continue on sheet 26

Continue on sheet 176

Continue on sheet 29

Continue on sheet 29

Continue on sheet 212





PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- The Miluveach River provides habitat for anadromous whitefish and char and for resident fish.
- The Kachemach River provides habitat for anadromous whitefish and for resident fish.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 16 miles west of DS-2N. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

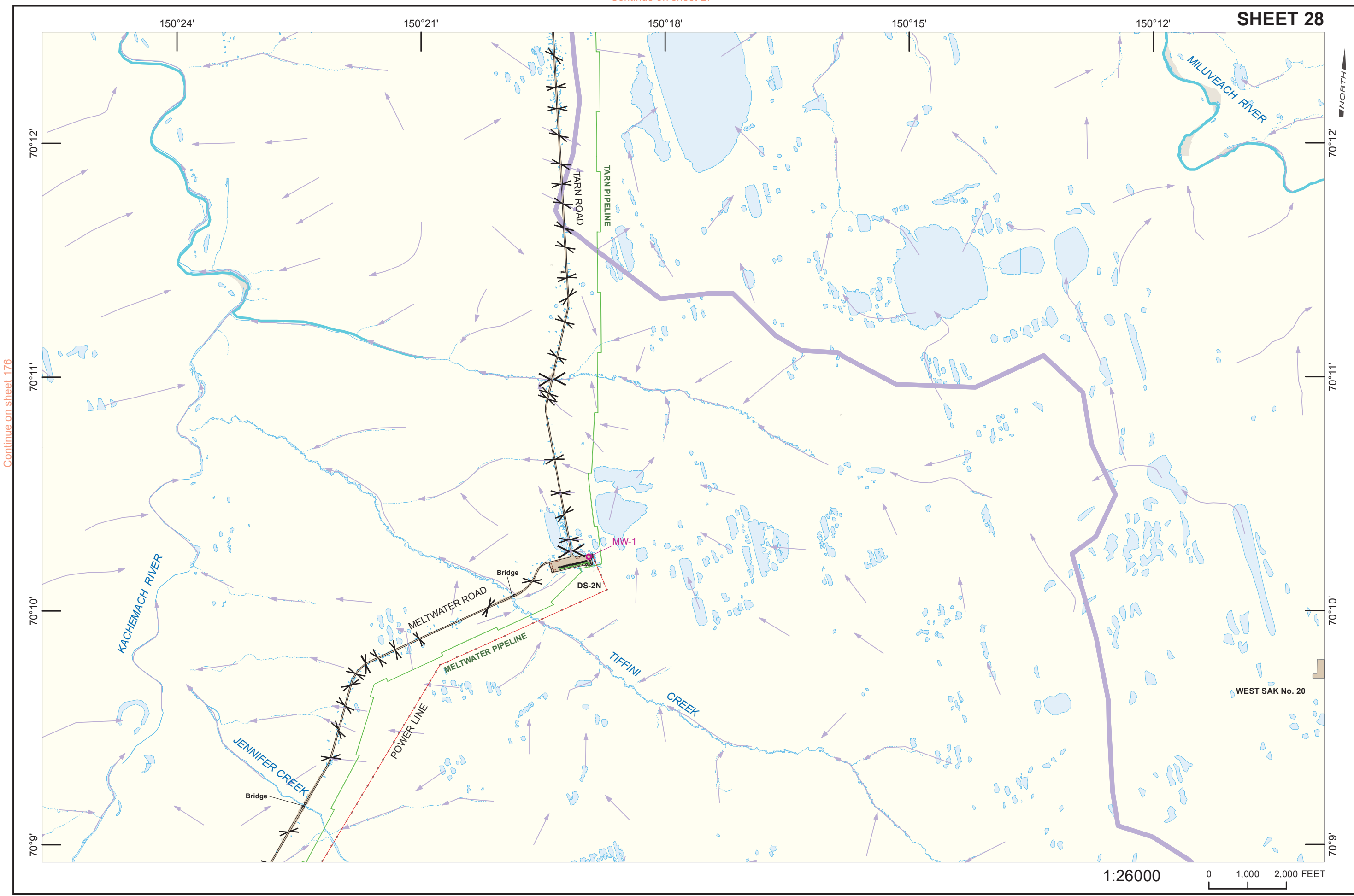
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shoreline on this sheet.

STAGING AREAS AND PRESTAGED EQUIPMENT

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
MW-1	DS-2N	Pipe Plastic sheeting Sandbags	40' 2 rolls Variable (sufficient to block tributary)	6" diameter Visqueen

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.



Continue on sheet 176

Continue on sheet 212



PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- The Kachemach River provides habitat for anadromous whitefish and for resident fish.
- Jessica Creek provides habitat for anadromous fish.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

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AIR ACCESS*

- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 14 miles northwest of MW-3. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

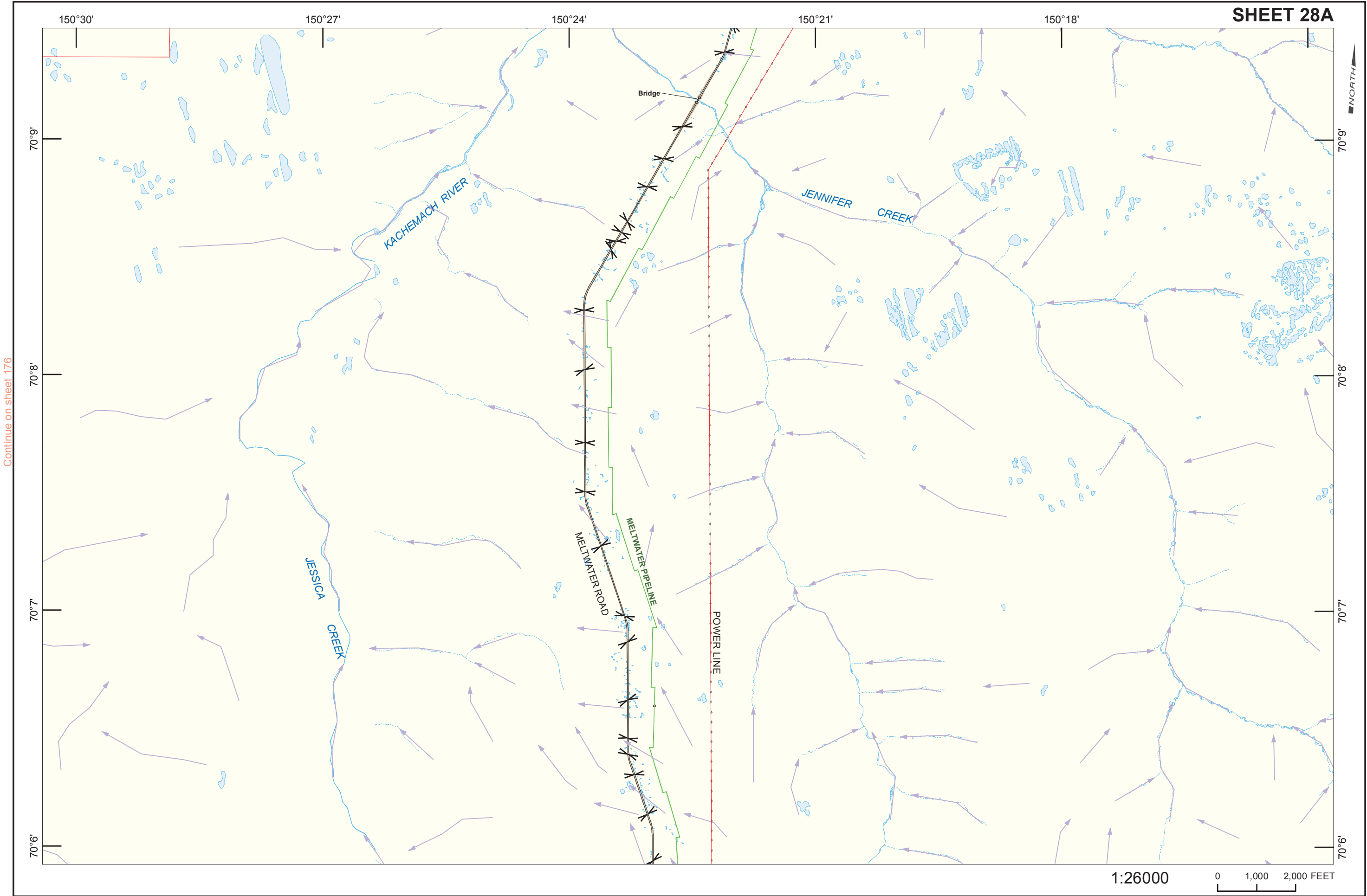
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shoreline on this sheet.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 176

Continue on sheet 213





PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- The Kachemach River provides habitat for anadromous whitefish and for resident fish.
- Jessica Creek provides habitat for anadromous fish.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

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AIR ACCESS*

- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 17 miles northwest of DS-2P. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shoreline on this sheet.

STAGING AREAS AND PRESTAGED EQUIPMENT

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
MW-2	DS-2P	Pipe Plastic sheeting Sandbags	40' 2 rolls Variable (sufficient to block tributary)	6" diameter Visqueen

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

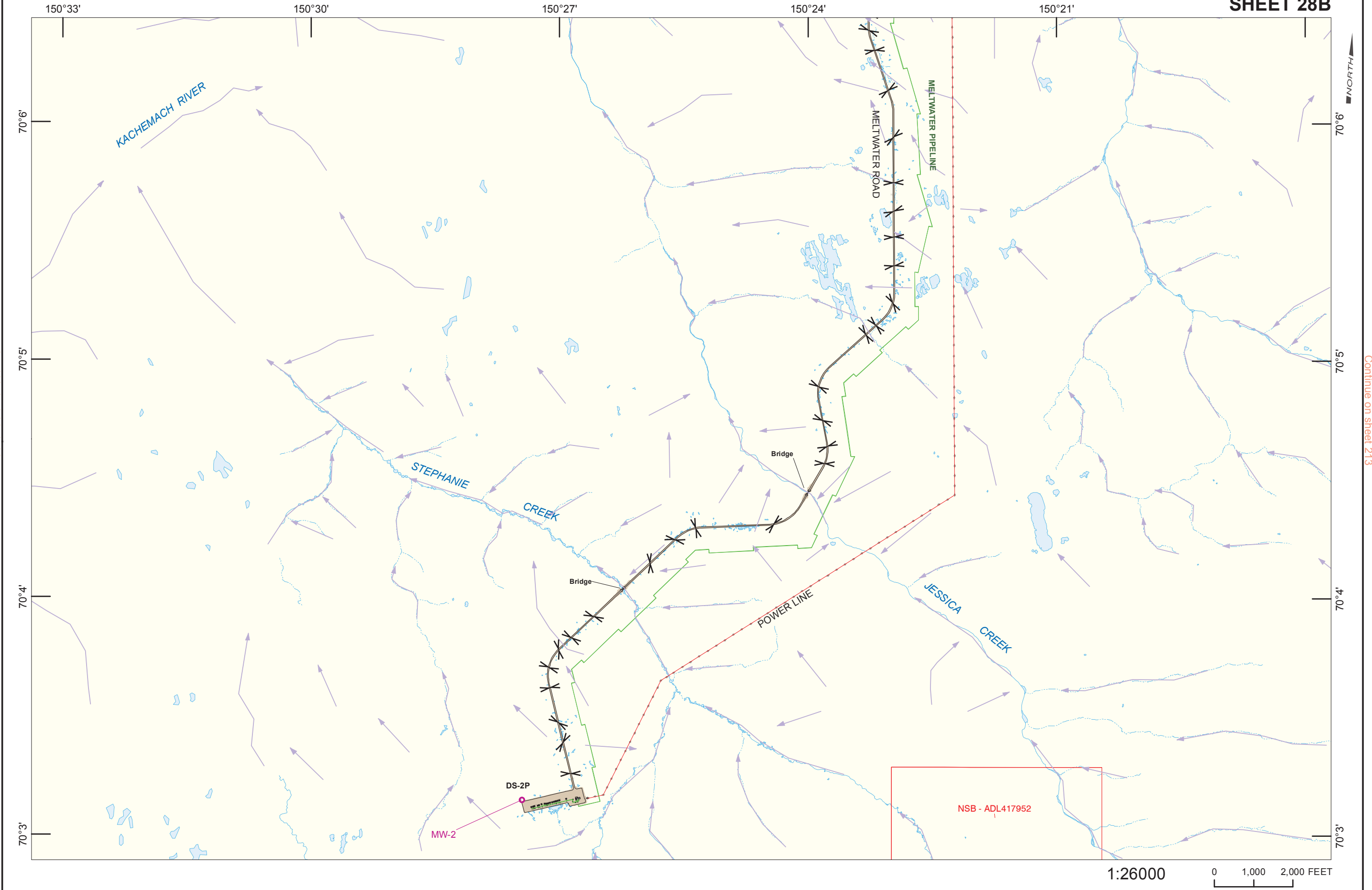
Continue on sheet 176

Continue on sheet 28A

SHEET 28B

Continue on sheet 175

Continue on sheet 213



Continue on sheet 28C



PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- The Kachemach River provides habitat for anadromous whitefish and for resident fish.
- Jessica Creek provides habitat for anadromous fish.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

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AIR ACCESS*

- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 17 miles northwest of DS-2P. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shoreline on this sheet.

STAGING AREAS AND PRESTAGED EQUIPMENT

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
MW-2	DS-2P	Pipe Plastic sheeting Sandbags	40' 2 rolls Variable (sufficient to block tributary)	6" diameter Visqueen

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

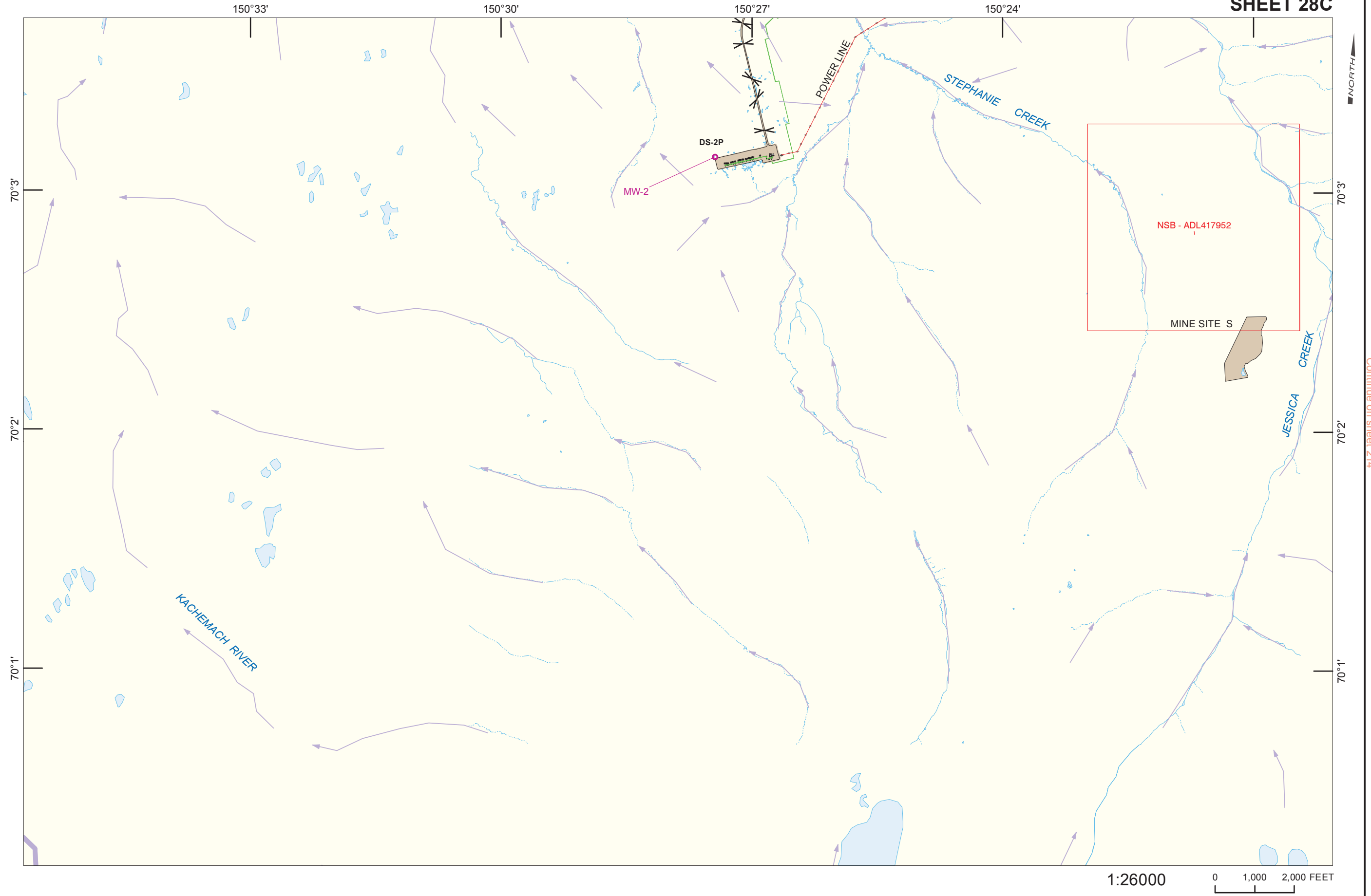
Continue on sheet 176

Continue on sheet 28B


SHEET 28C

Continue on sheet 175

Continue on sheet 214




Continue on sheet 259




PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.



GENERAL SENSITIVITIES


- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- This is a Brant nesting area. Birds are present from May through July.
- This is a Spectacled Eider nesting area.
- Kalubik Creek provides habitat for anadromous whitefish and char and for resident fish.



CULTURAL SITES


The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

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AIR ACCESS*

- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 19 miles west of West Sak 15. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.



VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shoreline on this sheet.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

NOTE: All values given on these pages are for planning purposes only.

Continue on sheet 23B

Continue on sheet 53

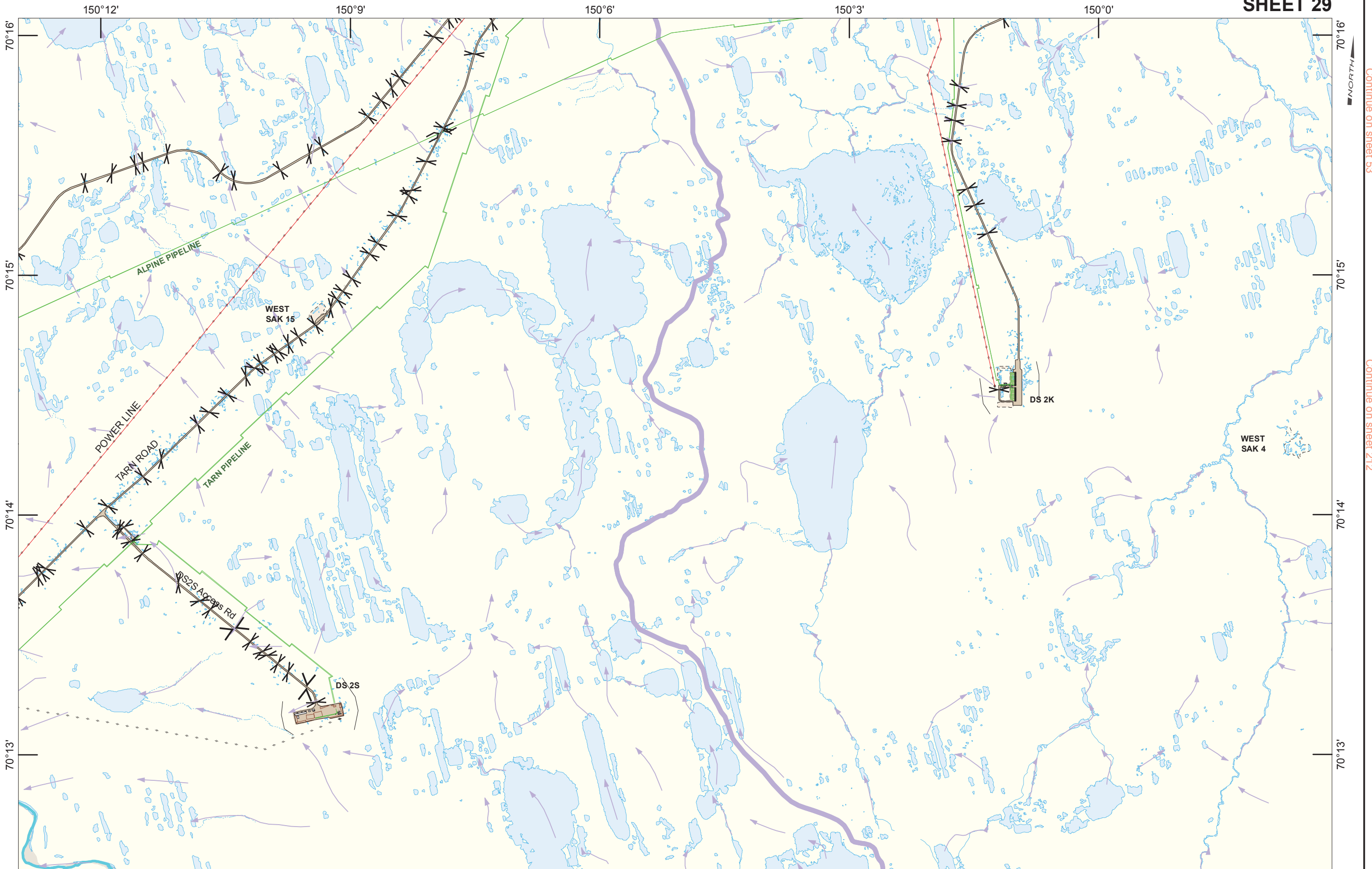
SHEET 29

Continue on sheet 23B

Continue on sheet 27

Continue on sheet 53


Continue on sheet 212



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Continue on sheet 212




PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.



GENERAL SENSITIVITIES


- The lee shores of the barrier islands are important areas for waterfowl molting and staging during August and September.
- Shoreline and offshore areas support molting Oldsquaws and eiders, and brood-rearing eiders. This is also a staging area for migrating Phalaropes (shorebirds). Birds are present in June through September.
- Common Eiders nest on offshore islands in June and July.
- Plan to deploy bird-hazing systems during the open-water season.



CULTURAL SITES


The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

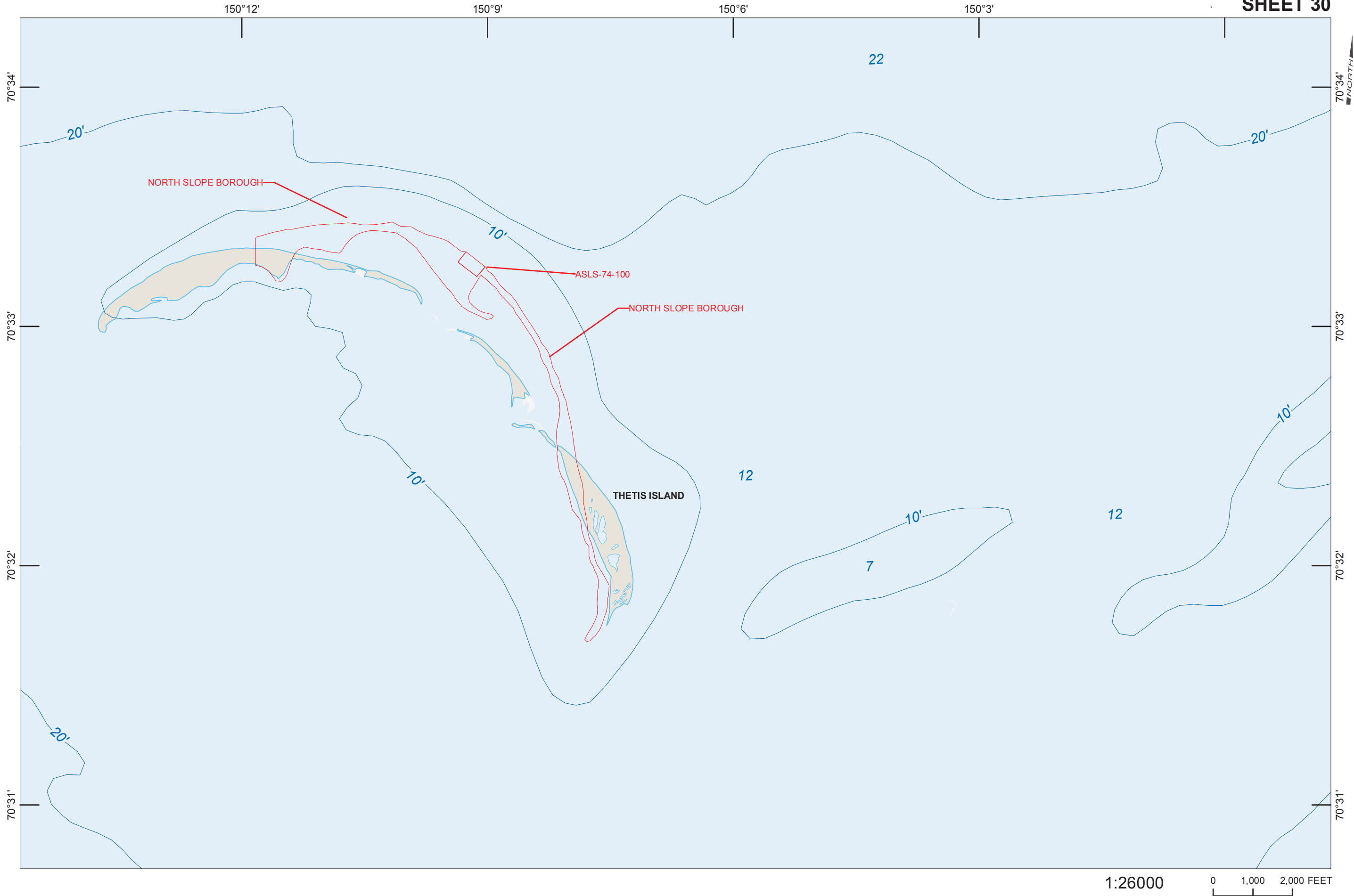
- Helmericks (Sheet 14), an unattended, 2,500 ft. dirt airstrip, is located approximately 9 miles southwest. It is situated west of the main channel of the Colville River near the mouth, and should be considered for emergency use only. Ditches line both sides of runway, which gets soft when wet.
- Ugnu-Kuparuk (Sheet 51) is a continuously attended, 6,551x150 ft. asphalt private airstrip serving the Kuparuk facilities. It is located approximately 20 miles southeast.



VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- Surface currents generally flow to the west at 10 to 30 cm/sec.
- Good small boat anchorage in 12 ft of water is available on the east side of Thetis Island, with protection from southwest winds.
- Strong offshore winds can reduce water depths by 2 to 3 ft.
- Thetis Island may be awash during storm surges of 2 to 3 ft and strong west and northwest winds.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.





PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

- The lee shores of Spy Island are important areas for waterfowl molting and staging during August and September.
- Shoreline and offshore areas support molting Oldsquaws and eiders, and brood-rearing eiders. This is also a staging area for migrating Phalaropes (shorebirds). Birds are present in June through September.
- Common Eiders nest on offshore islands in June and July.
- Plan to deploy bird-hazing systems during the open-water season.
- Polar bear dens have been found in this area. Dens may be in use from October through April.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- Helmericks (Sheet 14), an unattended, 2,500 ft. dirt airstrip, is located approximately 13 miles southwest of Spy Island. It is situated west of the main channel of the Colville River near the mouth, and should be considered for emergency use only. Ditches line both sides of runway, which gets soft when wet.
- Ugnu-Kuparuk (Sheet 51) is a continuously attended, 6,551x150 ft. asphalt private airstrip serving the Kuparuk facilities. It is located approximately 16 miles south-southeast of Spy Island.

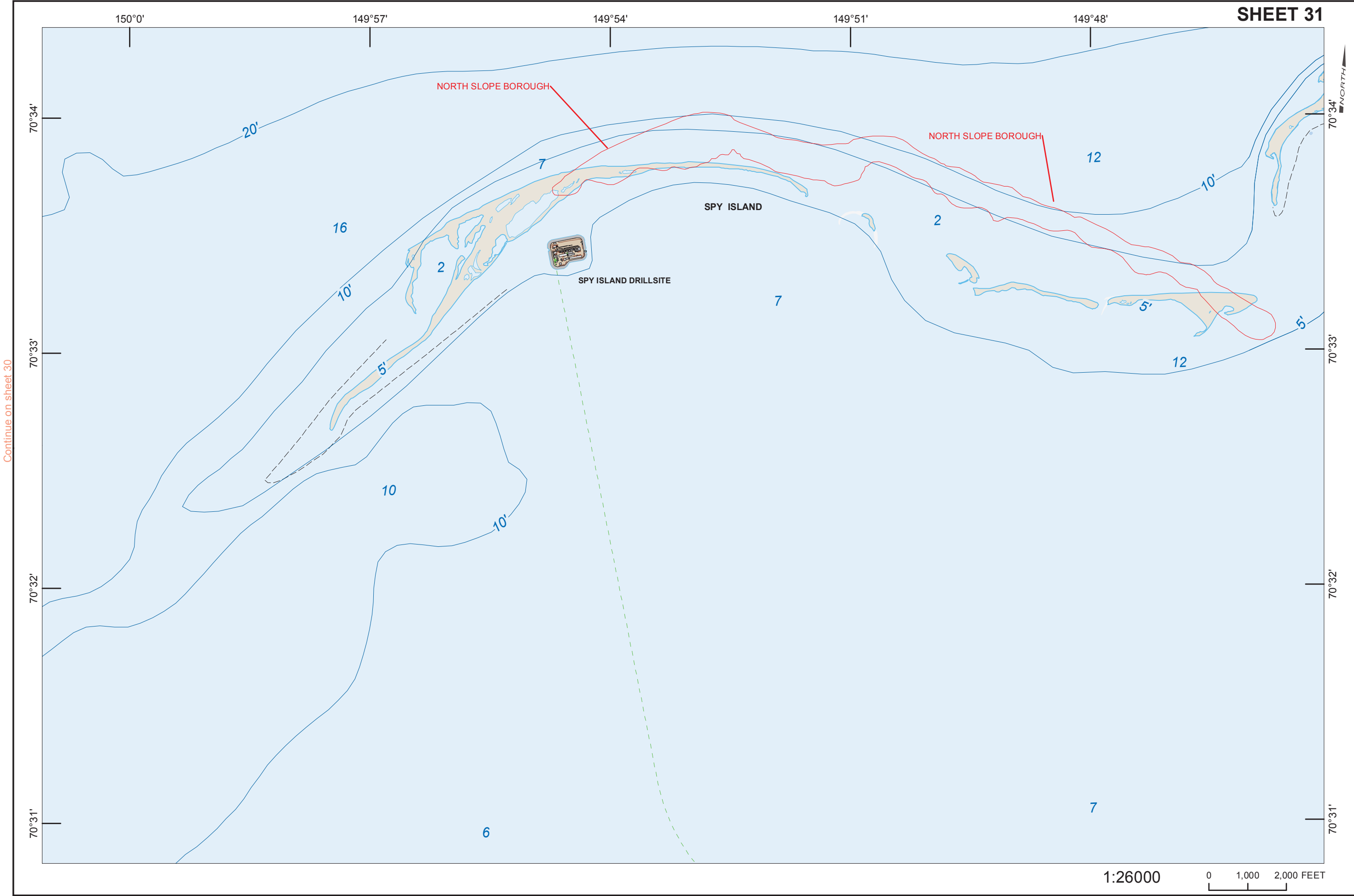
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS*

- Marine waters generally flow to the west with surface currents of 10 to 30 cm/sec.
- Water access is limited on lagoon-facing shores of the island, but is good on ocean-facing shores.
- Spy Island is inundated by storm surges.
- Alongshore sediment transport is to the west with erosion on the eastern end of Spy island and accumulation on the western end.

STAGING AREAS AND PRESTAGED EQUIPMENT

- There are staging areas and prestaged equipment at Oliktok Point (Sheet 35).

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.



Continue on sheet 30

Continue on sheet 32

Continue on sheet 35



PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

- The lee shores of the islands are important molting areas for male Oldsquaws in late July and early August.
- Shoreline and offshore areas support molting and brood-rearing eiders. This is also a staging area for migrating Phalaropes (shorebirds). Birds are present in June through September.
- Common Eiders nest on offshore islands in June and July.
- Plan to deploy bird-hazing systems during the open-water season.
- Polar bear dens have been found in this area. Dens may be in use from October through April.

CULTURAL SITES

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AIR ACCESS*

- Ugnu-Kuparuk (Sheet 51) is a continuously attended, 6,551x150 ft. asphalt private airstrip serving the Kuparuk facilities. It is located approximately 17 miles south of Leavitt Island.
- Helmericks (Sheet 14), an unattended, 2,500 ft. dirt airstrip, is located approximately 18 miles west-southwest of Leavitt Island. It is situated west of the main channel of the Colville River near the mouth, and should be considered for emergency use only. Ditches line both sides of runway, which gets soft when wet.

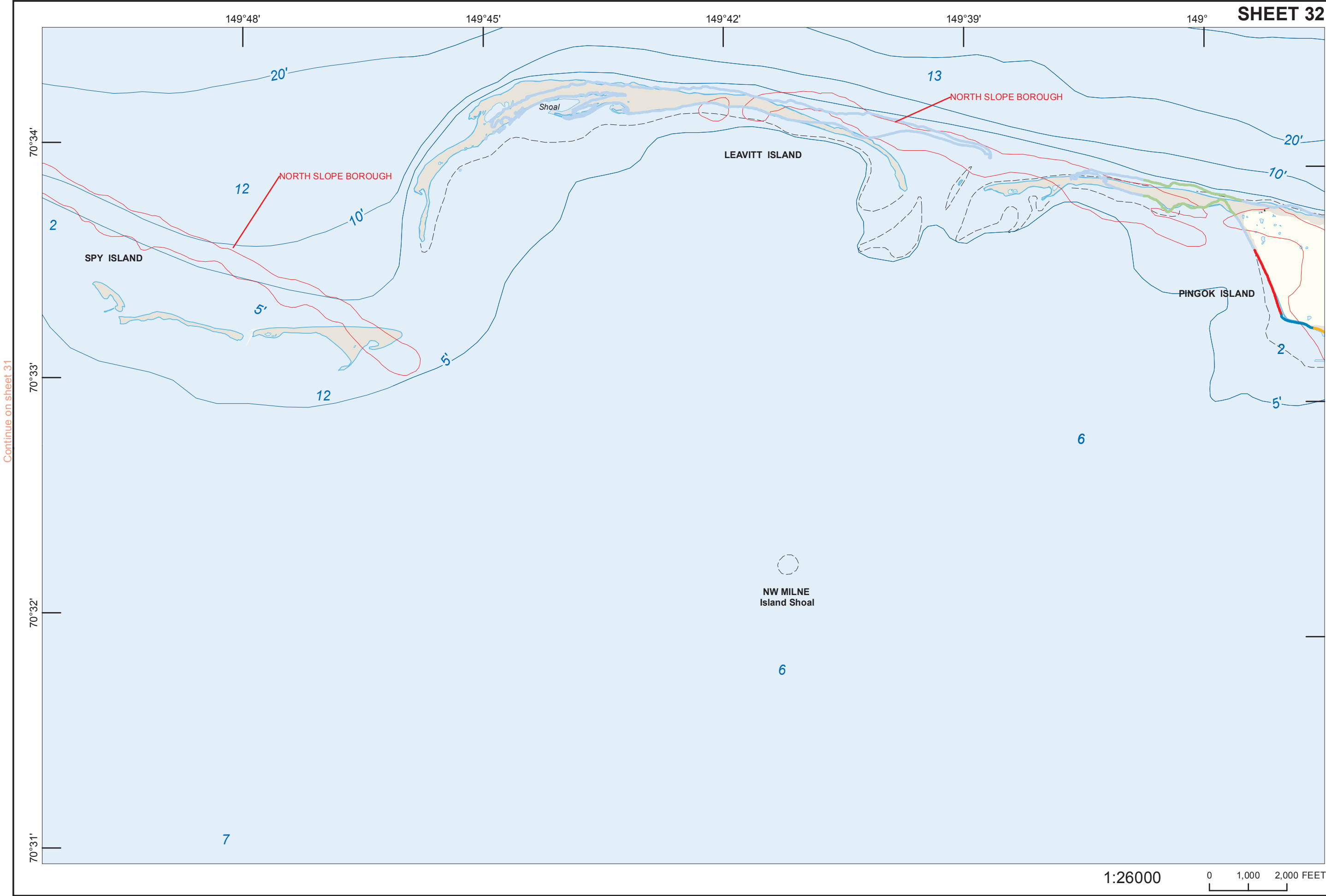
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- Water access is limited on lagoon-facing shores of islands, but is good on ocean-facing shores.
- Alongshore sediment transport is to the west with erosion on the eastern ends of islands and accumulation on the western ends.

STAGING AREAS AND PRESTAGED EQUIPMENT

- There are staging areas and prestaged equipment at Oliktok Point (Sheet 35).

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.





PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

- The lee shores of the islands are important molting areas for male Oldsquaws in late July and early August.
- Shoreline and offshore areas support molting and brood-rearing eiders. This is also a staging area for migrating Phalaropes (shorebirds). Birds are present in June through September.
- Common Eiders nest on offshore islands in June and July.
- Plan to deploy bird-hazing systems during the open-water season.
- Polar bear dens have been found in this area. Dens may be in use from October through April.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

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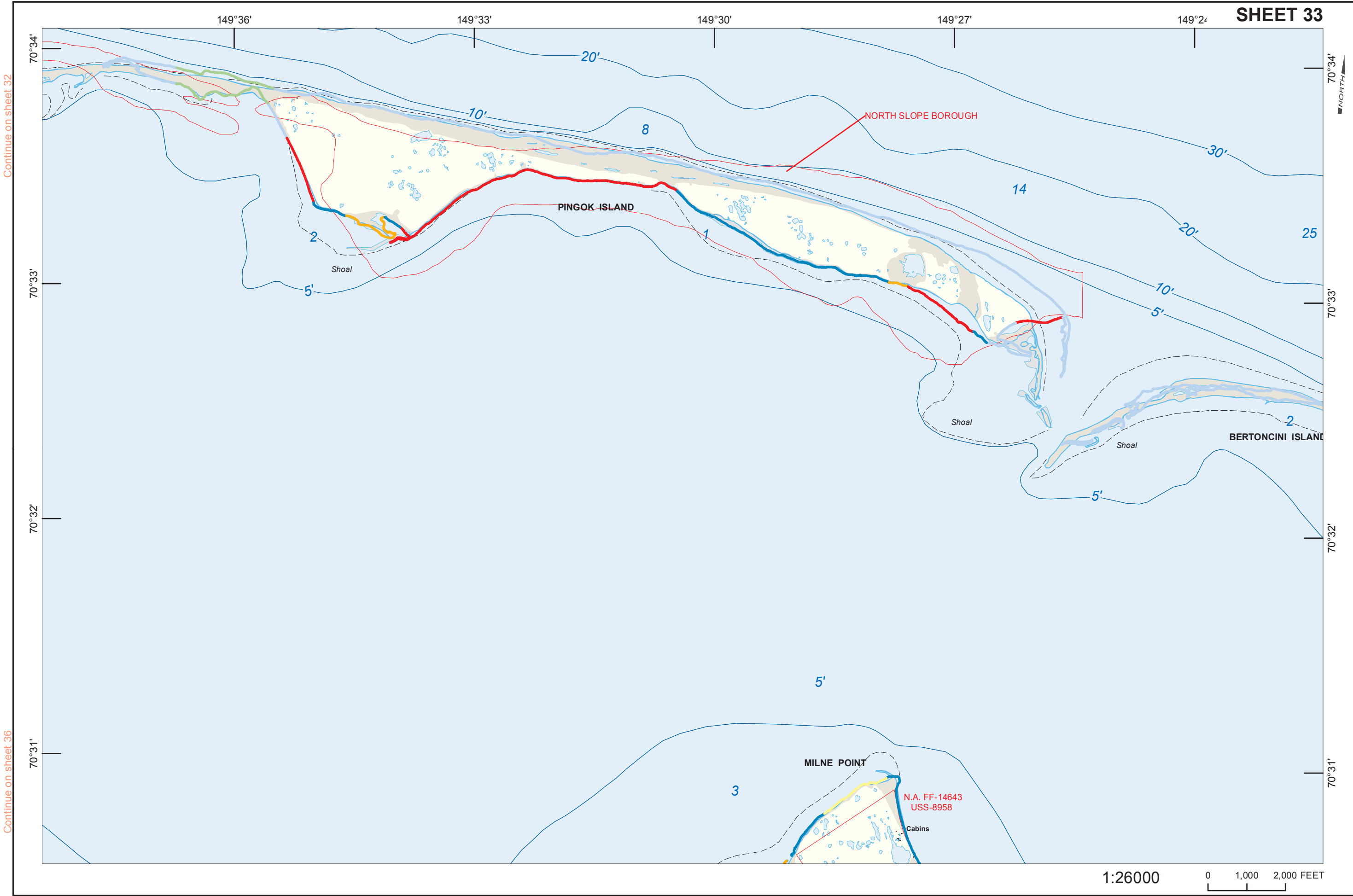
AIR ACCESS*

- Ugnu-Kuparuk (Sheet 51) is a continuously attended, 6,551x150 ft. asphalt private airstrip serving the Kuparuk facilities. It is located approximately 16 miles south of Pingok Island.
- Helmericks (Sheet 14), an unattended, 2,500 ft. dirt airstrip, is located approximately 20 miles west-southwest of Pingok Island. It is situated west of the main channel of the Colville River near the mouth, and should be considered for emergency use only. Ditches line both sides of runway, which gets soft when wet.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- Water access is limited on lagoon-facing shores of islands, but good on ocean-facing shores.
- Alongshore sediment transport is to the west with erosion on eastern ends of islands and accumulation on the western ends.
- There are a small lake and springs with fresh water at the midpoint of Pingok Island.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.




Continue on sheet 32

Continue on sheet 34

Continue on sheet 36

Continue on sheet 37



PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.


GENERAL SENSITIVITIES

- The lee shores of the islands are important molting areas for male Oldsquaws in late July and early August.
- Shoreline and offshore areas support molting and brood-rearing eiders. This is also a staging area for migrating Phalaropes (shorebirds). Birds are present in June through September.
- Common Eiders nest on offshore islands in June and July.
- Plan to deploy bird-hazing systems during the open-water season.
- Polar bear dens have been found in this area. Dens may be in use from October through April.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

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AIR ACCESS*

- Ugnu-Kuparuk (Sheet 51) is a continuously attended, 6,551x150 ft. asphalt private airstrip serving the Kuparuk facilities. It is located approximately 16 miles south-southwest of Bodfish Island.
- A continuously attended, private heliport is located at the Northstar facility (Sheet 59), approximately 13 miles east-southeast of Bodfish Island. The wooden pad is 62'x55'.
- An unattended and unmaintained 1,500 ft. gravel private airstrip is located at Point McIntyre (Sheet 62), approximately 17 miles southeast of Bodfish Island. Runway has soft spots, with erosion, grass and rocks up to 3". Recommend emergency use only.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

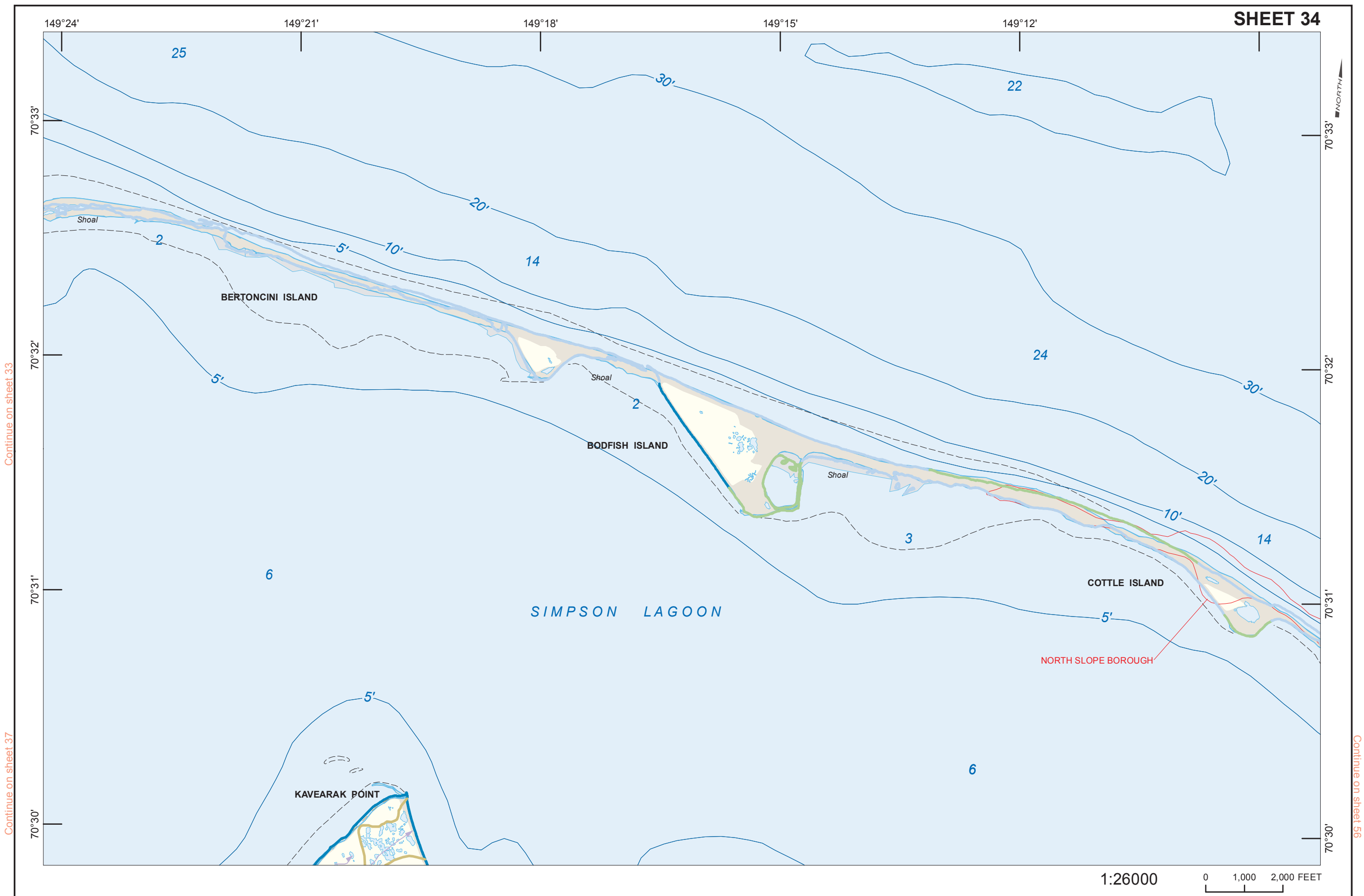
- Water access by other than very shallow-draft vessels will be precluded in Simpson Lagoon and Gwydyr Bay due to shallow water depths.
- Bars and shoals obstruct the passages between Pingok Island (Sheet 33) and Cottle Island.
- Barrier islands tend to migrate toward shore at 5 to 10 meters per year and westward 20 to 30 meters.
- Simpson Lagoon currents are generally to the west at 10 to 30 cm/sec.

COUNTERMEASURES CONSIDERATIONS

- The embayment on the east side of Bodfish Island will collect westerly flowing oil spills. All barrier islands will serve to restrain onshore/offshore dispersion of floating oil.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

NOTE: All values given on these pages are for planning purposes only.





PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS24A	Salt marsh 1 mile NE of Ugnuravik River mouth	Most sensitive during open water season. Keep oil from entering salt marsh.	C-13 or C-14	4,500'
PS25	Ugnuravik River mouth	Most sensitive during open water season. Keep oil from entering river. Peat shorelines are present on west shore of river.	C-13 or C-14	1,500'
PS27	Creek mouth west of Oliktok Pt. airstrip	Most sensitive during open water season. Keep oil from entering river.	C-13 or C-14	100'

GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Simpson Lagoon has large flocks of molting male Oldsquaw in July and early August, especially in the lee shores of the barrier islands.
- Shoreline and offshore areas support molting and brood-rearing eiders. This is also a staging area for migrating Phalaropes (shorebirds). Birds are present in June through September.
- This is a Brant nesting, brood-rearing, and molting area. Birds are present from May through August.
- This is a Spectacled Eider breeding and nesting area. Birds may be present in June to September.
- Plan to deploy bird-hazing systems during the open-water season.
- The Ugnuravik River provides habitat for anadromous whitefish and for resident fish.
- There is a seawater intake on the north wall of the Oliktok Seawater Treatment Plant approximately 8 ft below the surface. Precautions should be taken to keep oil away from this area.
- Polar bears may be present November to April.

CULTURAL SITES

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AIR ACCESS*

- Helmericks (Sheet 14), an unattended, 2,500 ft. dirt airstrip, is located approximately 12 miles southwest of Oliktok Point. It is situated west of the main channel of the Colville River near the mouth, and should be considered for emergency use only. Ditches line both sides of runway, which gets soft when wet.
- Ugnu-Kuparuk (Sheet 51) is a continuously attended, 6,551x150 ft. asphalt private airstrip serving the Kuparuk facilities. It is located approximately 15 miles south-southeast of Oliktok Point.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- Simpson Lagoon water depths range from 3 to 7 ft.
- Bars and shoals obstruct the passages between Pingok Island and Cottle Island (Sheets 33 and 34, respectively).
- There is small boat shelter from east winds behind the small sand spit west of Oliktok Point. It provides excellent moorage but is limited to 5 ft of water. This shelter is exposed to southwest winds. Shelter from southwest winds is available on the east side of Oliktok Point.
- There is a boat launch at Oliktok Dock.
- Simpson Lagoon currents are generally to the west at 10 to 30 cm/sec.

COUNTERMEASURES CONSIDERATIONS

- Sand-silt shores are very narrow (less than 20 ft wide) and interrupted by small creek mouths and areas of thick peat deposits. Large areas of potential overwash between Oliktok Point and Kalubik Creek (to the west) may make cleanup difficult. Backshore areas are wet tundra.
- Vegetated shorelines in this area may preclude the use of heavy equipment. Sand-silt washed over on the vegetated shorelines is mixed with large peat blocks, making mechanized travel difficult.
- West and north winds and Colville River discharge will cause floating oil to impinge on the shoreline west of Oliktok Point. There is some restricted access to beaches by shallow water.

STAGING AREAS AND PRESTAGED EQUIPMENT

- There are staging areas at Oliktok Dock and approximately 2 miles southeast of Oliktok Dock.

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
KUP-11	DS-3R	Boom	500'	8" x 6" river
KUP-12	Oliktok Dock	Boom	3,400'	8" x 6" river
KUP-12 cont'd	Additional equipment stored seasonally at Oliktok	Vessel	2	32"
		Vessel	2	26"
		Boom	2,000	11" x 15"
		Boom	1,300'	Shore Seal (w/floating pump and blower)
		Boom	492'	14" x 20" Nofi rapid deploy
		Mini-barges	2	249 bbl
		HYPU	1	For boom deployment
		Anchor Systems	Various	Various

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

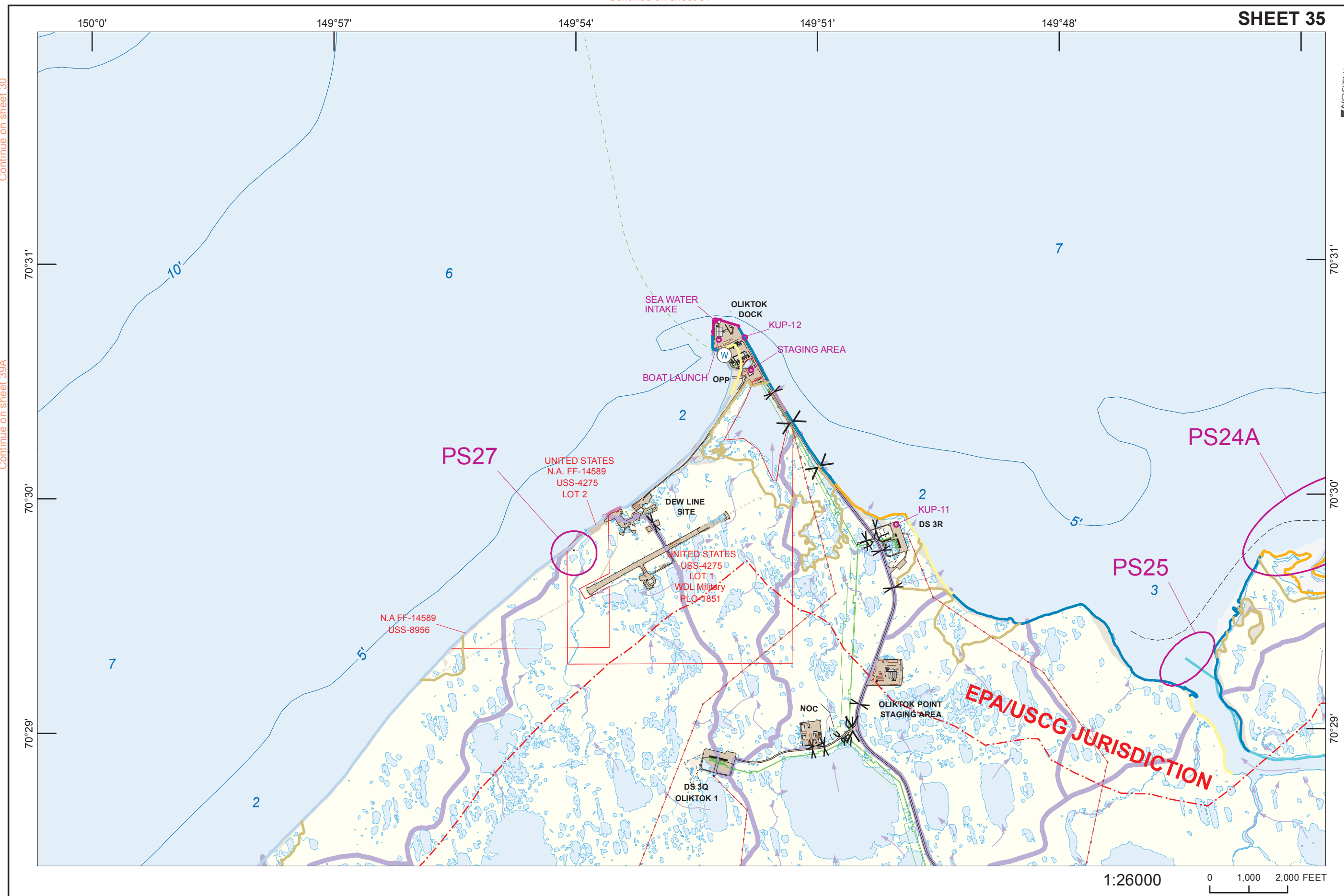
Continue on sheet 31

SHEET 35

Continue on sheet 30

Continue on sheet 39A

Continue on sheet 36



Continue on sheet 39

Continue on sheet 40

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PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS24	Gaps between marsh islands west of MPU L Pad	Most sensitive during open water season. Salt marsh and/or inundated low-lying tundra shoreline.	C-13 or C-14	400'
PS24A	Salt marsh 1 mile NE of Ugnuravik River mouth	Most sensitive during open water season. Keep oil from entering salt marsh.	C-13 or C-14	4,500'
PS25	Ugnuravik River mouth	Most sensitive during open water season. Keep oil from entering river. Peat shorelines are present on west shore of river.	C-13 or C-14	1,500'

GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Simpson Lagoon has large flocks of molting male Oldsquaw in July and early August, especially in the lee shores of the barrier islands.
- Shoreline and offshore areas support molting and brood-rearing eiders. This is also a staging area for migrating Phalaropes (shorebirds). Birds are present in June through September.
- This is a Brant nesting, brood-rearing, and molting area. Birds are present from May through August.
- Pairs of Spectacled Eider have been found in this area.
- Plan to deploy bird-hazing systems during the open-water season.
- The Ugnuravik River provides habitat for anadromous whitefish and for resident fish.

CULTURAL SITES

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AIR ACCESS*

- Ugnu-Kuparuk (Sheet 51) is a continuously attended, 6,551x150 ft. asphalt private airstrip serving the Kuparuk facilities. It is located approximately 12 miles south of MPU Pad F.
- Helmericks (Sheet 14), an unattended, 2,500 ft. dirt airstrip, is located approximately 16 miles west-southwest of MPU Pad F. It is situated west of the main channel of the Colville River near the mouth, and should be considered for emergency use only. Ditches line both sides of runway, which gets soft when wet.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- Simpson Lagoon water depths range from 3 to 7 ft.
- There is small boat shelter from east winds behind the small sand spit west of Oliktok Point (Sheet 35). It provides excellent moorage but is limited to 5 ft of water. This shelter is exposed to southwest winds. Shelter from southwest winds is available on the east side of Oliktok Point.
- Simpson Lagoon currents are generally to the west at 10 to 30 cm/sec.
- There is a boat launch at the southwest end of MPU F Pad.

COUNTERMEASURES CONSIDERATIONS

- Sand-silt shores are very narrow (less than 20 ft wide) and interrupted by small creek mouths and areas of thick peat deposits. Backshore areas are wet tundra.
- Vegetated shorelines making up much of this area will preclude the use of heavy equipment. Sand-silt washed over on the vegetated shorelines is mixed with large peat blocks, making mechanized travel difficult.

STAGING AREAS AND PRESTAGED EQUIPMENT

- There is a staging area 1 mile west of the mouth of the Ugnuravik River.
- There is a staging area at MPU L Pad.

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
KUP-11	DS 3R	Boom	500'	8" x 6" river
MPU-6	MPU F Pad	Boom	4,000'	8" x 6" river
		Boom	900'	Shore/tide
		Pump	2	3" diaphragm
		Pump	2	2" trash
		Skimmer	4	Weir, Mata Ray

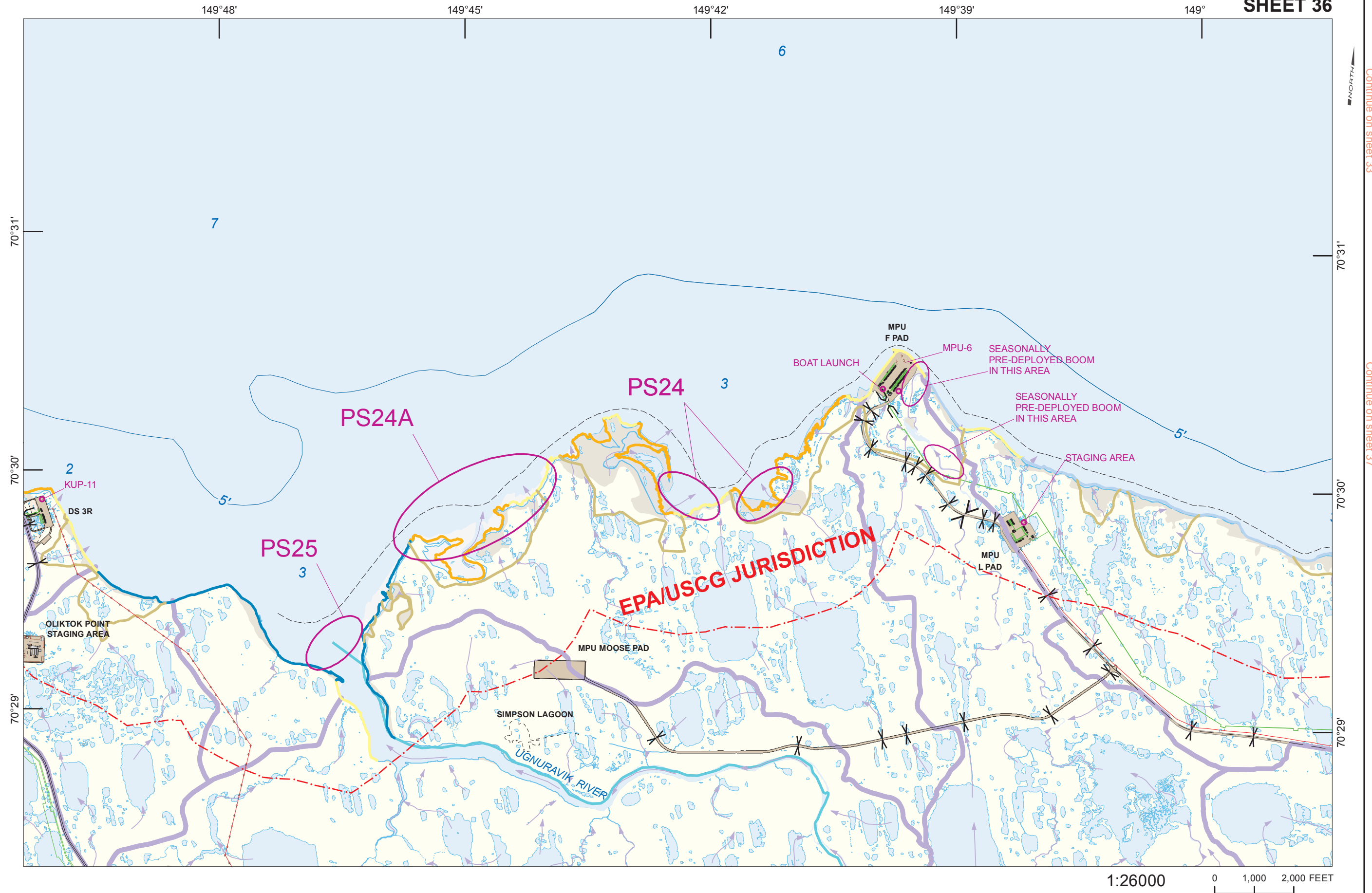
400' of boom is taken from F-pad and pre-deployed at Central Creek during summer months.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

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Continue on sheet 33

Continue on sheet 37



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PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS18	Creek mouth 2 miles SE of Milne Point	Most sensitive during open water season. Keep oil from entering lagoon.	C-13 or C-14	800'
PS18A	Salt marsh 1.75 miles SE of Milne Point	Most sensitive during open water season. Keep oil from entering salt marsh.	C-13 or C-14	800'
PS19	Inlet to marsh 2 miles SW of Milne Point	Most sensitive during open water season. Inundated low-lying tundra shorelines.	C-13 or C-14	500'

GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Simpson Lagoon has large flocks of molting male Oldsquaw in July and early August, especially in the lee shores of the barrier islands.
- Shoreline and offshore areas support molting and brood-rearing eiders. This is also a staging area for migrating Phalaropes (shorebirds). Birds are present in June through September.
- This is a Brant nesting, brood-rearing, and molting area. Birds are present from May through August.
- Pairs of Spectacled Eiders have been found in this area.
- Plan to deploy bird-hazing systems during the open-water season.

CULTURAL SITES

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Response Considerations

AIR ACCESS*

- Ugnu-Kuparuk (Sheet 51) is a continuously attended, 6,551x150 ft. asphalt private airstrip serving the Kuparuk facilities. It is located approximately 13 miles south of Milne Point.
- Helmericks (Sheet 14), an unattended, 2,500 ft. dirt airstrip, is located approximately 21 miles west-southwest of Milne Point. It is situated west of the main channel of the Colville River near the mouth, and should be considered for emergency use only. Ditches line both sides of runway, which gets soft when wet.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- Simpson Lagoon water depths range from 3 to 7 ft.
- Aircraft wreckage is present in 4 ft of water 0.5 mile offshore north of Milne Pt. 18-1.
- Simpson Lagoon currents are generally to the west at 10 to 30 cm/sec.

COUNTERMEASURES CONSIDERATIONS

- Vegetated shorelines making up much of this area will preclude the use of heavy equipment. Sand-silt washed over on the vegetated shorelines is mixed with large peat blocks, making mechanized travel difficult.

STAGING AREAS AND PRESTAGED EQUIPMENT

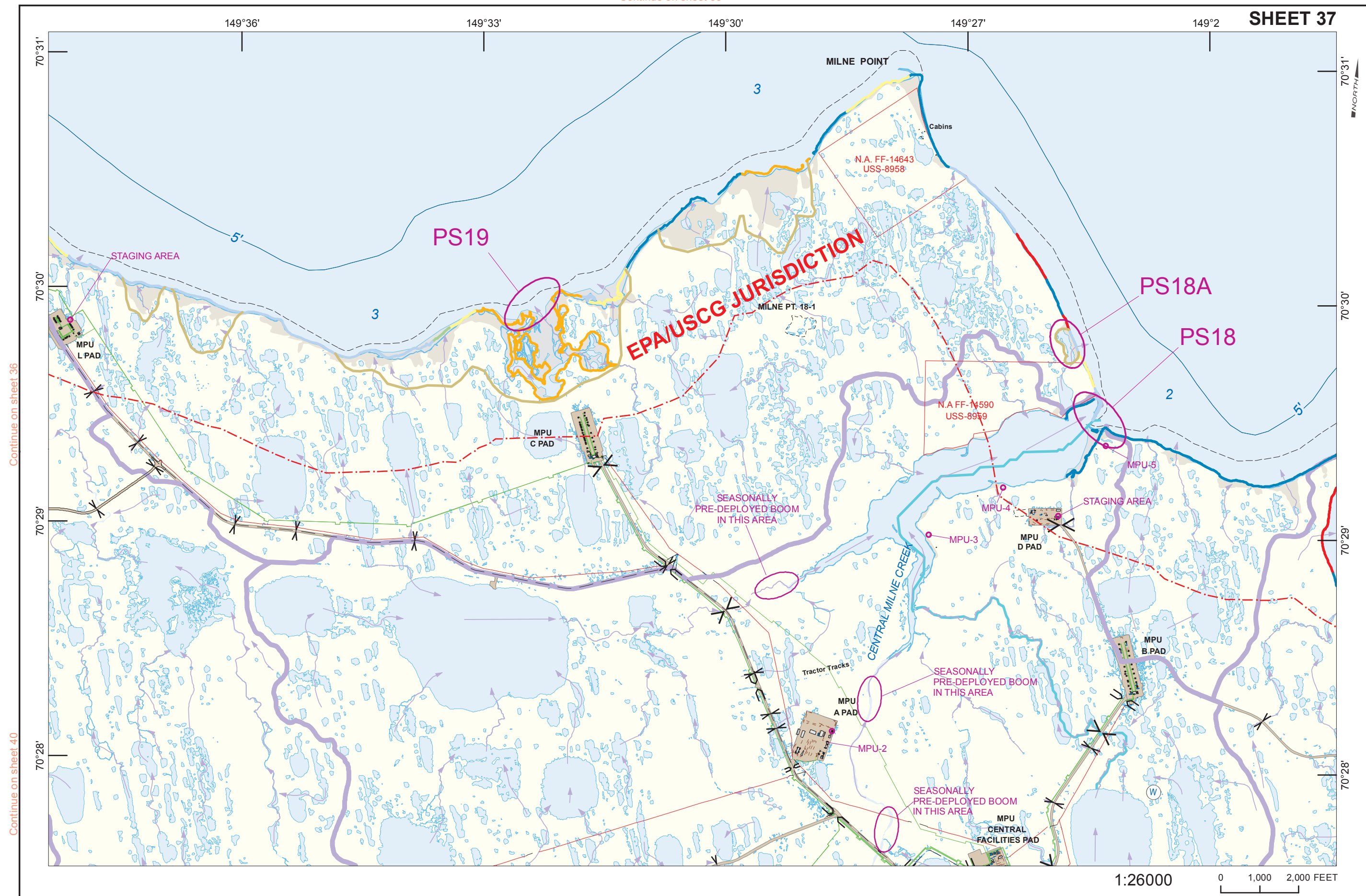
- There are staging areas at MPU D Pad and at MPU L Pad.
- Boom is typically predeployed seasonally on Central Milne Creek north of MPU-2 and northeast of Milne Point Road.


PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
MPU-2	MPU A Pad	Boom Boom Pump Skimmer Skimmer Storage	1,000' 300' 1 1 1 1	8" x 6" river Shore/tide 3" diaphragm Rope mop, Z14-E Disc, MI-30 2,400-gal. Fastank
MPU-3	On east side of inlet, southwest of MPU D Pad	Boom Boom Pump Skimmer Skimmer Storage	1,000' 100' 1 1 1 1	8" x 6" river Shore/tide 3" diaphragm Rope mop, Z14-E Weir, slurp 2,400-gal. Fastank
MPU-4	South side of inlet northwest of MPU D Pad	Boom Boom	1,000' 200'	8" x 6" river Shore/tide
MPU-5	On south side of inlet near entrance to bay	Boom Boom Pump Skimmer	1,500' 200' 1 1	8" x 6" river Shore/tide 3" diaphragm Disc, MI-30

*See the latest Supplement, Alaska and United States Coast Pilot for current information on air and vessel access, respectively.

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PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS17	Creek mouth 0.5 miles SE of Beechey Point	Most sensitive during open water season. Inundated low-lying tundra shorelines.	C-13 or C-14	500'
PS17A	Salt marsh 0.5 miles SW of Beechey Point	Most sensitive during open water season. Keep oil from entering salt marsh.	C-13 or C-14	2,000'
PS17B	Salt marsh 1 mile SW of Beechey Point	Most sensitive during open water season. Keep oil from entering salt marsh.	C-13 or C-14	1,200'
PS17C	Salt marsh 1.75 miles SE of Kavearak Point	Most sensitive during open water season. Keep oil from entering salt marsh. Inundated low-lying tundra shorelines.	C-13 or C-14	200'
PS17D	Salt marsh inlet 1 mile south of Kavearak Point	Most sensitive during open water season. Keep oil from entering salt marsh.	C-13 or C-14	2,000'
PS17E	Salt marsh on 1.5 miles SW of Kavearak Point	Most sensitive during open water season. Keep oil from entering salt marsh. Inundated low-lying tundra shorelines.	C-13 or C-14	700'

GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Simpson Lagoon has large flocks of molting male Oldsquaw in July and early August, especially in the lee shores of the barrier islands.
- Shoreline and offshore areas support molting and brood-rearing eiders. This is also a staging area for migrating Phalaropes (shorebirds). Birds are present in June through September.
- This is a Brant nesting, brood-rearing, and molting area. Birds are present from May through August.
- Pairs of Spectacled Eiders have been found in this area.
- Plan to deploy bird-hazing systems during the open-water season.
- East Milne Creek provides habitat for anadromous whitefish and char and for resident fish.
- Polar bear dens have been found in this area. Dens may be in use from October through April.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.

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NOTE: All values given on these pages are for planning purposes only.

Response Considerations

AIR ACCESS*


- Ugnu-Kuparuk (Sheet 51) is a continuously attended, 6,551x150 ft. asphalt private airstrip serving the Kuparuk facilities. It is located approximately 13 miles southwest of Kavearak Point.
- A continuously attended, private heliport is located at the Northstar facility (Sheet 59), approximately 15 miles east of Kavearak Point. The wooden pad is 62'x55'.
- An unattended and unmaintained 1,500 ft. gravel private airstrip is located at Point McIntyre (Sheet 62), approximately 18 miles southeast of Kavearak Point. Runway has soft spots, with erosion, grass and rocks up to 3". Recommend emergency use only.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- Water access by other than very shallow-draft vessels will be precluded in Simpson Lagoon and Gwydyr Bay due to shallow water depths.
- There is small boat shelter in 4 ft of water behind sandbar extending northwest from Beechey Point.
- Gwydyr Bay and Simpson Lagoon surface currents are generally to the west at 10 to 30 cm/sec. Water depth is 2 to 7 ft.

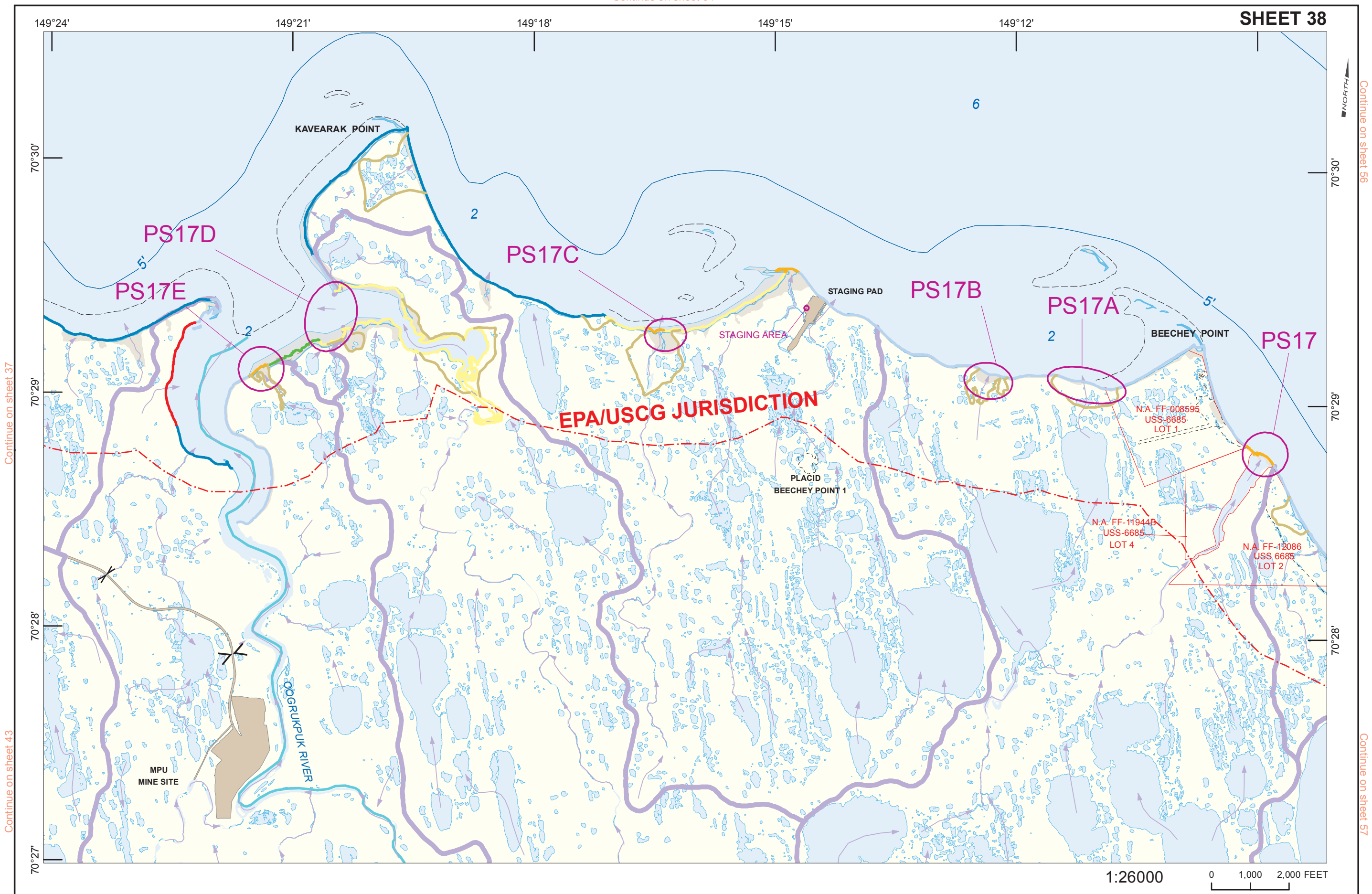
STAGING AREAS AND PRESTAGED EQUIPMENT

- There is a staging pad approximately 2 miles west of Beechey Point.



*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

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PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS27	Creek mouth west of Oliktok Pt. airstrip	Most sensitive during open water season. Keep oil from entering river.	C-13 or C-14	100'

GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- Shoreline and offshore areas support molting Oldsquaws and eiders, and brood-rearing eiders. This is also a staging area for migrating Phalaropes (shorebirds). Birds are present in June through September.
- This is a Spectacled Eider nesting area.
- This is a Brant nesting, brood-rearing, and molting area. Birds are present from May through August.
- Plan to deploy bird-hazing systems during the open-water season.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.

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Response Considerations

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AIR ACCESS*

- Helmericks (Sheet 14), an unattended, 2,500 ft. dirt airstrip, is located approximately 12 miles southwest of Oliktok Point. It is situated west of the main channel of the Colville River near the mouth, and should be considered for emergency use only. Ditches line both sides of runway, which gets soft when wet.
- Ugnu-Kuparuk (Sheet 51) is a continuously attended, 6,551x150 ft. asphalt private airstrip serving the Kuparuk facilities. It is located approximately 15 miles south-southeast of Oliktok Point.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- Simpson Lagoon water depths range from 3 to 7 ft.
- There is small boat shelter from east winds behind the small sand spit west of Oliktok Point (Sheet 35). It provides excellent moorage but is limited to 5 ft of water. This shelter is exposed to southwest winds. Shelter from southwest winds is available on the east side of Oliktok Point.
- Simpson Lagoon currents are generally to the west at 10 to 30 cm/sec.

COUNTERMEASURES CONSIDERATIONS

- Sand-silt shores are very narrow (less than 20 ft wide) and interrupted by small creek mouths and areas of thick peat deposits. Large areas of potential overwash west of Oliktok Point may make cleanup difficult. Backshore areas are wet tundra.
- West and north winds and Colville River discharge will cause floating oil to impinge on the shoreline west of Oliktok Point. There is some restricted access to beaches by shallow water.

STAGING AREAS AND PRESTAGED EQUIPMENT

- There is a staging area south of DS 3R.

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
KUP-11	DS 3R	Boom	500'	8" x 6" river

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

NOTE: All values given on these pages are for planning purposes only.

Continue on sheet 39A

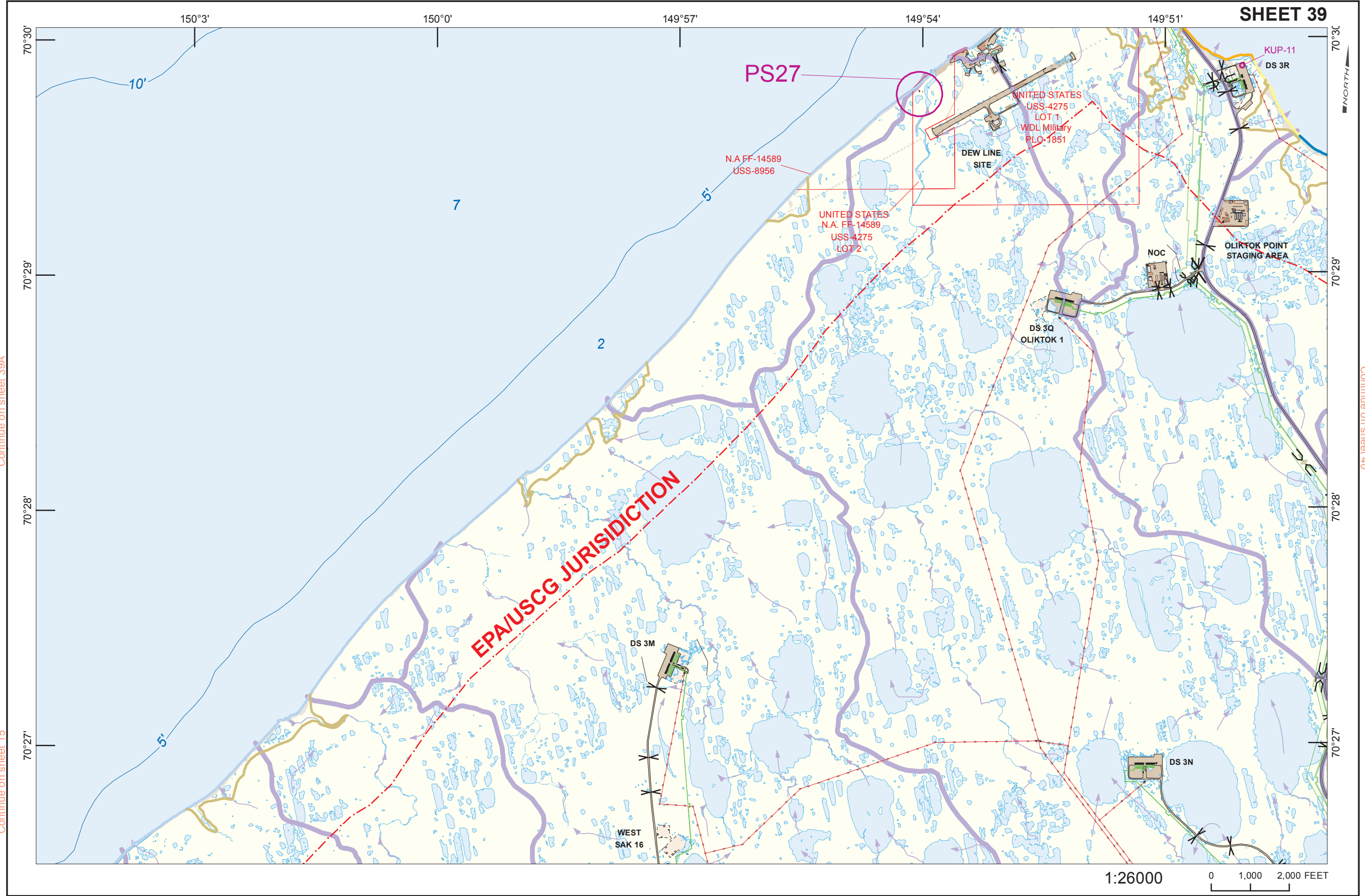
Continue on sheet 35

SHEET 39

Continue on sheet 39A

Continue on sheet 15

Continue on sheet 40



Continue on sheet 41



PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

- Shoreline and offshore areas support molting Oldsquaws and eiders, and brood-rearing eiders. This is also a staging area for migrating Phalaropes (shorebirds). Birds are present in June through September.
- Plan to deploy bird-hazing systems during the open-water season.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- Helmericks (Sheet 14), an unattended, 2,500 ft. dirt airstrip, is located approximately 4 miles southwest of the Oooguruk site. It is situated west of the main channel of the Colville River near the mouth, and should be considered for emergency use only. Ditches line both sides of runway, which gets soft when wet.
- Ugnu-Kuparuk (Sheet 51) is a continuously attended, 6,551x150 ft. asphalt private airstrip serving the Kuparuk facilities. It is located approximately 19 miles southeast of the Oooguruk site.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- Surface currents generally flow to the west at 10 to 30 cm/sec.
- Strong offshore winds can reduce water depths by 2 to 3 ft.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 30

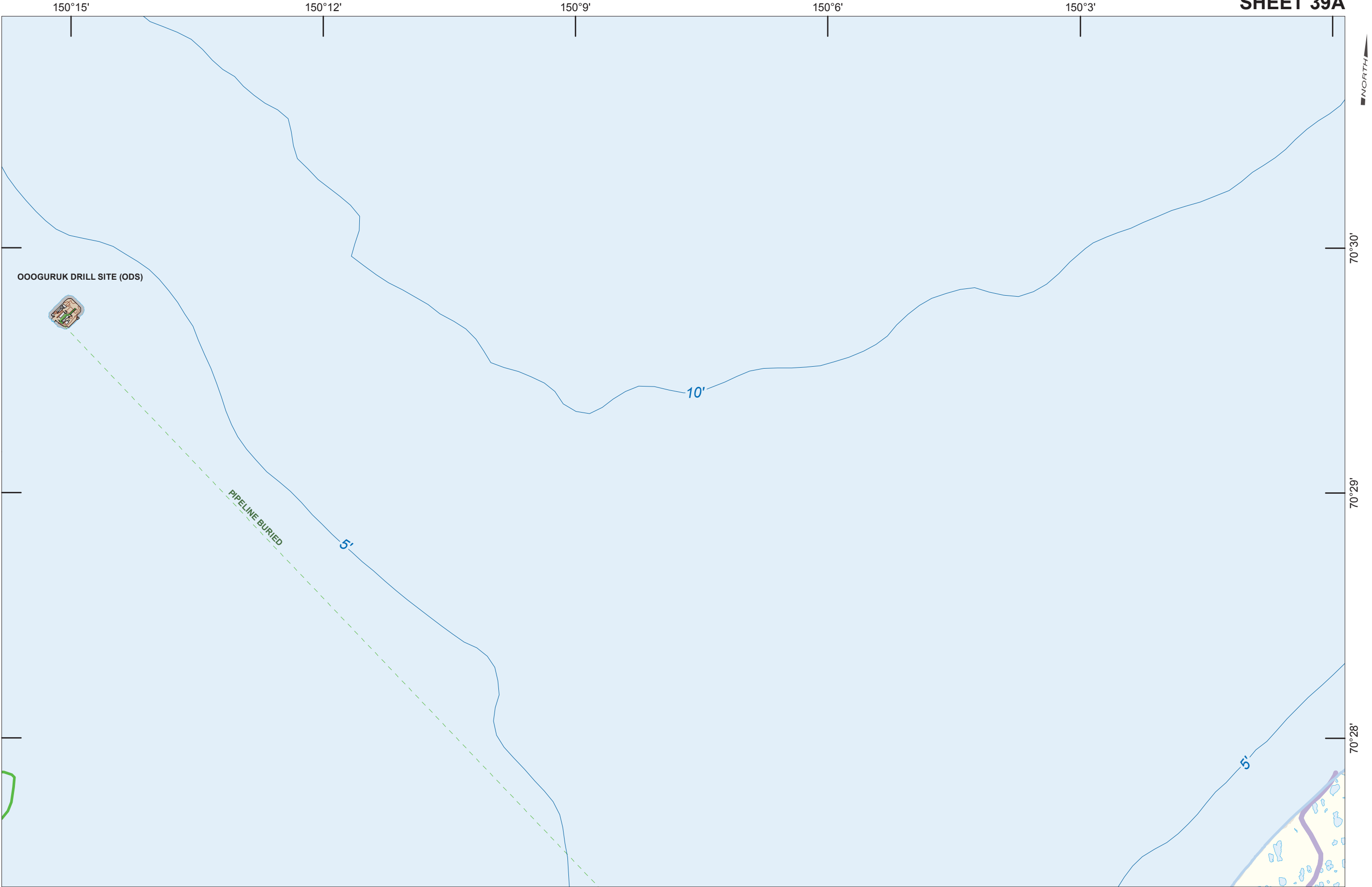
SHEET 39A

Continue on sheet 35

Continue on sheet 39

Continue on sheet 11

Continue on sheet 15



1:26000
0 1,000 2,000 FEET



SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS24	Gaps between marsh islands west of MPU L Pad	Most sensitive during open water season. Salt marsh and/or inundated low-lying tundra shoreline.	C-13 or C-14	400'
PS24A	Salt marsh 1 mile NE of Ugnuravik River mouth	Most sensitive during open water season. Keep oil from entering salt marsh.	C-13 or C-14	4,500'
PS25	Ugnuravik River mouth	Most sensitive during open water season. Keep oil from entering river. Peat shorelines are present on west shore of river.	C-13 or C-14	1,500'
PS27	Creek mouth west of Oliktok Pt. airstrip	Most sensitive during open water season. Keep oil from entering river.	C-13 or C-14	100'

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Simpson Lagoon has large flocks of molting male Oldsquaw in July and early August, especially in the lee shores of the barrier islands.
- This is a Spectacled Eider nesting area.
- This is a Brant nesting, brood-rearing, and molting area. Birds are present from May through August.
- Pairs of Spectacled Eiders have been found in this area.
- Plan to deploy bird-hazing systems during the open-water season.
- The Ugnuravik River provides habitat for anadromous whitefish and for resident fish.

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



- Ugnu-Kuparuk (Sheet 51) is a continuously attended, 6,551x150 ft. asphalt private airstrip serving the Kuparuk facilities. It is located approximately 11 miles south of Mine Site E.
- Helmericks (Sheet 14), an unattended, 2,500 ft. dirt airstrip, is located approximately 15 miles west of Mine Site E. It is situated west of the main channel of the Colville River near the mouth, and should be considered for emergency use only. Ditches line both sides of runway, which gets soft when wet.

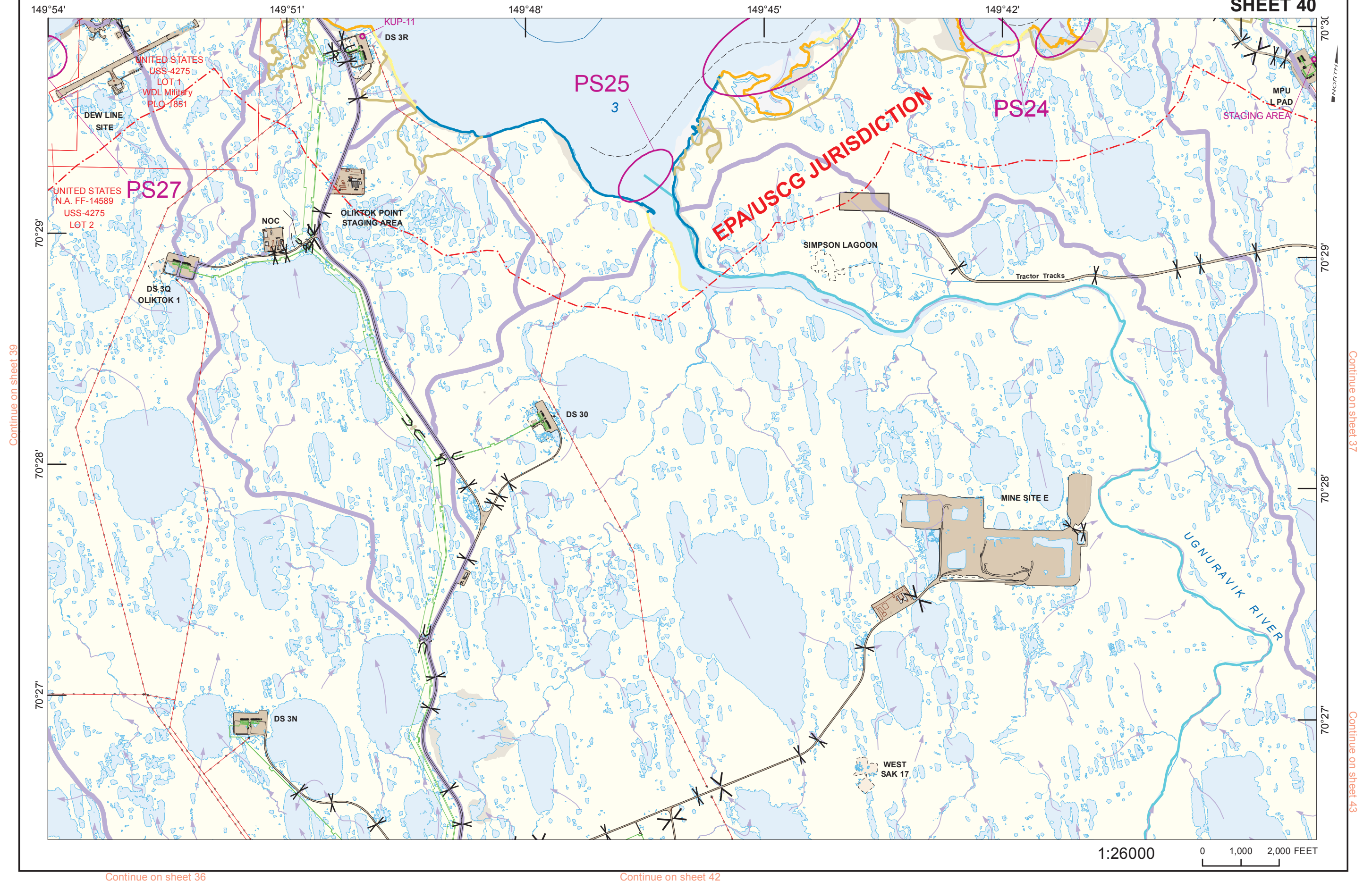
- Simpson Lagoon water depths range from 3 to 7 ft.
- Simpson Lagoon currents are generally to the west at 10 to 30 cm/sec.

- Vegetated shorelines making up much of this area will preclude the use of heavy equipment. Sand-silt washed over on the vegetated shorelines is mixed with large peat blocks, making mechanized travel difficult.

- There is a staging area approximately 1 mile west of the mouth of the Ugnuravik River.
- There is a staging area at MPU L Pad.

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
KUP-11	DS 3R	Boom	500'	8" x 6" river

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.



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PRIORITY PROTECTION SITES

• There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

• Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.

• Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.

• This is a Spectacled Eider nesting area.

• Plan to deploy bird-hazing systems during the open-water season.

• Kalubik Creek provides habitat for anadromous whitefish and char and for resident fish.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.

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Response Considerations

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AIR ACCESS*

• Helmericks (Sheet 14), an unattended, 2,500 ft. dirt airstrip, is located approximately 10 miles west of West Sak 16. It is situated west of the main channel of the Colville River near the mouth, and should be considered for emergency use only. Ditches line both sides of runway, which gets soft when wet.

• Ugnu-Kuparuk (Sheet 51) is a continuously attended, 6,551x150 ft. asphalt private airstrip serving the Kuparuk facilities. It is located approximately 12 miles southeast of West Sak 16.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

• Severe shoaling and continuous sediment transport occur in the Colville River delta. Water depths are generally less than 4 ft up to 5 miles offshore.

COUNTERMEASURES CONSIDERATIONS

• Sand-silt shores are very narrow (less than 20 ft wide) and interrupted by small creek mouths. Areas of potential overwash may make cleanup difficult. Backshore areas are wet tundra.

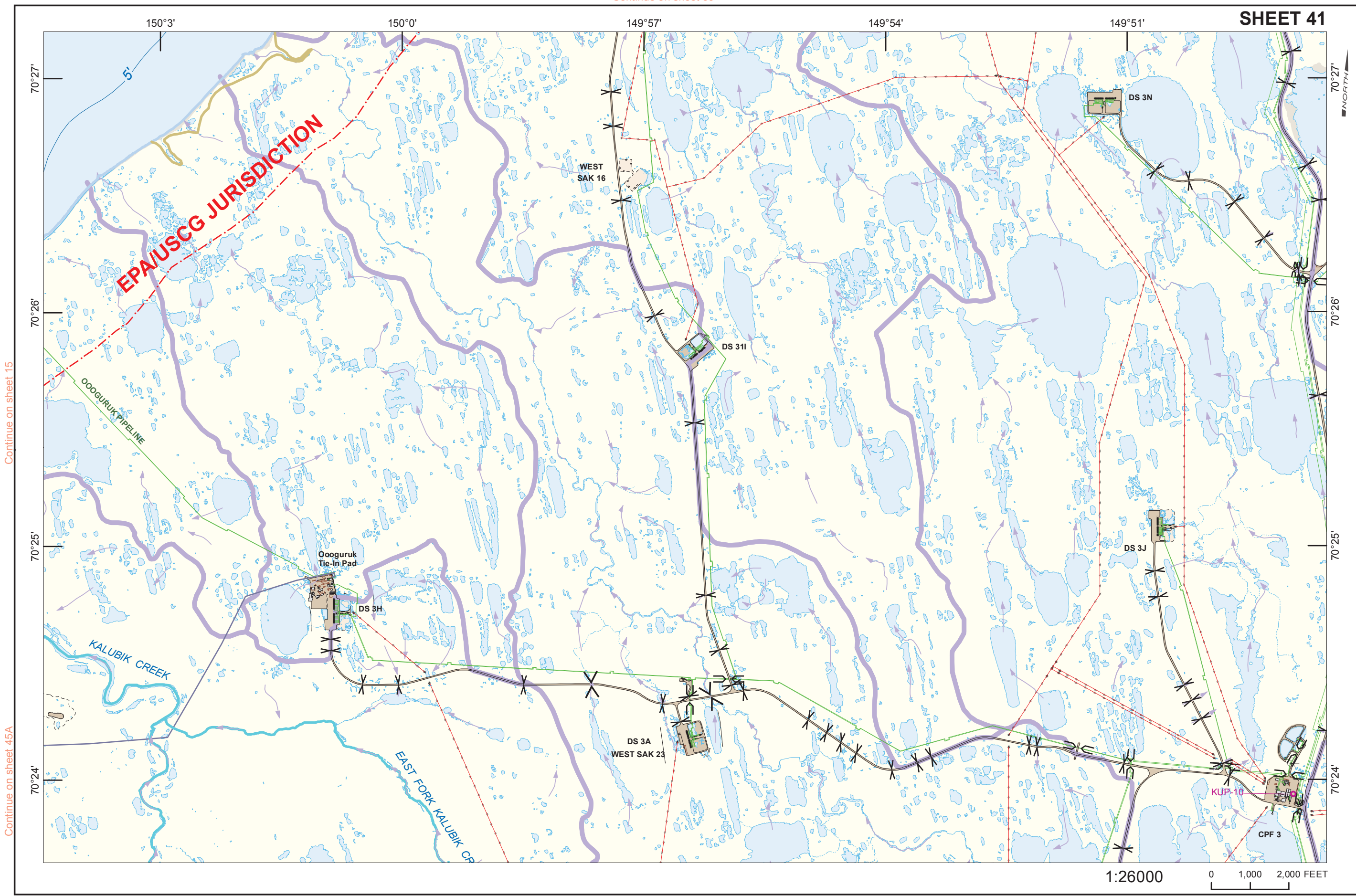
• West and north winds and Colville River discharge will cause floating oil to impinge on the shoreline west of Oliktok Point. There is some restricted access to beaches by shallow water.

STAGING AREAS AND PRESTAGED EQUIPMENT

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
KUP-10	At CPF-3	Storage	2	2,400-gal. Fastank

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

NOTE: All values given on these pages are for planning purposes only.





PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- This is a Spectacled Eider nesting area.
- This is a Brant nesting area. Birds are present from May through July.
- Plan to deploy bird-hazing systems during the open-water season.
- The Ugnuravik River provides habitat for anadromous whitefish and for resident fish.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- Ugnu-Kuparuk (Sheet 51) is a continuously attended, 6,551x150 ft. asphalt private airstrip serving the Kuparuk facilities. It is located approximately 9 miles south of MPU N Pad.
- Helmericks (Sheet 14), an unattended, 2,500 ft. dirt airstrip, is located approximately 16 miles west of MPU N Pad. It is situated west of the main channel of the Colville River near the mouth, and should be considered for emergency use only. Ditches line both sides of runway, which gets soft when wet.

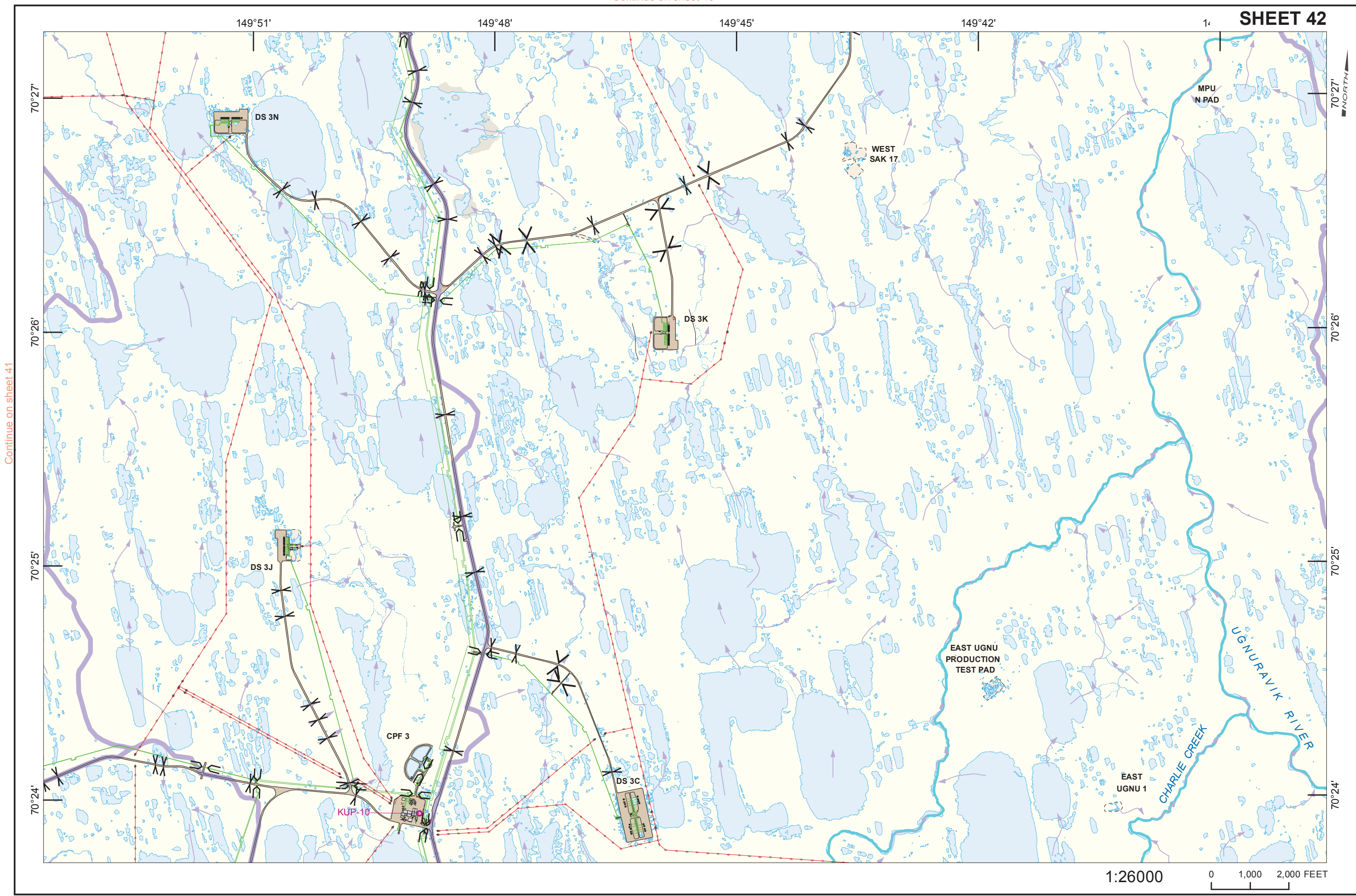
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS


- There are no marine waters or shorelines on this sheet.

STAGING AREAS AND PRESTAGED EQUIPMENT

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
KUP-10	At CPF-3	Storage	2	2,400-gal. Fastank

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.





PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.


GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- This is a Brant nesting, brood-rearing, and molting area. Birds are present from May through August.
- Pairs of Spectacled Eiders have been found in this area.
- Plan to deploy bird-hazing systems during the open-water season.
- The Ugnuravik River provides habitat for anadromous whitefish and for resident fish.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- Ugnu-Kuparuk (Sheet 51) is a continuously attended, 6,551x150 ft. asphalt private airstrip serving the Kuparuk facilities. It is located approximately 10 miles south of MPU Central Facilities Pad.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this sheet.

STAGING AREAS AND PRESTAGED EQUIPMENT

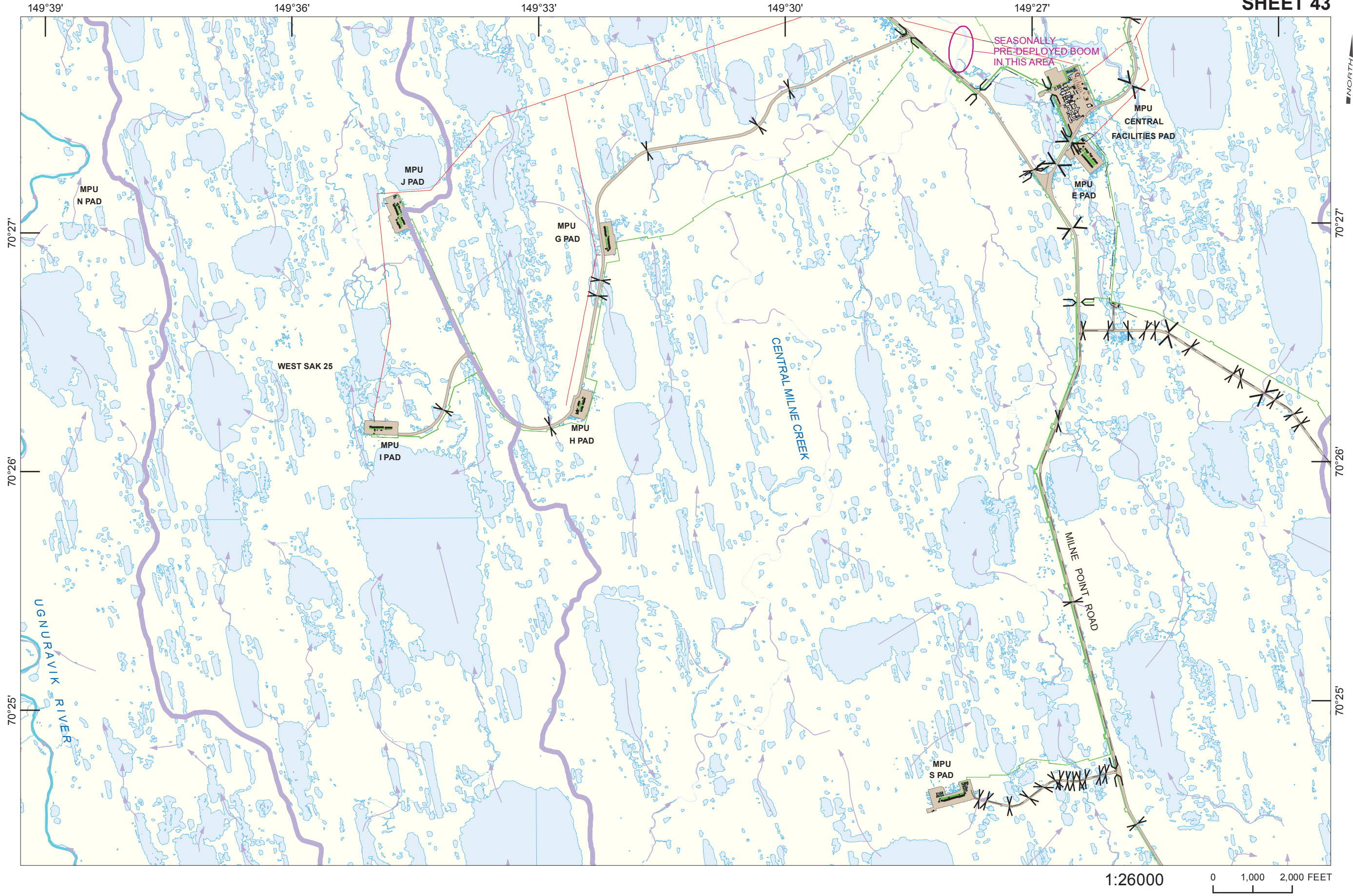
- Boom is typically predeployed seasonally on Central Milne Creek northeast of Milne Point Road.


*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 40

Continue on sheet 42

Continue on sheet 44





PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.


GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- This is a Brant nesting area. Birds are present from May through July.
- Pairs of Spectacled Eiders have been found in this area.
- Plan to deploy bird-hazing systems during the open-water season.
- East Milne Creek provides habitat for anadromous whitefish and char and for resident fish.

CULTURAL SITES

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AIR ACCESS*

- Ugnu-Kuparuk (Sheet 51) is a continuously attended, 6,551x150 ft. asphalt private airstrip serving the Kuparuk facilities. It is located approximately 9 miles southwest of MPU K Pad.
- A continuously attended, private heliport is located at the Northstar facility (Sheet 59), approximately 15 miles east-northeast of MPU K Pad. The wooden pad is 62'x55'.
- An unattended and unmaintained 1,500 ft. gravel private airstrip is located at Point McIntyre (Sheet 62), approximately 16 miles east of MPU K Pad. Runway has soft spots, with erosion, grass and rocks up to 3". Recommend emergency use only.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this sheet.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 43

Continue on sheet 47

Continue on sheet 57

Continue on sheet 281





PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- This is a Brant nesting, brood-rearing, and molting area. Birds are present from May through August.
- Plan to deploy bird-hazing systems during the open-water season.
- Kalubik Creek provides habitat for anadromous whitefish and char and for resident fish.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

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AIR ACCESS*

- Ugnu-Kuparuk (Sheet 51) is a continuously attended, 6,551x150 ft. asphalt private airstrip serving the Kuparuk facilities. It is located approximately 9 miles southeast of West Sak 23.
- Helmericks (Sheet 14), an unattended, 2,500 ft. dirt airstrip, is located approximately 11 miles west-northwest of West Sak 23. It is situated west of the main channel of the Colville River near the mouth, and should be considered for emergency use only. Ditches line both sides of runway, which gets soft when wet.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this sheet.

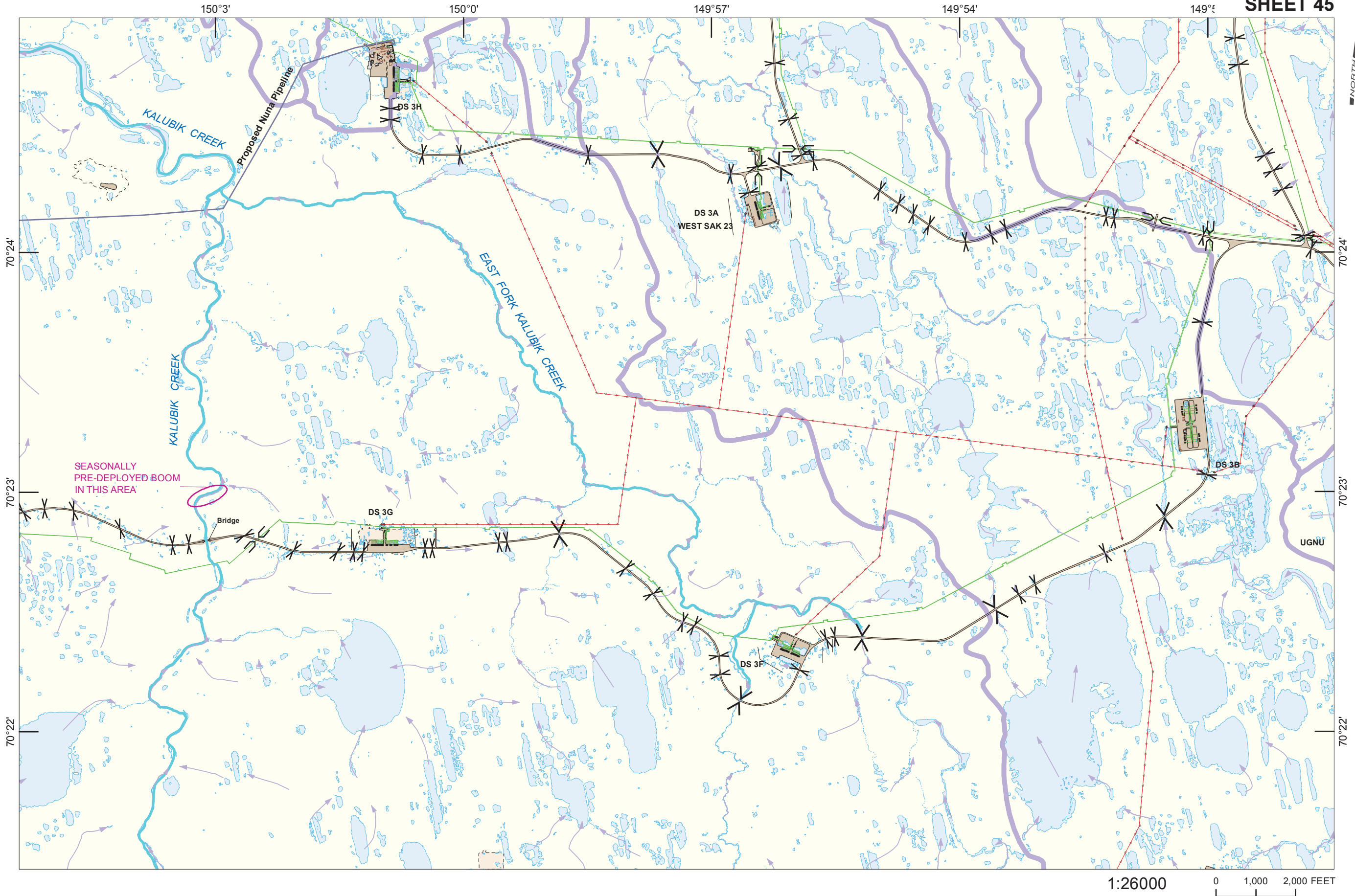
STAGING AREAS AND PRESTAGED EQUIPMENT

- Boom is typically predeployed seasonally on Kalubik Creek northwest of DS 3G.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 45A

Continue on sheet 46





PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- This is a Brant nesting, brood-rearing, and molting area. Birds are present from May through August.
- Plan to deploy bird-hazing systems during the open-water season.
- Kalubik Creek provides habitat for anadromous whitefish and char and for resident fish.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

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AIR ACCESS*

- Helmericks (Sheet 14), an unattended, 2,500 ft. dirt airstrip, is located approximately 5 miles northwest of DS 3S. It is situated west of the main channel of the Colville River near the mouth, and should be considered for emergency use only. Ditches line both sides of runway, which gets soft when wet.
- Ugnu-Kuparuk (Sheet 51) is a continuously attended, 6,551x150 ft. asphalt private airstrip serving the Kuparuk facilities. It is located approximately 15 miles east-southeast of DS 3S.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this sheet.

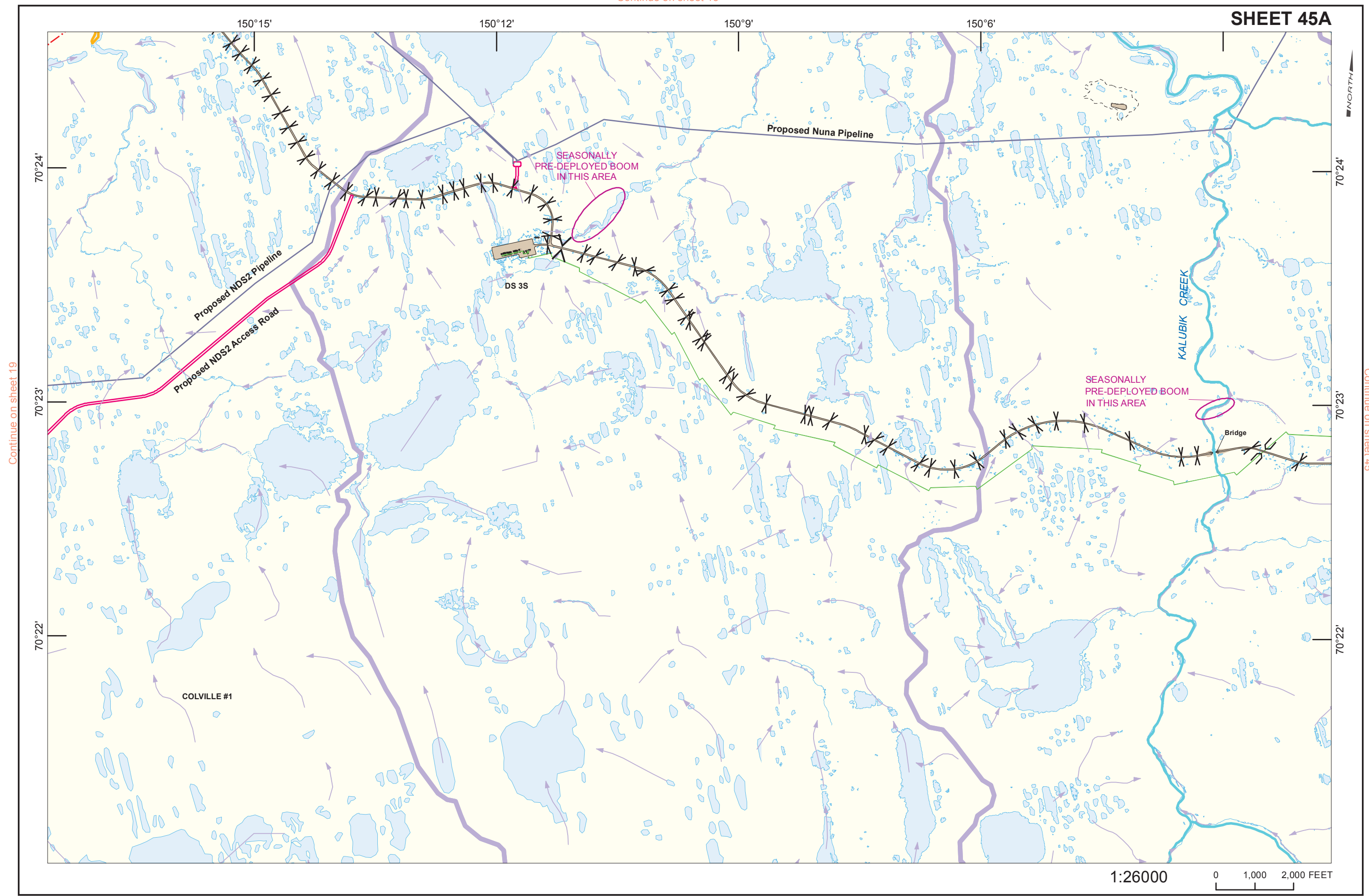
STAGING AREAS AND PRESTAGED EQUIPMENT

- Boom is typically predeployed seasonally on Kalubik Creek north of road to DS 3S.
- Boom is typically predeployed seasonally on the stream just northeast of DS 3S.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 15


SHEET 45A



1:26000 0 1,000 2,000 FEET

Continue on sheet 49A

Continue on sheet 49



NORTH SLOPE SPILL RESPONSE

A WORLD CLASS ORGANIZATION

PRIORITY PROTECTION SITES

• There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

• Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.

• Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.

• This is a Spectacled Eider nesting area.

• This is a Brant nesting, brood-rearing, and molting area. Birds are present from May through August.

• Plan to deploy bird-hazing systems during the open-water season.

• Charlie Creek provides habitat for anadromous whitefish and for resident fish.

• The Ugnuravik River provides habitat for anadromous whitefish and for resident fish.

CULTURAL SITES


The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.

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NOTE: All values given on these pages are for planning purposes only.

Response Considerations



NORTH SLOPE SPILL RESPONSE

A WORLD CLASS ORGANIZATION

AIR ACCESS*

• Ugnu-Kuparuk (Sheet 51) is a continuously attended, 6,551x150 ft. asphalt private airstrip serving the Kuparuk facilities. It is located approximately 8 miles southeast of CPF 3.

• Helmericks (Sheet 14), an unattended, 2,500 ft. dirt airstrip, is located approximately 13 miles west of CPF 3. It is situated west of the main channel of the Colville River near the mouth, and should be considered for emergency use only. Ditches line both sides of runway, which gets soft when wet.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

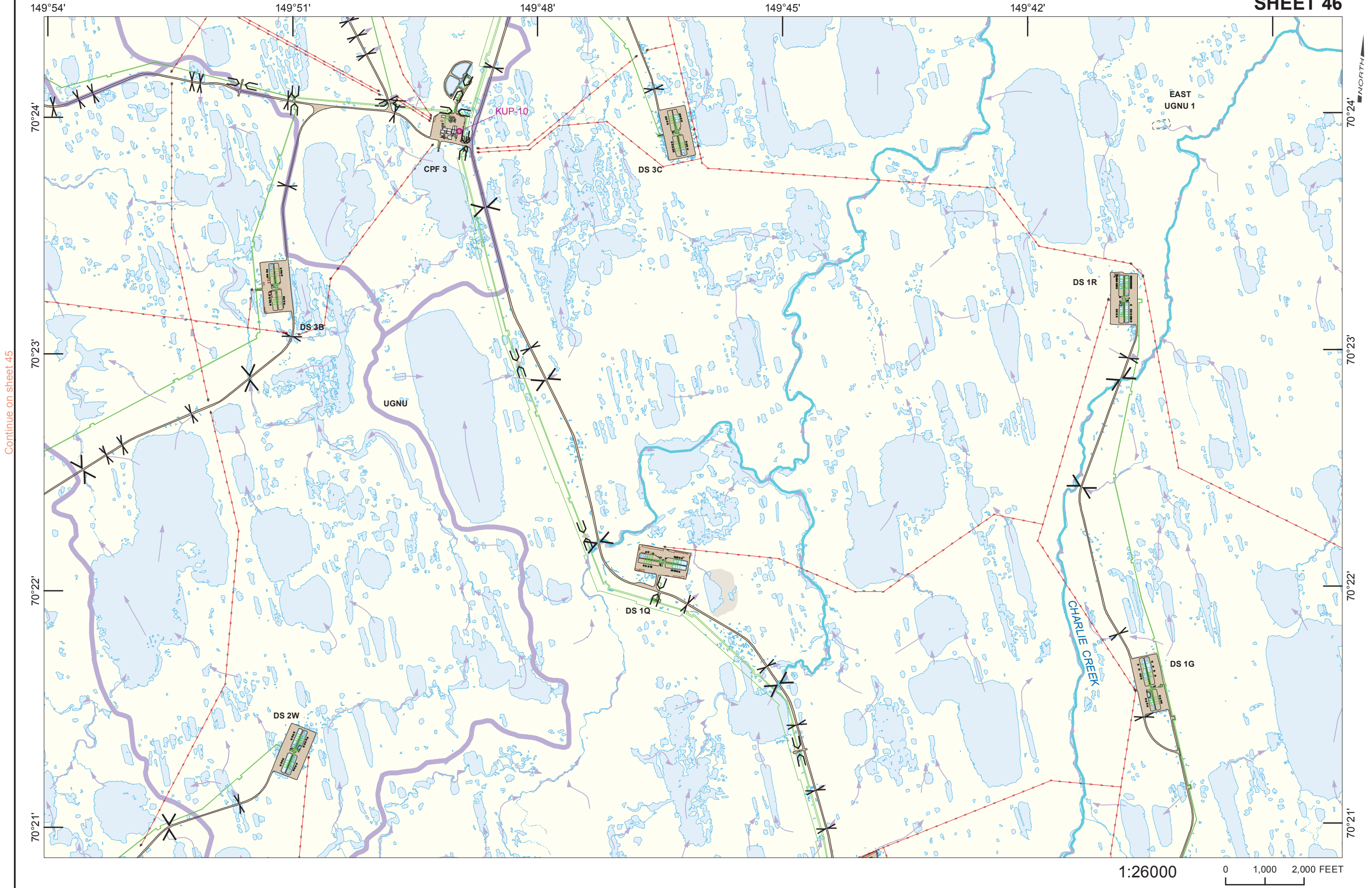
• There are no marine waters or shorelines on this sheet.

STAGING AREAS AND PRESTAGED EQUIPMENT

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
KUP-10	At CPF-3	Storage	2	2,400-gal. Fastank

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

NOTE: All values given on these pages are for planning purposes only.





PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- This is a Brant nesting, brood-rearing, and molting area. Birds are present from May through August.
- Pairs of Spectacled Eiders have been found in this area.
- Plan to deploy bird-hazing systems during the open-water season.
- The Ugnuravik River and Charlie Creek provide habitat for anadromous whitefish and for resident fish.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



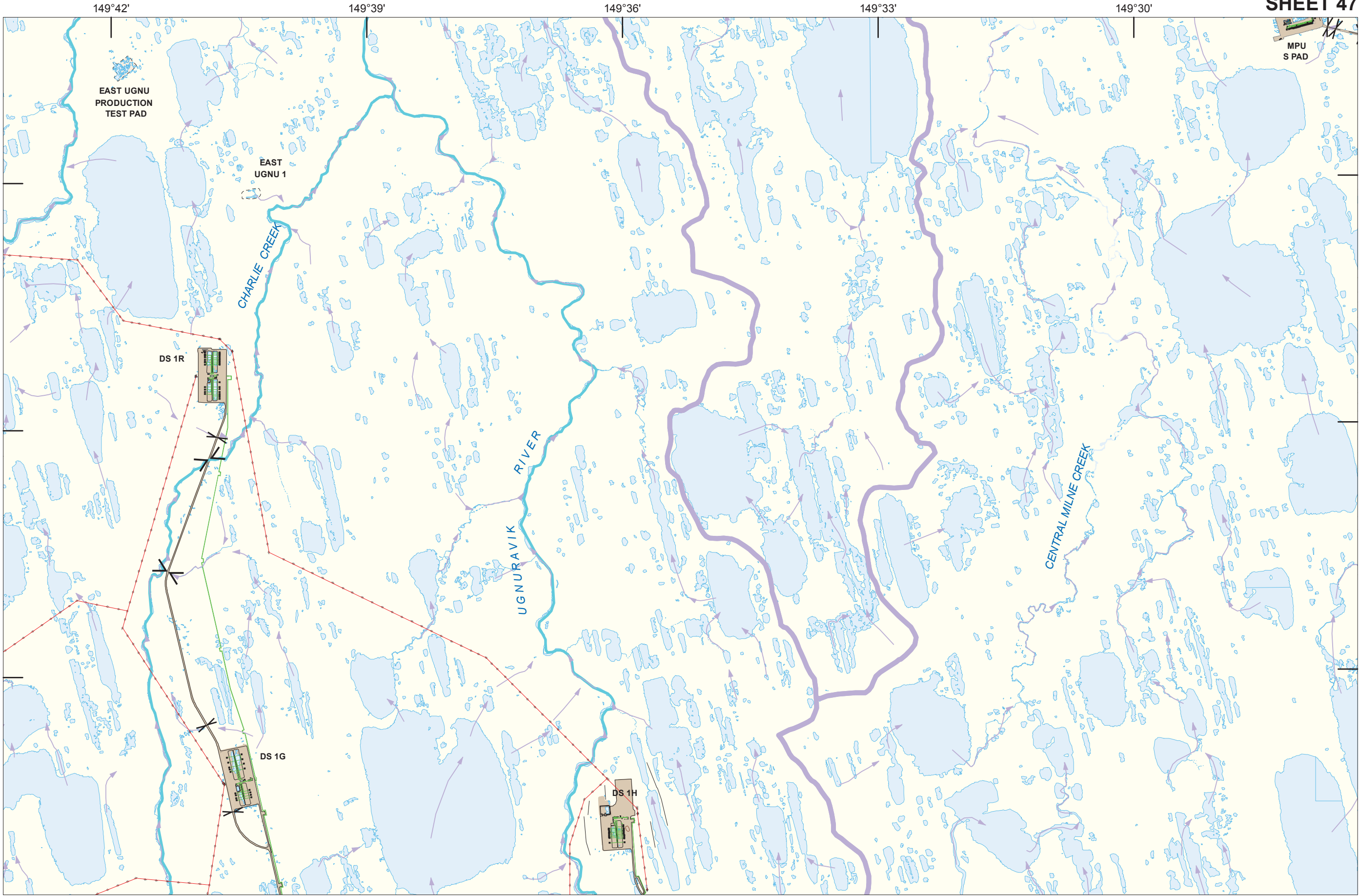
AIR ACCESS*

- Ugnu-Kuparuk (Sheet 51) is a continuously attended, 6,551x150 ft. asphalt private airstrip serving the Kuparuk facilities. It is located approximately 5 miles south-southeast of DS 1R.
- Helmericks (Sheet 14), an unattended, 2,500 ft. dirt airstrip, is located approximately 16 miles west-northwest of DS 1R. It is situated west of the main channel of the Colville River near the mouth, and should be considered for emergency use only. Ditches line both sides of runway, which gets soft when wet.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this sheet.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.





PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- This is a Brant nesting, brood-rearing, and molting area. Birds are present from May through August.
- Pairs of Spectacled Eiders have been found in this area.
- Plan to deploy bird-hazing systems during the open-water season.
- East Milne Creek provides habitat for anadromous whitefish and char and for resident fish.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- The Pt. McIntyre airstrip (Sheet 62) is approximately 16 miles east-northeast of ARCO NW Eileen 1. This is a 1,500-ft gravel strip, which is unattended and not maintained. Emergency use only is recommended.
- The Kuparuk airstrip (Sheet 51) is approximately 5 miles west-southwest of ARCO NW Eileen 1.

AIRSTRIP	DESCRIPTION/ LOCATION	FIXED-WING MINIMUMS	FUEL/ SERVICES	TRAFFIC CONTROL
Kuparuk Airstrip	6,551x150ft.asphalt runway attended continuously	VFR: 1 mi vis. clear of clouds IFR: 0.75 mi vis.	Jet A	24-hr advance notification required: 907-659-7213

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this sheet.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 47

Continue on sheet 281

Continue on sheet 282

Continue on sheet 51

149°27'

149°24'

149°21'

149°18'

149°15'

70°23'

70°22'

70°21'

70°23'

70°22'

70°21'

EILEEN STATE 1

ARCO NW
EILEEN 1

MOBIL
SOCAL
32-29E

L PAD

MILNE POINT ROAD

OGRUKUK RIVER

NORTH

1:26000

0 1,000 2,000 FEET

Continue on sheet 52

Continue on sheet 68



PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- This is a Spectacled Eider nesting area.
- This is a Brant nesting area. Birds are present from May through July.
- Plan to deploy bird-hazing systems during the open-water season.
- Kalubik Creek provides habitat for anadromous whitefish and char and for resident fish.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- The Kuparuk airstrip (Sheet 51) is approximately 9 miles east of Mine Site F.

AIRSTRIP	DESCRIPTION/ LOCATION	FIXED-WING MINIMUMS	FUEL/ SERVICES	TRAFFIC CONTROL
Kuparuk Airstrip	6,551x150ft.asphalt runway attended continuously	VFR: 1 mi vis. clear of clouds IFR: 0.75 mi vis.	Jet A	24-hr advance notification required: 907-659-7213

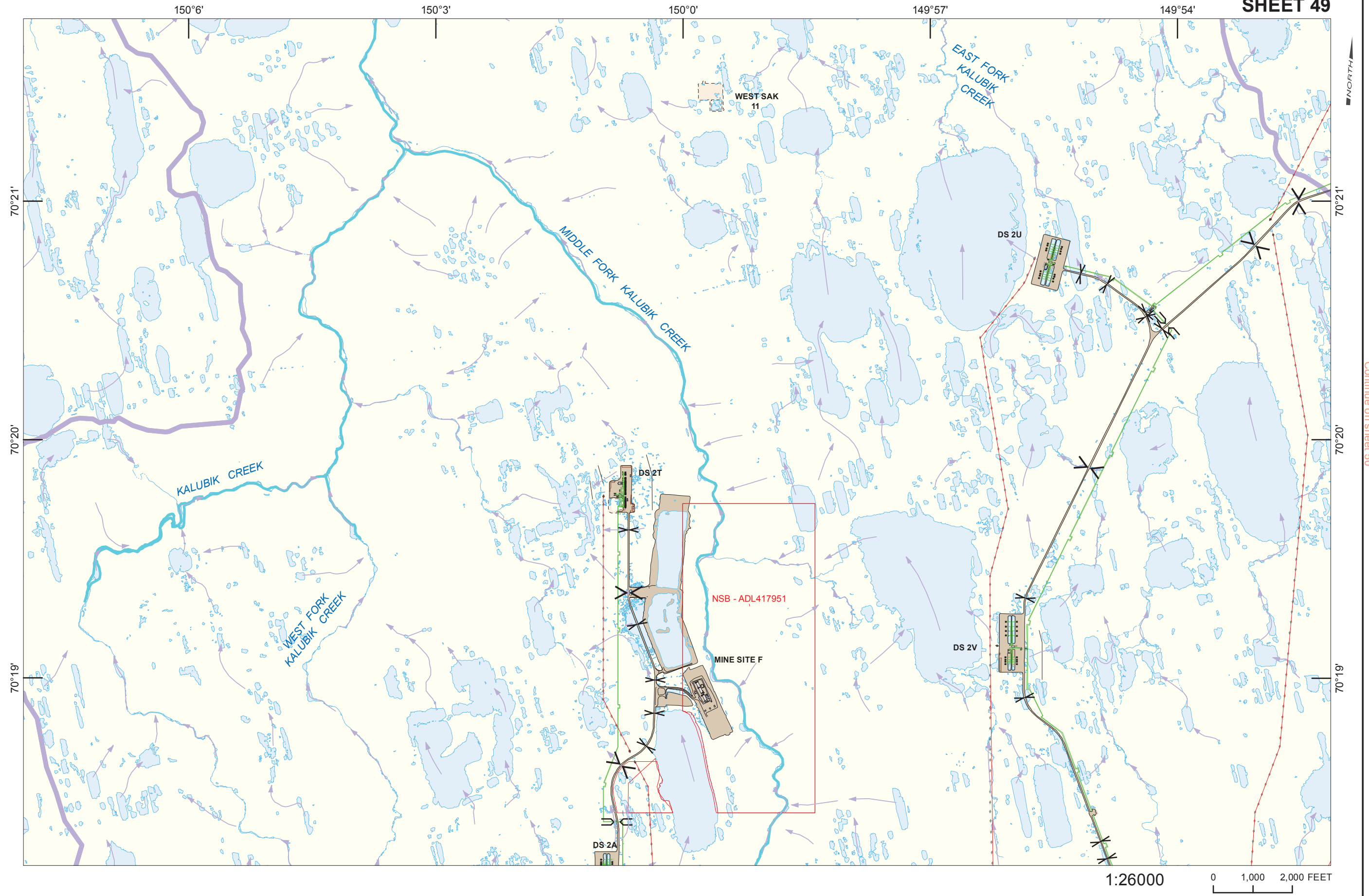
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this sheet.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 49A

Continue on sheet 50





PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- Plan to deploy bird-hazing systems during the open-water season.
- Kalubik Creek provides habitat for anadromous whitefish and char and for resident fish.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- The Kuparuk airstrip (Sheet 51) is approximately 12 miles east of West Sak #18.

AIRSTRIP	DESCRIPTION/ LOCATION	FIXED-WING MINIMUMS	FUEL/ SERVICES	TRAFFIC CONTROL
Kuparuk Airstrip	6,551x150ft.asphalt runway attended continuously	VFR: 1 mi vis. clear of clouds IFR: 0.75 mi vis.	Jet A	24-hr advance notification required: 907-659-7213

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

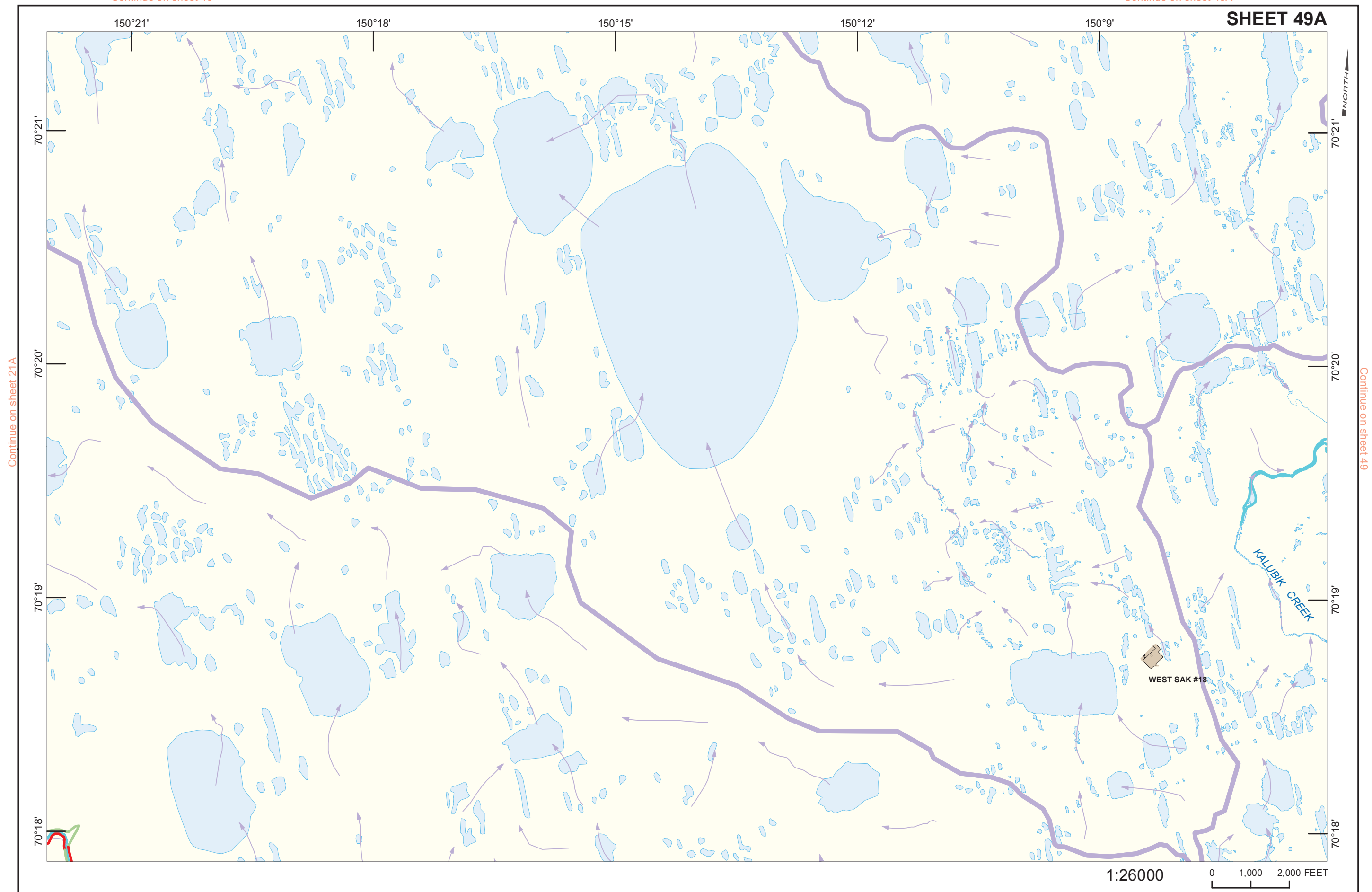
- There are no marine waters or shorelines on this sheet.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 19

Continue on sheet 45A

SHEET 49A





PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- This is a Spectacled Eider nesting area.
- This is a Brant nesting area. Birds are present from May through July.
- Plan to deploy bird-hazing systems during the open-water season.
- Kalubik Creek provides habitat for anadromous whitefish and char and for resident fish.
- Charlie Creek provides habitat for anadromous whitefish and for resident fish.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- The Kuparuk airstrip (Sheet 51) is approximately 5 miles west of DS 2X.

AIRSTRIP	DESCRIPTION/ LOCATION	FIXED-WING MINIMUMS	FUEL/ SERVICES	TRAFFIC CONTROL
Kuparuk Airstrip	6,551x150ft.asphalt runway attended continuously	VFR: 1 mi vis. clear of clouds IFR: 0.75 mi vis.	Jet A	24-hr advance notification required: 907-659-7213

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

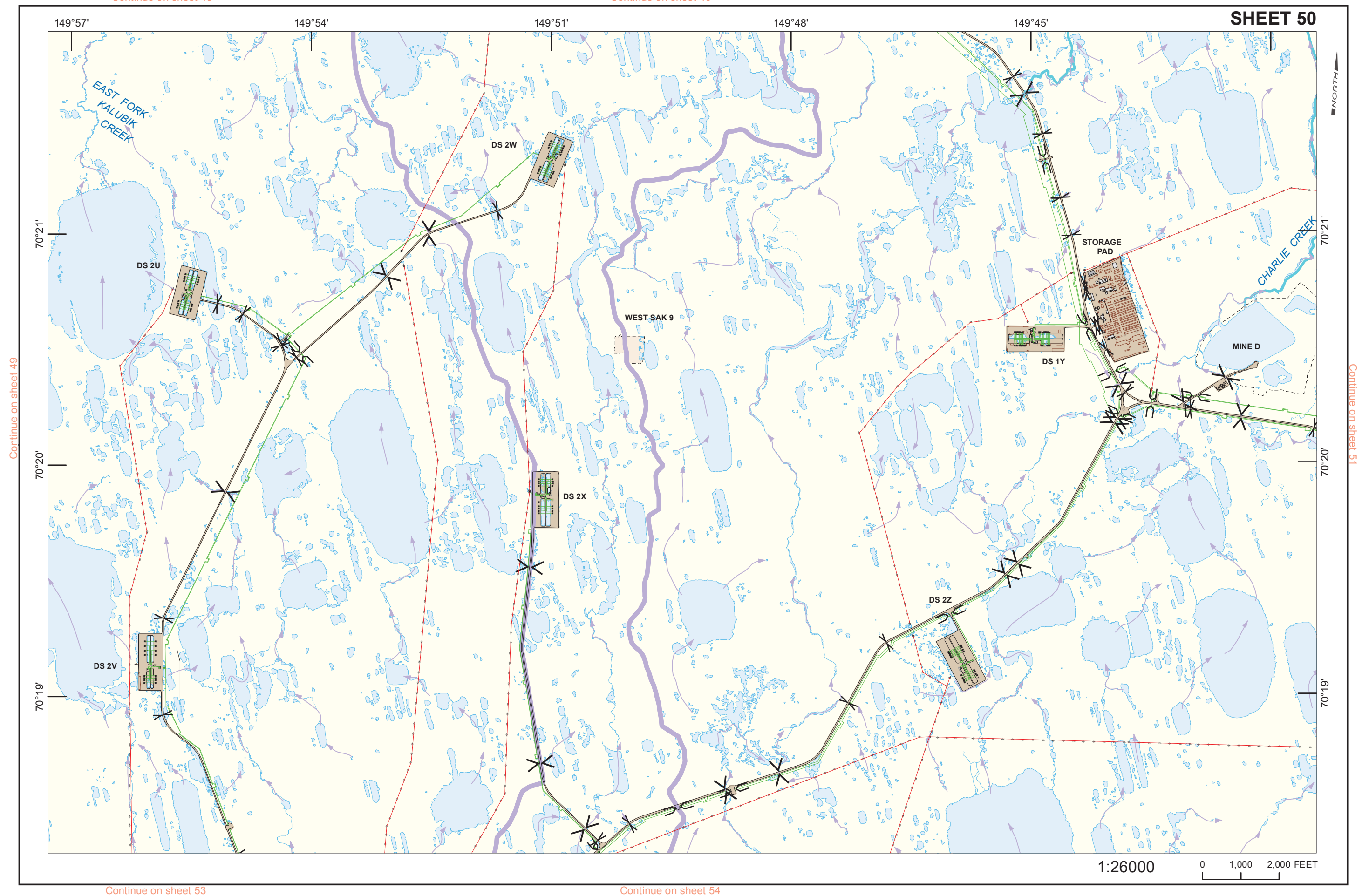
- There are no marine waters or shorelines on this sheet.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 45

Continue on sheet 46

SHEET 50



Continue on sheet 53

Continue on sheet 54



PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- This is a Brant nesting area. Birds are present from May through July.
- Plan to deploy bird-hazing systems during the open-water season.
- The Ugnuravik River and Charlie Creek provide habitat for anadromous whitefish and for resident fish.
- There is a freshwater intake west of DS 1B and north of Mine C at approximately 20 to 25 ft below the surface.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



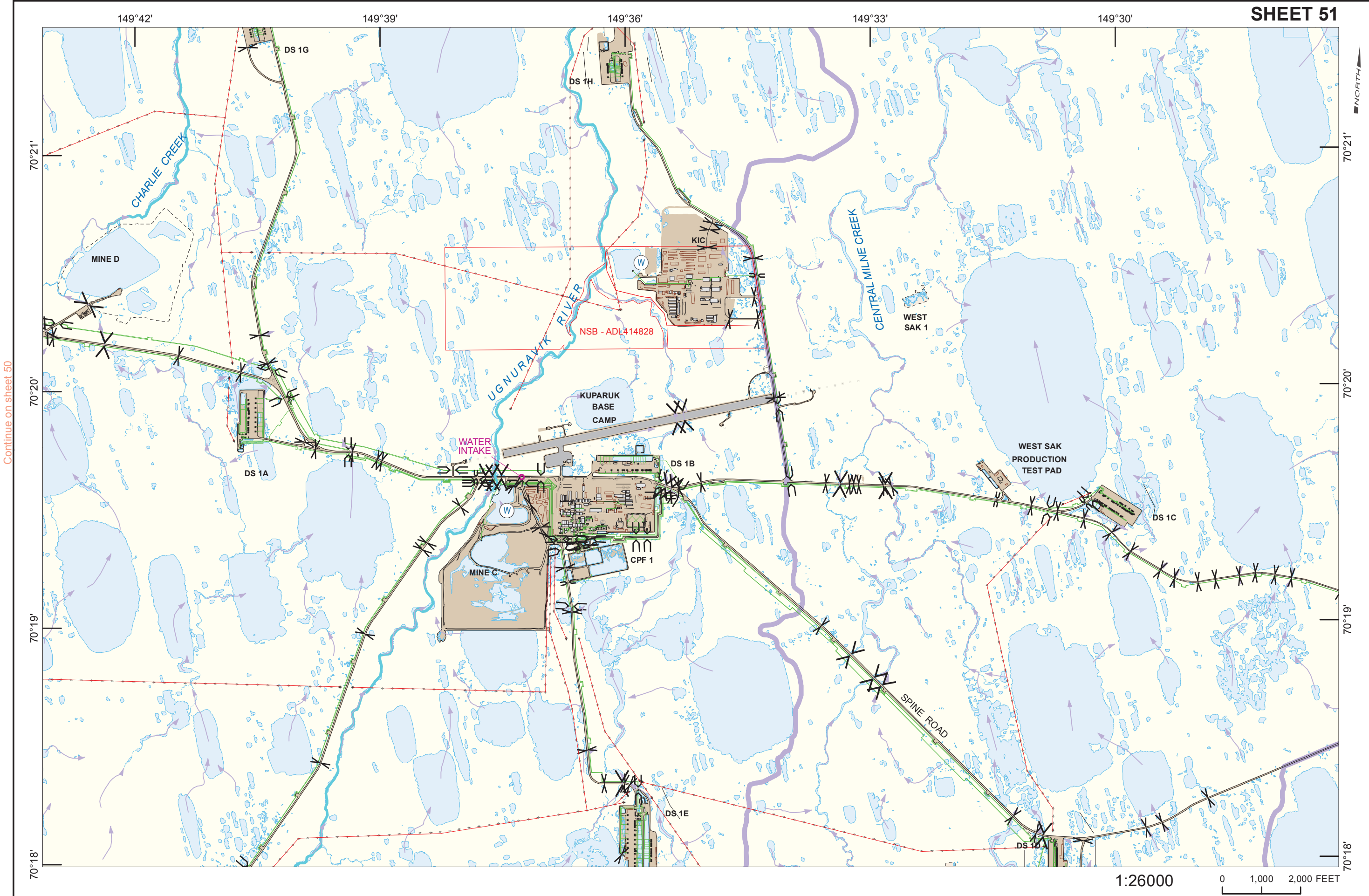
AIR ACCESS*

AIRSTRIP	DESCRIPTION/ LOCATION	FIXED-WING MINIMUMS	FUEL/ SERVICES	TRAFFIC CONTROL
Kuparuk Airstrip	6,551x150ft.asphalt runway attended continuously	VFR: 1 mi vis. clear of clouds IFR: 0.75 mi vis.	Jet A	24-hr advance notifcation required: 907-659-7213

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this sheet.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.



Continue on sheet 50

Continue on sheet 52



PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- This is a Brant nesting, brood-rearing, and molting area. Birds are present from May through August.
- Pairs of Spectacled Eiders have been found in this area.
- Plan to deploy bird-hazing systems during the open-water season.
- East Milne Creek provides habitat for anadromous whitefish and char and for resident fish.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- The Kuparuk airstrip (Sheet 51) is approximately 4 miles west of Mine Site B.

AIRSTRIP	DESCRIPTION/ LOCATION	FIXED-WING MINIMUMS	FUEL/ SERVICES	TRAFFIC CONTROL
Kuparuk Airstrip	6,551x150ft.asphalt runway attended continuously	VFR: 1 mi vis. clear of clouds IFR: 0.75 mi vis.	Jet A	24-hr advance notification required: 907-659-7213

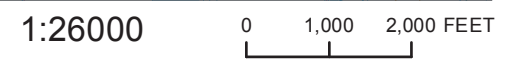
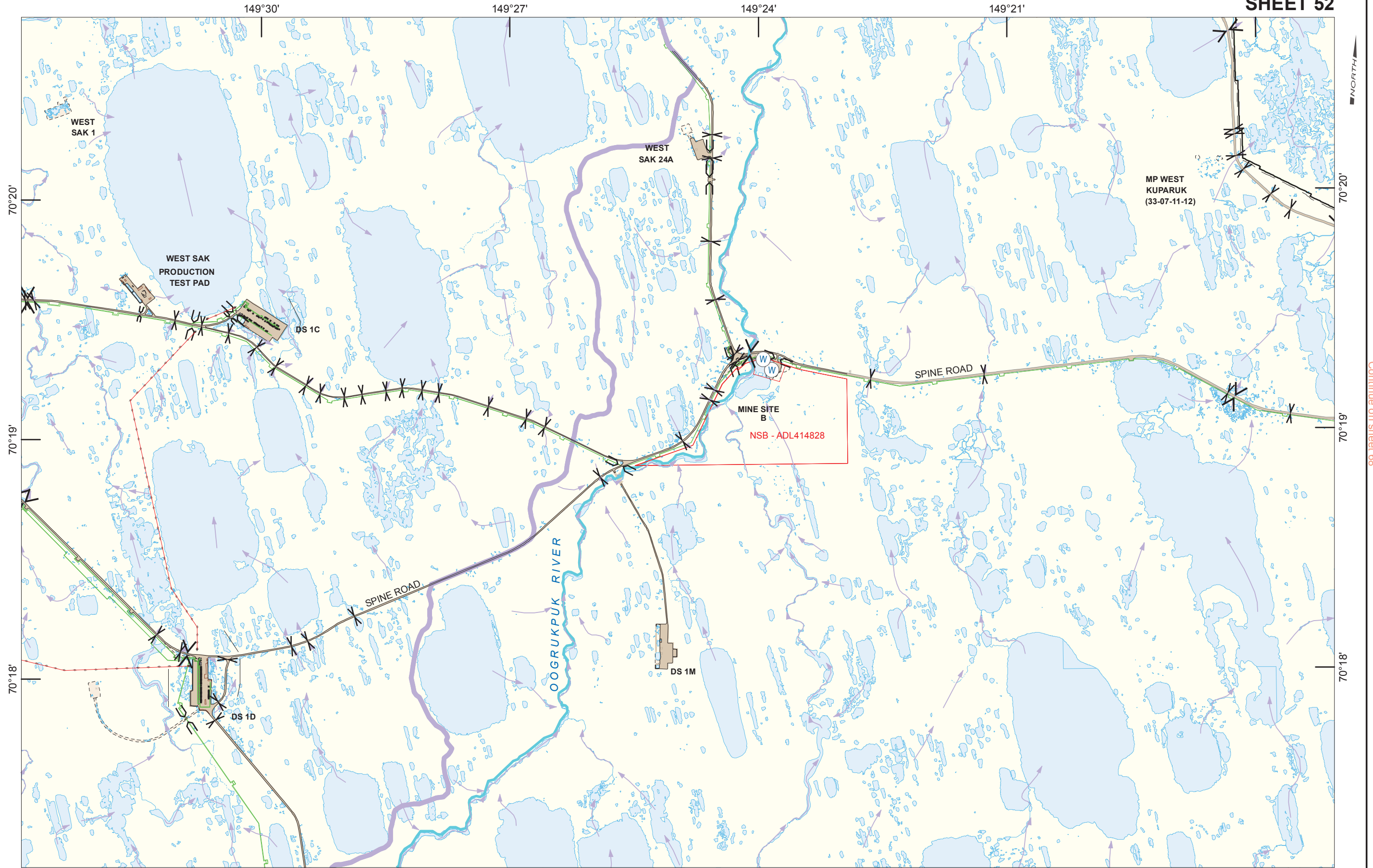
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this sheet.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 51

Continue on sheet 68





PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- This is a Spectacled Eider nesting area.
- This is a Brant nesting area. Birds are present from May through July.
- Plan to deploy bird-hazing systems during the open-water season.
- Kalubik Creek provides habitat for anadromous whitefish and char and for resident fish.
- Polar bear dens have been found in this area. Dens may be in use from October through April.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- The Kuparuk airstrip (Sheet 51) is approximately 7 miles northeast of CPF 2.

AIRSTRIP	DESCRIPTION/ LOCATION	FIXED-WING MINIMUMS	FUEL/ SERVICES	TRAFFIC CONTROL
Kuparuk Airstrip	6,551x150ft.asphalt runway attended continuously	VFR: 1 mi vis. clear of clouds IFR: 0.75 mi vis.	Jet A	24-hr advance notification required: 907-659-7213

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this sheet.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 49A

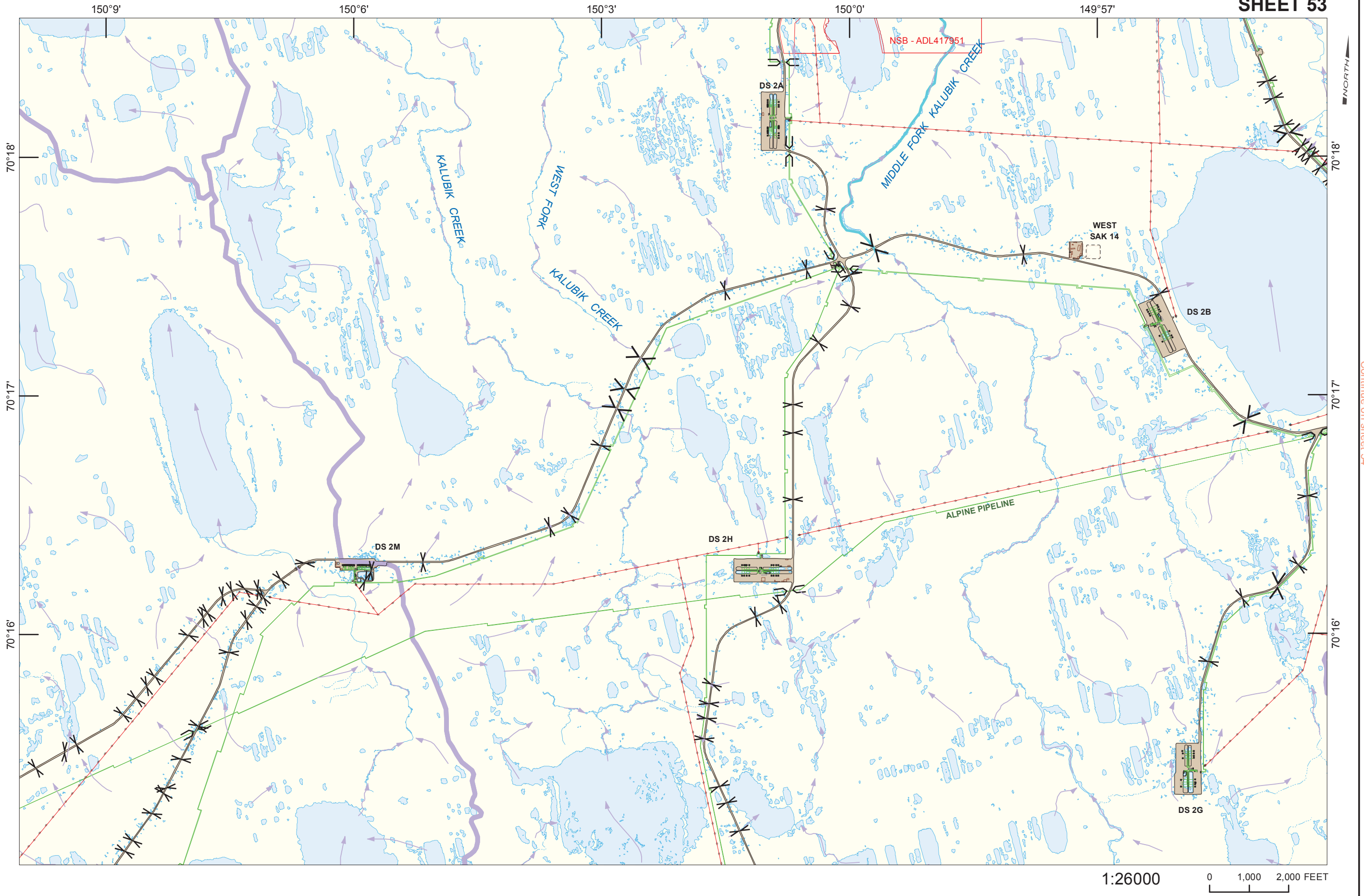
Continue on sheet 49

Continue on sheet 50

SHEET 53

Continue on sheet 23B

Continue on sheet 54



Continue on sheet 212

Continue on sheet 29



PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- This is a Spectacled Eider nesting area.
- This is a Brant nesting area. Birds are present from May through July.
- Plan to deploy bird-hazing systems during the open-water season.
- The Ugnuravik River provides habitat for anadromous whitefish and for resident fish.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- The Kuparuk airstrip (Sheet 51) is approximately 7 miles northeast of CPF 2.

AIRSTRIP	DESCRIPTION/ LOCATION	FIXED-WING MINIMUMS	FUEL/ SERVICES	TRAFFIC CONTROL
Kuparuk Airstrip	6,551x150ft.asphalt runway attended continuously	VFR: 1 mi vis. clear of clouds IFR: 0.75 mi vis.	Jet A	24-hr advance notification required: 907-659-7213

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this sheet.

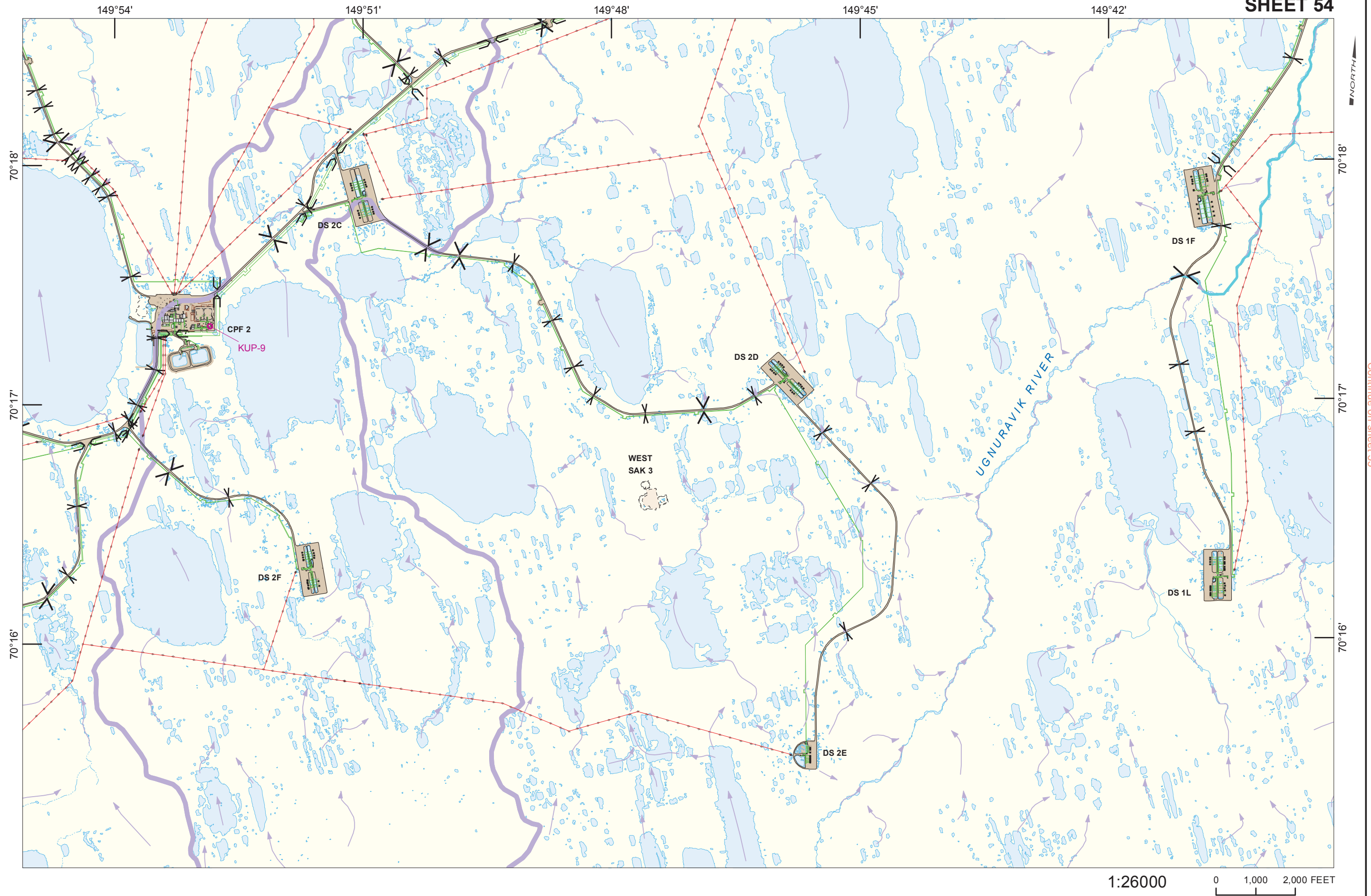
STAGING AREAS AND PRESTAGED EQUIPMENT

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
KUP-9	At CPF-2	Storage	2	2,400-gal. Fastank

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 53

Continue on sheet 55



1:26000

0 1,000 2,000 FEET

PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- Plan to deploy bird-hazing systems during the open-water season.
- The Ugnuravik River provides habitat for anadromous whitefish and for resident fish.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.

AIR ACCESS*

- The Kuparuk airstrip (Sheet 51) is approximately 2 miles west of DS 1D.

AIRSTRIP	DESCRIPTION/ LOCATION	FIXED-WING MINIMUMS	FUEL/ SERVICES	TRAFFIC CONTROL
Kuparuk Airstrip	6,551x150ft.asphalt runway attended continuously	VFR: 1 mi vis. clear of clouds IFR: 0.75 mi vis.	Jet A	24-hr advance notification required: 907-659-7213

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this sheet.

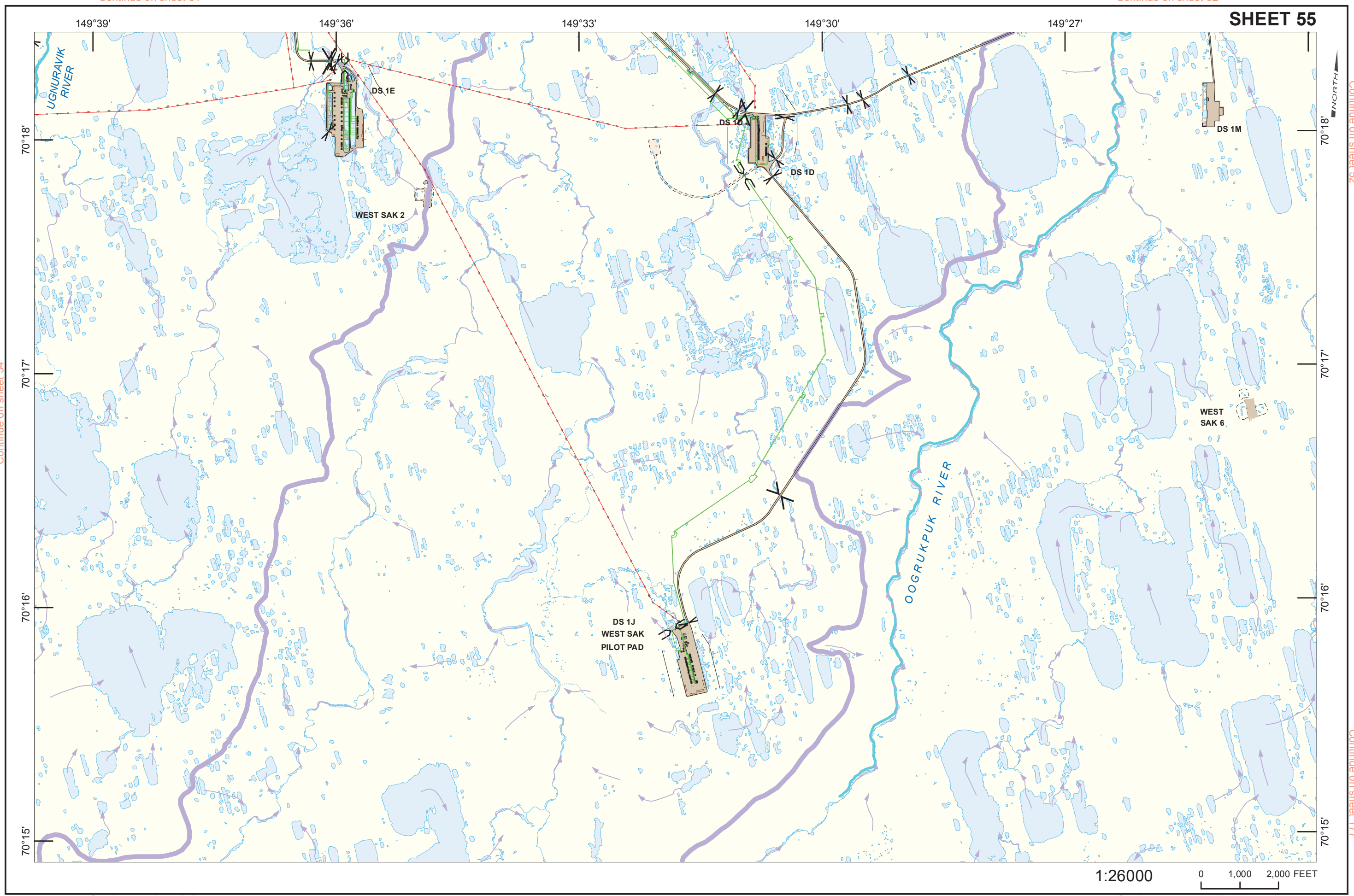
*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.


NOTE: All values given on these pages are for planning purposes only.

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Continue on sheet 177





PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS17	Creek mouth 0.5 miles SE of Beechey Point	Most sensitive during open water season. Inundated low-lying tundra shorelines.	C-13 or C-14	500'
PS17A	Salt marsh 0.5 miles SW of Beechey Point	Most sensitive during open water season. Keep oil from entering salt marsh.	C-13 or C-14	2,000'


GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Simpson Lagoon has large flocks of molting male Oldsquaw in July and early August, especially in the lee shores of the barrier islands.
- Shoreline and offshore areas support molting and brood-rearing eiders. This is also a staging area for migrating Phalaropes (shorebirds). Birds are present in June, July, and August.
- Common Eiders nest on offshore islands in June and July.
- This is a Brant brood-rearing and molting area. Birds are present in July and August.
- Plan to deploy bird-hazing systems during the open-water season.
- Polar bear dens have been found in this area. Dens may be in use from October through April.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- The Pt. McIntyre airstrip (Sheet 62) is approximately 12 miles southeast of Beechey Point. This is a 1,500-ft gravel strip, which is unattended and not maintained. Emergency use only is recommended.
- The Kuparuk airstrip (Sheet 51) is approximately 14 miles southwest of Beechey Point.

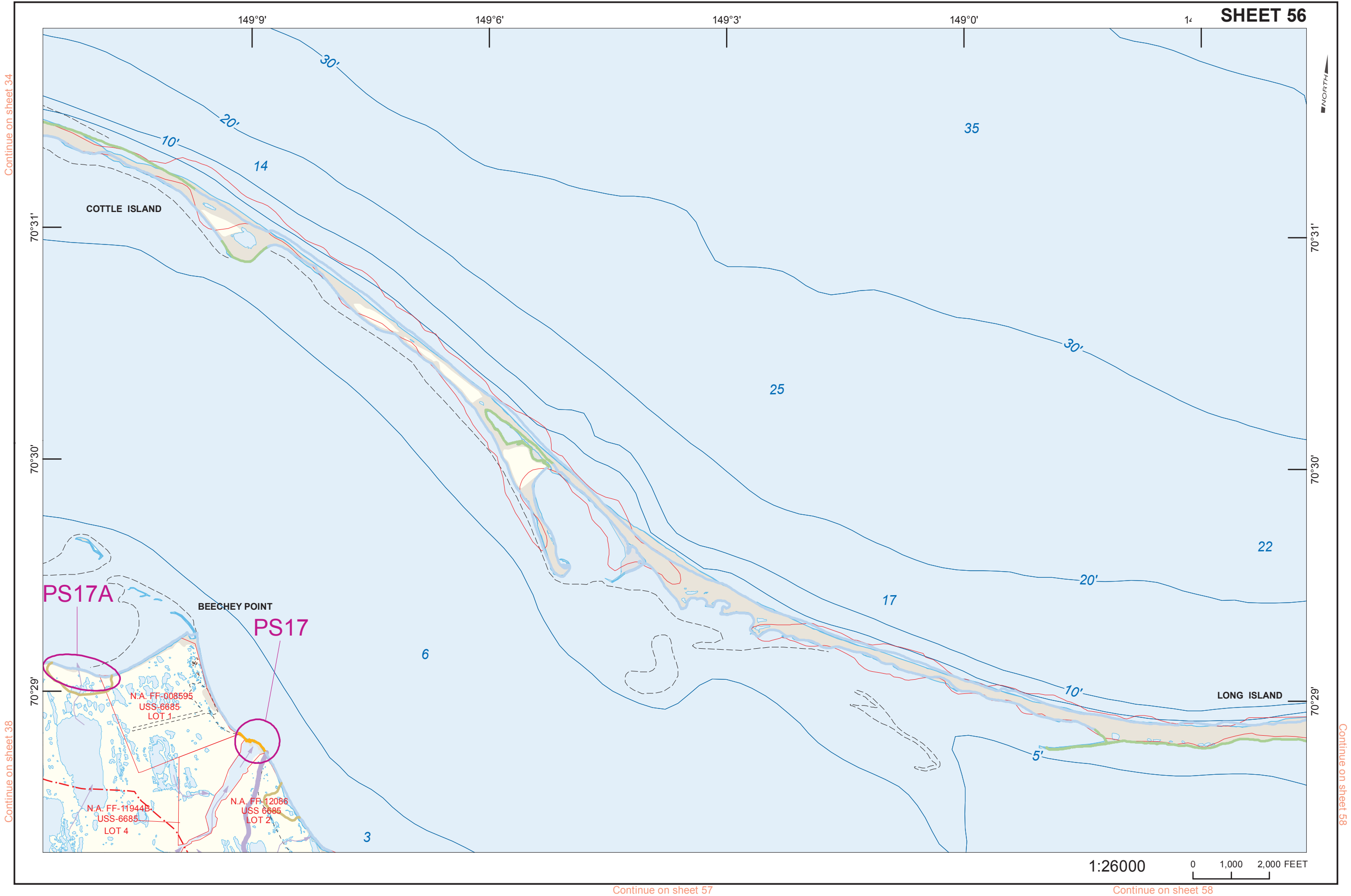
AIRSTRIP	DESCRIPTION/ LOCATION	FIXED-WING MINIMUMS	FUEL/ SERVICES	TRAFFIC CONTROL
Kuparuk Airstrip	6,551x150ft.asphalt runway attended continuously	VFR: 1 mi vis. clear of clouds IFR: 0.75 mi vis.	Jet A	24-hr advance notification required: 907-659-7213

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- Water access by other than very shallow-draft vessels will be precluded in Simpson Lagoon and Gwydyr Bay due to shallow water depths.
- There is small boat shelter in 4 ft of water behind a sandbar extending northwest from Beechey Point.
- There is no navigable passage between Cottle and Long Islands.
- Gwydyr Bay and Simpson Lagoon surface currents are generally to the west at 10 to 30 cm/sec. Water depth is 2 to 7 ft.
- Barrier islands tend to migrate toward shore at 5 to 10 meters per year and westward 20 to 30 meters.
- Alongshore sediment transport is westerly.

COUNTERMEASURES CONSIDERATIONS

- The east end of Cottle Island is subject to trapping floating oil during generally east winds and offshore circulation patterns.



ACS

North Slope Spill Response

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PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS16B	Salt marsh 1.25 miles SE of the Sakonowayak River mouth	Most sensitive during open water season Keep oil from entering salt marsh. Inundated low-lying tundra shorelines.	C-13 or C-14	3,500'
PS16C	Sakonowayak River mouth	Most sensitive during open water season. Keep oil from entering river.	C-13 or C-14	2,800'

GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- The lee shores of the barrier islands are important molting areas for Oldsquaw in July and early August.
- Shoreline and offshore areas support molting Oldsquaws and eiders, and brood-rearing eiders. This is also a staging area for migrating Phalaropes (shorebirds). Birds are present in June thorough September.
- This is a Brant nesting, brood-rearing, and molting area. Birds are present from May through August.
- Pairs of Spectacled Eiders have been found in this area.
- Plan to deploy bird-hazing systems during the open-water season.
- The Sakonowyak River provides habitat for anadromous whitefish.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.

ACS Tech. Manual Vol. 2, 06/21

NOTE: All values given on these pages are for planning purposes only.

Response Considerations

ACS

North Slope Spill Response

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North Slope Spill Response

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AIR ACCESS*

- The Pt. McIntyre airstrip (Sheet 62) is approximately 10 miles southeast of Back Point. This is a 1,500-ft gravel strip, which is unattended and not maintained. Emergency use only is recommended.
- The Kuparuk airstrip (Sheet 51) is approximately 15 miles southwest of Back Point.

AIRSTRIP	DESCRIPTION/ LOCATION	FIXED-WING MINIMUMS	FUEL/ SERVICES	TRAFFIC CONTROL
Kuparuk Airstrip	6,551x150ft.asphalt runway attended continuously	VFR: 1 mi vis. clear of clouds IFR: 0.75 mi vis.	Jet A	24-hr advance notification required: 907-659-7213

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- Water access by other than very shallow-draft vessels will be precluded in Gwydyr Bay due to shallow water depths.
- Gwydyr Bay surface currents are generally to the west at 10 to 30 cm/sec. Water depth is 2 to 7 ft.
- Annual average flow rate of the Kuparuk River (to the east) is 1,830 cfs. Much of the sediment load is transported west in the alongshore current.

COUNTERMEASURES CONSIDERATIONS

- Riverine discharge is large enough to preclude much oil impinging on any beaches south of Back Point.

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
KUP-8	West bank of river near mouth	Boom	2,000'	8" x 6" river

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

NOTE: All values given on these pages are for planning purposes only.

Continue on sheet 38

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Continue on sheet 58

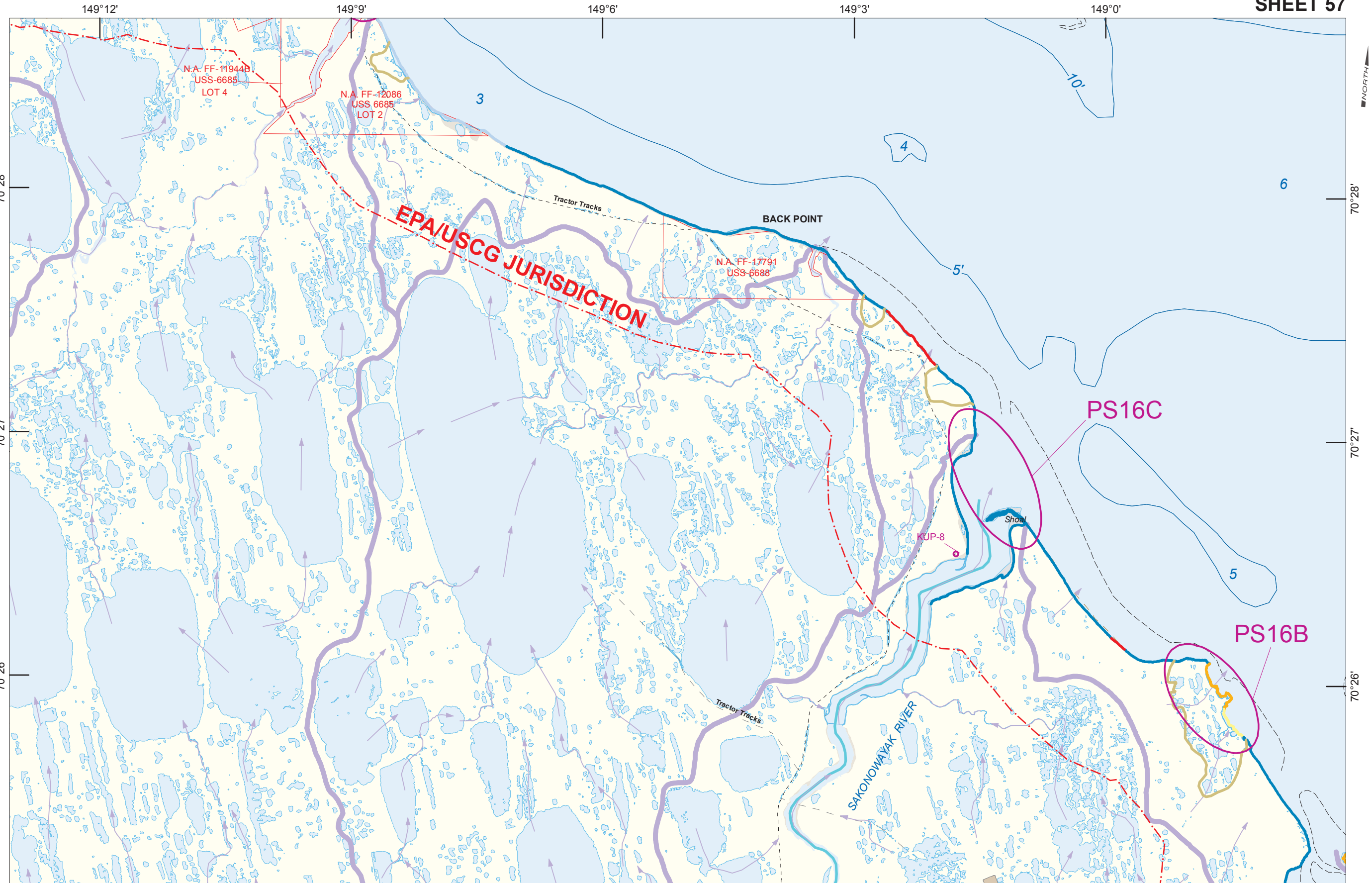
SHEET 57

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Continue on sheet 58

Continue on sheet 61



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SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS16B	Salt marsh 2 miles NW of Kuparuk River delta	Most sensitive during open water season Keep oil from entering salt marsh. Inundated low-lying tundra shorelines.	C-13 or C-14	3,500'

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- The lee side of Egg Island is an important area for Oldsquaw molting and staging in July and August.
- Shoreline and offshore areas support molting Oldsquaws and eiders, and brood-rearing eiders. This is also a staging area for migrating Phalaropes (shorebirds). Birds are present in June through September.
- Common Eiders nest on offshore islands in June and July.
- This is a Brant nesting area. Birds are present from May through July.
- Plan to deploy bird-hazing systems during the open-water season.

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



- The Pt. McIntyre airstrip (Sheet 62) is located approximately 2.5 miles southeast of Egg Island. This is a 1,500-ft gravel strip, which is unattended and not maintained. Emergency use only is recommended.
- The Kuparuk airstrip (Sheet 51) is located approximately 10 miles southwest of Egg Island.

AIRSTRIP	DESCRIPTION/ LOCATION	FIXED-WING MINIMUMS	FUEL/ SERVICES	TRAFFIC CONTROL
Kuparuk Airstrip	6,551x150ft.asphalt runway attended continuously	VFR: 1 mi vis. clear of clouds IFR: 0.75 mi vis.	Jet A	24-hr advance notification required: 907-659-7213

- Water access is limited to shallow-draft vessels on the lagoon-facing shores of the barrier islands.
- Bars and shoals extend into Gwydyr Bay off the southeast end of the island northwest of Egg Island, but a 5-ft deep channel between these bars and Egg Island is the best marine entrance to the bay.
- Gwydyr Bay surface currents are generally to the west at 10 to 30 cm/sec. Water depth is 2 to 7 ft.
- Annual average flow rate of the Kuparuk River is 1,830 cfs. Much of the sediment load is transported west in the alongshore current.
- Barrier islands may be awash during storm surges. The islands are migrating toward shore at 5 to 10 meters per year and westward 20 to 30 meters.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 56

Continue on sheet 59

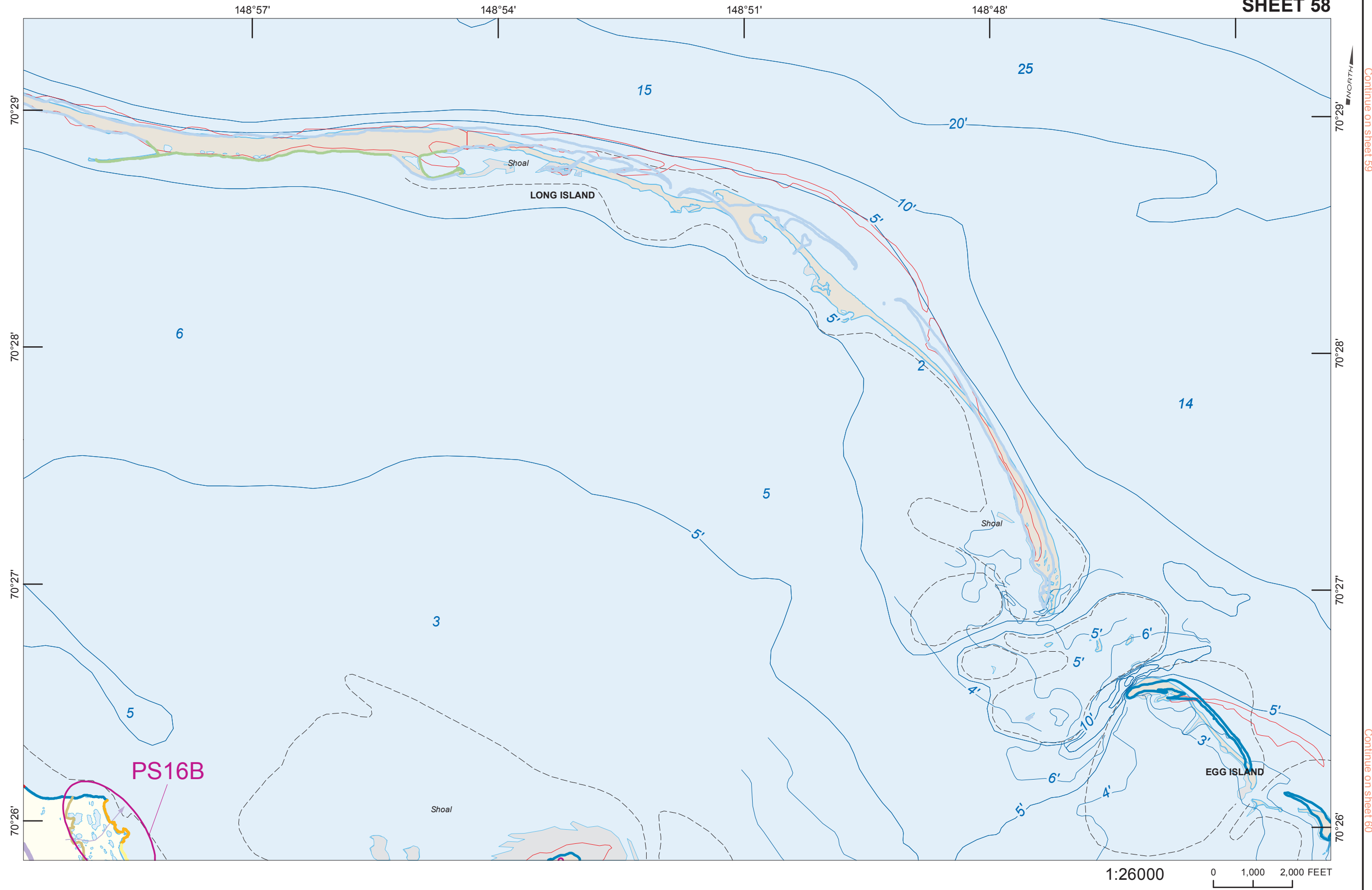
SHEET 58

Continue on sheet 56

Continue on sheet 57

Continue on sheet 59

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Continue on sheet 61



PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- Shoreline and offshore areas support molting Oldsquaws and eiders, and brood-rearing eiders. This is also a staging area for migrating Phalaropes (shorebirds). Birds are present in June through September.
- Common Eiders nest on offshore islands in June and July.
- Plan to deploy bird-hazing systems during the open-water season.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

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AIR ACCESS*

- Deadhorse airport (Sheet 81) is approximately 21 miles to the south-southeast.
- The Pt. McIntyre airstrip (Sheet 62) is located approximately 6 miles to the south. This is a 1,500-ft gravel strip, which is unattended and not maintained. Emergency use only is recommended.

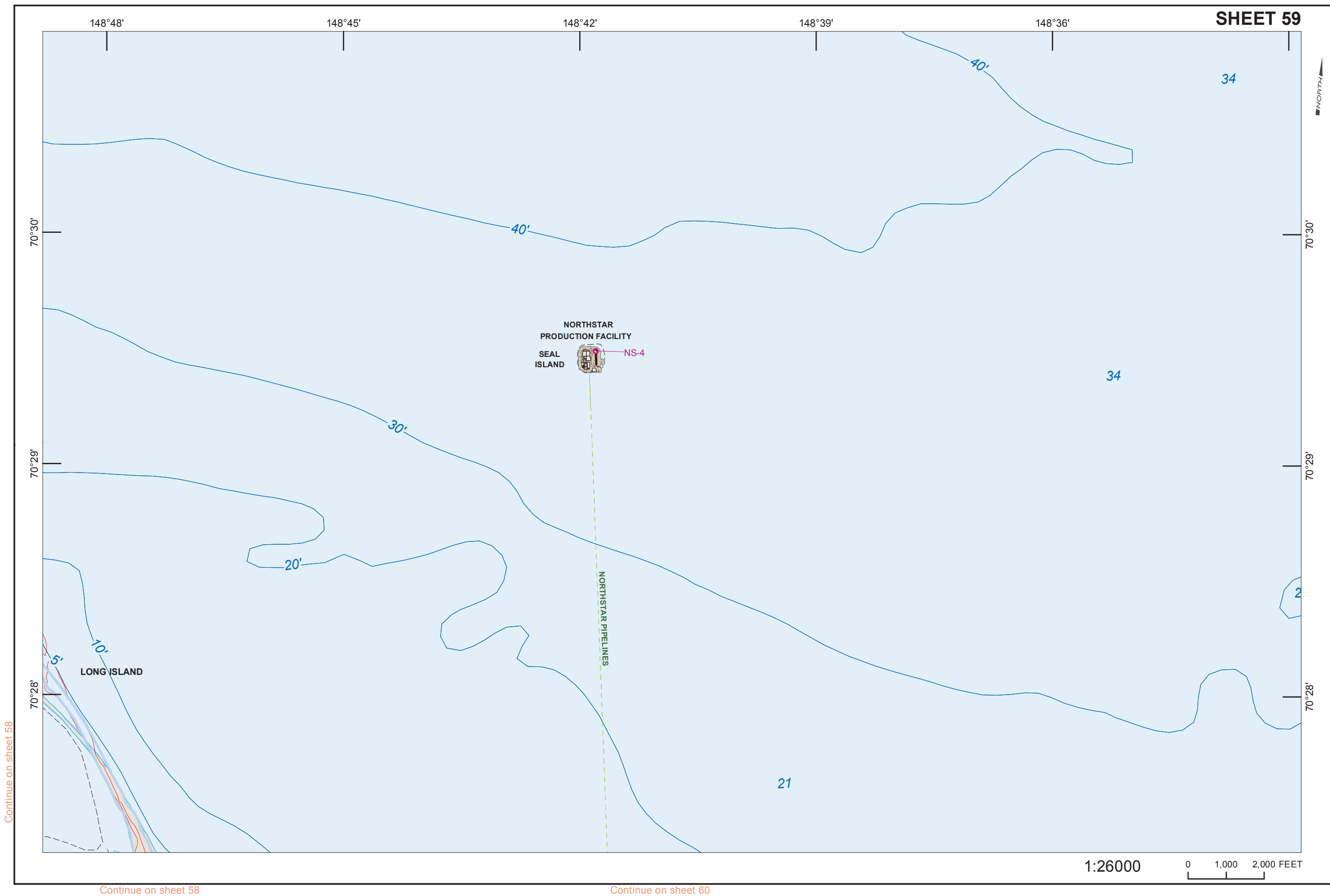
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- Water access is limited to shallow-draft vessels on the lagoon-facing shores of the barrier islands.
- The best marine entrance to Gwydyr Bay is in the 5-ft-deep channel at the west end of Egg Island (Sheet 58).
- Gwydyr Bay surface currents are generally to the west at 10 to 30 cm/sec. Water depth is 2 to 7 ft.
- Annual average flow rate of the Kuparuk River is 1,830 cfs. Much of the sediment load is transported west in the alongshore current.
- Barrier islands may be awash during storm surges. The islands are migrating toward shore at 5 to 10 meters per year and westward 20 to 30 meters.

STAGING AREAS AND PRESTAGED EQUIPMENT

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
NS-4	Northstar	Vessel	2	24'
		Storage	2	2,400-gal. Fastanks
		Storage	3	1,500-gal. Foldatanks
		Skimmer	1	Electric rope mop
		Skimmer	1	Brush
		Boom	2,000'	10" x 14" NOFI boom bag
		Boom	2,460'	Ro-Boom

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.



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PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS16	Inlet to salt marsh at Pt. Storkersen	Most sensitive during open water season. Salt marsh and/or undated low-lying tundra shoreline.	C-13 or C-14	400'

GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- The lee side of Egg Island is an important area for Oldsquaw molting and staging in July and August.
- Shoreline and offshore areas support molting Oldsquaws and eiders, and brood-rearing eiders. This is also a staging area for migrating Phalaropes (shorebirds). Birds are present in June through September.
- Common Eiders nest on offshore islands in June and July.
- This is a Brant nesting, brood-rearing, and molting area. Birds are present from May through August.
- Plan to deploy bird-hazing systems during the open-water season.
- There is a seawater intake at the seawater treatment plant at West Dock approximately 14 ft below the surface at the southwest corner of the barge. Precautions should be taken to keep oil out of this area.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

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Response Considerations

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AIR ACCESS*

- Deadhorse airport (Sheet 81) is approximately 16 miles southeast of Pt. Storkersen.
- The Pt. McIntyre airstrip (Sheet 62) is located approximately 1 mile southeast of Pt. Storkersen. This is a 1,500-ft gravel strip, which is unattended and not maintained. Emergency use only is recommended.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- Water access is limited to shallow-draft vessels on the lagoon-facing shores of the barrier islands.
- The best marine entrance to Gwydyr Bay is in the 5-ft-deep channel at the west end of Egg Island.
- The passage between Egg Island and Stump Island has depths of 3 ft, but there is little water between Stump Island and Pt. McIntyre.
- Gwydyr Bay surface currents are generally to the west at 10 to 30 cm/sec. Water depth is 2 to 7 ft.
- Barrier islands may be awash during storm surges. The islands are migrating toward shore at 5 to 10 meters per year and westward 20 to 30 meters.

COUNTERMEASURES CONSIDERATIONS

- Riverine discharge is high enough to preclude much floating oil gathering on deltaic surfaces west of Point Storkersen.

STAGING AREAS AND PRESTAGED EQUIPMENT

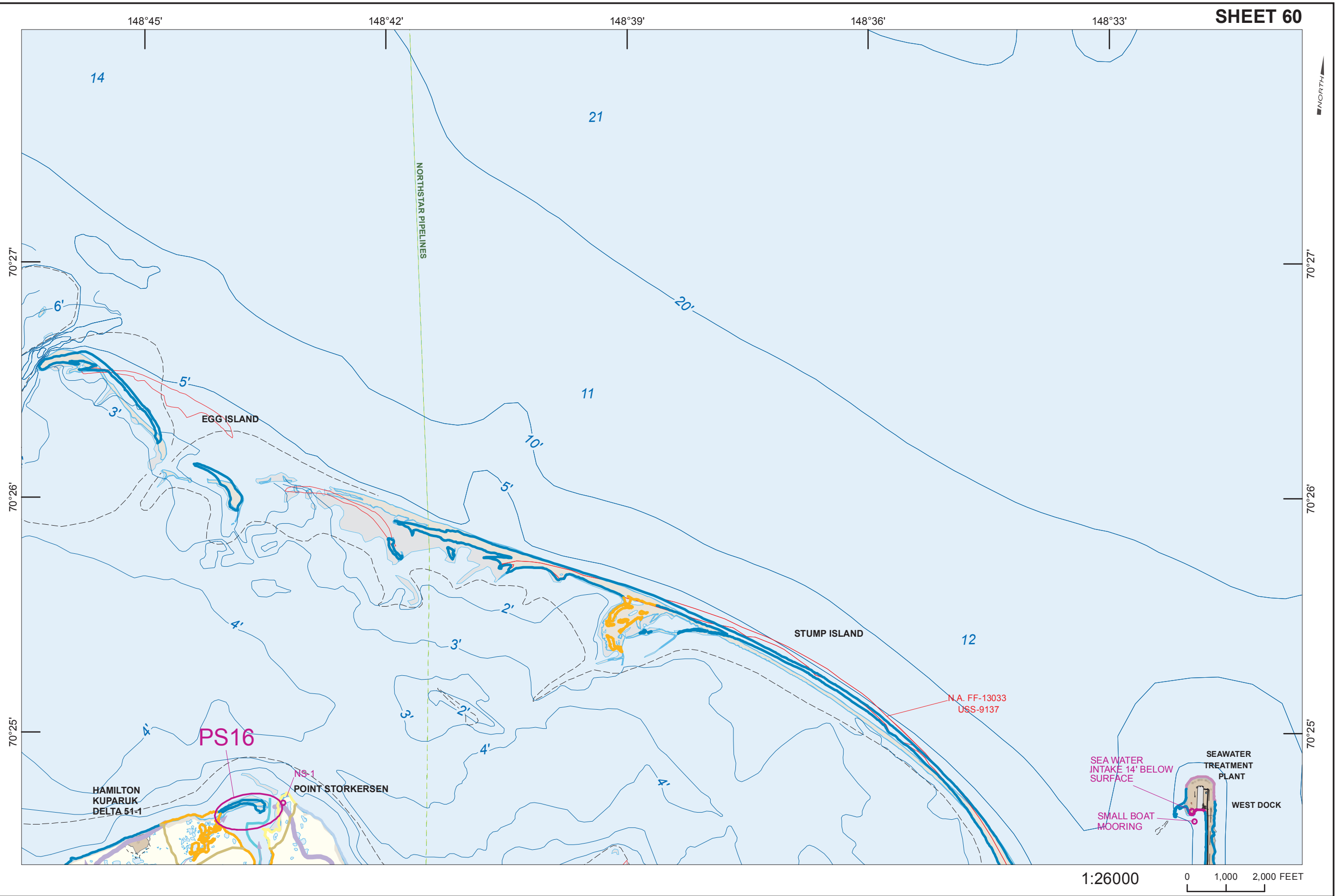
PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
NS-1	End of Pt. Storkersen	Boom Anchors	400' 4	8" x 6" river 40 lb. c/w rigging

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

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PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS16A	Inlet to salt marsh east of Kuparuk River delta	Most sensitive during open water season. Keep oil from entering salt marsh. Inundated low-lying tundra shorelines.	C-13 or C-14	4,000'
PS16B	Salt marsh 2 miles NW of Kuparuk River delta	Most sensitive during open water season. Keep oil from entering salt marsh. Inundated low-lying tundra shorelines.	C-13 or C-14	3,500'

GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- Shoreline and offshore areas support molting Oldsquaws and eiders, and brood-rearing eiders. This is also a staging area for migrating Phalaropes (shorebirds). Birds are present in June through September.
- This is a Brant nesting, brood-rearing, and molting area. Birds are present from May through August.
- Pairs of Spectacled Eiders have been found in this area.
- Plan to deploy bird-hazing systems during the open-water season.
- The Kuparuk River provides habitat for anadromous whitefish and for resident fish.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.

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AIR ACCESS*

- The Pt. McIntyre airstrip (Sheet 62) is located approximately 3 miles east of the Kuparuk River delta. This is a 1,500-ft gravel strip, which is unattended and not maintained. Emergency use only is recommended.
- The Kuparuk airstrip (Sheet 51) is located approximately 17 miles southwest of the Kuparuk River delta.

AIRSTRIP	DESCRIPTION/ LOCATION	FIXED-WING MINIMUMS	FUEL/ SERVICES	TRAFFIC CONTROL
Kuparuk Airstrip	6,551x150ft.asphalt runway attended continuously	VFR: 1 mi vis. clear of clouds IFR: 0.75 mi vis.	Jet A	24-hr advance notification required: 907-659-7213

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- Water access is limited to shallow-draft vessels on the lagoon-facing shores of the barrier islands.
- Best marine entrance to Gwydyr Bay is in the 5-ft-deep channel at the west end of Egg Island (Sheet 58).
- Gwydyr Bay surface currents are generally to the west at 10 to 30 cm/sec. Water depth is 2 to 7 ft.
- Annual average discharge rate of the Kuparuk River is 1,830 cfs. Much of the sediment load is transported west in alongshore currents.

COUNTERMEASURES CONSIDERATIONS

- Riverine discharge is high enough to preclude much floating oil gathering on deltaic surfaces.

STAGING AREAS AND PRESTAGED EQUIPMENT

- There are staging areas at Gwyder Bay State Bay A and Gwyder Bay State 1.
- KUP-7 is a predetermined containment site. No equipment is staged there.

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
KUP-6	Gwydyr Bay South pad	Boom Skimmer	3,900' 1	8" x 6" river 3" Manta Ray Weir

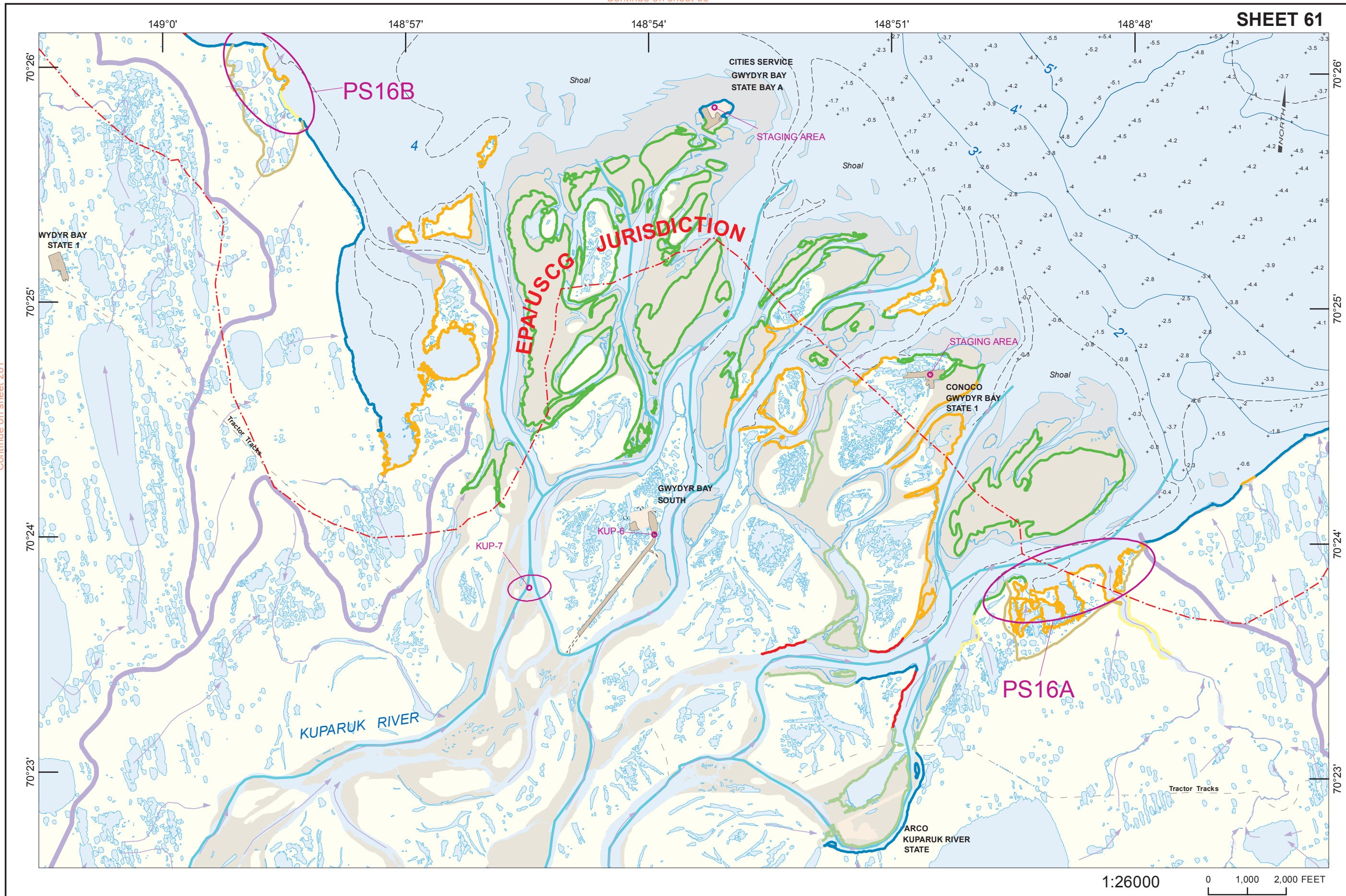
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*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

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PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS11	Tidal inlet, west side of West Dock base	Most sensitive during open water season, when oil could drift into inlet. Inundated low-lying tundra shoreline.	C-13 or C-14	1,000'
PS14	Marsh inlet, 0.5 miles west of Pt. McIntyre	Most sensitive during open water season, when oil could drift into salt marsh.	C-13 or C-14	500'
PS15	Marsh inlet, 0.5 miles east of DEW line site	Most sensitive during open water season, when oil could drift into salt marsh.	C-13 or C-14	100'
PS16	Inlet to salt marsh, Pt. Storkersen	Most sensitive during open water season, when oil could drift into salt marsh and/or inundated low-lying tundra shoreline.	C-13 or C-14	400'

GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- Shoreline and offshore areas support molting Oldsquaws and eiders, and brood-rearing eiders. This is also a staging area for migrating Phalaropes (shorebirds). Birds are present in June through September.
- This is a Brant nesting, brood-rearing, and molting area. Birds are present from May through August.
- Pairs of Spectacled Eiders have been found in this area.
- Plan to deploy bird-hazing systems during the open-water season.
- There is a seawater intake at the seawater treatment plant at West Dock approximately 14 ft below the surface at the southwest corner of the barge. Precautions should be taken to keep oil out of this area.
- Polar bears may be present November to April.

CULTURAL SITES

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Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.

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AIR ACCESS*

- The Pt. McIntyre airstrip is a 1,500-ft gravel strip, which is unattended and not maintained. Emergency use only is recommended.
- Deadhorse airport (Sheet 81) is approximately 14 miles south-southeast of Pt. McIntyre.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- Gwydyr Bay surface currents are generally to the west at 10 to 30 cm/sec. High shoaling areas exist between the Kuparuk River delta (to the west) and West Dock. Water depth ranges from 2 to 5 feet. The best marine entrance to Gwydyr Bay is in the 5-ft-deep channel at the west end of Egg Island (Sheet 58).
- There are boat launches at Dock 2 and the entrance to West Dock. There is a barge mooring on the east side of West Dock between Dock 2 and Dock 3. There is a small boat mooring at the south end of the seawater treatment plant.
- The outer portion of Prudhoe Bay has water depths of 5 to 8 feet and affords good holding anchorage with protection from all but northwest weather. The inner bay has shoals across most of the entrance, with water depths of 2 to 6 ft. There is little water between Pt. Storkersen and Pt. McIntyre, and between Pt. McIntyre and Stump Island.
- Water access is limited to shallow-draft vessels on the lagoon-facing shores of barrier islands. These islands are awash during storm surges and are migrating toward shore at 5 to 10 meters per year and westward 20 to 30 meters.
- Currents through the West Dock breach can be very strong.
- Annual average discharge rate of the Kuparuk River is 1,830 cfs. Much of the sediment load is transported west in alongshore currents.

COUNTERMEASURES CONSIDERATIONS

- High riverine discharge keeps most floating oil from gathering on deltaic surfaces west of Pt. Storkersen.

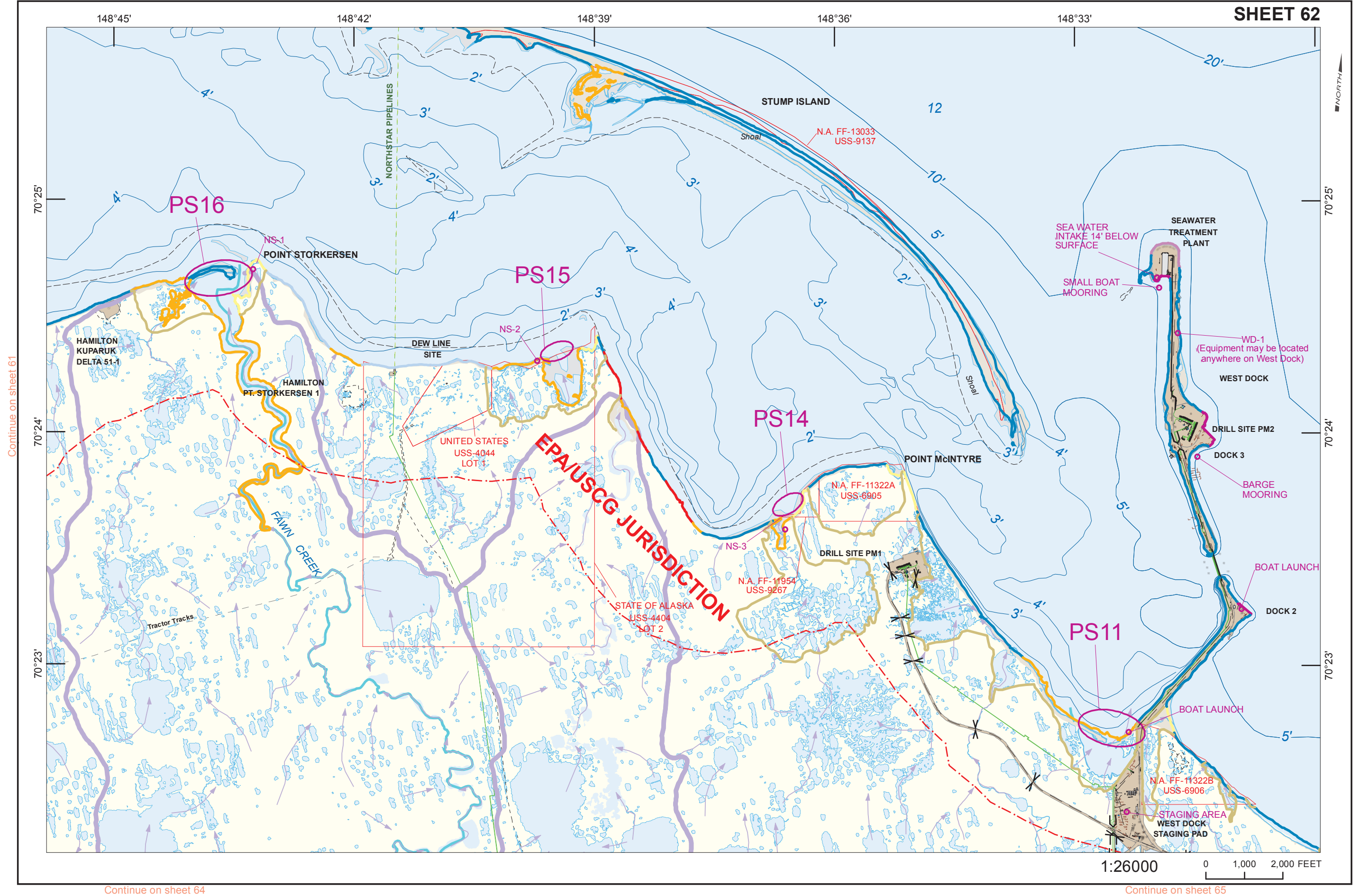
STAGING AREAS AND PRESTAGED EQUIPMENT

- The West Dock Staging Pad is a staging area.

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
WD-1	West Dock	Vessel Vessel Vessel Vessel Vessel Skimmer Skimmer Skimmer Skimmer Skimmer Barge Boom Boom Boom Boom Boom Anchors Anchor Systems	4 1 1 2 4 1 1 1 1 7 1 5,400' 2,492' 4,000' 2,350' 3,000' 8 6	42' 45' 55' 38' 25' Foxtail Rope mop, Foxden Walosep Transrec-250 Lori Beaufort-21 8" x 6" Delta boom 10" x 14" NOFI boom bag 14" x 18" light ocean, reel Fire boom 20" x 30" ocean boom 40 lb. c/w rigging 66 lb. Bruce anchor system w/line and buoys
NS-1	End of Pt. Storkersen	Boom Anchors	400' 4	8" x 6" river 40 lb. c/w rigging
NS-2	On coast east of DEW Line site	Boom Anchors	1,000' 4	8" x 6" river 40 lb. c/w rigging
NS-3	On coast SW of Pt. McIntyre	Boom Anchors	500' 4	8" x 6" river 40 lb. c/w rigging

*See the latest Supplement, Alaska and United States Coast Pilot for current information on air and vessel access, respectively.

NOTE: All values given on these pages are for planning purposes only.





PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- This is a Brant nesting area. Birds are present from May through July.
- Pairs of Spectacled Eiders have been found in this area.
- Plan to deploy bird-hazing systems during the open-water season.
- The Kuparuk River provides habitat for anadromous whitefish and for resident fish.
- The Sakonowyak River provides habitat for anadromous whitefish.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

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AIR ACCESS*

- Deadhorse airport (Sheet 81) is approximately 17 miles southeast of S Pad and 4 miles southwest of the Prudhoe Bay airport.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shoreline on this sheet.
- There are two boat launches on the Kuparuk River on either side of the Spine Road bridge.
- The annual average discharge rate of the Kuparuk River is 1,830 cfs.

COUNTERMEASURES CONSIDERATIONS

- The Spine Road bridge over the Kuparuk River washes out during breakup each year and must be repaired.

STAGING AREAS AND PRESTAGED EQUIPMENT

- There is a staging area east of Kuparuk Reservoir 2 near the road to Dead Arm Mine Site.
- KUP-3 is a predetermined containment site.
- KUP-5 is a predetermined containment site. No equipment is staged there.
- Boom is typically predeployed seasonally southeast of PBW-1 and east of S Pad.

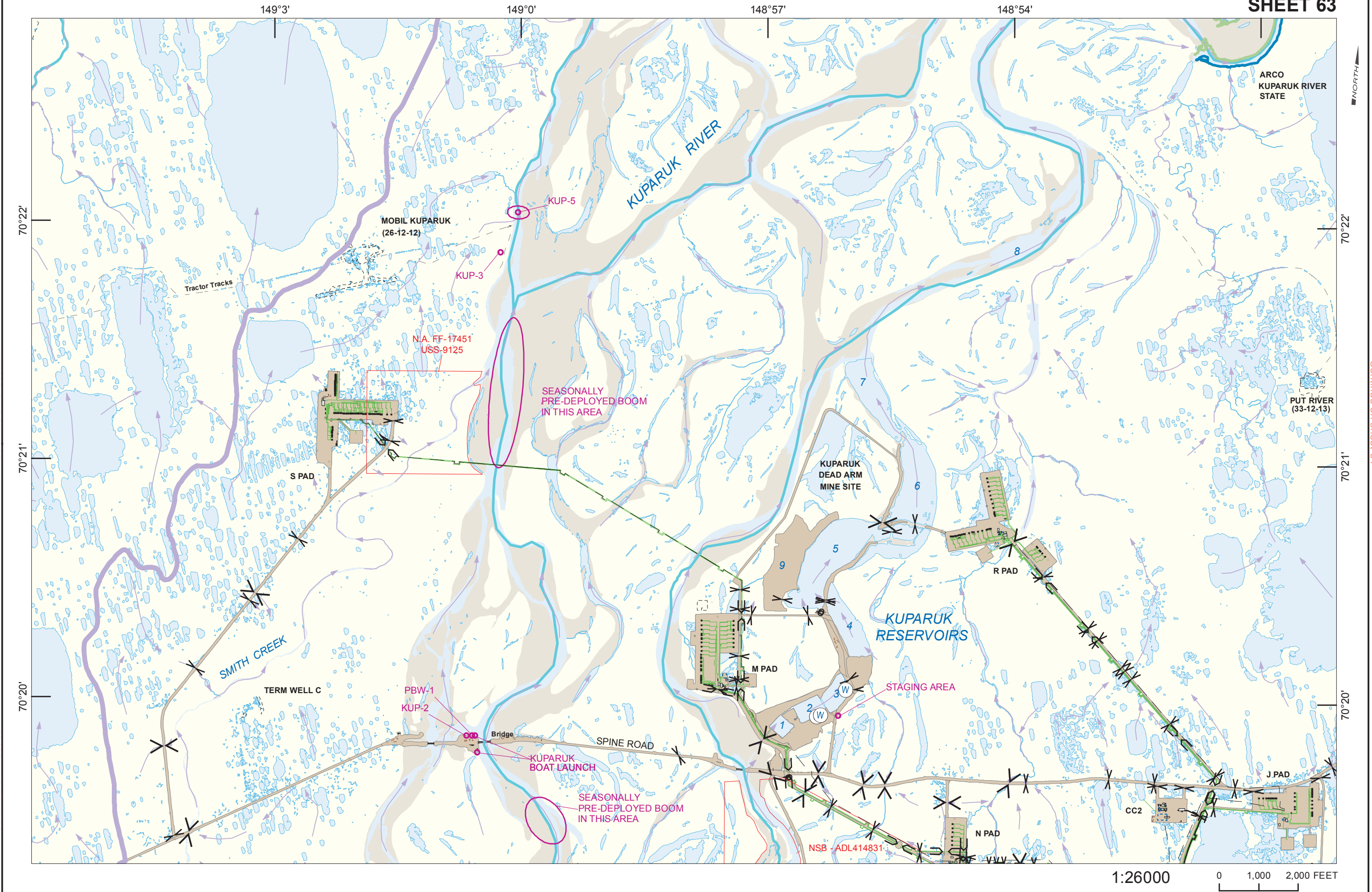
PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
KUP-2	On Spine Road approx. 0.5 mile west of bridge	Boom Anchor Systems	4,700' 3	8" x 6" Delta boom
KUP-3	On west bank of river northeast of S Pad	Boom Skimmer Storage	3,250' 2 4	8" x 6" river Weir, Manta Ray, 3" 2,400-gal Fastank
PBW-1	On west bank of main channel south of bridge	Boom	6,000'	8" x 6" river


*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 282

Continue on sheet 68


Continue on sheet 64






PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.



GENERAL SENSITIVITIES


- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- This is a Brant nesting area. Birds are present from May through July.
- Pairs of Spectacled Eiders have been found in this area.
- Plan to deploy bird-hazing systems during the open-water season.



CULTURAL SITES


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AIR ACCESS*

- Deadhorse airport (Sheet 81) is approximately 11 miles south of E Pad.
- The Pt. McIntyre airstrip (Sheet 62) is approximately 4 miles north of E Pad. This is a 1,500-ft gravel strip, which is unattended and not maintained. Emergency use only is recommended.



VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine shorelines or waters on this sheet.



STAGING AREAS AND PRESTAGED EQUIPMENT

- There is a staging area at T Pad.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

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PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS10	Creek mouth north of LGI	Most sensitive during open water season. Inundated low-lying tundra shoreline.	C-13 or C-14	100'
PS11	Tidal inlet, west side of West Dock base	Most sensitive during open water season, when oil could drift into inlet. Inundated low-lying tundra shoreline.	C-13 or C-14	1,000'

GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- Shoreline and offshore areas support molting Oldsquaws and eiders, and brood-rearing eiders. This is also a staging area for migrating Phalaropes (shorebirds). Birds are present in June through September.
- High concentrations of brood-rearing and molting Snow Geese are present in July and August.
- This is a Brant nesting, brood-rearing, and molting area. Birds are present from May through August.
- Pairs of Spectacled Eiders have been found in this area.
- Plan to deploy bird-hazing systems during the open-water season.

CULTURAL SITES

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NORTH SLOPE SPILL RESPONSE

A WORLD CLASS ORGANIZATION

AIR ACCESS*

- Deadhorse airport (Sheet 78) is located approximately 10 miles south of LGI.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- Outer portions of Prudhoe Bay have water depths of 6 to 9 ft and afford good holding anchorage with protection from all but northwest winds. Inner bay has shoals across most of the entrance, with water depths of 2 to 6 ft.
- The best marine access route to Prudhoe Bay parallels the west shore at a distance of 0.4 mile and has depths of 4 ft.
- There are boat launches at West Beach State and at the south end of West Dock.
- There is high sediment transport in westerly direction along shore due to Sagavanirktok River discharge.
- Eddies and reduced current velocities in Prudhoe Bay cause extensive shoaling and migration of barrier islands.

COUNTERMEASURES CONSIDERATIONS

- Sand-gravel beaches on the interior of Prudhoe Bay are quite narrow and interrupted by vegetated shorelines, making large machinery impractical.

STAGING AREAS AND PRESTAGED EQUIPMENT

- The West Dock Staging Pad is a staging area.

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
PBE-3	West Beach State	Boom Anchor System	2,000' 1	8" x 6" river

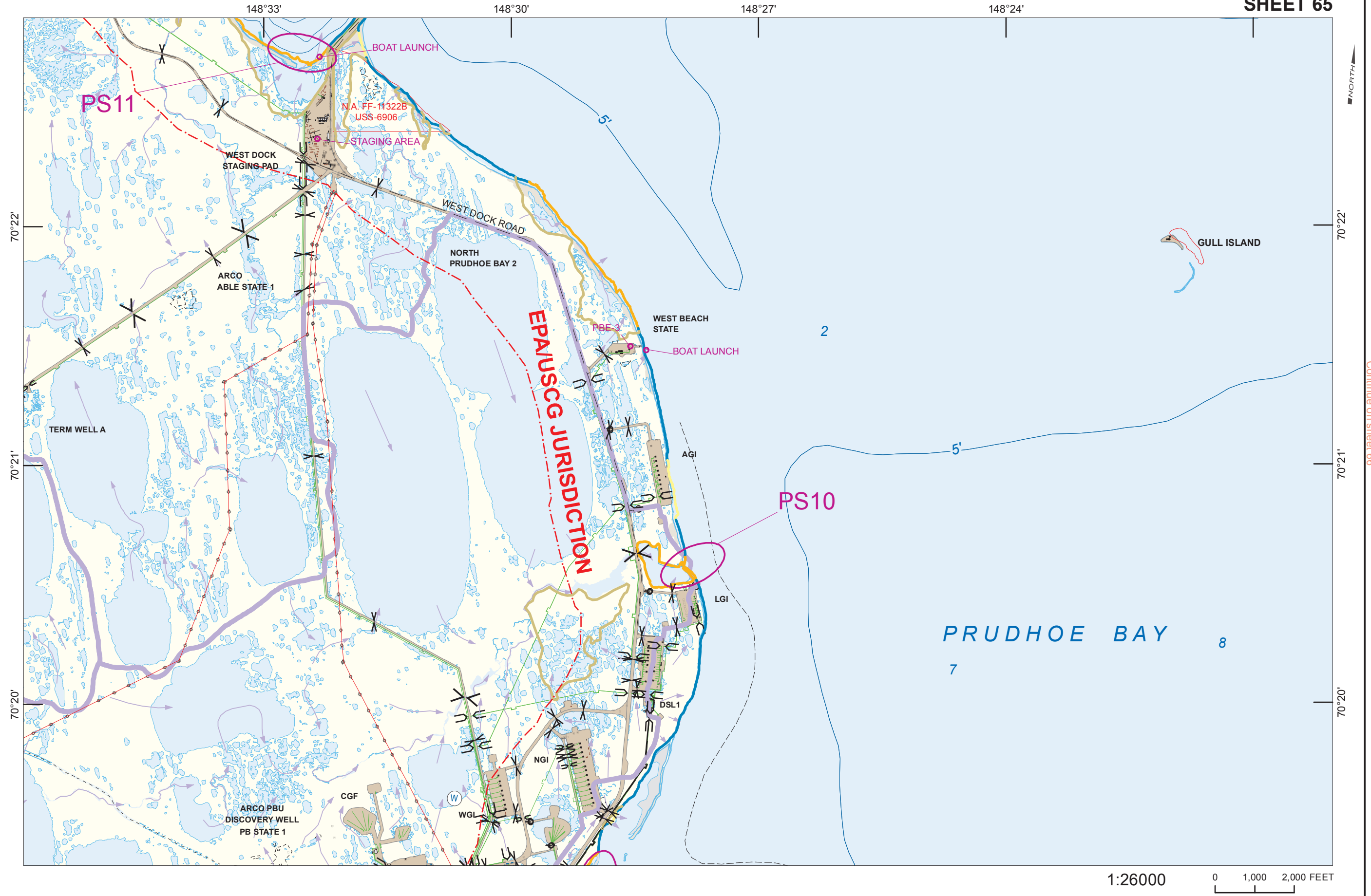
*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

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PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present from June to September in the Sagavanirktok River delta.
- The outer portion of the delta is an important migration staging area for shorebirds from July through September and a Pintail molting area in July and August.
- High concentrations of brood-rearing, and molting Snow Geese are present in July and August.
- This is a Brant nesting, brood-rearing and molting area. Birds are present from May through August.
- Plan to deploy bird-hazing systems during the open-water season.
- The Sagavanirktok River is a migratory corridor for arctic char and whitefish, and an overwintering area for a variety of whitefish, burbot, grayling, and sculpin.
- Polar bear dens have been found in this area. Dens may be in use from October through April.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- Deadhorse airport (Sheet 78) is located approximately 12 miles south-southwest of Heald Point.

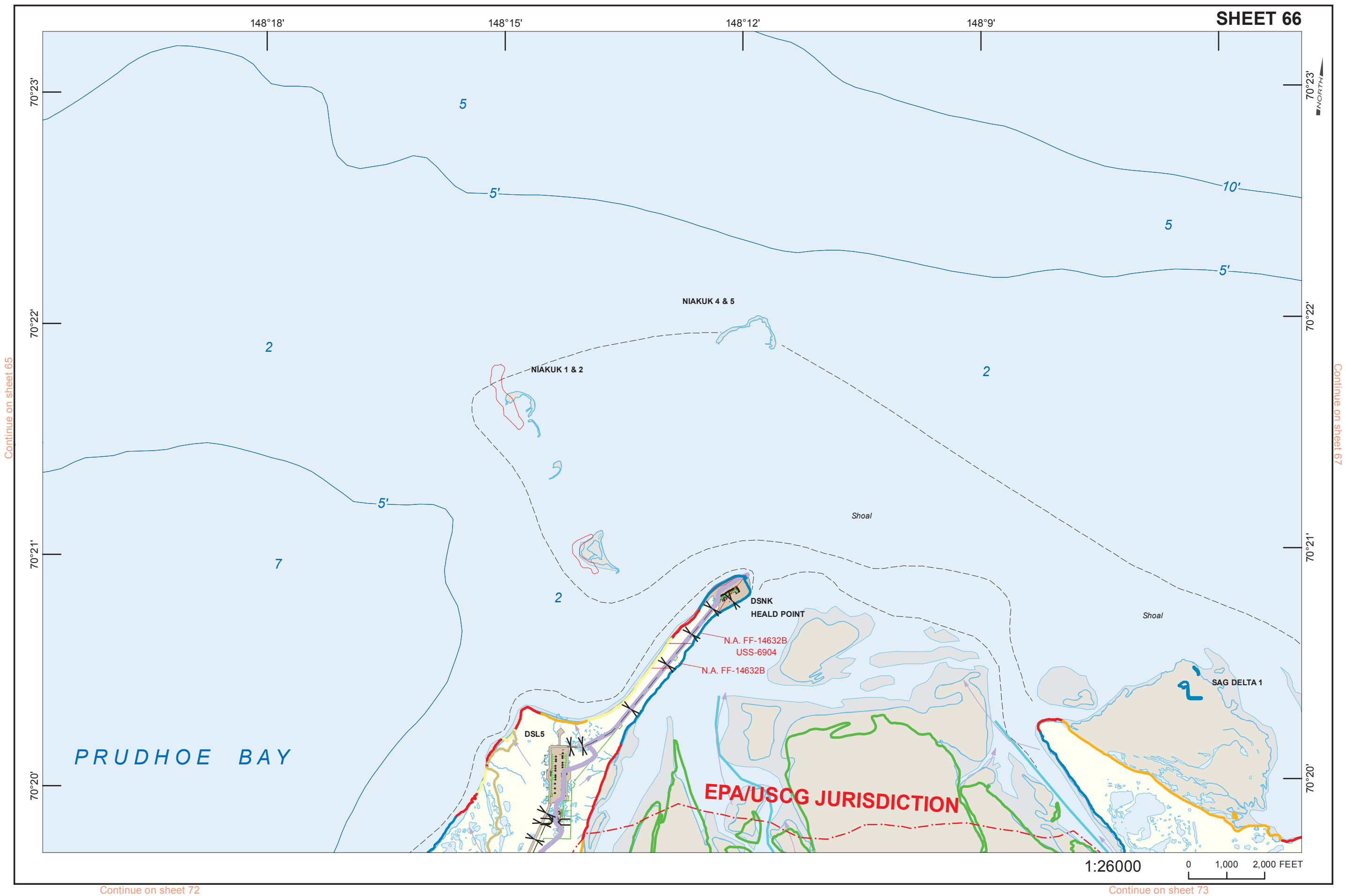
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- Outer portions of Prudhoe Bay have water depths of 6 to 9 ft and afford good holding anchorage with protection from all but northwest winds. Inner bay has shoals across most of the entrance, with water depths of 2 to 6 ft.
- The best marine access route to Prudhoe Bay parallels the west shore at a distance of 0.4 mile with 4 ft. depths.
- Annual average flow rate of the Sagavanirktok River is 2,770 cfs.
- There is high sediment transport in a westerly direction along shore due to Sagavanirktok River discharge.
- There is extensive shoaling as much as 2 miles out from the Sagavanirktok River delta.
- Eddies and reduced current velocities in Prudhoe Bay cause extensive shoaling and migration of barrier islands.

COUNTERMEASURES CONSIDERATIONS

- Sand-gravel beaches on the interior of Prudhoe Bay are quite narrow and are interrupted by vegetated shorelines; this makes the use of large machinery impractical.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.




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PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS12	Eight seabird colonies from Heald Pt. to Pt. Brower	Most sensitive during open water season (June through September). Concentrations of birds.	C-13 or C-14	6,000'


GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present from June to September in the Sagavanirktok River delta.
- The outer portion of the delta is an important migration staging area for shorebirds from July through September and a Pintail molting area in July and August.
- High concentrations of brood-rearing and molting Snow Geese are present in July and August.
- Plan to deploy bird-hazing systems during the open-water season.
- There is a seawater intake between the Endicott Main Production Island (MPI) and Endeavor Island approximately 4 to 9 ft below the surface. Precautions should be taken to keep oil away from this area.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- Deadhorse airport (Sheet 78) is located approximately 15 miles southwest of Endicott Main Production Island (MPI).

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- Outer portions of Prudhoe Bay have water depths of 6 to 9 ft and afford good holding anchorage with protection from all but northwest winds. Inner bay has shoals across most of the entrance, with water depths of 2 to 6 ft.
- There is a boat launch on the west side of MPI.
- There is high sediment transport in a westerly direction along shore due to Sagavanirktok River discharge.
- Annual average flow rate of the Sagavanirktok River is 2,770 cfs. River discharge discolors seawater for many miles.
- There is extensive shoaling as much as 2 miles out from the Sagavanirktok River delta.
- Eddies and reduced current velocities in Prudhoe Bay cause extensive shoaling and migration of barrier islands.

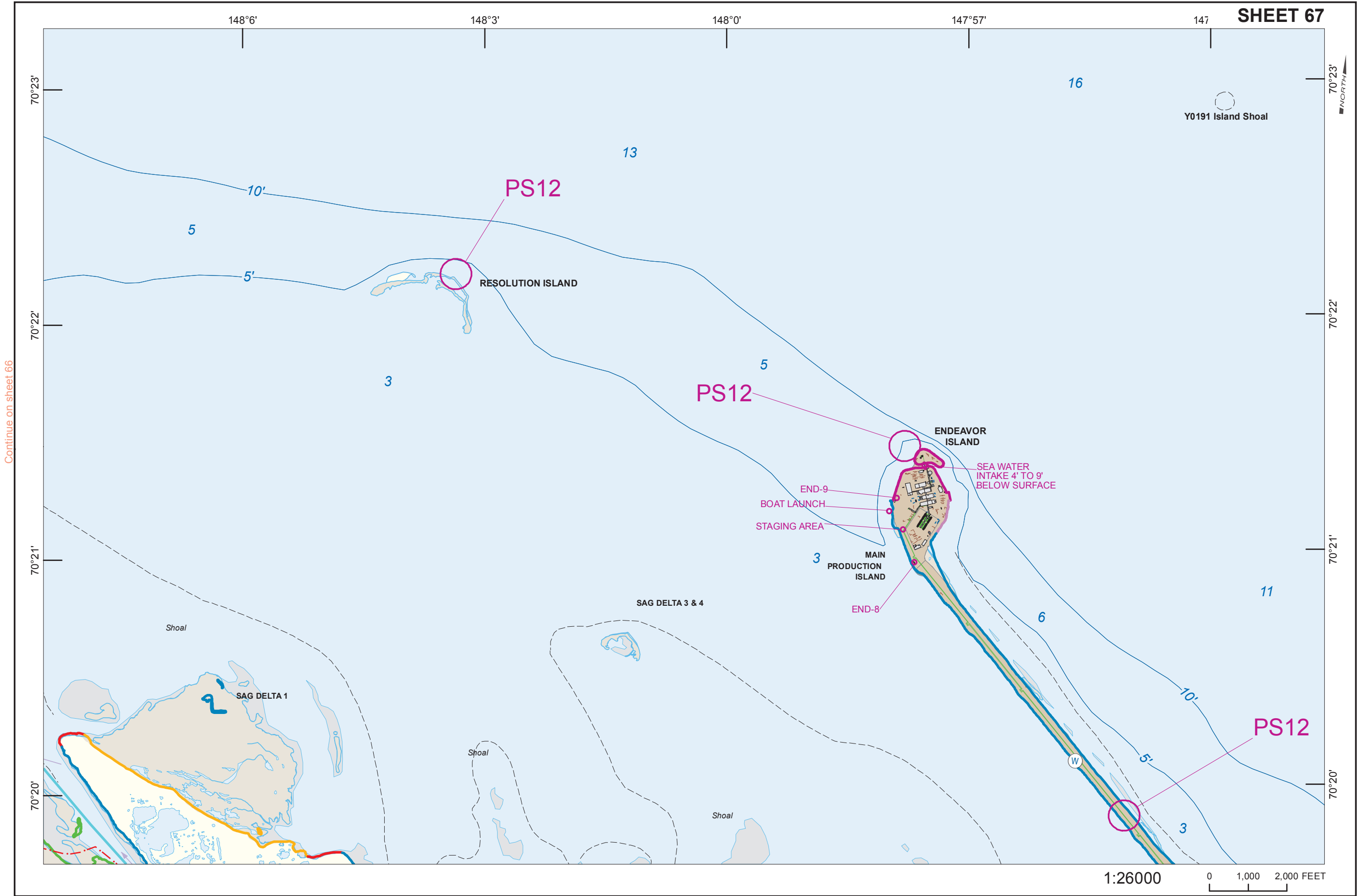
STAGING AREAS AND PRESTAGED EQUIPMENT

- There is a staging area on the MPI.

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
END-9	West side of MPI	Boom	1,000'	14" x 18" light ocean, reel
END-8	Southwest corner of MPI	Boom	6,000'	8" x 6" river

*See the latest Supplement, Alaska and United States Coast Pilot for current information on air and vessel access, respectively.

NOTE: All values given on these pages are for planning purposes only.





PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- This is a Brant nesting area. Birds are present from May through July.
- Pairs of Spectacled Eiders have been found in this area.
- Plan to deploy bird-hazing systems during the open-water season.
- The Sakonowyak River provides habitat for anadromous whitefish.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



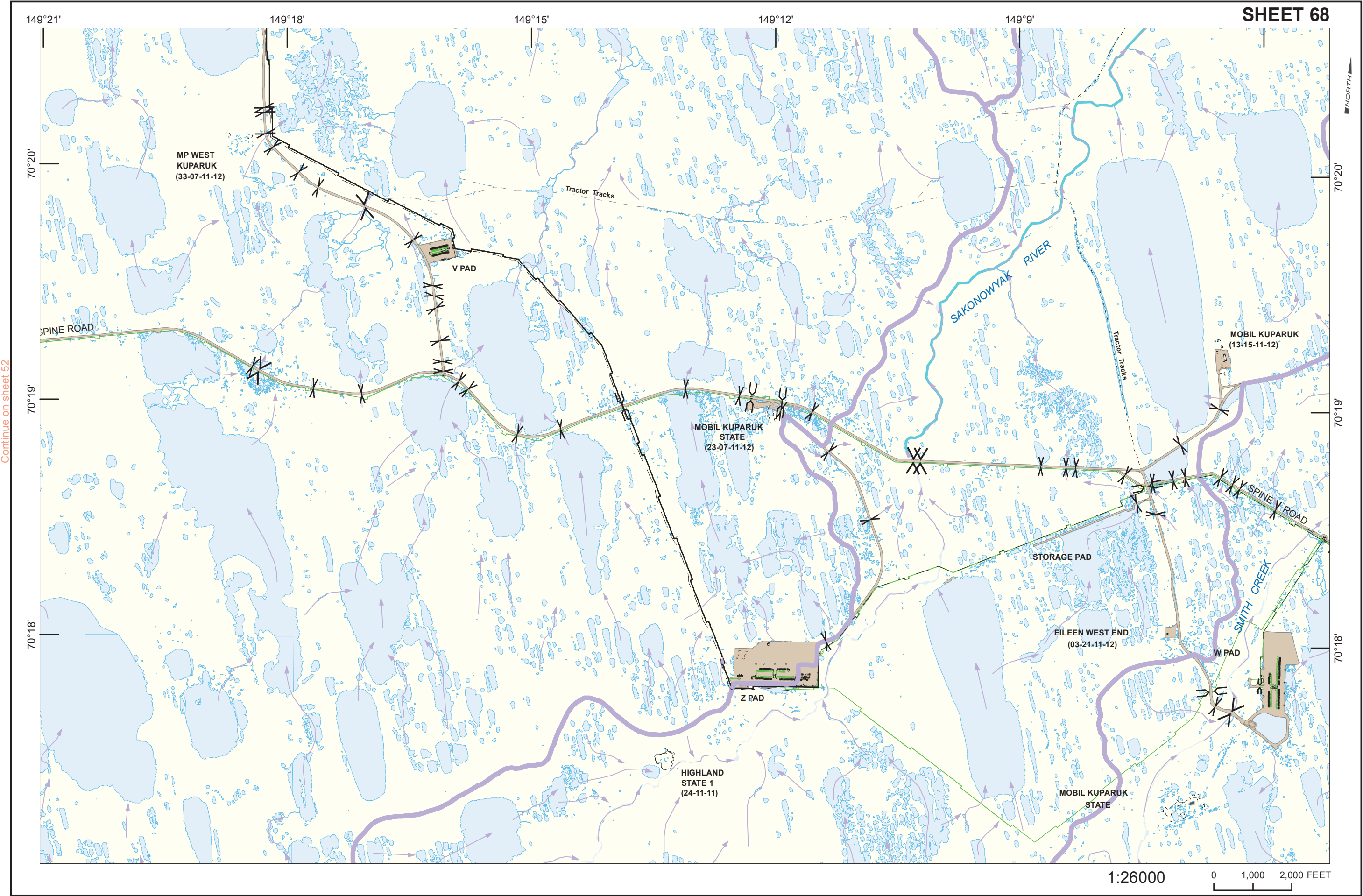
AIR ACCESS*

- Deadhorse airport (Sheet 81) is approximately 18 miles southeast of Z Pad.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine shorelines or waters on this sheet.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.



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PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- Pairs of Spectacled Eiders have been found in this area.
- Plan to deploy bird-hazing systems during the open-water season.
- The Kuparuk River provides habitat for anadromous whitefish and for resident fish.
- The Sakonowyak River provides habitat for anadromous whitefish.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- Deadhorse airport (Sheet 81) is approximately 16 miles southeast of W Pad.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine shorelines or waters on this sheet.
- The annual average discharge rate of the Kuparuk River is 1,830 cfs.
- There are two boat launches on the Kuparuk River on either side of the Spine Road bridge.

STAGING AREAS AND PRESTAGED EQUIPMENT

- There is a possible staging area at the Service City pad.
- KUP-1 is a predetermined containment site. No equipment is staged there.
- Boom is typically predeployed seasonally southeast of PBW-1.

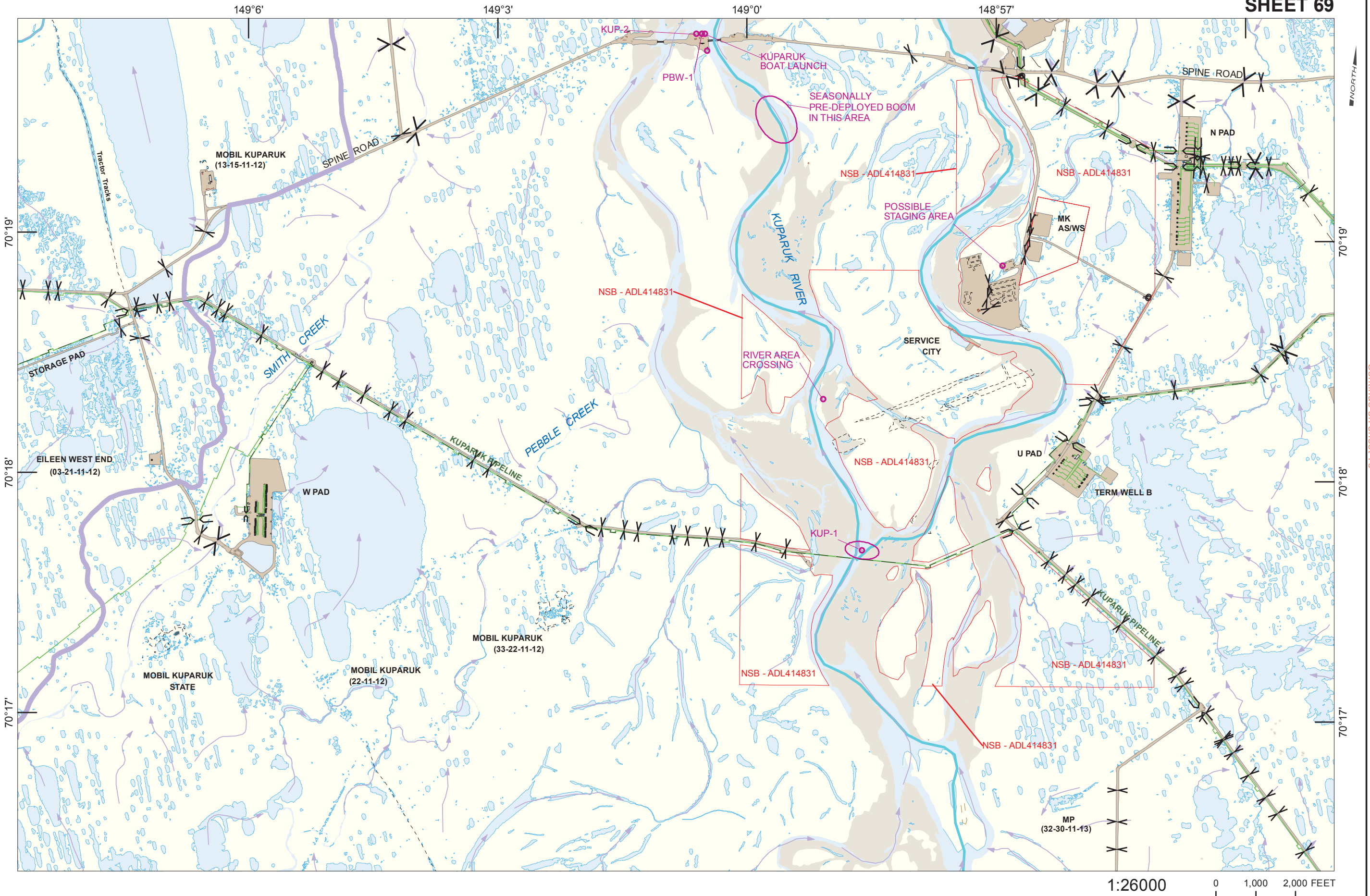
PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
KUP-2	On Spine Road approx. 0.5 mile west of bridge	Boom Anchor Systems	5,050' 3	8" x 6" river
PBW-1	On west bank of main channel south of bridge	Boom	6,000'	8" x 6" river

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

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PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- This is a Brant nesting area. Birds are present from May through July.
- Pairs of Spectacled Eiders have been found in this area.
- Plan to deploy bird-hazing systems during the open-water season.
- There is a freshwater intake in Big Lake west of the BOC. The intake is 5 ft below the surface and is not used during winter. Precautions should be taken to protect this area.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- Deadhorse airport (Sheet 81) is approximately 10 miles south-southeast of GC1.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine shorelines or waters on this sheet.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

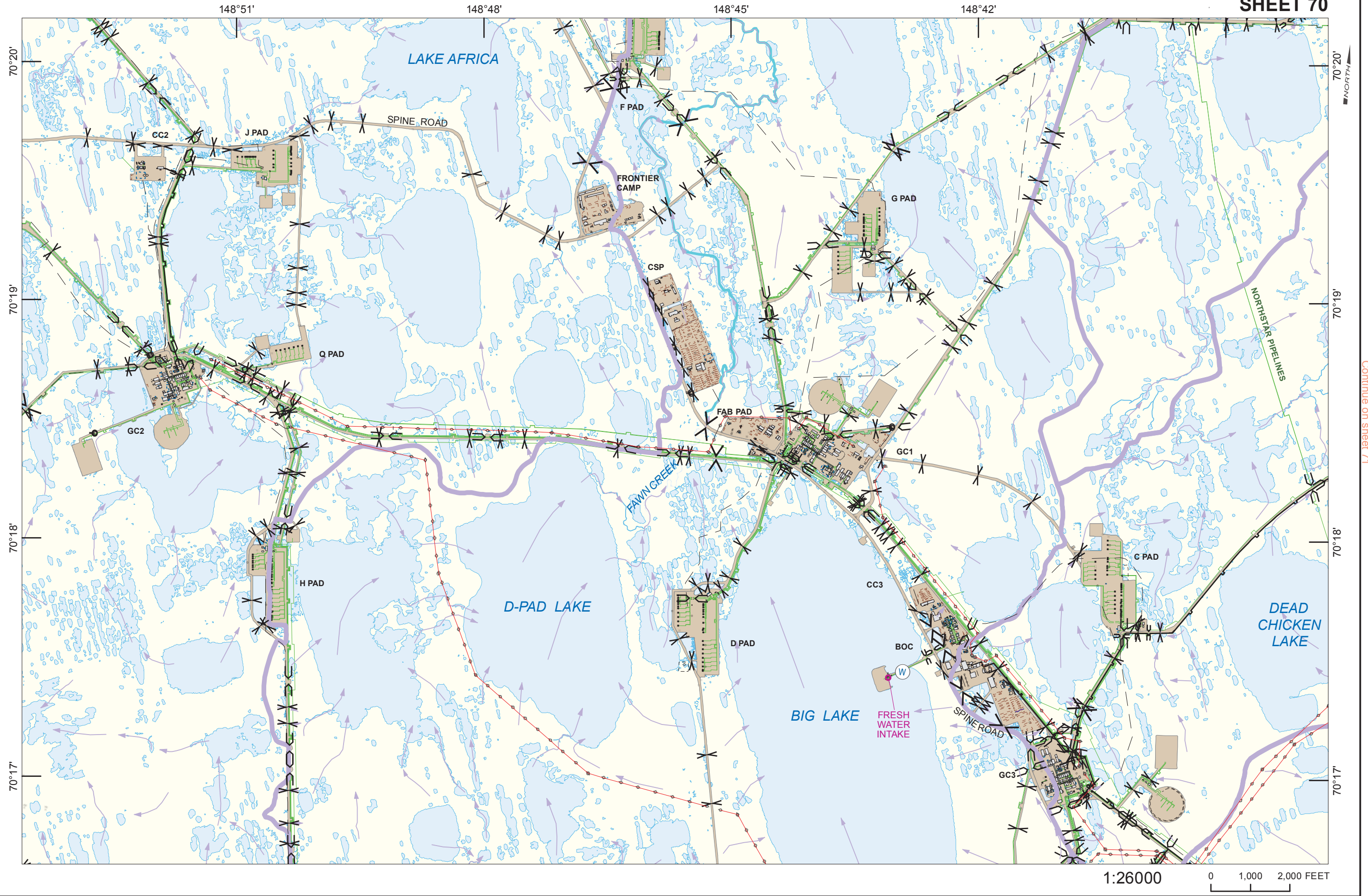
Continue on sheet 63

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SHEET 70

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AIR ACCESS*

- Deadhorse airport (Sheet 81) is approximately 9 miles south of the CGF.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- Outer portions of Prudhoe Bay have water depths of 6 to 9 ft and afford good holding anchorage with protection from all but northwest winds. Inner bay has shoals across most of the entrance, with water depths of 2 to 6 ft.
- The best marine access route to Prudhoe Bay parallels the west shore at a distance of 0.4 mile and has depths of 4 ft.
- There is a boat launch on the north side of the large bend in the Putuligayuk River west of the river mouth.
- There is a boat launch west of the inlet at the mouth of the Putuligayuk River.

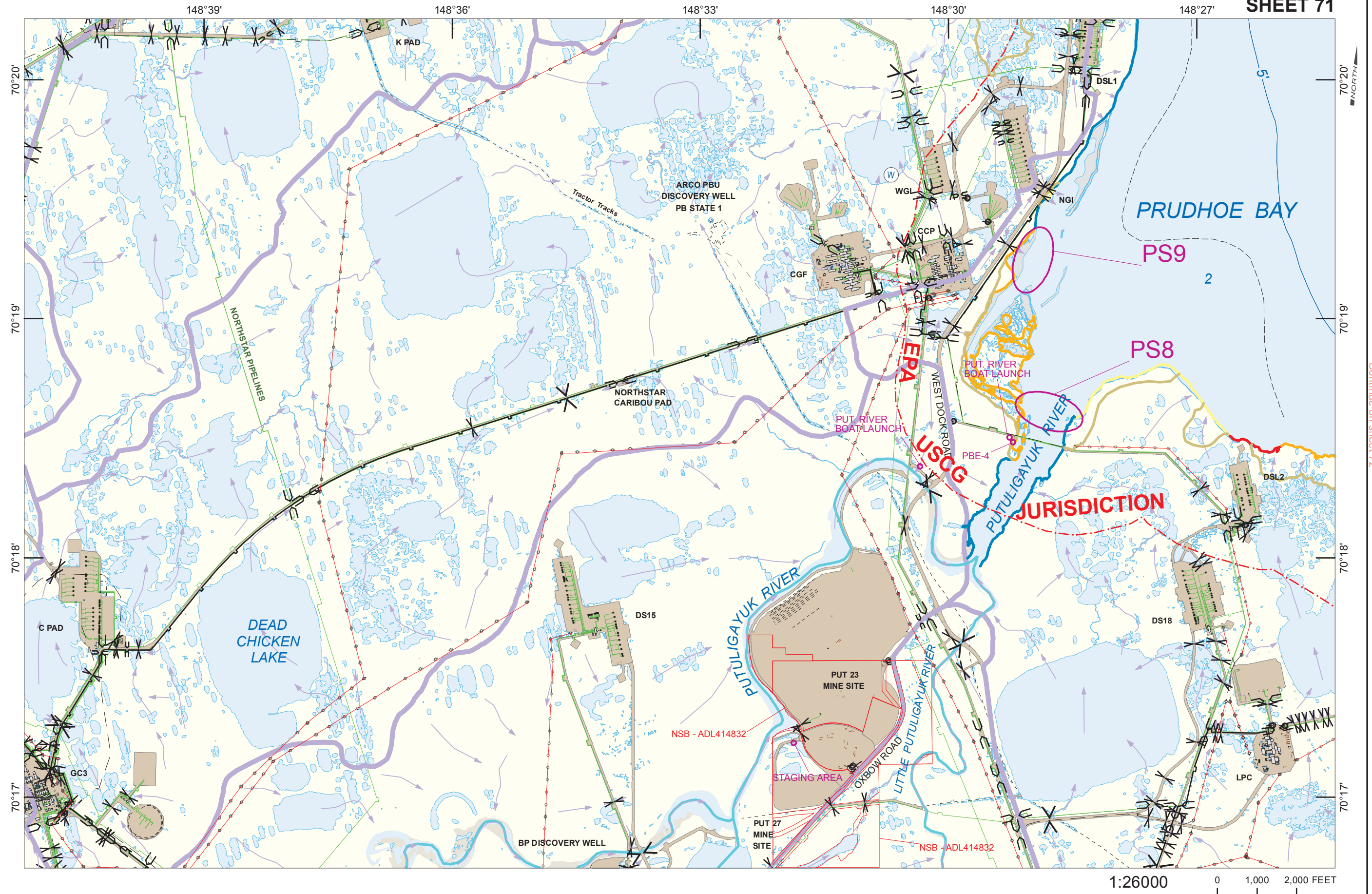
COUNTERMEASURES CONSIDERATIONS

- Sand-gravel beaches on the interior of Prudhoe Bay are quite narrow and interrupted by vegetated shorelines; this makes the use of large machinery impractical.

- There is a possible staging area at the Put 23 Mine site.

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.





- There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- High concentrations of brood-rearing and molting Snow Geese are present in July and August.
- This is a Brant nesting, brood-rearing and molting area. Birds are present from May through August.
- Pairs of Spectacled Eiders have been found in this area.
- Plan to deploy bird-hazing systems during the open-water season.
- The Sagavanirktok River is a migratory corridor for arctic char and whitefish, and an overwintering area for a variety of whitefish, burbot, grayling, and sculpin.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pings, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- Deadhorse airport (Sheet 81) is approximately 9 miles south-southwest of East Dock.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- Outer portions of Prudhoe Bay have water depths of 6 to 9 ft and afford good holding anchorage with protection from all but northwest winds. Inner bay has shoals across most of the entrance, with water depths of 2 to 6 ft.
- The best marine access route to Prudhoe Bay parallels the west shore at a distance of 0.4 mile and has depths of 4 ft.
- There is a boat launch at East Dock.
- There is a boat launch on the west bank of the west channel of the Sagavanirktok River south of Surfcote Pad.

COUNTERMEASURES CONSIDERATIONS

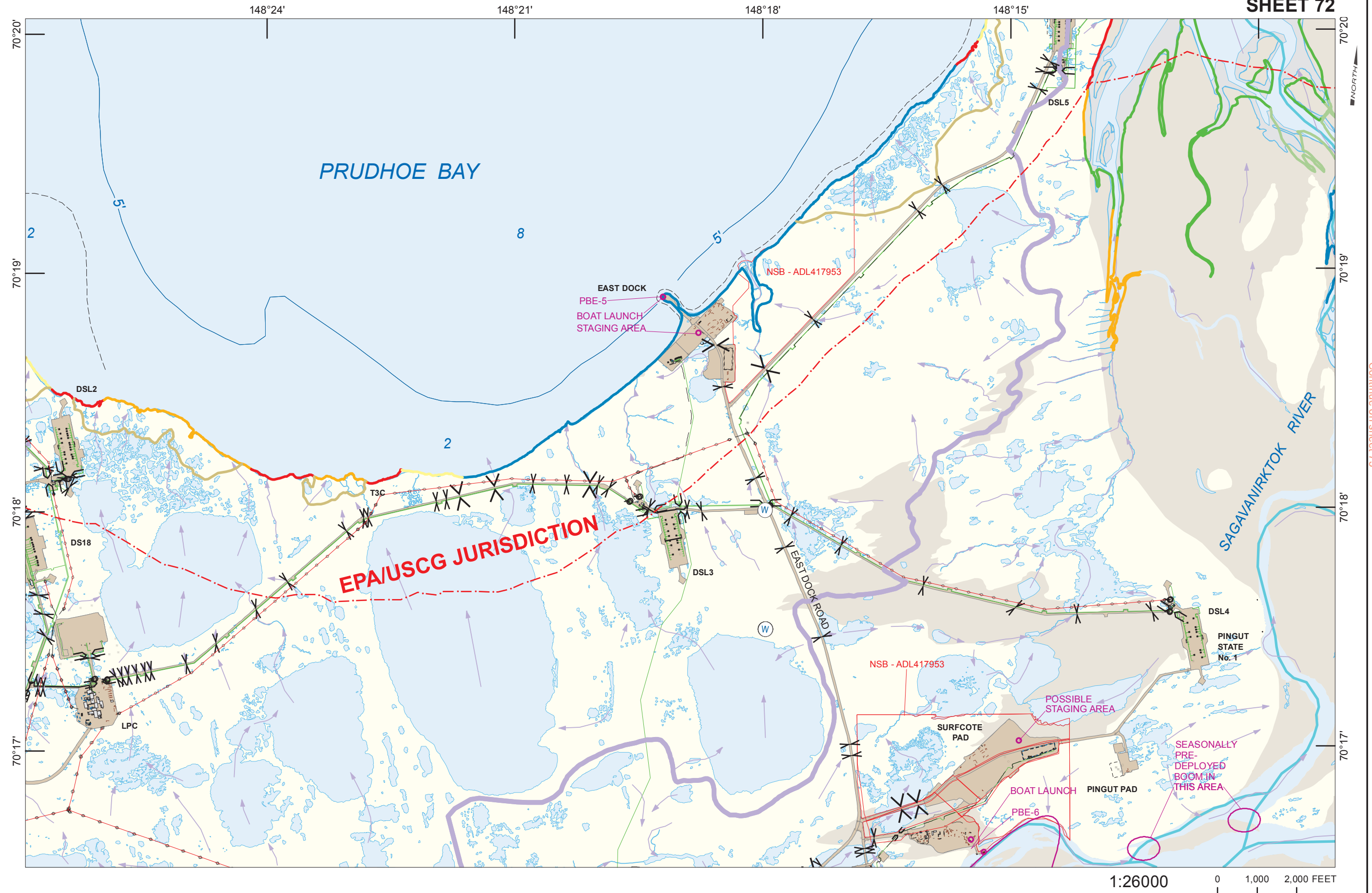
- Sand-gravel beaches on the interior of Prudhoe Bay are quite narrow and interrupted by vegetated shorelines; this makes the use of large machinery impractical.

STAGING AREAS AND PRESTAGED EQUIPMENT

- There is a staging area at the East Dock pad.
- There is a possible staging area at Surfcote Pad.
- Boom is typically predeployed seasonally between PBE-7 and PBE-8.

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
PBE-5	East Dock	Boom	10,950'	8"x 6" river
PBE-6	West of the river south of Surfcote Pad	Boom	950'	8"x12" fire
		Boom	10,000'	8"x 6" river
		Skimmer	3	Disc, MI
		Pump	3	3" diaphragm
	North bank of river south of Pingut Pad	Boom	2,000'	8"x 6" river
		Storage	1	1,320-gal bladder
		Storage	1	2,640-gal bladder
		Storage	1	2,400-gal Fastank
	West bank of river southeast of Pingut Pad	Boom	2,000'	8"x 6" river
		Storage	1	1,320-gal bladder
		Storage	1	2,640-gal bladder
		Storage	1	2,400-gal Fastank

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.





SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS5	Howe Island	Most sensitive during open water season (June through September). Snow goose breeding area.	C-13 or C-14	5,000'
PS6	Inlet channel, southwest of Howe Island	Most sensitive during open water season when oil could drift into inlet. Inundated low-lying tundra shoreline.	C-13 or C-14	1,000'

* Priority Protection Area -- The entire delta region of the Sagavanirktok River is one large Priority Protection Area due to its size and numerous geographical features. On-site conditions may require the use of open water tactics to prevent oil migration into this delta.

GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Howe Island is the only known major site for Snow Goose breeding in the United States. Birds are present from June to September on the island and in the Sagavanirktok River delta.
- Concentrations of swans, ducks, other geese, and shorebirds also are present from June to September in the Sagavanirktok River delta.
- The outer portion of the delta is an important migration staging area for shorebirds from July through September and a Pintail molting area in July and August.
- This is a Brant nesting, brood-rearing, and molting area. Birds are present from May through August.
- Pairs of Spectacled Eiders have been found in this area.
- Plan to deploy bird-hazing systems during the open-water season.
- The Sagavanirktok River is a migratory corridor for arctic char and whitefish, and an overwintering area for a variety of whitefish, burbot, grayling, and sculpin.
- Polar bear dens have been found in this area. Dens may be in use from October through April.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.

AIR ACCESS*

- Deadhorse airport (Sheet 81) is located approximately 13 miles southwest of Howe Island.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- Outer portions of Prudhoe Bay have water depths of 6 to 9 ft and afford good holding anchorage with protection from all but northwest winds. Inner bay has shoals across most of the entrance, with water depths of 2 to 6 ft.
- Annual average flow rate of the Sagavanirktok River is 2,770 cfs. River discharge discolors seawater for many miles. Large amounts of river sediments are swept westward in alongshore currents.
- There is extensive shoaling as much as 2 miles out from the Sagavanirktok River delta.

COUNTERMEASURES CONSIDERATIONS

- Mud flats at the eastern front of the Sagavanirktok River delta may have low load-bearing capacity.
- Most shorelines between the Kuparuk River (to the west) and the Sagavanirktok River are accessible by balloon-tired vehicles or beach-front access at West Dock and East Dock.

STAGING AREAS AND PRESTAGED EQUIPMENT

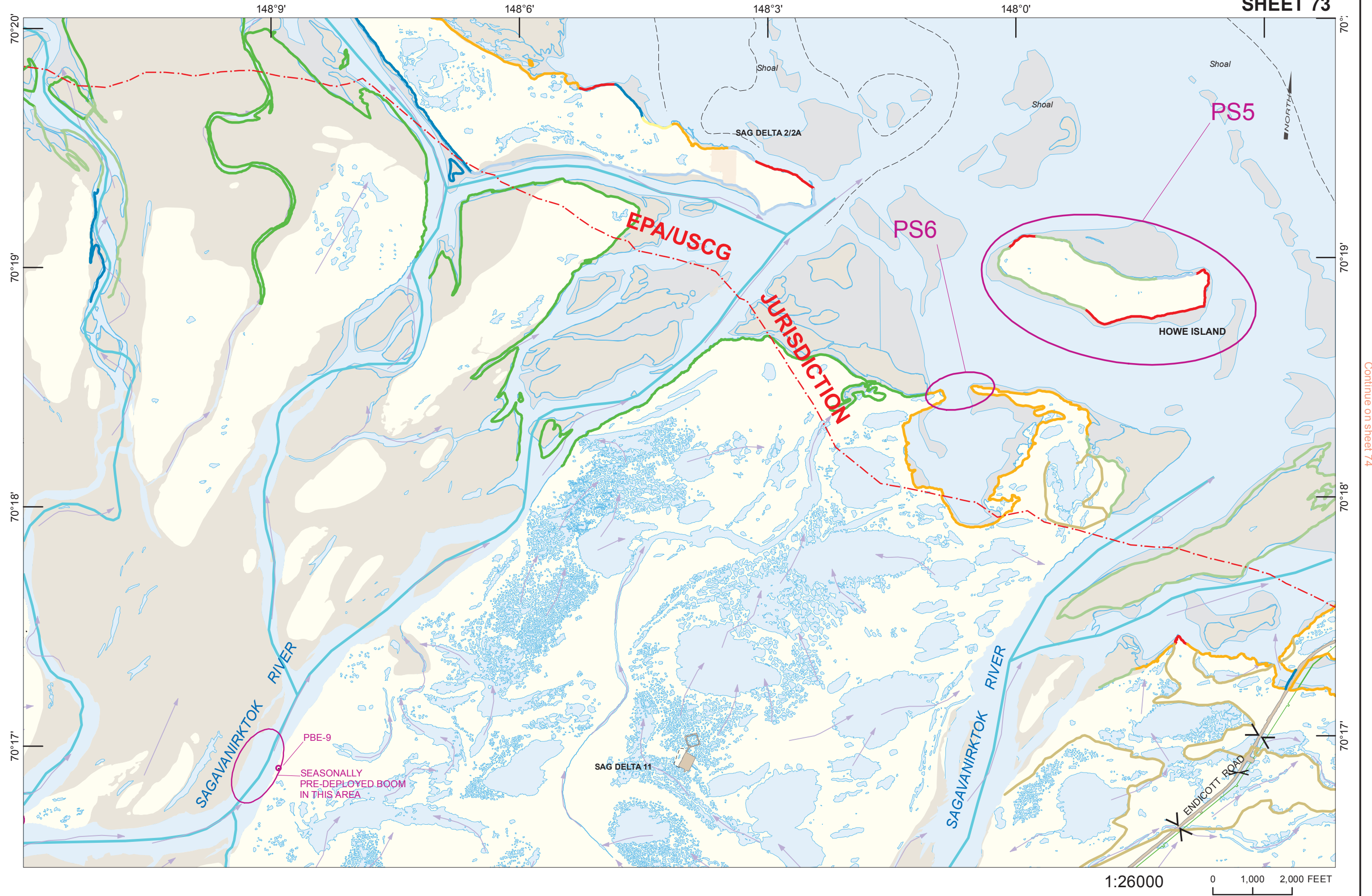
- Boom is typically predeployed seasonally between PBE-7 and PBE-8, and near PBE-9.

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
PBE-9	East bank of main channel west of Sag Delta 11	Boom	2,000'	8"x 6" river
		Storage	2	1,320-gal bladder
		Storage	2	2,640-gal bladder
		Storage	1	2,400-gal Fastank

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

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Continue on sheet 74





PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS5	Howe Island	Most sensitive during open water season (June through September). Snow goose breeding area.	C-13 or C-14	5,000'
PS7	Duck Island	Most sensitive during open water season (June through September). Concentrations of birds.	C-13 or C-14	3,000'
PS12	Eight seabird colonies from Heald Pt. to Pt. Brower (one site, Duck Island 3, may be submerged)	Most sensitive during open water season (June through September). Concentrations of birds.	C-13 or C-14	6,000'

* Priority Protection Area -- The entire delta region of the Sagavanirktok River is one large Priority Protection Area due to its size and numerous geographical features. On-site conditions may require the use of open water tactics to prevent oil migration into this delta.

GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Howe Island is the only known major site for Snow Goose breeding in the United States. Birds are present from June to September on the island and in the Sagavanirktok River delta.
- Concentrations of swans, ducks, other geese, and shorebirds also are present from June to September in the Sagavanirktok River delta.
- The outer portion of the delta is an important migration staging area for shorebirds from July through September and a Pintail molting area in July and August.
- This is a Brant nesting, brood-rearing and molting area. Birds are present from May through August.
- Plan to deploy bird-hazing systems during the open-water season.
- The Sagavanirktok River is a migratory corridor for arctic char and whitefish, and an overwintering area for a variety of whitefish, burbot, grayling, and sculpin.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- Deadhorse airport (Sheet 81) is located approximately 16 miles southwest of Endicott Satellite Drilling Island (SDI).

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There is a boat launch on the west side of SDI.
- There is small boat and float plane shelter in the lagoon on the southeast side of Point Brower. Water depth is 2 to 4 ft.
- Annual average flow rate of the Sagavanirktok River is 2,770 cfs. River discharge discolors seawater for many miles. Large amounts of river sediments are swept westward in alongshore currents.
- There is extensive shoaling as much as 2 miles out from the Sagavanirktok River delta.
- Currents are swift through the Endicott causeway breaches.

COUNTERMEASURES CONSIDERATIONS

- Mud flats at the eastern front of the Sagavanirktok River delta may have low load-bearing capacity.

STAGING AREAS AND PRESTAGED EQUIPMENT

- There is a staging area on the SDI.

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
END-1	At entrance to causeway	Boom	4,000'	8"x 6" river
END-2	On causeway north of first bridge	Boom	4,000'	8"x 6" river
END-3	On causeway south of second bridge	Boom	6,000'	8"x 6" river
END-4	On causeway north of third bridge	Boom	6,000'	8"x 6" river
END-5	SDI	Boom	4,400'	8"x 6" river

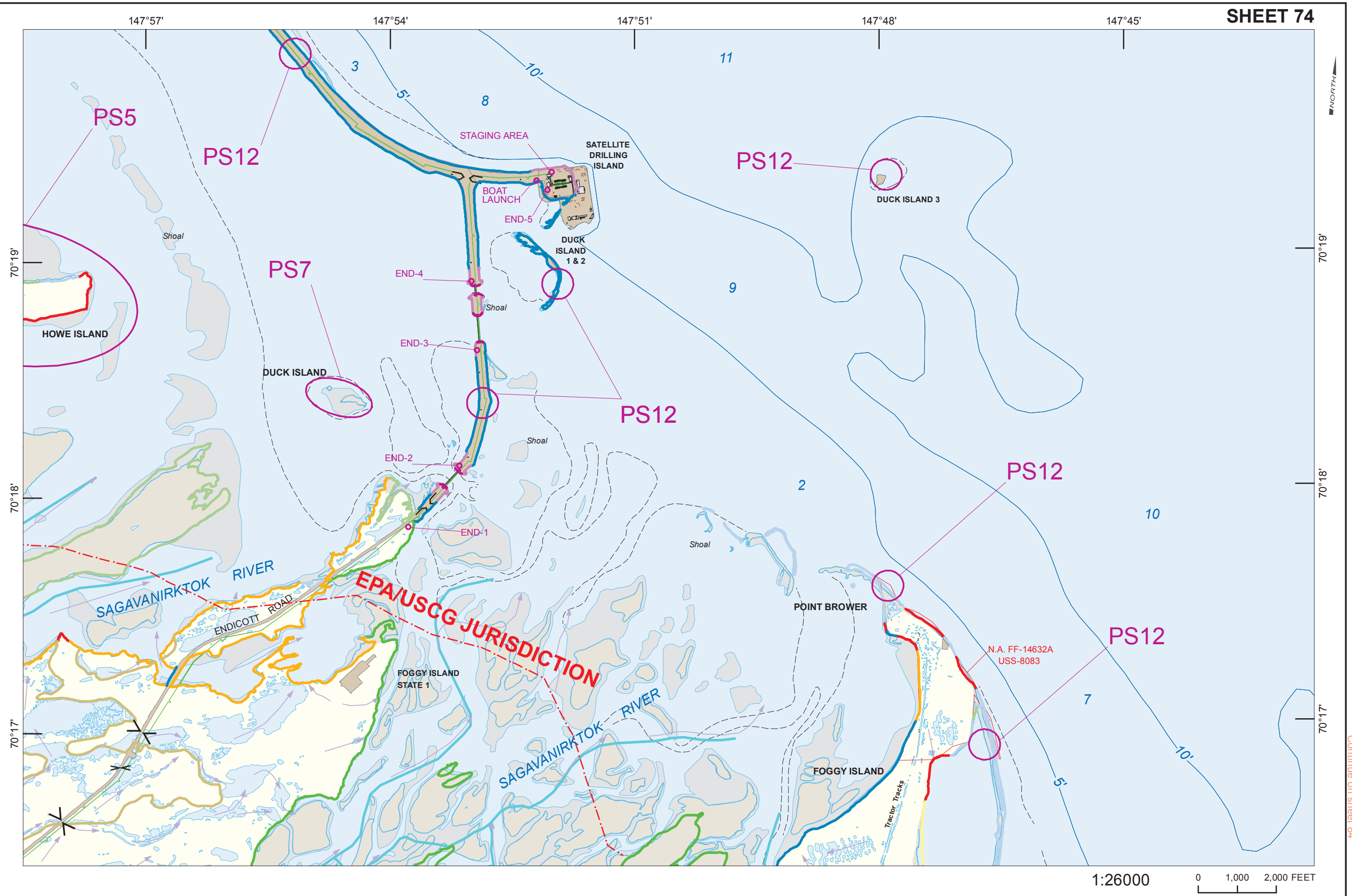
*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

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SHEET 74

Continue on sheet 73

Continue on sheet 84



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PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- Pairs of Spectacled Eiders have been found in this area.
- Plan to deploy bird-hazing systems during the open-water season.
- The Kuparuk River provides habitat for anadromous whitefish and for resident fish.
- The Putuligayuk River provides habitat for anadromous whitefish and char.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- Deadhorse airport (Sheet 81) is approximately 12 miles southeast of P Pad.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

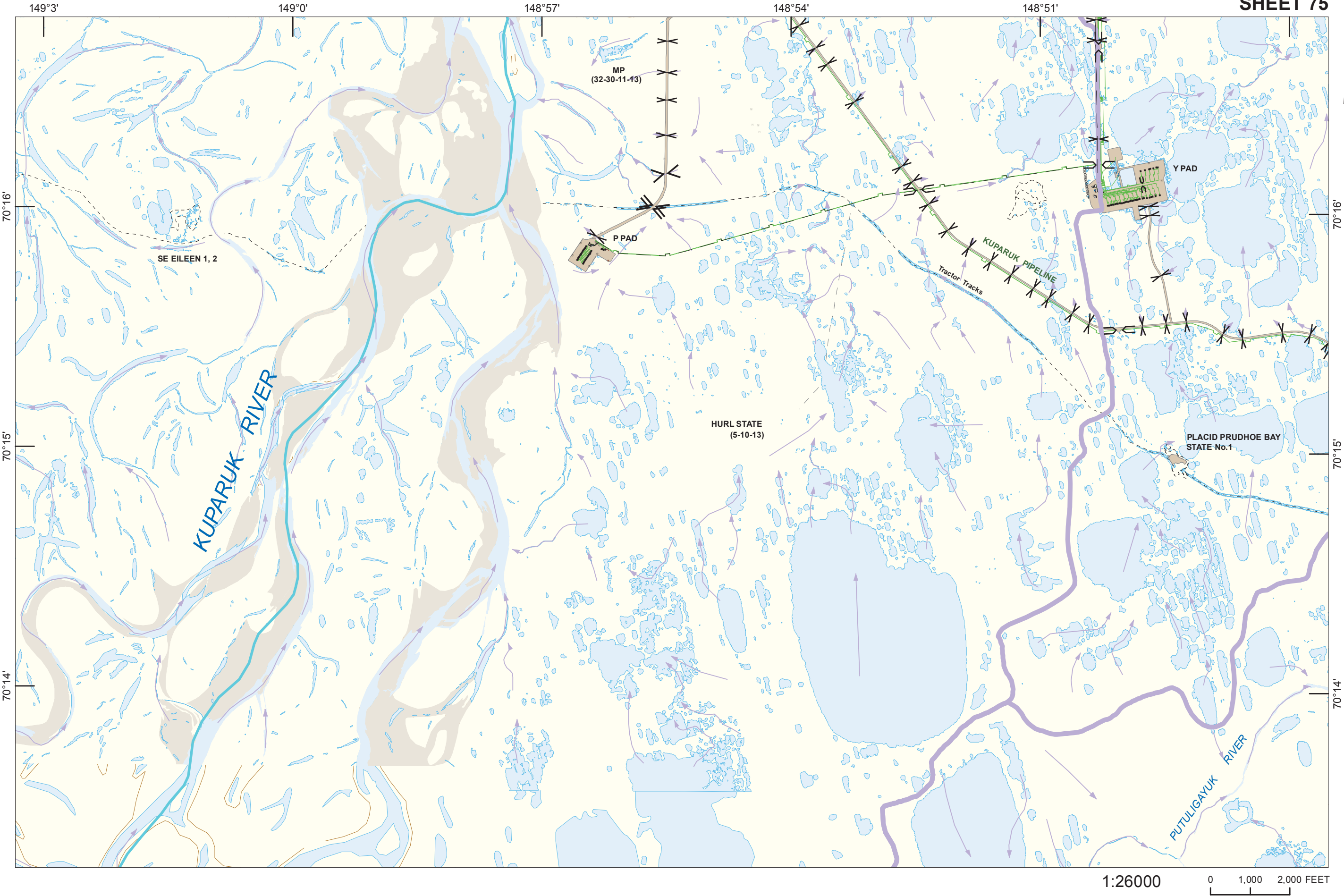
- There are no marine shorelines or waters on this sheet.
- The annual average discharge rate of the Kuparuk River is 1,830 cfs.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 177

Continue on sheet 76

Continue on sheet 283



1:26000

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PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- This is a Brant nesting area. Birds are present from May through July.
- Pairs of Spectacled Eiders have been found in this area.
- Plan to deploy bird-hazing systems during the open-water season.
- The Putuligayuk River provides habitat for anadromous whitefish and char.
- There is a freshwater intake in Big Lake west of the BOC. The intake is 5 ft below the surface and is not used during winter because of ice. Precautions should be taken to protect this area.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- Deadhorse airport (Sheet 81) is approximately 8 miles southeast of A Pad.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

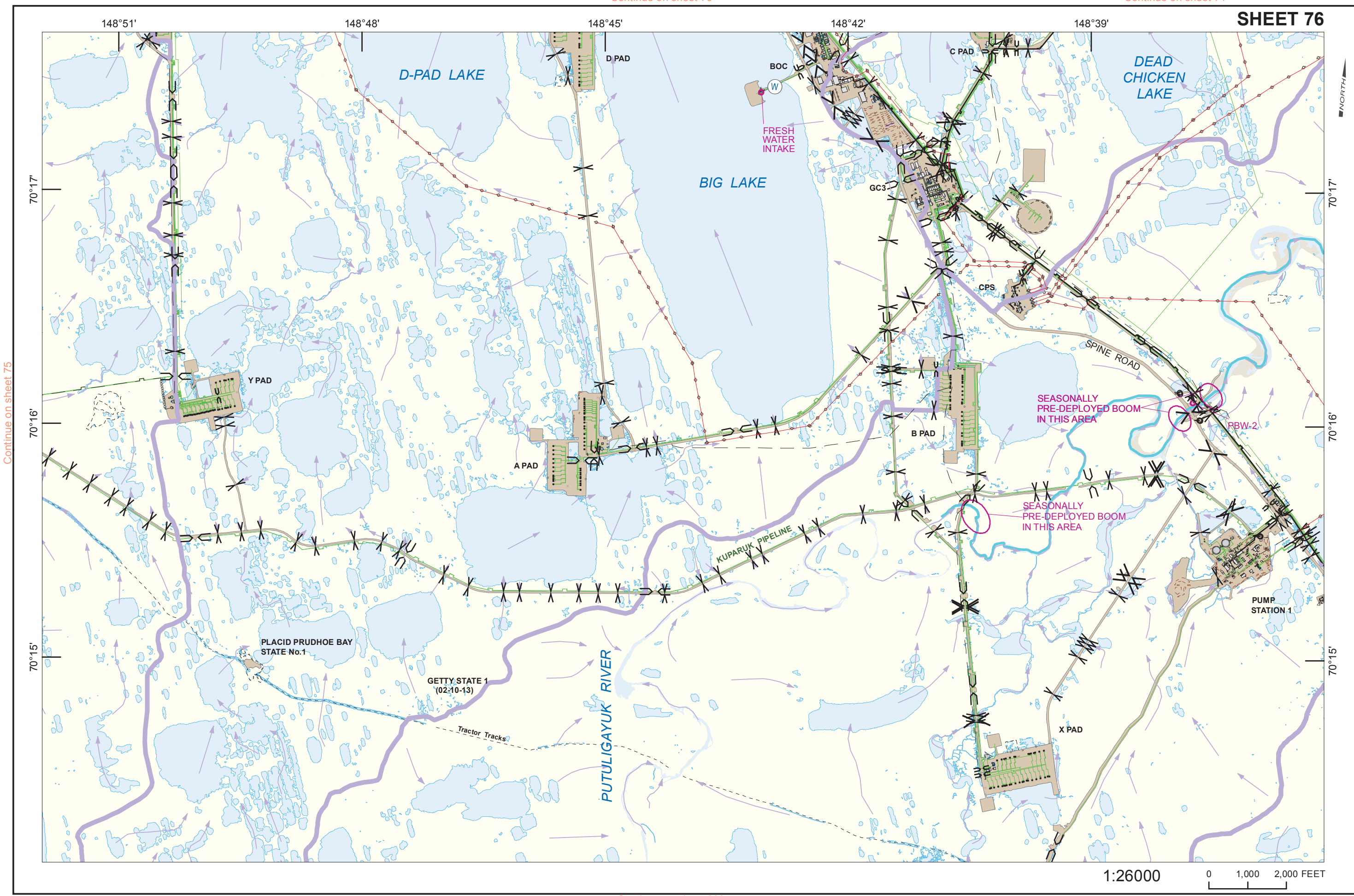
- There are no marine shorelines or waters on this sheet.

STAGING AREAS AND PRESTAGED EQUIPMENT

- Boom is typically predeployed seasonally on the Putuligayuk River on either side of Spine Road near PBW-2 and near the X Pad access road.

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
PBW-2	On pad north of Put River near Spine Road	Boom	2,175'	8" x 6" river

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.



Continue on sheet 75

Continue on sheet 77



PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- This is a Brant nesting area. Birds are present from May through July.
- Pairs of Spectacled Eiders have been found in this area.
- Plan to deploy bird-hazing systems during the open-water season.
- The Putuligayuk and Little Putuligayuk Rivers provide habitat for anadromous whitefish and char.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- Deadhorse airport (Sheet 81) is approximately 5 miles southeast of Pump Station 1.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine shorelines or waters on this sheet.

STAGING AREAS AND PRESTAGED EQUIPMENT

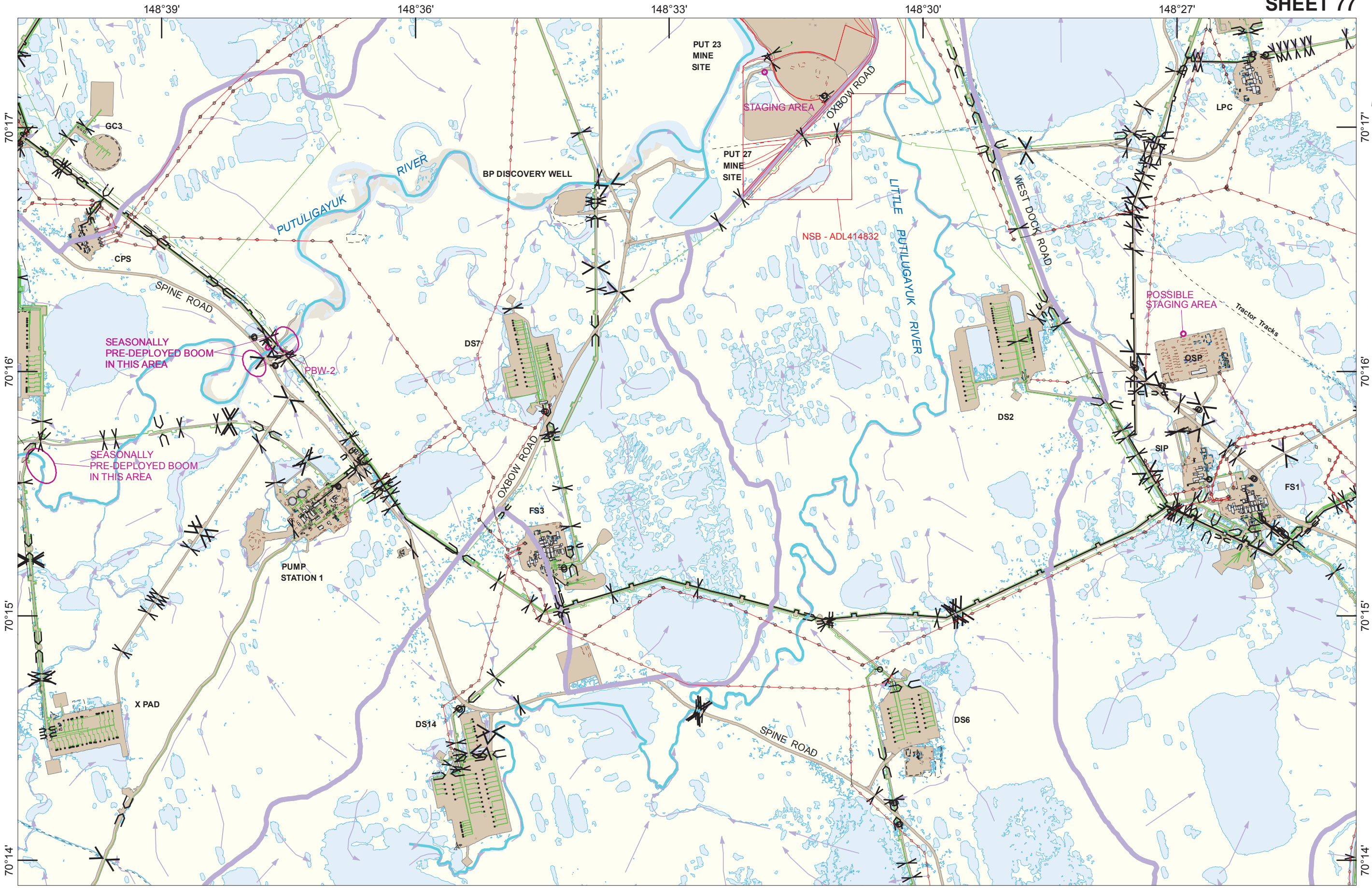
- There is a possible staging area at the OSP.
- There is a staging area on the west side of the pad at Put 23 Mine Site.
- Boom is typically predeployed seasonally on the Putuligayuk River on either side of Spine Road near PBW-2.

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
PBW-2	On pad north of Put River near Spine Road	Boom	2,175'	8" x 6" river

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 76

Continue on sheet 78



1:26000

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PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- High concentrations of brood-rearing and molting Snow Geese are present in July and August.
- This is a Brant nesting area. Birds are present from May through July.
- Pairs of Spectacled Eiders have been found in this area.
- Plan to deploy bird-hazing systems during the open-water season.
- The Sagavanirktok River is a migratory corridor for arctic char and whitefish, and an overwintering area for a variety of whitefish, burbot, grayling, and sculpin.
- There is a freshwater intake at the south end of Webster Reservoir at 30 to 35 ft below the surface. This intake is used from September through June.
- There is a freshwater intake on the west bank of the west channel of the Sagavanirktok River east of the PBOC at approximately 10 to 12 ft below the surface. This intake is used from June to September.
- Precautions should be taken to protect these water intake areas.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- Deadhorse airport (Sheet 81) is approximately 5 miles southwest of the PBOC.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

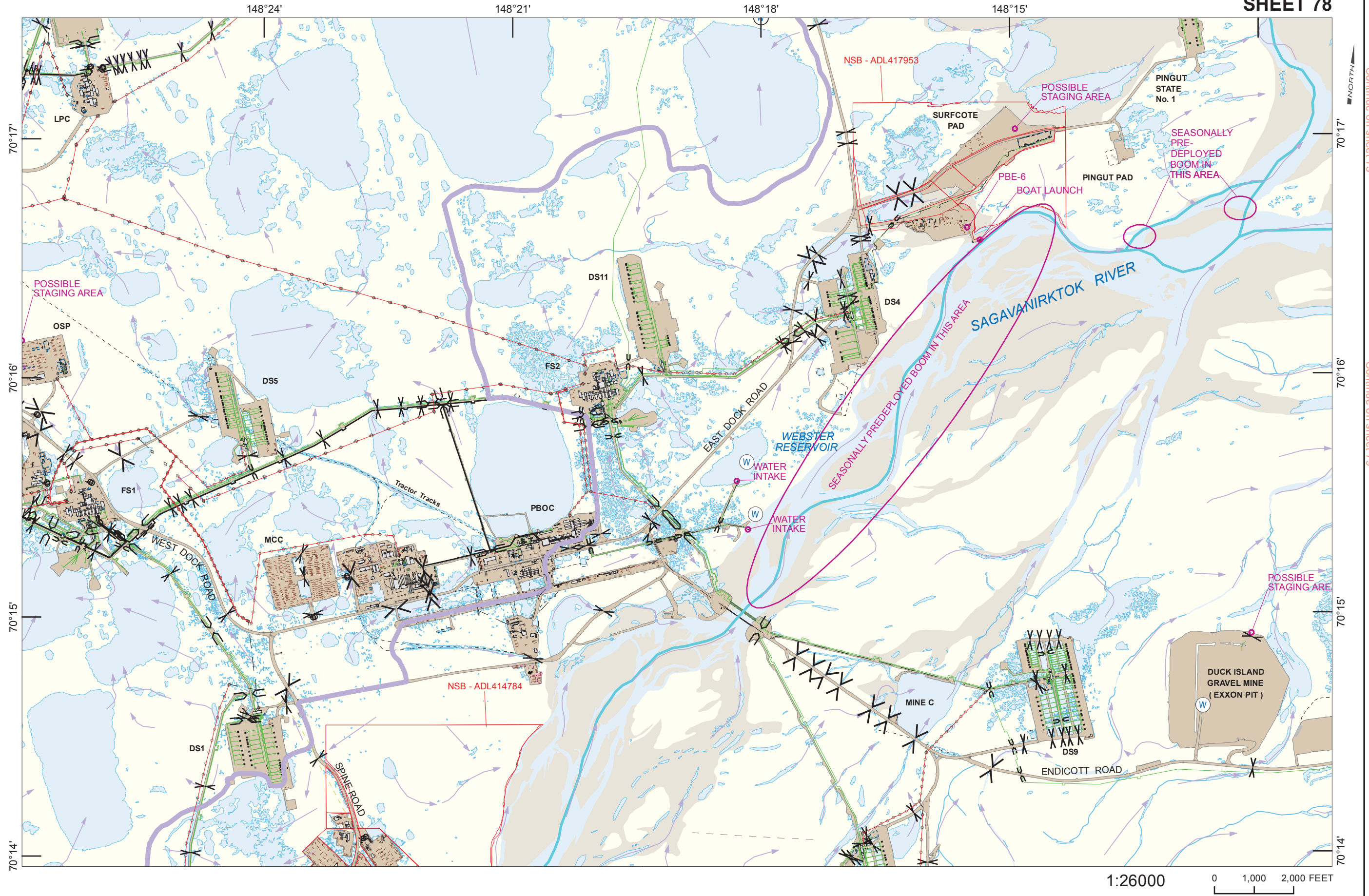
- There are no marine shorelines or waters on this sheet.
- There is a boat launch on the west bank of the west channel of the Sagavanirktok River northeast of DS4.
- Annual average flow rate of the Sagavanirktok River is 2,770 cfs.

STAGING AREAS AND PRESTAGED EQUIPMENT

- There is a possible staging area at the Duck Island Gravel Mine site.
- There is a possible staging area at Surfcote Pad.
- Boom is typically predeployed seasonally between the Sagavanirktok River bridge and PBE-6, and between PBE-7 and PBE-8.

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
PBE-6	West of the river south of Surfcote Pad	Boom Boom Skimmer Pump	950' 10,000' 3 3	8" x 12" fire 8" x 6" river MI 3" diaphragm
	North bank of river south of Pingut Pad	Boom Storage Storage Storage	2,000' 1 1 1	8" x 6" river 1,320-gal bladder 2,640-gal bladder 2,400-gal Fastank
	West bank of river southeast of Pingut Pad	Boom Storage Storage Storage	2,000' 1 1 1	8" x 6" river 1,320-gal bladder 2,640-gal bladder 2,400-gal Fastank

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.





PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- The outer portion of the delta is an important migration staging area for shorebirds from July through September and a Pintail molting area in July and August.
- High concentrations of brood-rearing and molting Snow Geese are present in July and August.
- This is a Brant nesting, brood-rearing, and molting area. Birds are present from May through August.
- Pairs of Spectacled Eiders have been found in this area.
- Plan to deploy bird-hazing systems during the open-water season.
- The Sagavanirktok River is a migratory corridor for arctic char and whitefish, and an overwintering area for a variety of whitefish, burbot, grayling, and sculpin.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- Deadhorse airport (Sheet 81) is approximately 11 miles southwest of Delta State 2.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this sheet.
- Annual average flow rate of the Sagavanirktok River is 2,770 cfs.

STAGING AREAS AND PRESTAGED EQUIPMENT

- There is a possible staging area at the Duck Island Gravel Mine site.
- Boom is typically predeployed seasonally near PBE-9.

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
PBE-9	East bank of main channel west of Sag Delta 11	Boom	2,000'	8" x 6" river
		Storage	2	1,320-gal bladder, liftable
		Storage	2	2,640-gal bladder, tow/lift
PBE-6	North bank of river south of Pingut Pad	Storage	1	2,400-gal Fastank
		Boom	2,000'	8" x 6" river
		Storage	1	1,320-gal bladder, liftable
	West bank of river southeast of Pingut Pad	Storage	1	2,640-gal bladder, tow/lift
		Storage	1	2,400-gal Fastank
		Boom	2,000'	8" x 6" river

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

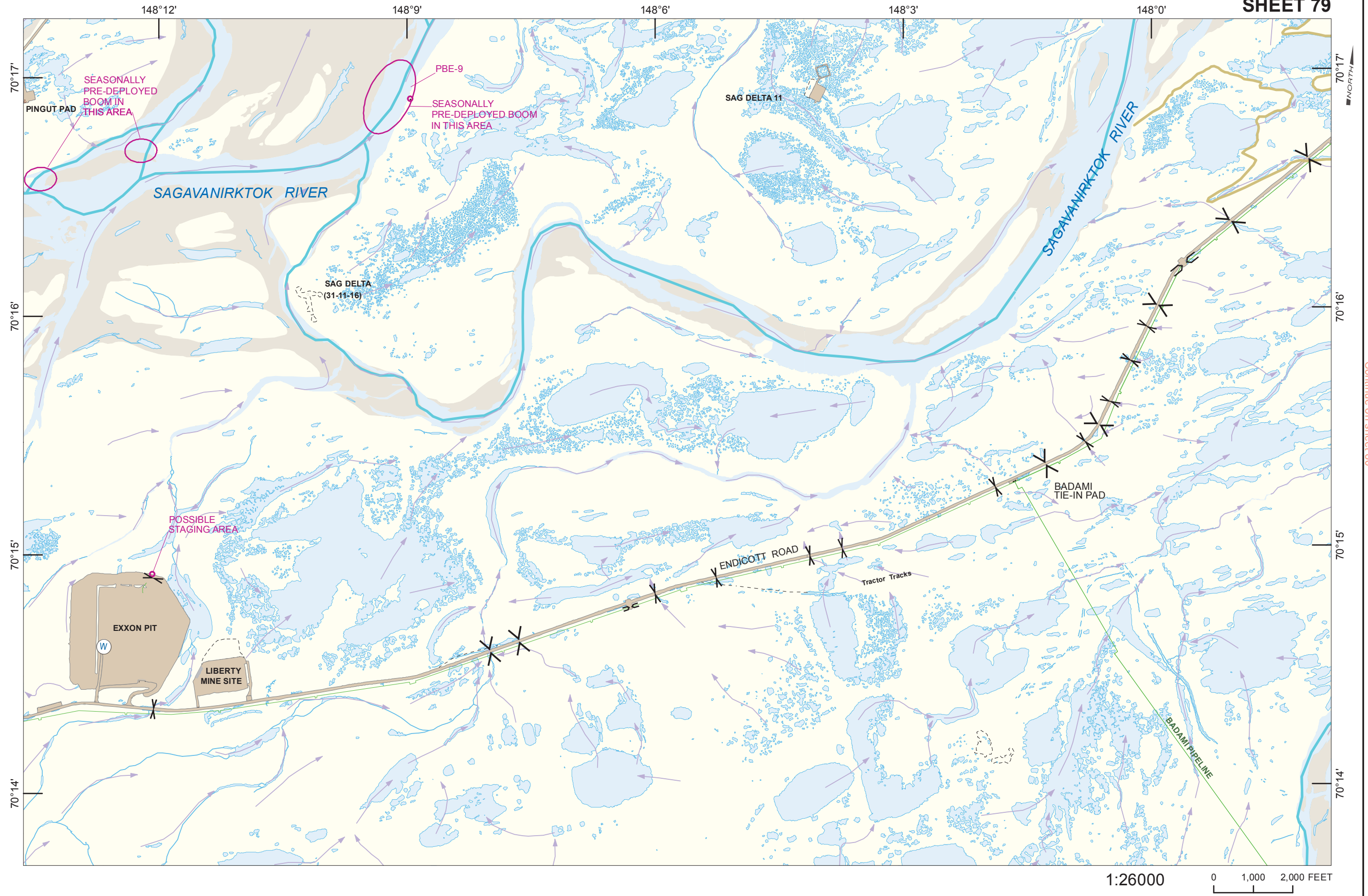
Continue on sheet 72

Continue on sheet 73

SHEET 79


Continue on sheet 78

Continue on sheet 80



Continue on sheet 82

Continue on sheet 180



PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS12	Eight seabird colonies from Heald Pt. to Pt. Brow-er (one site, Duck Island 3, may be submerged)	Most sensitive during open water season (June through September). Concentrations of birds.	C-13 or C-14	6,000'

* Priority Protection Area -- The entire delta region of the Sagavanirktok River is one large Priority Protection Area due to its size and numerous geographical features. On-site conditions may require the use of open water tactics to prevent oil migration into this delta.

GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- The outer portion of the delta is an important migration staging area for shorebirds from July through September and a Pintail molting area in July and August.
- High concentrations of brood-rearing and molting Snow Geese are present in July and August.
- This is a Brant nesting, brood-rearing and molting area. Birds are present from May through August.
- Pairs of Spectacled Eiders have been found in this area.
- Plan to deploy bird-hazing systems during the open-water season.
- The Sagavanirktok River is a migratory corridor for arctic char and whitefish, and an overwintering area for a variety of whitefish, burbot, grayling, and sculpin.
- Polar bear dens have been found in this area. Dens may be in use from October through April.

CULTURAL SITES

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Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.

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NOTE: All values given on these pages are for planning purposes only.

Response Considerations

AIR ACCESS*

- Deadhorse airport (Sheet 81) is approximately 25 miles to the southwest.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

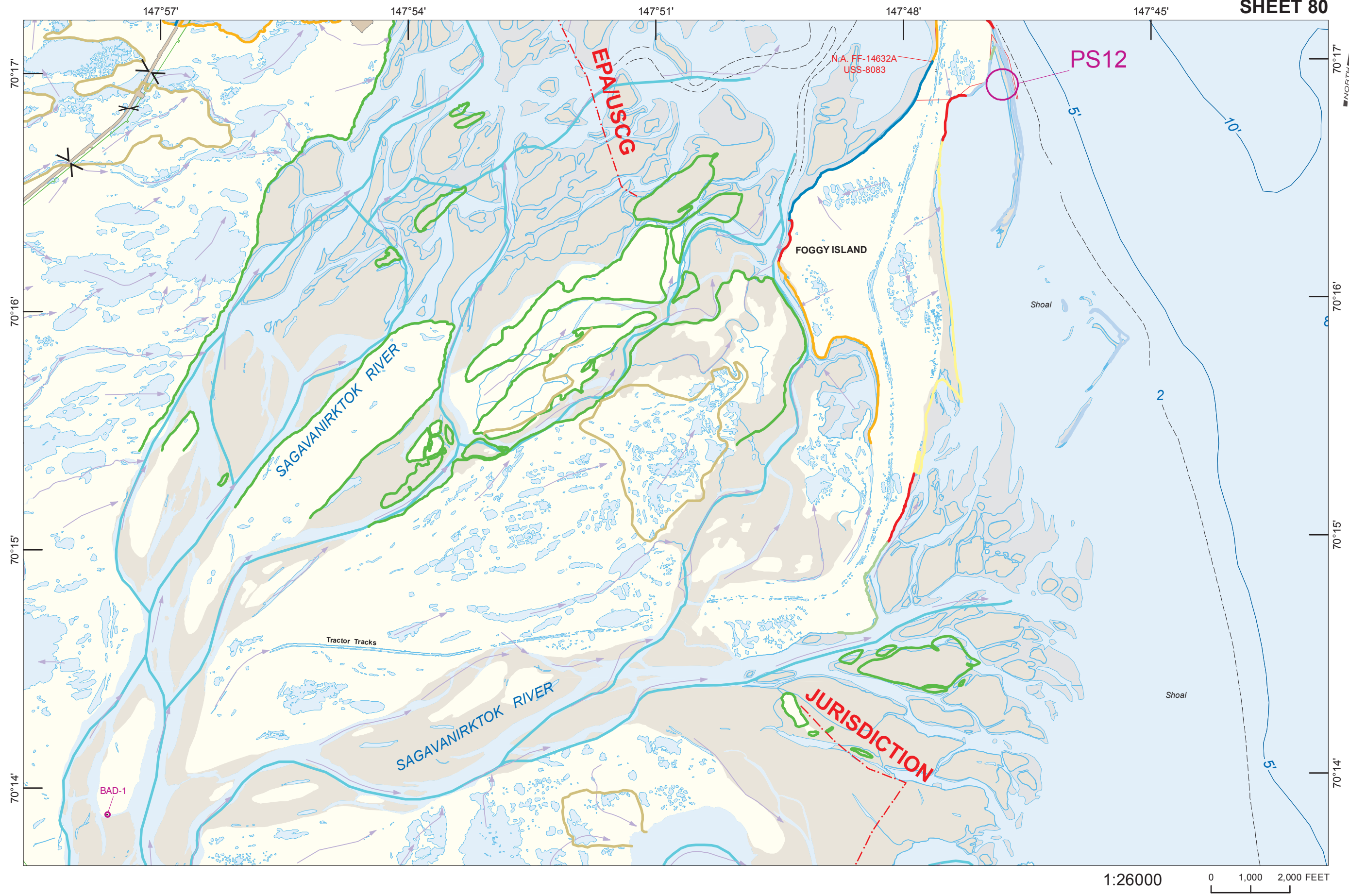
- Annual average flow rate of the Sagavanirktok River is 2,770 cfs. River discharge discolors seawater for many miles.

*See the latest Supplement, Alaska and United States Coast Pilot for current information on air and vessel access, respectively.

NOTE: All values given on these pages are for planning purposes only.

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Continue on sheet 84





PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- This is a Brant nesting area. Birds are present from May through July.
- Pairs of Spectacled Eiders have been found in this area.
- Plan to deploy bird-hazing systems during the open-water season.
- The Sagavanirktok River is a migratory corridor for arctic char and whitefish, and an overwintering area for a variety of whitefish, burbot, grayling, and sculpin.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

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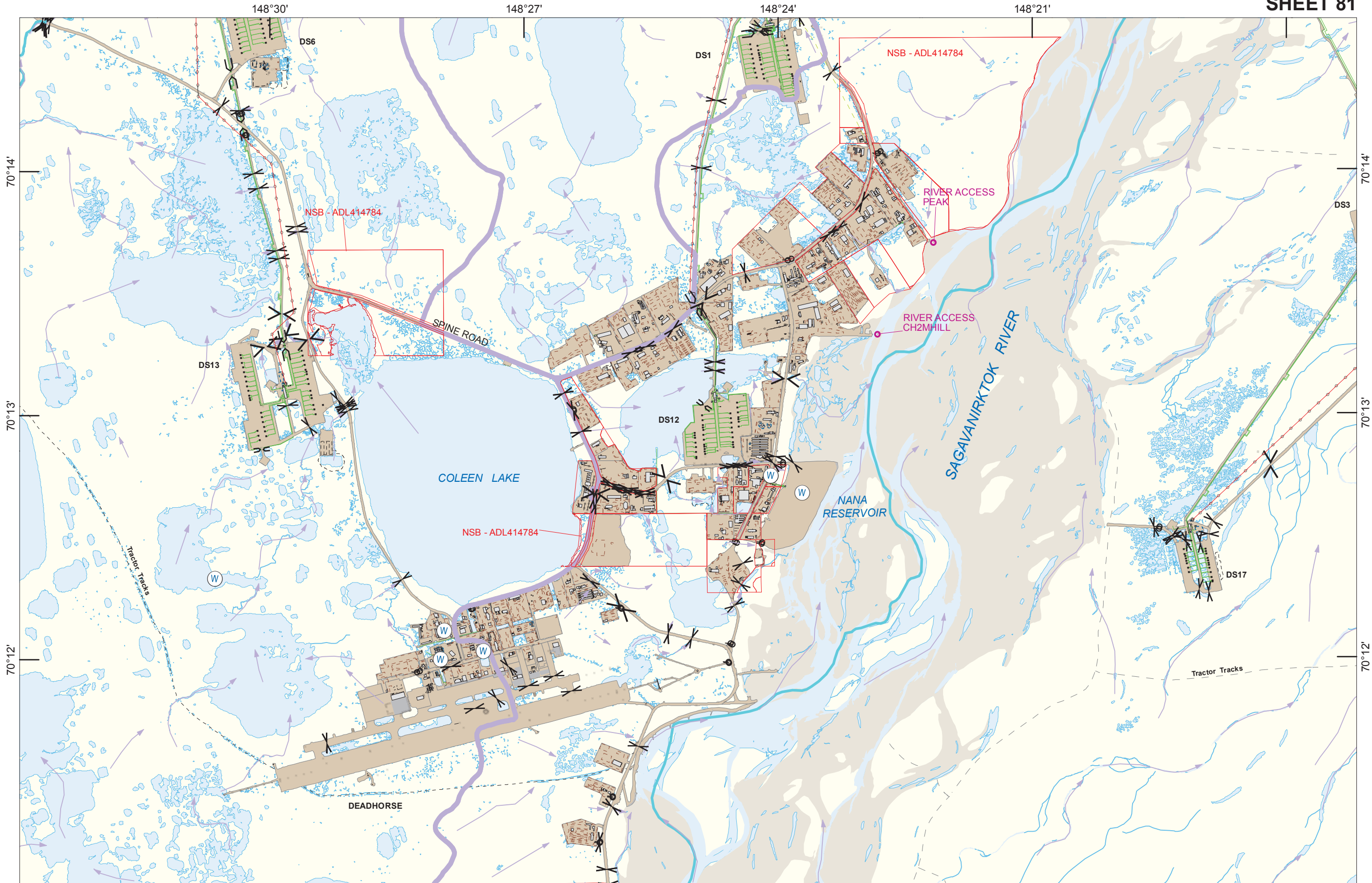
AIR ACCESS*

AIRFIELD	RUNWAY DESCRIPTION	FIXED WING MINIMUMS	FUEL / SERVICES	ATC
Deadhorse Airport	6,500 ft. asphalt	VFR: 1 mi vis. clear of clouds IFR: 0.5 mi vis. (ILS)	100-octane avgas, Jet B, Mogas	Deadhorse Tower

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine shorelines or waters on this sheet.
- Annual average flow rate of the Sagavanirktok River is 2,770 cfs. River discharge discolors seawater for many miles.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.





PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- High concentrations of brood-rearing and molting Snow Geese are present in July and August.
- Pairs of Spectacled Eiders have been found in this area.
- Plan to deploy bird-hazing systems during the open-water season.
- The Sagavanirktok River is a migratory corridor for arctic char and whitefish, and an overwintering area for a variety of whitefish, burbot, grayling, and sculpin.
- There is a freshwater intake on the west bank of the west channel of the Sagavanirktok River east of the PBOC at approximately 10 to 12 ft below the surface. This intake is used from June to September.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- Deadhorse airport (Sheet 81) is approximately 5 miles southwest of the PBOC.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine shorelines or waters on this sheet.
- Annual average flow rate of the Sagavanirktok River is 2,770 cfs.

STAGING AREAS AND PRESTAGED EQUIPMENT

- There is a possible staging area at the Duck Island Gravel Mine site.

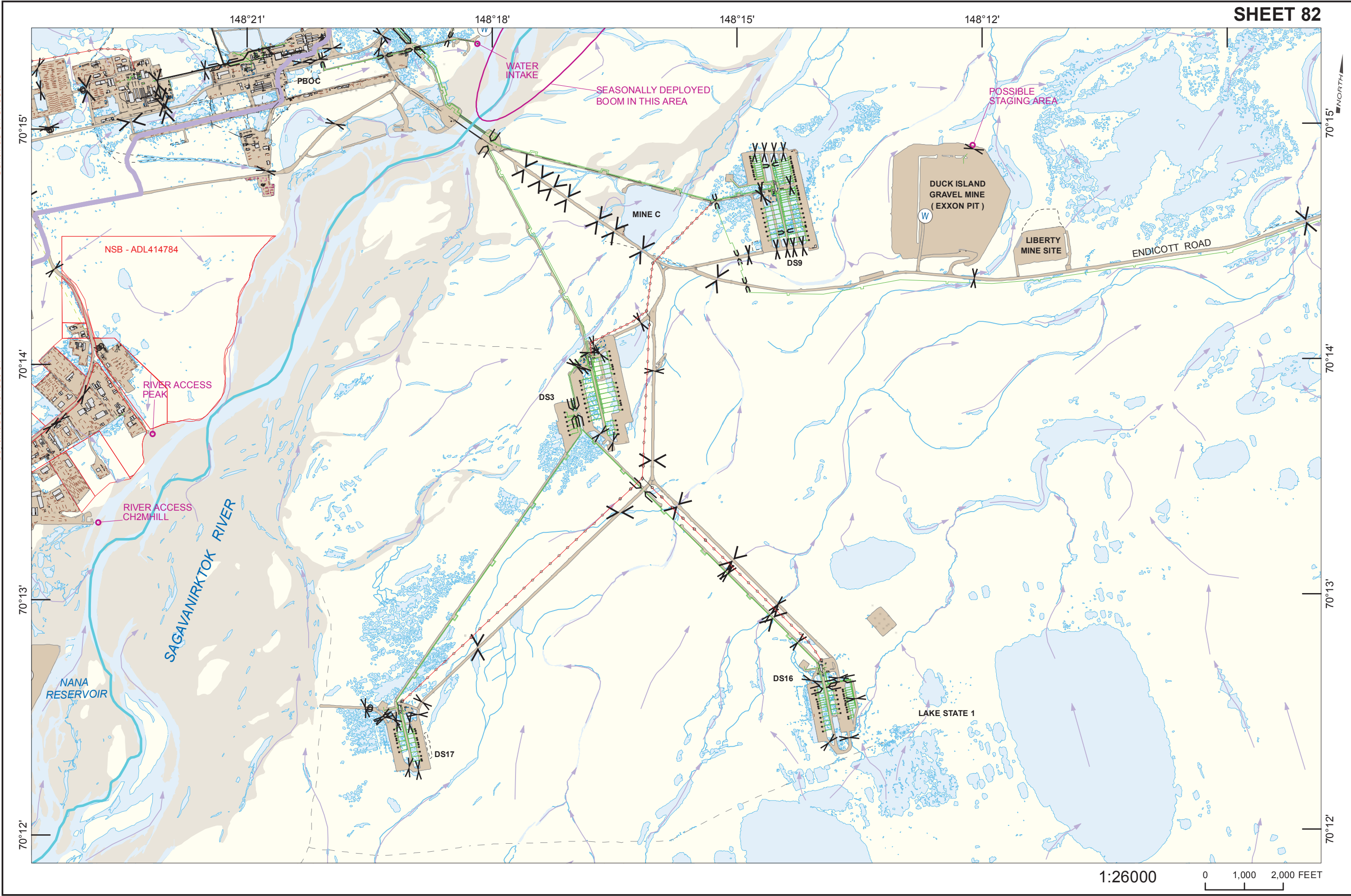
*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

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Continue on sheet 81

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Continue on sheet 180





SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS4A	Inlet to salt marsh 1.25 miles SE of Sagavanirktok River delta	Most sensitive during open water season. Keep oil from entering salt marsh.	C-13 or C-14	500'
PS4B	Inlet to salt marsh south of Sagavanirktok River delta	Most sensitive during open water season. Keep oil from entering salt marsh.	C-13 or C-14	500'

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- The outer portion of the delta is an important migration staging area for shorebirds from July through September and a Pintail molting area in July and August.
- High concentrations of brood-rearing and molting Snow Geese are present in July and August.
- This is a Brant nesting, brood-rearing and molting area. Birds are present from May through August.
- Pairs of Spectacled Eiders have been found in this area.
- Plan to deploy bird-hazing systems during the open-water season.
- The Sagavanirktok River is a migratory corridor for arctic char and whitefish, and an overwintering area for a variety of whitefish, burbot, grayling, and sculpin.

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pings, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



- Deadhorse airport (Sheet 81) is approximately 13 miles to the west.

- Annual average flow rate of the Sagavanirktok River is 2,770 cfs. River discharge discolors sea water for many miles.

- Mud flats at the eastern front of the Sagavanirktok River delta may have low load-bearing capacity.

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
BAD-1	East of Sagavanirktok River north of Badami pipeline	Boom	3,225'	8" x 6" river
		Pump	1	3" trash, diesel
		Skimmer	1	Disc, MI-30
		Skimmer	1	Rope mop, Z14-E
		Storage	2	500-gal bladder, liftable

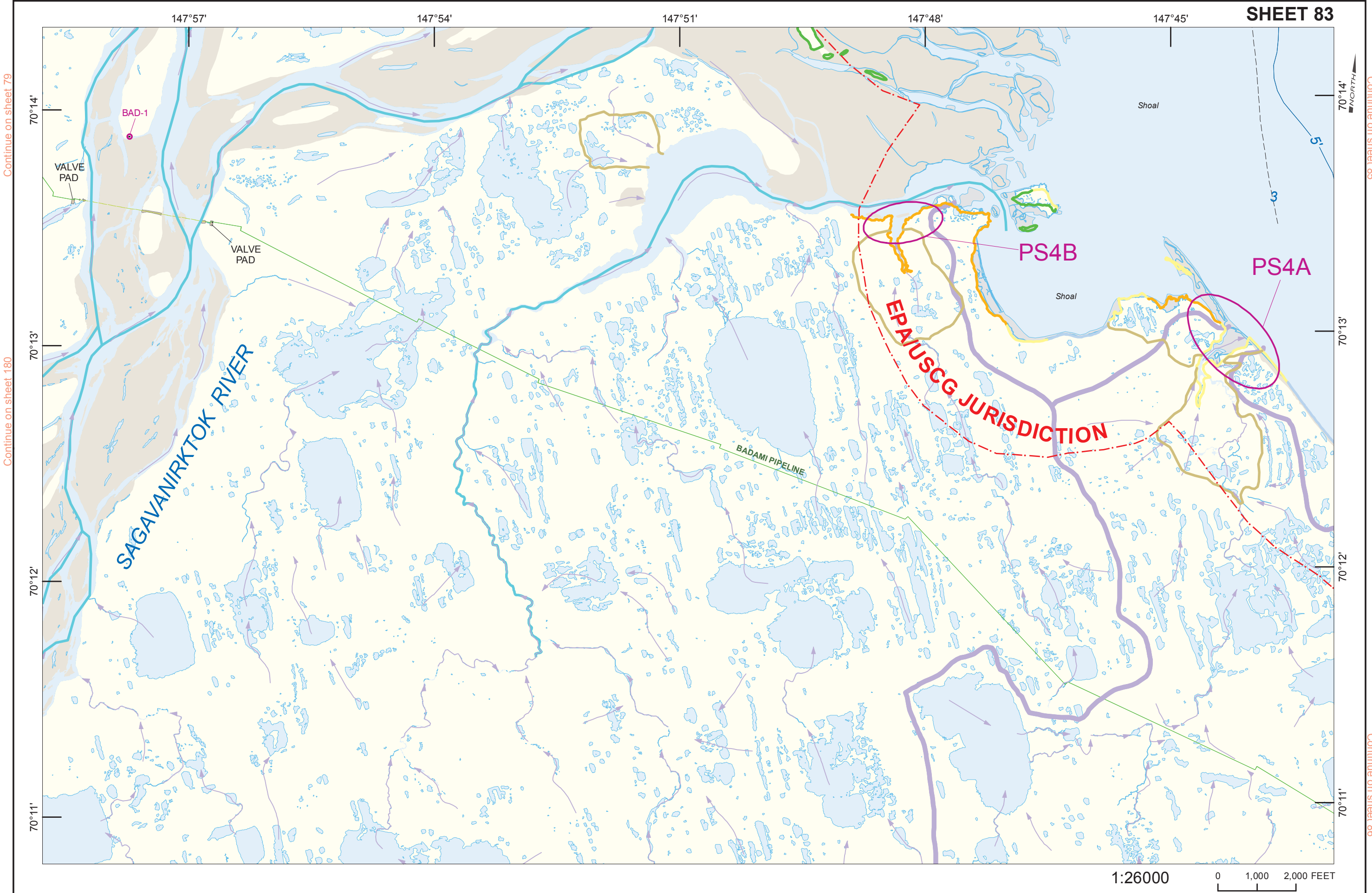
*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.


Continue on sheet 79

Continue on sheet 180

Continue on sheet 85

Continue on sheet 86





PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.


GENERAL SENSITIVITIES

- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- Plan to deploy bird-hazing systems during the open-water season.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- Deadhorse airport (Sheet 81) is approximately 22 miles to the southwest.
- Badami airstrip (Sheet 91) is approximately 15 miles to the southeast.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- Annual average flow rate of the Sagavanirktok River is 2,770 cfs. River discharge discolors seawater for many miles.

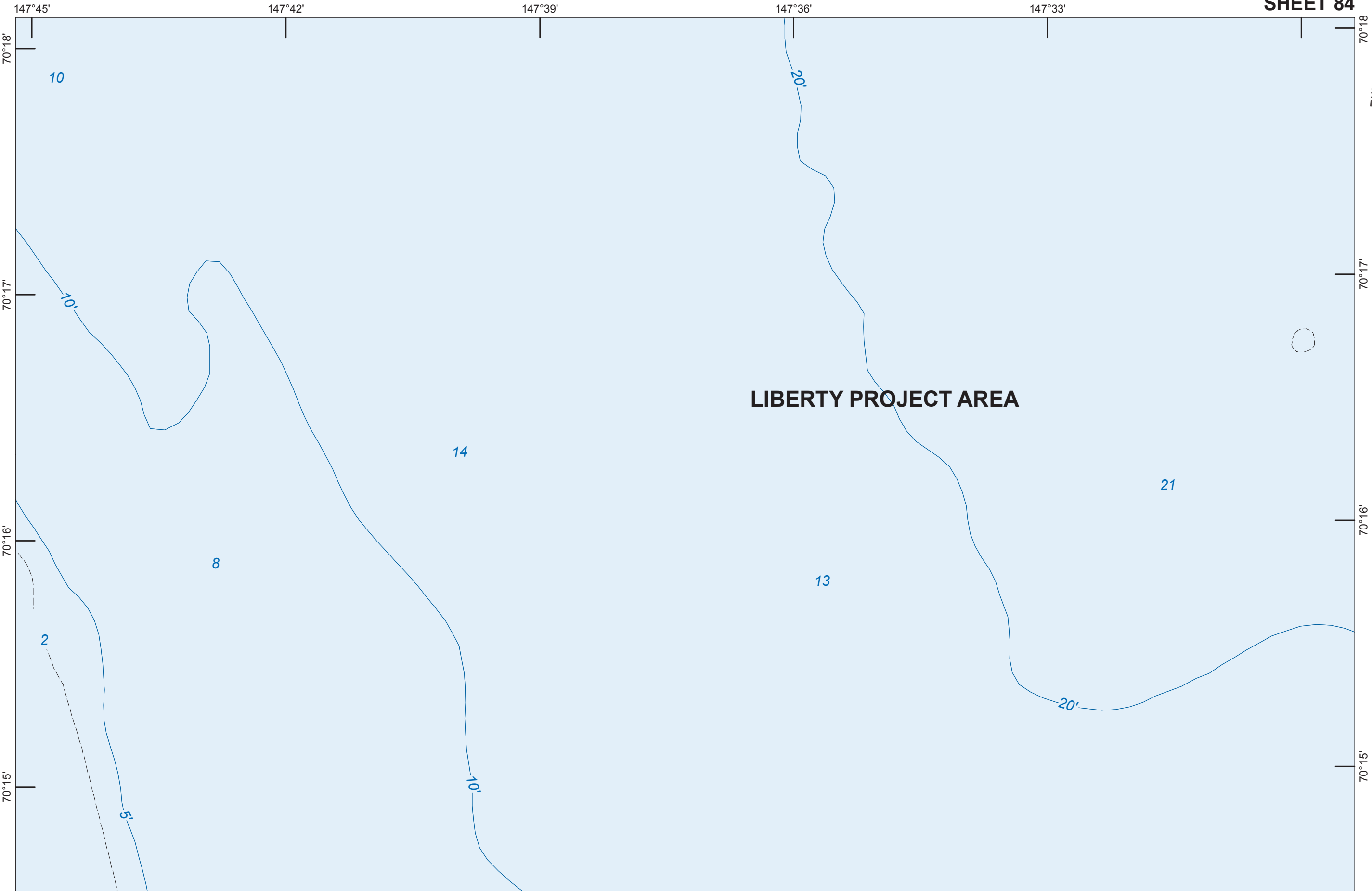
*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

NOTE: All values given on these pages are for planning purposes only.


Continue on sheet 74

Continue on sheet 80

Continue on sheet 85



1:26000 0 1,000 2,000 FEET



PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS3D	Inlet to salt marsh 1.5 miles east of Kadleroshilik River delta	Most sensitive during open water season. Keep oil from entering salt marsh. Inundated low-lying tundra shorelines.	C-13 or C-14	1,000'
PS4	Inlet mouth west of Kadleroshilik River delta	Most sensitive during open water season. Salt marsh and/or inundated low-lying tundra shorelines.	C-13 or C-14	1,000'
PS4A	Inlet to salt marsh 2.5 miles NW of Kadleroshilik River delta	Most sensitive during open water season. Keep oil from entering salt marsh.	C-13 or C-14	500'


GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- High concentrations of brood-rearing and molting Snow Geese are present in July and August.
- This is a Brant nesting, brood-rearing and molting area. Birds are present from May through August.
- Plan to deploy bird-hazing systems during the open-water season.
- The Kadleroshilik River provides habitat for anadromous char and for resident fish.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- There is float plane landing in the lagoon east of the mouth of the Kadleroshilik River. Water depths range from 3 to 5 ft. There is a hard gravel beach on the spit. Campsite, firewood, and water are available at east end of the lagoon.
- Deadhorse airport (Sheet 81) is approximately 19 miles west of the Kadleroshilik River delta.
- Badami airstrip (Sheet 91) is approximately 14 miles southeast of the Kadleroshilik River delta.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- Water depths are shallow and changeable off the Kadleroshilik River delta.
- Annual average flow rate of the Sagavanirktok River is 2,770 cfs. River discharge discolors seawater for many miles.
- Average annual rate of flow of the Kadleroshilik River is 325 cfs. Sediment discharge is westward.

COUNTERMEASURES CONSIDERATIONS

- Access is very limited in areas of vegetated shorelines. Caution should be exercised to minimize erosion.

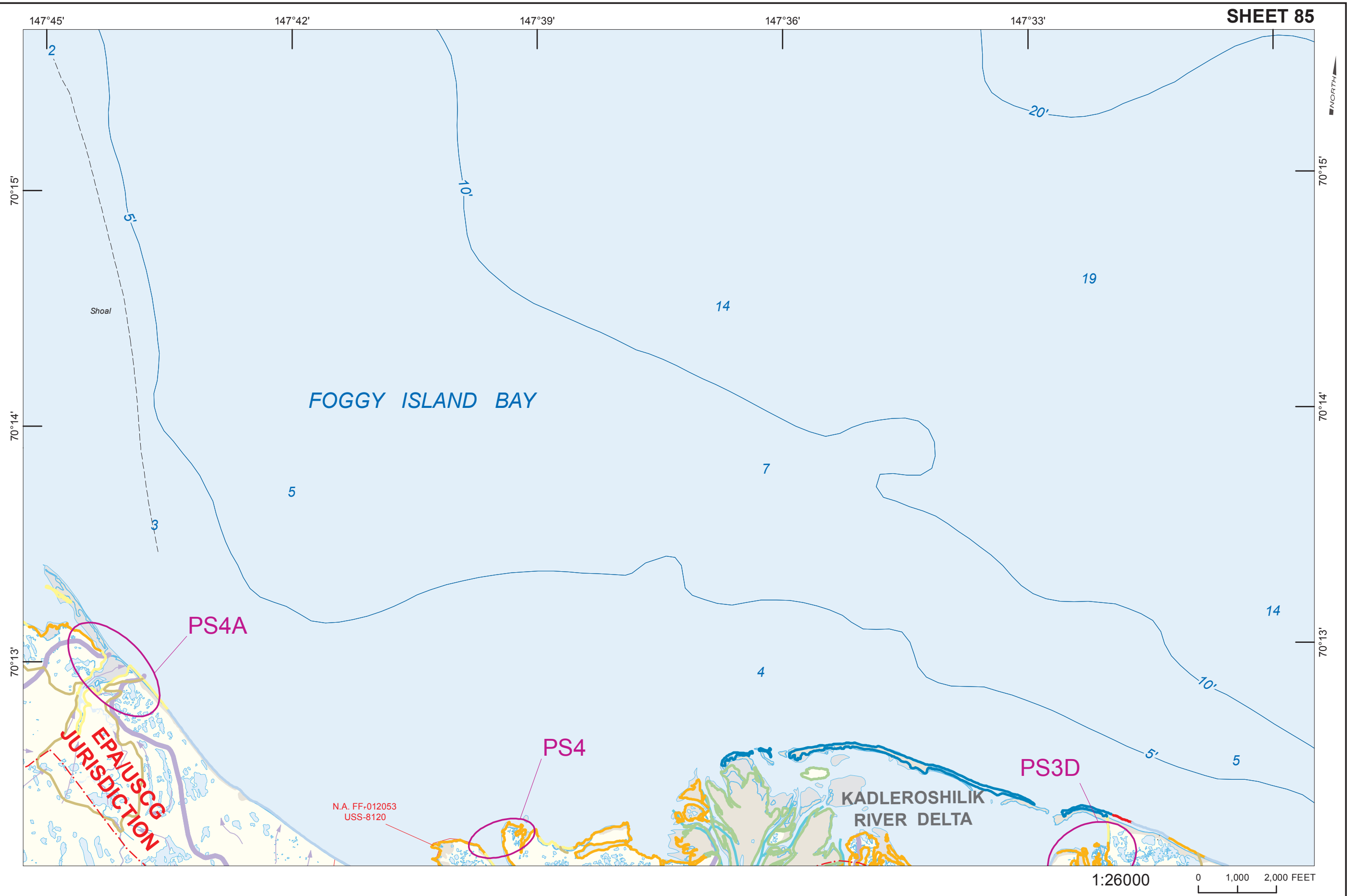
*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

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SHEET 85

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Continue on sheet 83



Continue on sheet 86

Continue on sheet 87

ACS

North Slope Spill Response

World Class Organization

ACS

North Slope Spill Response

World Class Organization

PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS3D	Inlet to salt marsh 1.5 miles east of Kadleroshilik River delta	Most sensitive during open water season. Keep oil from entering salt marsh. Inundated low-lying tundra shorelines.	C-13 or C-14	1,000'
PS4	Inlet mouth west of Kadleroshilik River delta	Most sensitive during open water season. Salt marsh and/or inundated low-lying tundra shorelines.	C-13 or C-14	1,000'

GENERAL SENSITIVITIES

• Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during June through September.

• Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.

• High concentrations of brood-rearing and molting Snow Geese are present in July and August.

• This is a Brant nesting, brood-rearing, and molting area. Birds are present from May through August.

• Pairs of Spectacled Eiders have been found in this area.

• Plan to deploy bird-hazing systems during the open-water season.

• The Kadleroshilik River provides habitat for anadromous char and for resident fish.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.

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NOTE: All values given on these pages are for planning purposes only.

Response Considerations

AIR ACCESS*

• There is float plane landing in the lagoon east of the mouth of the Kadleroshilik River. Water depths range from 3 to 5 ft. There is a hard gravel beach on the spit. Campsite, firewood, and water are available at east end of the lagoon.

• Deadhorse airport (Sheet 81) is approximately 19 miles west of the Kadleroshilik River delta.

• Badami airstrip (Sheet 91) is approximately 14 miles southeast of the Kadleroshilik River delta.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

• Water depths are shallow and changeable off the Kadleroshilik River delta.

• Average annual rate of flow of the Kadleroshilik River is 325 cfs. Sediment discharge is westward.

COUNTERMEASURES CONSIDERATIONS

• Access is very limited in areas of vegetated shorelines. Caution should be exercised to minimize erosion.

STAGING AREAS AND PRESTAGED EQUIPMENT

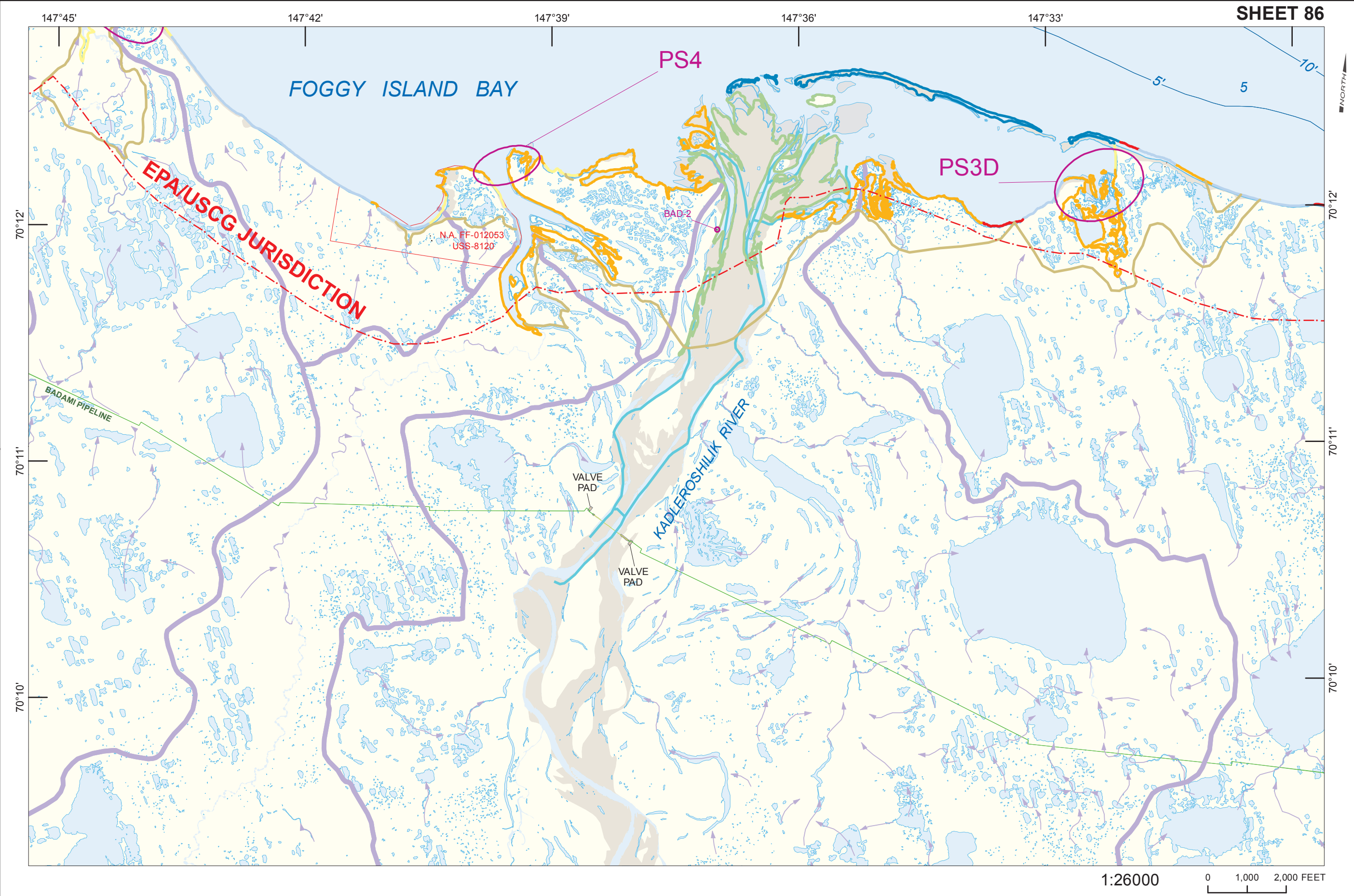
PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
BAD-2	Western side of Kadleroshilik River delta	Boom Skimmer Storage Storage	1,125' 1 1 1	8" x 6" river Drum or brush cassette 2,500-gal open top 500-gal bladder, liftable

*See the latest Supplement, Alaska and United States Coast Pilot for current information on air and vessel access, respectively.

NOTE: All values given on these pages are for planning purposes only.

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1:26000
0 1,000 2,000 FEET



AIR ACCESS*

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS3B	Inlet mouth 2 miles west of Shaviovik River delta	Most sensitive during open water season. linundated low-lying tundra shorelines.	C-13 or C-14	200'
PS3C	Inlet mouth 3.5 miles west of Shaviovik River delta	Most sensitive during open water season. linundated low-lying tundra shorelines.	C-13 or C-14	200'
PS3D	Inlet to salt marsh 5.5 miles west of Shaviovik River delta	Most sensitive during open water season. Keep oil from entering salt marsh. Inundated low-lying tundra shorelines.	C-13 or C-14	1,000'

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during June through September.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- High concentrations of brood-rearing and molting Snow Geese are present in July and August.
- This is a Brant nesting, brood-rearing, and molting area. Birds are present from May through August.
- Pairs of Spectacled Eiders have been found in this area.
- Plan to deploy bird-hazing systems during the open-water season.
- The Shaviovik River provides habitat for anadromous char and for resident fish.
- Polar bear dens have been found in this area. Dens may be in use from October through April.

COUNTERMEASURES CONSIDERATIONS

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

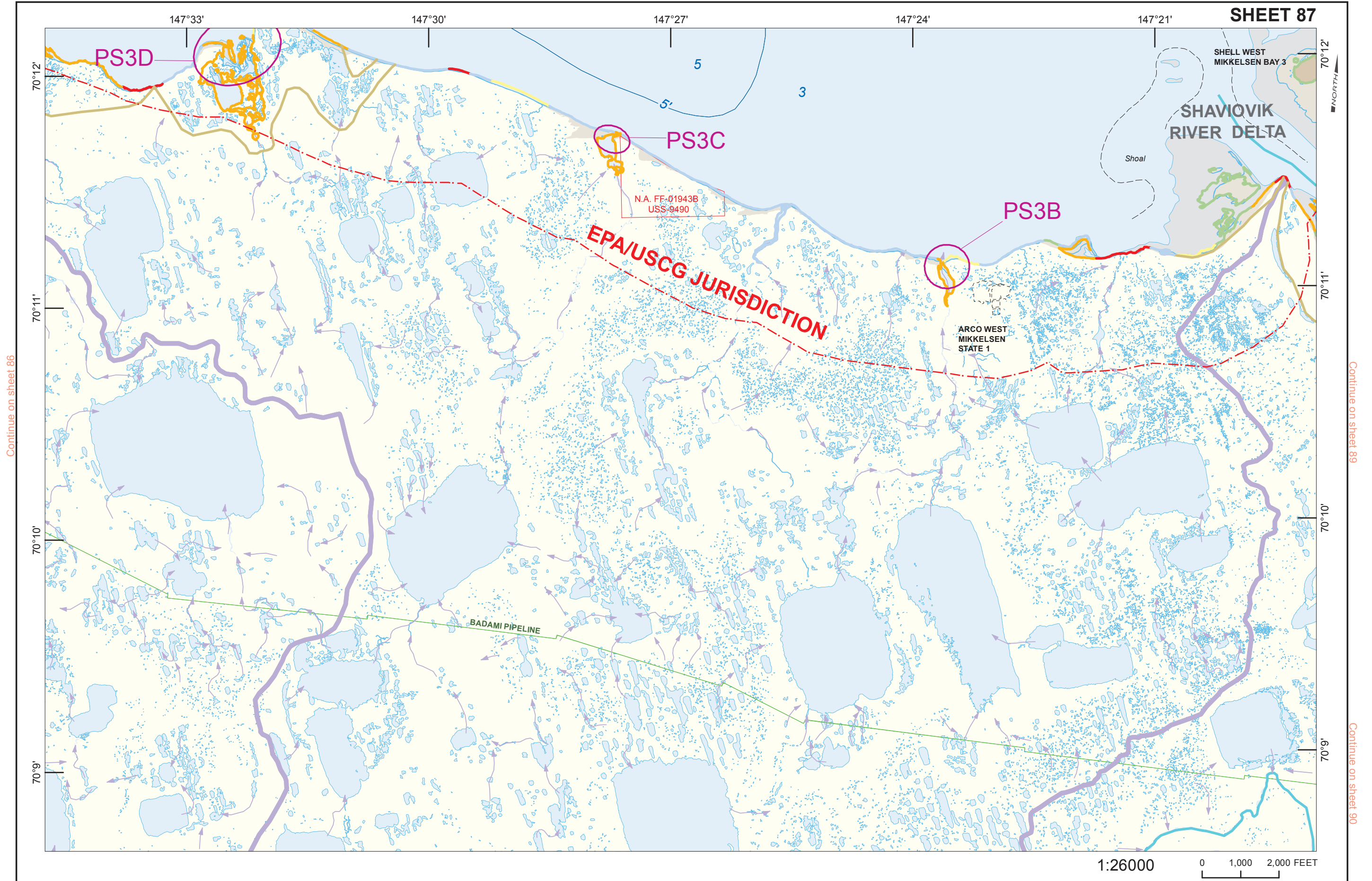
Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.

- Emergency small plane landing can be accommodated on gravel bar on north end of Tigvariak Island (Sheet 88).
- Bullen Point airstrip (Sheet 101) is approximately 13 miles east of West Mikkelsen State 1. This is an unattended, 2,900-ft gravel airstrip. The extreme west end of the strip reportedly tends to be soft.
- Deadhorse airport (Sheet 81) is located approximately 25 miles west of West Mikkelsen State 1.
- Badami airstrip (Sheet 91) is approximately 9 miles east-southeast of West Mikkelsen State 1.

- Water depths are shallow and changeable off the Shaviovik River delta (to the east) and the Kadleroshilik River delta (to the west).
- Average annual rate of flow of the Kadleroshilik River is 325 cfs. Sediment discharge is westward.
- Average annual rate of discharge of the Shaviovik River is 800 cfs. Shoaling extends 2 miles northwest into Foggy Island Bay.

- Access is very limited in areas of vegetated shorelines. Caution should be exercised to minimize erosion.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.




Continue on sheet 86

Continue on sheet 89

Continue on sheet 90

Continue on sheet 182

Continue on sheet 90



PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.


GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- Shoreline and offshore areas support molting Oldsquaws and eiders, and brood-rearing eiders. This is also a staging area for migrating Phalaropes (shorebirds). Birds are present in June through September.
- High concentrations of brood-rearing and molting Snow Geese are present in July and August.
- This is a Brant nesting, brood-rearing, and molting area. Birds are present from May through August.
- Plan to deploy bird-hazing systems during the open-water season.
- The Shaviovik River provides habitat for anadromous char and for resident fish.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

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AIR ACCESS*

- Emergency small plane landing can be accommodated on gravel bar on north end of Tigvariak Island.
- Bullen Point airstrip (Sheet 101) is approximately 9 miles west of Tigvariak Island. This is an unattended, 2,900-ft gravel airstrip. The extreme west end of the strip reportedly tends to be soft.
- Deadhorse airport (Sheet 81) is approximately 28 miles west of Tigvariak Island.
- Badami airstrip (Sheet 91) is approximately 7 miles southeast of Tigvariak Island.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

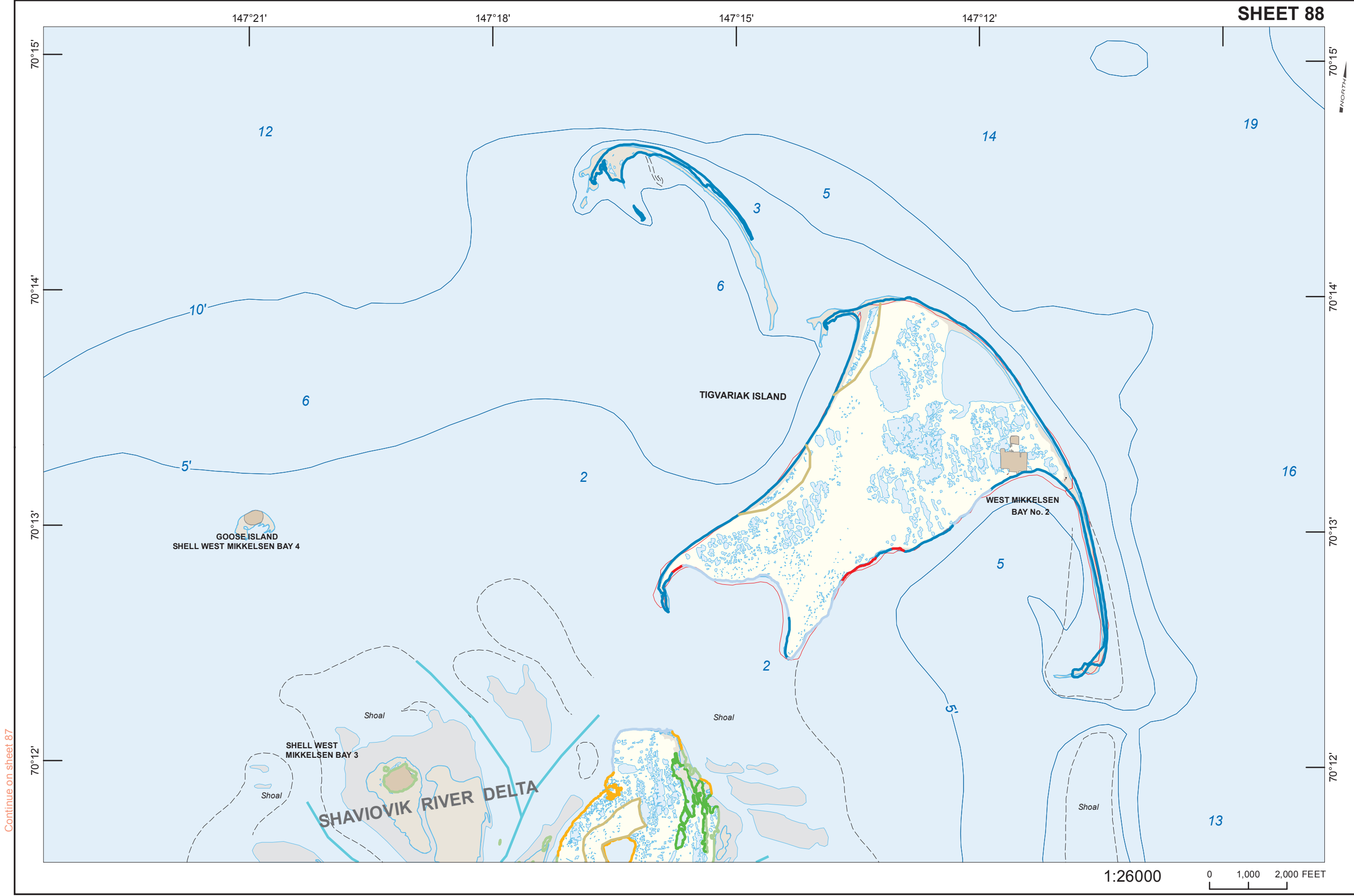
- Water depths are shallow and changeable off the Shaviovik River delta.
- Waters around Tigvariak Island are very shallow.
- Average annual rate of discharge of the Shaviovik River is 800 cfs. Shoaling extends 2 miles northwest into Foggy Island Bay.

COUNTERMEASURES CONSIDERATIONS

- Access is very limited in areas of vegetated shorelines. Caution should be exercised to minimize erosion.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

NOTE: All values given on these pages are for planning purposes only.



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PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS3	River mouth channels of an unnamed river (referred to as No Name River) east of the Shav-iovik River delta	Most sensitive during open water season. Salt marsh and/or inundated low-lying tundra shoreline.	C-13 or C-14	1,000'
PS3A	Salt marsh and inundated tundra shoreline east of Shaviovik River delta	Most sensitive during open water season. Salt marsh and/or inundated low-lying tundra shoreline.	C-13 or C-14	1,000'
PS3B	Inlet mouth 2 miles west of Shaviovik River delta	Most sensitive during open water season. linundated low-lying tundra shorelines.	C-13 or C-14	200"

GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- Shoreline and offshore areas support molting Oldsquaws and eiders, and brood-rearing eiders. This is also a staging area for migrating Phalaropes (shorebirds). Birds are present in June through September.
- High concentrations of brood-rearing and molting Snow Geese are present in July and August.
- This is a Brant nesting, brood-rearing, and molting area. Birds are present from May through August.
- Pairs of Spectacled Eiders have been found in this area.
- Plan to deploy bird-hazing systems during the open-water season.
- The Shaviovik River provides habitat for anadromous char and for resident fish.
- Polar bear dens have been found in this area. Dens may be in use from October through April.

CULTURAL SITES

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AIR ACCESS*

- Emergency small plane landing can be accommodated on gravel bar on north end of Tigvariak Island (Sheet 88).
- Bullen Point airstrip (Sheet 101) is approximately 13 miles east of West Mikkelsen State 1. This is an unattended, 2,900-ft gravel airstrip. The extreme west end of the strip reportedly tends to be soft.
- Deadhorse airport (Sheet 81) is located approximately 25 miles west of West Mikkelsen State 1.
- Badami airstrip (Sheet 91) is approximately 9 miles east-southeast of West Mikkelsen State 1.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- Water depths are shallow and changeable off the Shaviovik River delta.
- There is small boat anchorage at the south end of Tigvariak Island. Water depths are limited at 2 to 4 ft.
- Average annual rate of discharge of the Shaviovik River is 800 cfs. Shoaling extends 2 miles northwest into Foggy Island Bay.

COUNTERMEASURES CONSIDERATIONS

- Access is very limited in areas of vegetated shorelines. Caution should be exercised to minimize erosion.
- Gravel beaches are generally wide (more than 30 ft), but are interrupted by numerous inlets and vegetated shorelines.
- Small embayments will collect oil during sustained west or northwest winds and storm surge.

STAGING AREAS AND PRESTAGED EQUIPMENT

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
BAD-3	West of Shaviovik River main channel near delta	Boom Pump Skimmer Storage Storage	1,650' 1 1 1 2	8" x 6" river 2" diaphragm, diesel Drum or brush cassette 2,500-gal open top 500-gal bladder, liftable

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

NOTE: All values given on these pages are for planning purposes only.

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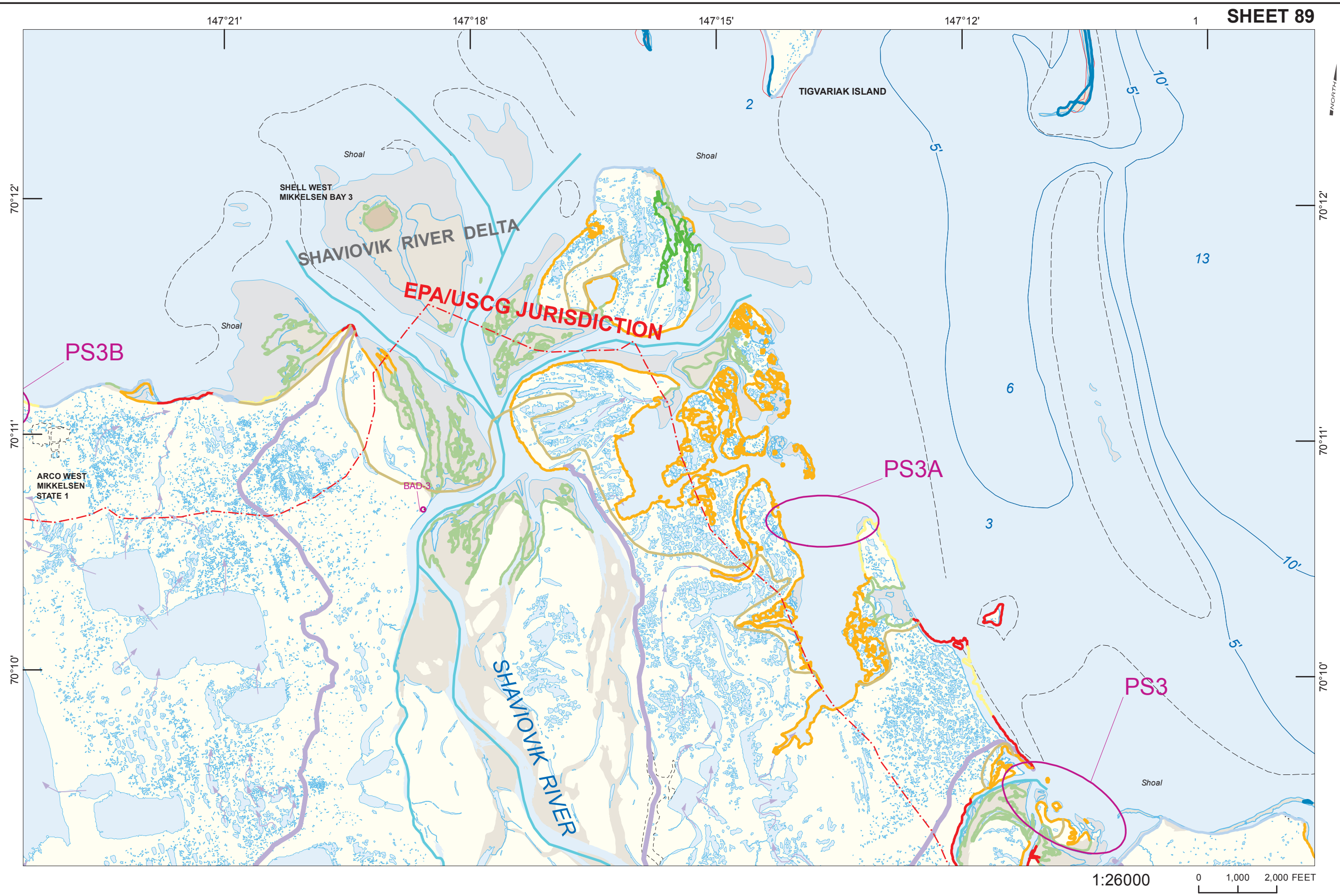
Continue on sheet 182


Continue on sheet 182

Continue on sheet 90

Continue on sheet 91

Continue on sheet 91





PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS3	River mouth channels of an unnamed river (referred to as No Name River) east of the Shaviovik River delta	Most sensitive during open water season. Salt marsh and/or inundated low-lying tundra shoreline.	C-13 or C-14	3,000'


GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- Shoreline and offshore areas support molting Oldsquaws and eiders, and brood-rearing eiders. This is also a staging area for migrating Phalaropes (shorebirds). Birds are present in June through September.
- Pairs of Spectacled Eiders have been found in this area.
- Plan to deploy bird-hazing systems during the open-water season.
- The Shaviovik River and No Name River provide habitat for anadromous char and for resident fish.
- Polar bear dens have been found in this area. Dens may be in use from October through April.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

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AIR ACCESS*

- Bullen Point airstrip (Sheet 101) is approximately 8 miles northeast of Mikkelsen Bay State 1. This is an unattended, 2,900-ft gravel airstrip. The extreme west end of the strip reportedly tends to be soft.
- Badami airstrip (Sheet 91) is approximately 4 miles east of Mikkelsen Bay State 1.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- Water depths are shallow and changeable off the Shaviovik River delta.
- Average annual rate of discharge of the Shaviovik River is 800 cfs.

COUNTERMEASURES CONSIDERATIONS

- Access is very limited in areas of vegetated shorelines. Caution should be exercised to minimize erosion.
- Gravel beaches are generally wide (more than 30 ft), but are interrupted by numerous inlets and vegetated shorelines.
- Small embayments will collect oil during sustained west or northwest winds and storm surge.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

NOTE: All values given on these pages are for planning purposes only.

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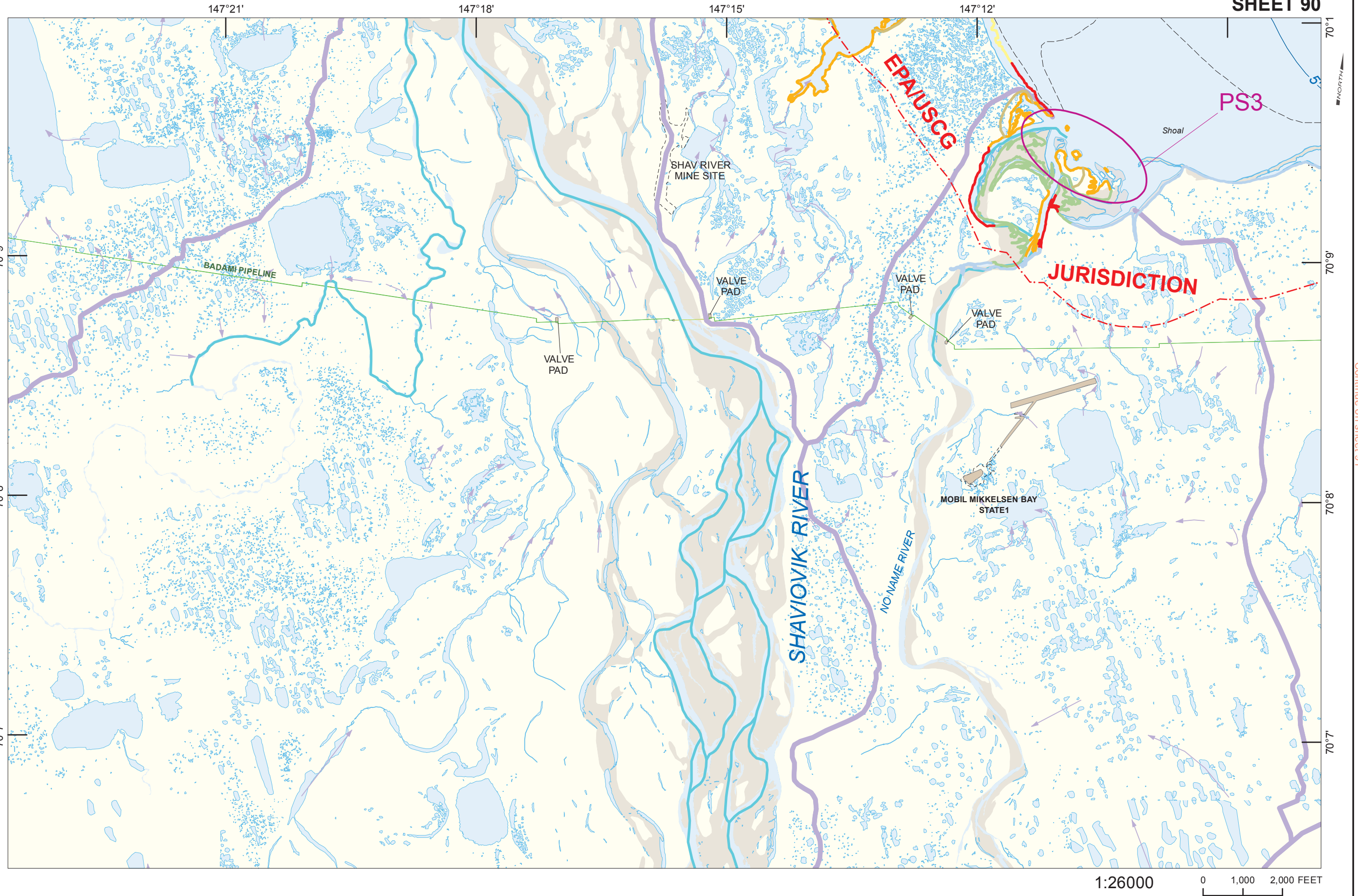
Continue on sheet 89

SHEET 90

Continue on sheet 87

Continue on sheet 182

Continue on sheet 183



Continue on sheet 91



Response Considerations



SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS2	Badami Creek mouth	Most sensitive during open water season. Keep oil from entering creek. Inundated low-lying tundra shoreline.	C-13 or C-14	1,200'
PS3	River mouth channels of an unnamed river (referred to as No Name River) east of the Shaviovik River delta	Most sensitive during open water season. Salt marsh and/or inundated low-lying tundra shoreline.	C-13 or C-14	3,000'
PS55	Lagoon at mouth of East Badami Creek	Most sensitive during open water season. Salt marsh and/or inundated low-lying tundra shoreline.	C-13 or C-14	200'

GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- Shoreline and offshore areas support molting Oldsquaws and eiders, and brood-rearing eiders. This is also a staging area for migrating Phalaropes (shorebirds). Birds are present in June through September.
- Pairs of Spectacled Eiders have been found in this area.
- Plan to deploy bird-hazing systems during the open-water season.
- East Badami Creek and No Name River provide habitat for anadromous char and for resident fish.
- Polar bear dens have been found in this area. Dens may be in use from October through April.

CULTURAL SITES

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Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.

AIR ACCESS*

- Bullen Point airstrip (Sheet 101) is approximately 8 miles northeast of Mikkelsen Bay State 1. This is an unattended, 2,900-ft gravel airstrip. The extreme west end of the strip reportedly tends to be soft.

AIRSTRIP	DESCRIPTION/ LOCATION	FIXED-WING MINIMUMS	FUEL/ SERVICES	TRAFFIC CONTROL
Badami Airstrip	5,100-ft gravel runway, unmanned	1 mile IFR and no VFR (carrier's decision); ceiling is uncontrolled	None	Notify 907-659-1332 of intention to land

COUNTERMEASURES CONSIDERATIONS

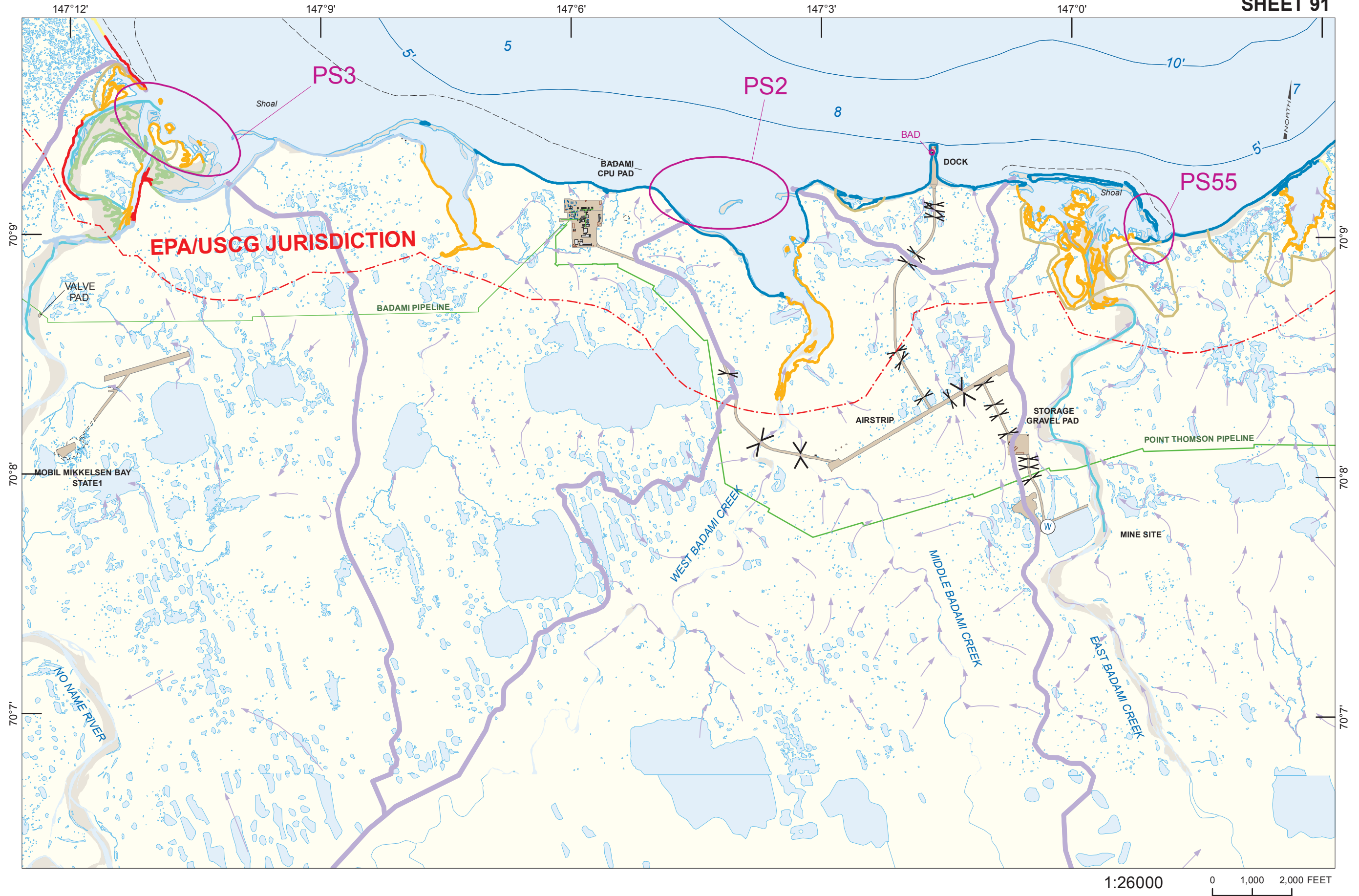
- Access is very limited in areas of vegetated shorelines. Caution should be exercised to minimize erosion.
- Gravel beaches are generally wide (more than 30 ft), but are interrupted by numerous inlets and vegetated shorelines.
- Small embayments will collect oil during sustained west or northwest winds and storm surge.

STAGING AREAS AND PRESTAGED EQUIPMENT

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
BAD	Badami Dock	Vessels	2	Air boat
			1	Work boat
			1	Inflatable boat
		Boom	2,000'	Ocean
			1,725'	River
			650'	Fire
			550'	River (Exxon Mobil)
		Skimmers	1	Drum
			1	Rope Mop
		Storage (total of 10,100 gal.)	4	Fol-Da-Tank
	2	Fast tank		

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

NOTE: All values given on these pages are for planning purposes only.





PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- Plan to deploy bird-hazing systems during the open-water season.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

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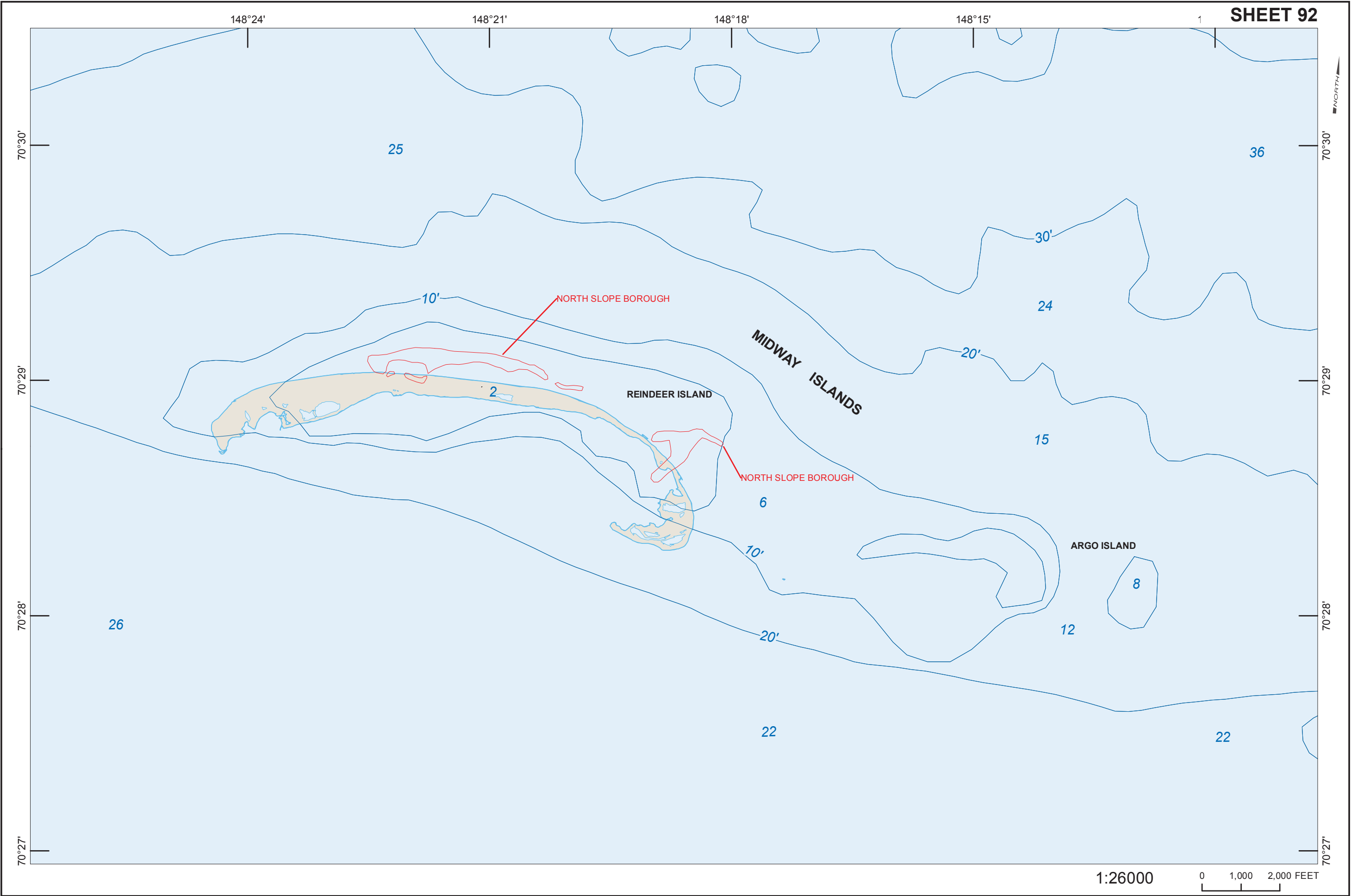
AIR ACCESS*

- Deadhorse airport (Sheet 81) is located approximately 20 miles south of Reindeer Island.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- Water access is limited to shallow-draft vessels on the lagoon-facing shores of the barrier islands.
- The variability of bottom topography and the erosional nature of the islands may make navigation difficult.
- Water depths across Stefansson Sound range from 12 to 30 ft.
- Good anchorage for vessels drawing up to 6 ft can be found behind Reindeer Island.
- Gwydyr Bay surface currents are generally to the west at 10 to 30 cm/sec. Water depth is 2 to 7 ft.
- Annual average discharge rate of the Kuparuk River is 1,830 cfs. Much of sediment load is transported west in along-shore transport.
- Barrier islands may be awash during storm surges. The islands are migrating toward shore at 5 to 10 meters per year and westward 20 to 30 meters.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.





PRIORITY PROTECTION SITES

- There are no individual priority protection sites on this sheet.
- * Priority Protection Area -- Cross Island and adjacent islets should be viewed as one large Priority Protection Area due to a high concentration of polar bears. On-site conditions may require the use of open water tactics to prevent oil migration into sensitive habitat.

GENERAL SENSITIVITIES

- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- Common Eiders nest on offshore islands in June and July.
- The lee side of Cross Island is an important molting area for Oldsquaw in August.
- Plan to deploy bird-hazing systems during the open-water season.
- Polar bear dens have been found in this area. Dens may be in use from October through April.
- North Slope residents use Cross Island as a staging area for the annual fall whale hunt.
- Polar bears congregate near, and feed on, the whale bone piles remaining after subsistence hunts.

CULTURAL SITES

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AIR ACCESS*

- Deadhorse airport (Sheet 81) is located approximately 24 miles south-southwest of Cross Island.

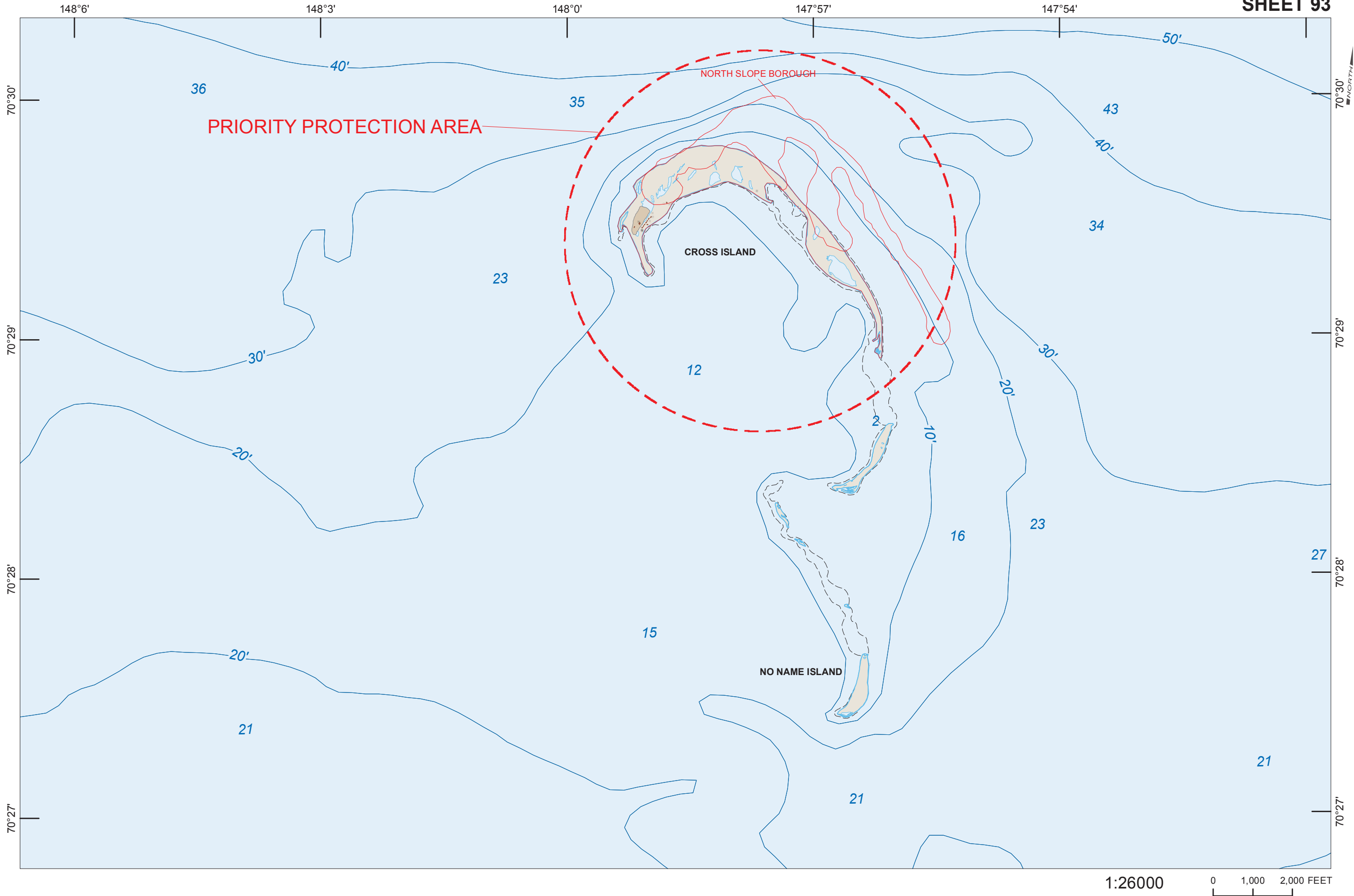
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- Water depths across Stefansson Sound range from 12 to 30 ft.
- The variability of bottom topography and the erosional nature of the islands may make navigation difficult.
- There is somewhat protected anchorage for small vessels drawing up to 10 ft behind Cross Island and several small islands that extend to the south.

COUNTERMEASURES CONSIDERATIONS

- Large ice floes remain hinged to the north and east sides of Cross Island during open-water season.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.





PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- Shoreline and offshore areas support molting Oldsquaws and eiders, and brood-rearing eiders. This is also a staging area for migrating Phalaropes (shorebirds). Birds are present in June through September.
- Common Eiders nest on offshore islands in June and July.
- The lee side of the McClure Islands is an important molting and staging area for Oldsquaw and shorebirds.
- Plan to deploy bird-hazing systems during the open-water season.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

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AIR ACCESS*

- Badami airstrip (Sheet 91) is approximately 19 miles southeast of Narwhal Island.

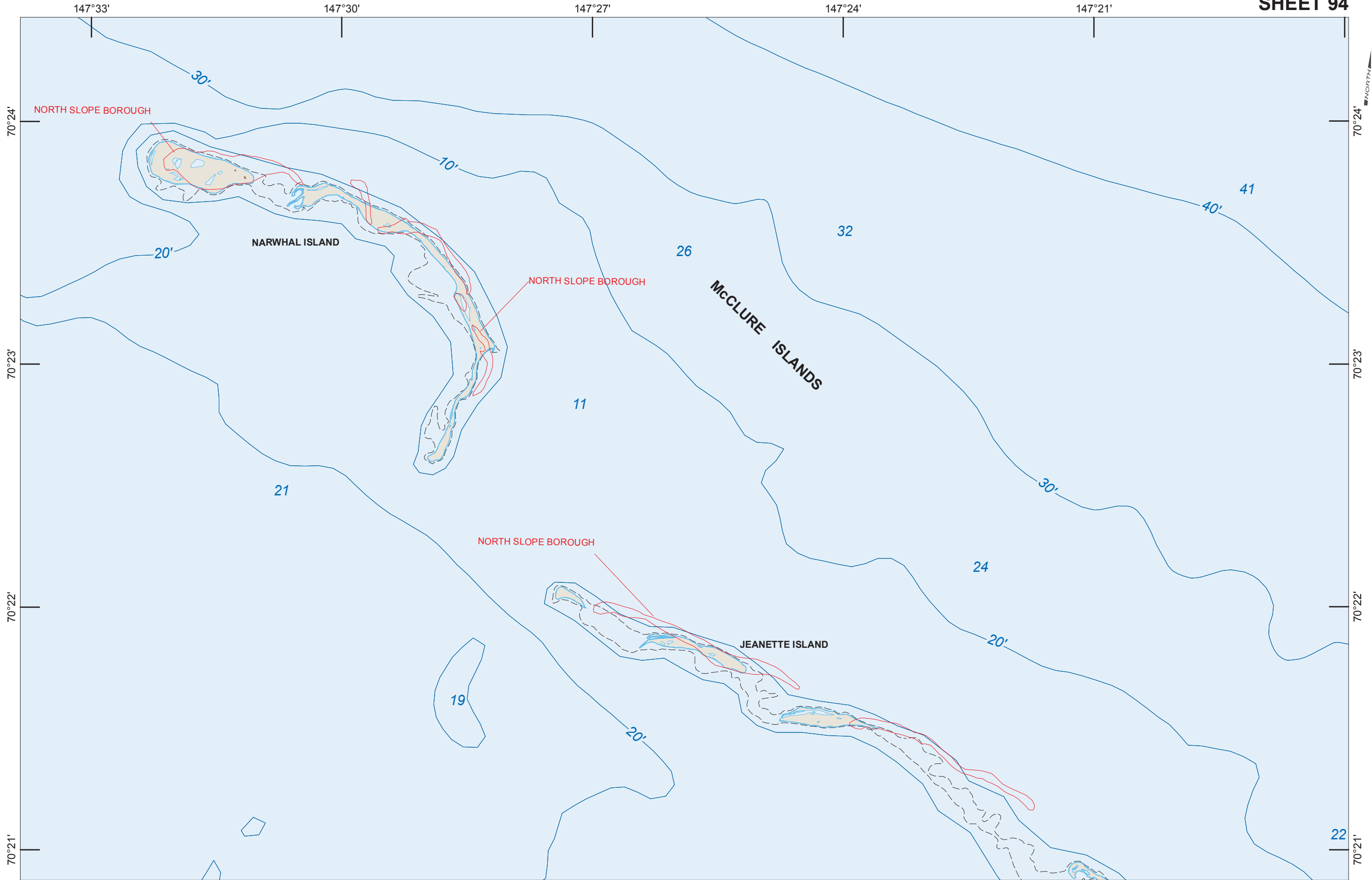
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- Protected anchorage is available in depths of 15 ft south of the northwest end of Narwhal Island. Little ice is encountered during open-water season.
- Protected anchorage is available in depths of 9 to 15 ft south of Jeanette Island.
- Jeanette Island is exposed to vigorous ice and wind action, and there is continuous change in the shoreline and in shallower depths.
- Newport Entrance (Sheet 95), southeast of the McClure Islands, is 1 mile wide with depths of 16 to 18 ft. Two sand bars (1 mile and 2.3 miles south-southeast of Karluk Island, respectively) are a few yards in width and are awash during storm high waters. Water depth over the bars is 5 to 7 ft.

COUNTERMEASURES CONSIDERATIONS

- Due to the variability of bottom topography and erosional nature of these islands, access may be limited to helicopter-deployable equipment.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.



Continue on sheet 95

Continue on sheet 95



PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- Shoreline and offshore areas support molting Oldsquaws and eiders, and brood-rearing eiders. This is also a staging area for migrating Phalaropes (shorebirds). Birds are present in June through September.
- Common Eiders nest on offshore islands in June and July.
- The lee side of the barrier islands is an important molting and staging area for Oldsquaw and shorebirds.
- Plan to deploy bird-hazing systems during the open-water season.

CULTURAL SITES

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AIR ACCESS*

- Badami airstrip (Sheet 91) is approximately 15 miles southeast of Karluk Island.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- Protected anchorage is available in depths of 9 to 15 ft south of Karluk Island.
- Karluk Island is exposed to vigorous ice and wind action, and there is continuous change in the shoreline and in shallower depths.
- Newport Entrance, southeast of the McClure Islands, is 1 mile wide with depths of 16 to 18 ft. Two sand bars (1 mile and 2.3 miles south-southeast of Karluk Island, respectively) are a few yards in width and are awash during storm high waters. Water depth over the bars is 5 to 7 ft.

COUNTERMEASURES CONSIDERATIONS

- Due to the variability of bottom topography and erosional nature of these islands, access may be limited to helicopter-deployable equipment.

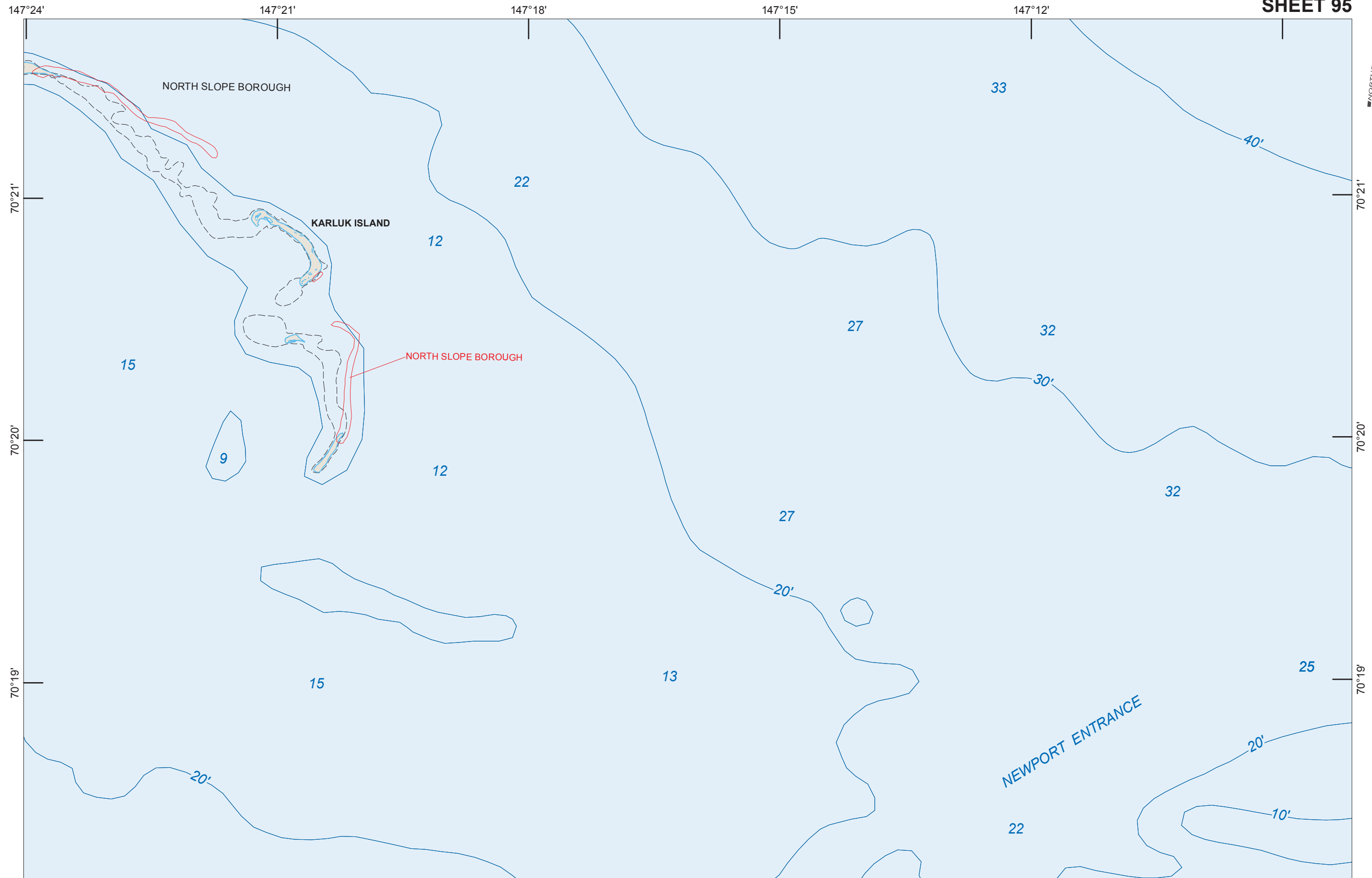
*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 94

SHEET 95

Continue on sheet 94

Continue on sheet 96





PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- Shoreline and offshore areas support molting Oldsquaws and eiders, and brood-rearing eiders. This is also a staging area for migrating Phalaropes (shorebirds). Birds are present in June through September.
- Common Eiders nest on offshore islands in June and July.
- The lee side of the Stockton Islands is an important molting and staging area for Oldsquaws in July and August.
- Plan to deploy bird-hazing systems during the open-water season.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- Bullen Point airstrip (Sheet 101) is located approximately 10 miles south-southeast of Pole Island. This is an untended, 2,900-ft gravel airstrip. The extreme west end of the strip reportedly tends to be soft.
- Badami airstrip (Sheet 91) is approximately 11 miles south of Pole Island.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- Newport Entrance (Sheet 95) is 1 mile wide with depths of 16 to 18 ft. Two sand bars (1 mile and 2.3 miles south-southeast of Karluk Island, respectively) are a few yards in width and are awash during storm high waters. Water depth over the bars is 5 to 7 ft.
- Challenge Entrance (Sheet 97) is between Belvedere Island and Challenge Island (Sheet 98). The west side of the opening and the area immediately south of Belvedere Island are shallow and dotted with tiny islets and bare shoals. The best water is 0.8 miles west of Challenge Island where vessels drawing 10 ft or less can enter safely.

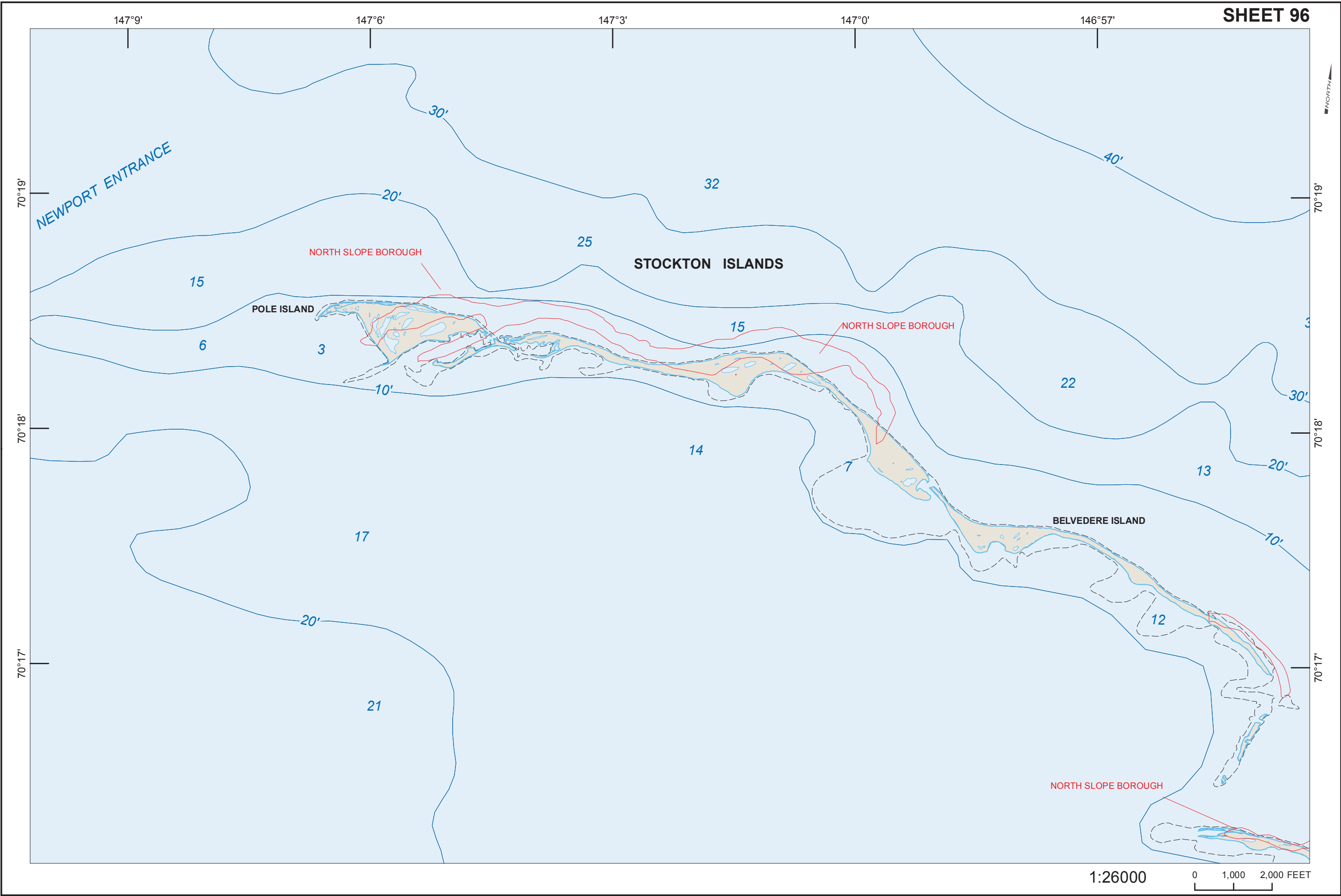
COUNTERMEASURES CONSIDERATIONS

- Due to the variability of bottom topography and erosional nature of these islands, access may be limited to helicopter-deployable equipment.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 95

Continue on sheet 97





PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- Shoreline and offshore areas support molting Oldsquaws and eiders, and brood-rearing eiders. This is also a staging area for migrating Phalaropes (shorebirds). Birds are present in June through September.
- The lee side of the barrier islands is an important molting and staging area for Oldsquaws in July and August.
- Plan to deploy bird-hazing systems during the open-water season.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

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AIR ACCESS*

- Bullen Point airstrip (Sheet 101) is located approximately 6 miles to the south. This is an unattended, 2,900-ft gravel airstrip. The extreme west end of the strip reportedly tends to be soft.
- Badami airstrip (Sheet 91) is approximately 9 miles to the southwest.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

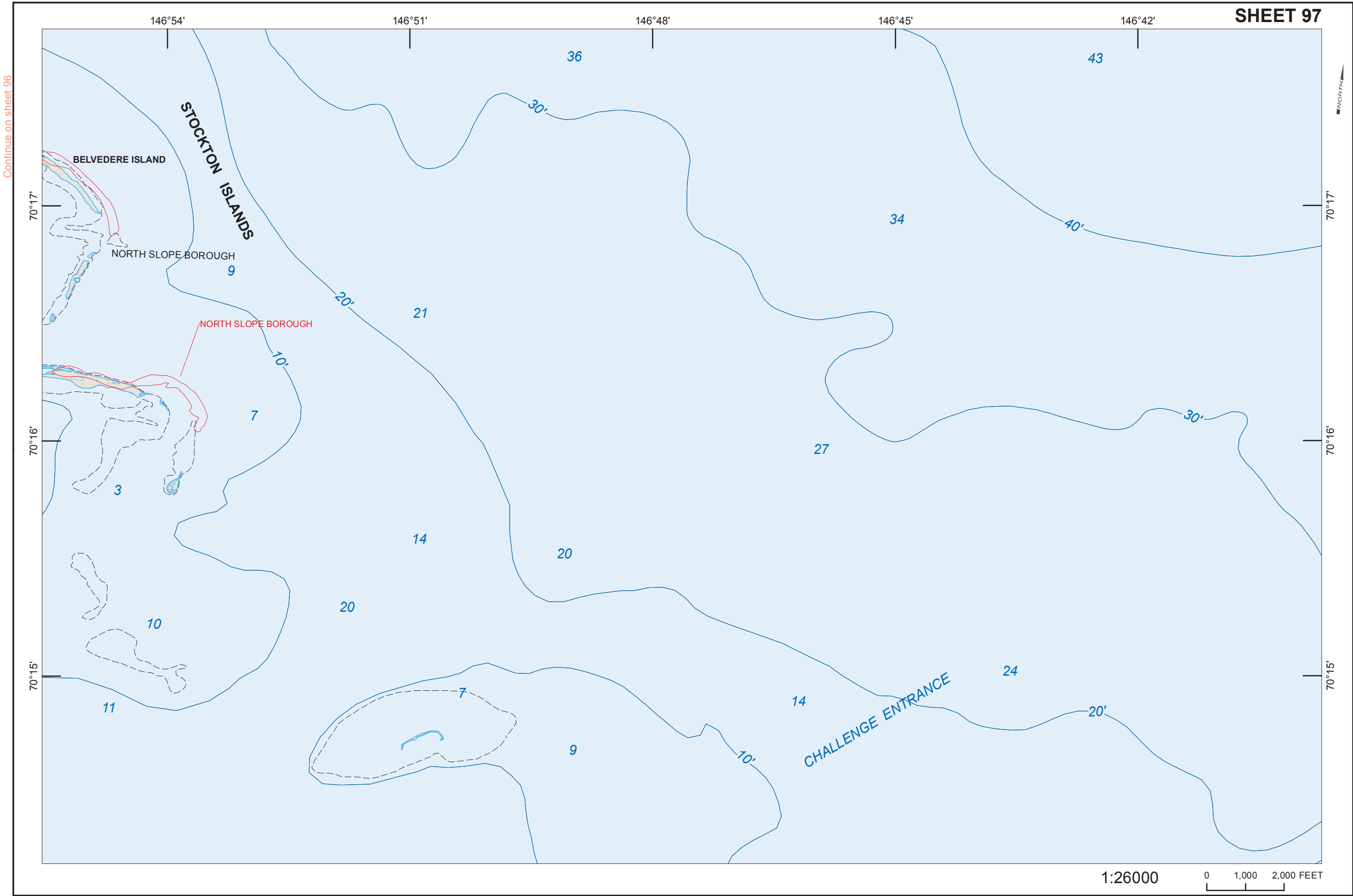
- Challenge Entrance is between Belvedere Island and Challenge Island (Sheet 98). The west side of the opening and the area immediately south of Belvedere Island are shallow and dotted with tiny islets and bare shoals. The best water is 0.8 miles west of Challenge Island where vessels drawing 10 ft or less can enter safely.

COUNTERMEASURES CONSIDERATIONS

- Due to the variability of bottom topography and erosional nature of these islands, access may be limited to helicopter-deployable equipment.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 96



Continue on sheet 98

Continue on sheet 95



PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- Shoreline and offshore areas support molting Oldsquaws and eiders, and brood-rearing eiders. This is also a staging area for migrating Phalaropes (shorebirds). Birds are present in June through September.
- This is the edge of a major molting and staging area for Oldsquaw in August and September. The area extends eastward on the lee side of the barrier islands.
- Common Eiders nest on offshore islands in June and July.
- Plan to deploy bird-hazing systems during the open-water season.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

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AIR ACCESS*

- Bullen Point airstrip (Sheet 101) is located approximately 6 miles southwest of Challenge Island. This is an unattended, 2,900-ft gravel airstrip. The extreme west end of the strip reportedly tends to be soft.
- Badami airstrip (Sheet 91) is approximately 11 miles southwest of Challenge Island.
- Point Thomson Air Strip (Sheet 104) is located approximately 1.5 miles south of Point Thomson Unit Central Pad. This is a private use 5000 –ft maintained gravel airstrip.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There is no channel between Challenge Island and Alaska Island.
- Channel between Alaska and Duchess islands averages 7 ft, but is meandering and not recommended for travel.
- Mary Sachs Entrance (Sheet 99) has extensive shoals to 3 ft on either side. Mid-channel depth is 10 ft.
- Challenge Entrance (Sheet 97) is between Belvedere Island (Sheet 96) and Challenge Island. The west side of the opening and the area immediately south of Belvedere Island are shallow and dotted with tiny islets and bare shoals. The best water is 0.8 miles west of Challenge Island where vessels drawing 10 ft or less can enter safely.
- Water depths near the mainland shore are shallow and changeable due to growth and change in bars and spits just offshore.

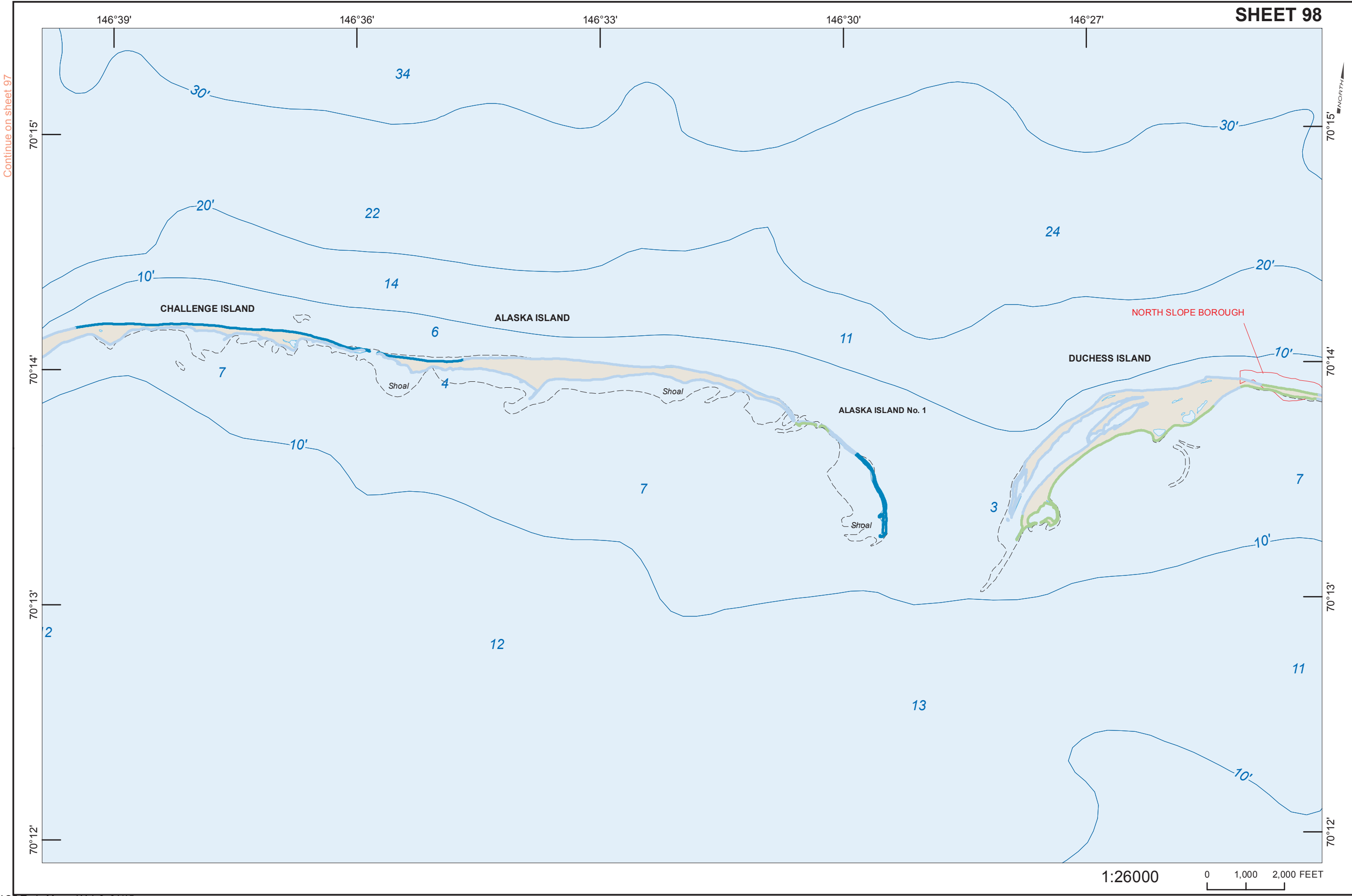
COUNTERMEASURES CONSIDERATIONS

- Gravel beaches are often “perched” on tundra vegetation, complicating response measures.
- Due to the variability of bottom topography and erosional nature of these islands, access may be limited to helicopter-deployable equipment.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 97

Continue on sheet 99





PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- Shoreline and offshore areas support molting Oldsquaws and eiders, and brood-rearing eiders. This is also a staging area for migrating Phalaropes (shorebirds). Birds are present in June through September.
- This is the edge of a major molting and staging area for Oldsquaw in August and September. The area extends eastward on the lee side of the barrier islands.
- Common Eiders nest on offshore islands in June and July.
- Plan to deploy bird-hazing systems during the open-water season.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

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AIR ACCESS*

- Flaxman Island airstrip (Sheet 100) is located approximately 7 miles east-southeast of Northstar Island. This is an 800-ft gravel strip atop 20-ft bluffs on the east end of the island. The runway reportedly is deteriorating, and the extreme west end should be avoided.
- Point Thomson Air Strip (Sheet 104) is located approximately 1.5 miles south of Point Thomson Unit Central Pad. This is a private use 5000 –ft maintained gravel airstrip.

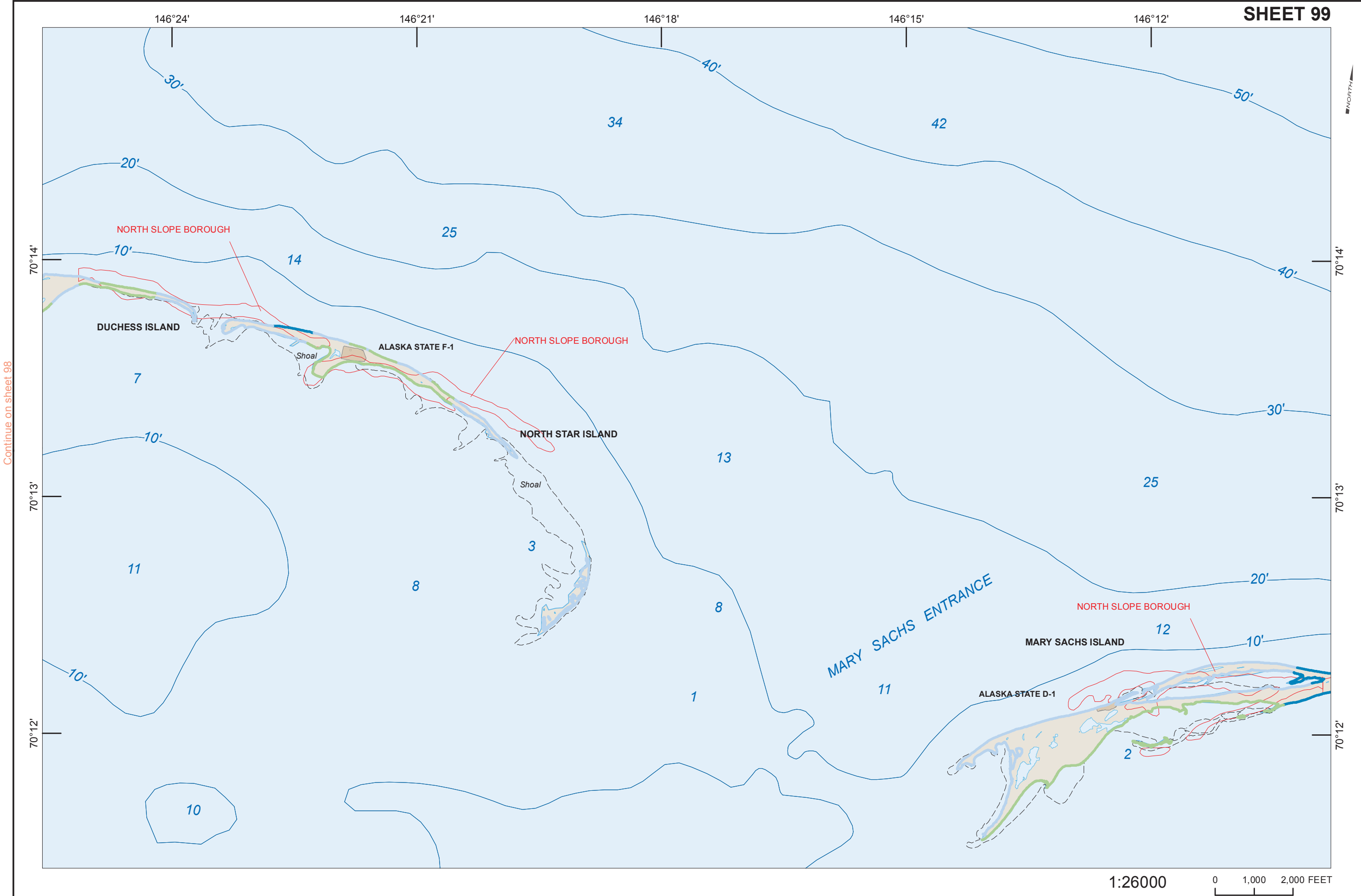
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS


- Water depths near the mainland shore are shallow and changeable due to growth and change in bars and spits just offshore.
- Channels at either end of Northstar Island are shallow and changing. They are not recommended for travel.
- Access on the lagoon side of Flaxman Island may be difficult due to shallow water depths.
- Mary Sachs Entrance has extensive shoals to 3 ft on both sides. Mid-channel depth is 10 ft.
- There is extensive shoaling on the south and southeast sides of Northstar Island.

COUNTERMEASURES CONSIDERATIONS

- Gravel beaches are often “perched” on tundra vegetation, complicating response measures.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.





PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS56	Lagoon on Flaxman Island	Most sensitive during open water season. Keep oil from entering lagoon. Salt marsh and/or inundated low-lying tundra shore-line.	C-13 or C-14	500'
PS57	Salt marsh and inundated tundra shoreline on east side of Flaxman Island	Most sensitive during open water season. Keep oil from entering salt marsh and/or inundated low-lying tundra shoreline.	C-13 or C-14	3,000'
PS74	Gap between Flaxman Island and Brownlow Point	Most sensitive during open water season. Keep oil from entering Lion Bay. Tundra cliffs and mixed sand and gravel beaches on Flaxman Island.	C-13 or C-14	3,000"


GENERAL SENSITIVITIES

- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- Shoreline and offshore areas support molting Oldsquaws and eiders, and brood-rearing eiders. This is also a staging area for migrating Phalaropes (shorebirds). Birds are present in June through September.
- This is the edge of a major molting and staging area for Oldsquaw in August and September. The area extends eastward on the lee side of Flaxman Island.
- Plan to deploy bird-hazing systems during the open-water season.
- Polar bear dens have been found in this area. Dens may be in use from October through April.

CULTURAL SITES

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AIR ACCESS*

- Flaxman Island airstrip is an 800-ft gravel strip atop 20-ft bluffs on the east end of the island. The runway reportedly is deteriorating, and the extreme west end should be avoided.
- Point Thomson Air Strip (Sheet 104) is located approximately 1.5 miles south of Point Thomson Unit Central Pad. This is a private use 5000 –ft maintained gravel airstrip.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

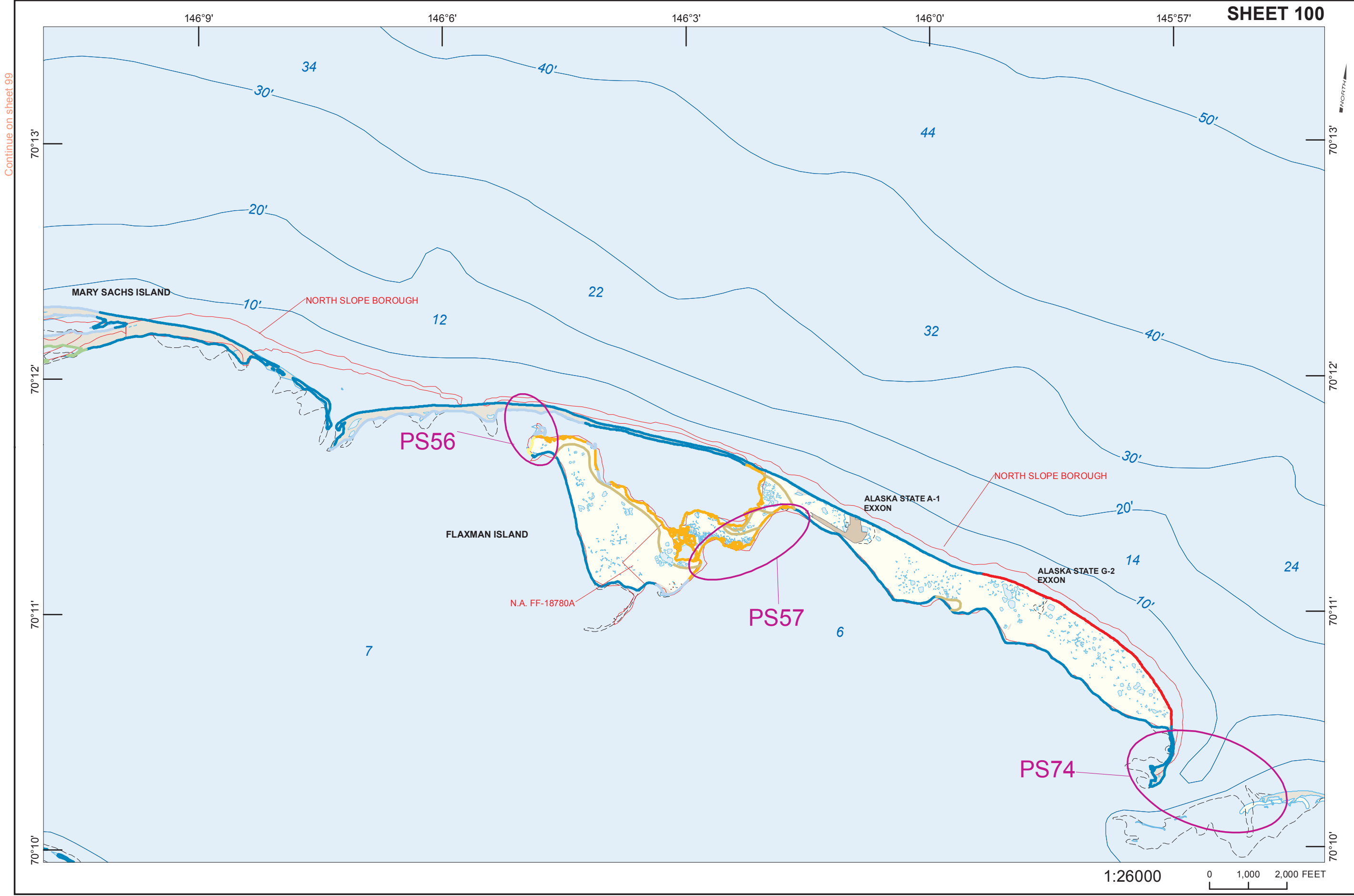
- Water depths near the mainland shore are shallow and changeable due to growth and change in bars and spits just offshore.
- Access on the lagoon side of Flaxman Island may be difficult due to shallow water depths.
- Mary Sachs Entrance (Sheet 99) has extensive shoals to 3 ft on either side. Mid-channel depth is 10 ft.
- There is passage between Flaxman Island and Brownlow Point to the southeast. The channel is close to the east end of the island and has depths of 8 ft, which shoal to 4 ft in the lagoon.
- There is extensive shoaling at the mouth of the west fork of the Canning River southeast of Flaxman Island.
- Annual average discharge of the Staines River is 14 cfs.

COUNTERMEASURES CONSIDERATIONS

- Island lagoon will trap oil during sustained west and southwest winds.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

NOTE: All values given on these pages are for planning purposes only.




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PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS59	Entrance to lagoon 2 miles east of Bullen Point	Most sensitive during open water season. Salt marsh and/or inundated low-lying tundra shoreline.	C-13 or C-14	100'


GENERAL SENSITIVITIES

- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- Shoreline and offshore areas support molting Oldsquaws and eiders, and brood-rearing eiders. This is also a staging area for migrating Phalaropes (shorebirds). Birds are present in June through September.
- Plan to deploy bird-hazing systems during the open-water season.

CULTURAL SITES

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AIR ACCESS*

- Badami airstrip (Sheet 91) is approximately 4 miles southwest of the Bullen Point airstrip.
- Bullen Point airstrip is an unattended, 2,900-ft gravel airstrip. The extreme west end of the strip reportedly tends to be soft.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- Waters around Bullen Point are very shallow.

COUNTERMEASURES CONSIDERATIONS

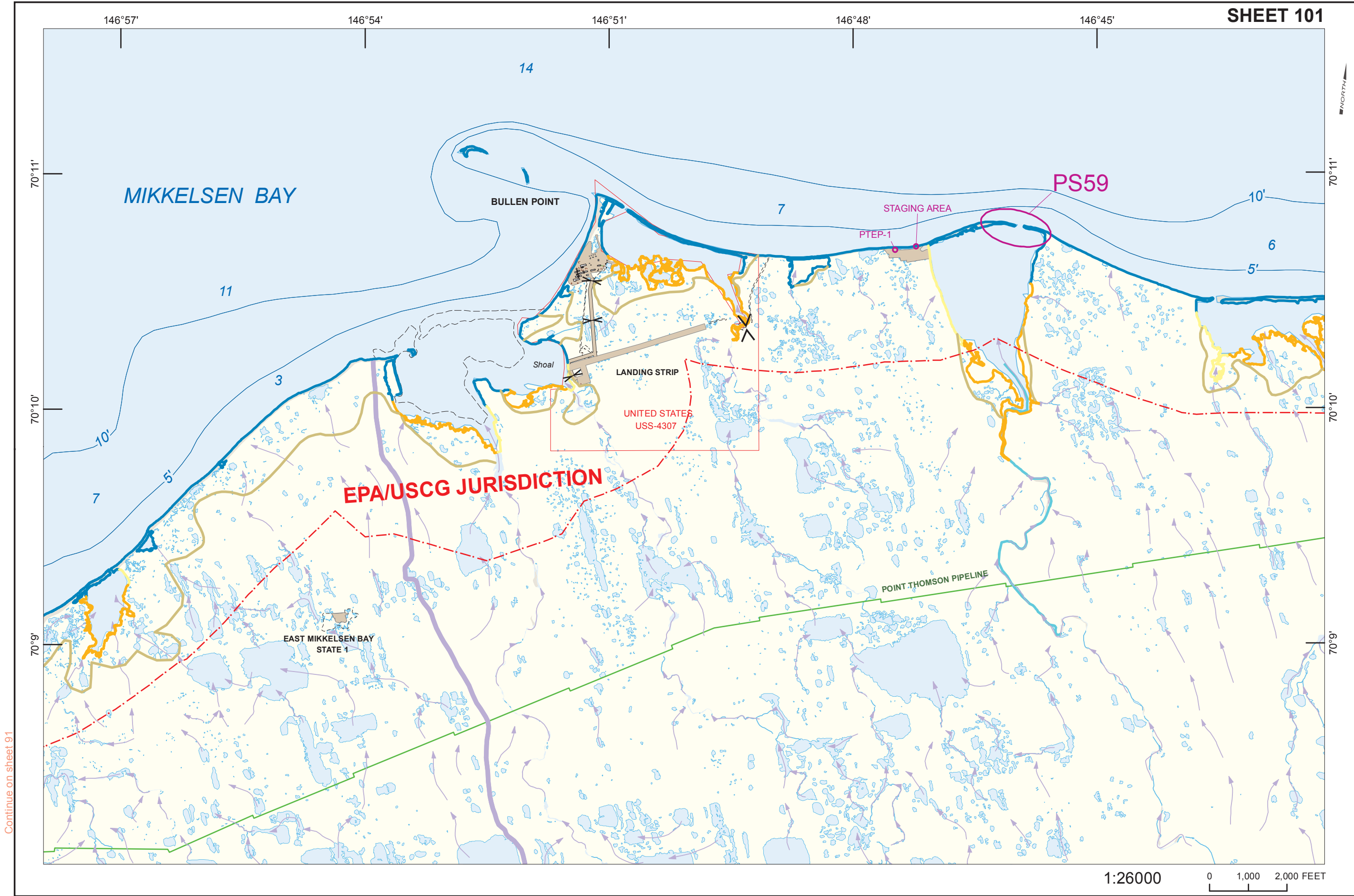
- Gravel beaches are generally wide (more than 30 ft), but are interrupted by numerous inlets and vegetated shorelines.
- Embayment at Bullen Point will collect oil during west or northwest sustained winds and storm surge.

STAGING AREAS AND PRESTAGED EQUIPMENT

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
PTEP-1	Coast off the NE end of Bullen Point airstrip	Boom	4,000'	Boom and anchor systems

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

NOTE: All values given on these pages are for planning purposes only.





PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS60	Lagoon 0.25 miles east of Pt. Gordon	Most sensitive during open water season. Salt marsh and inundated low-lying tundra shorelines.	C-13 or C-14	100'
PS61	Lagoon 0.25 miles east of Pt. Hopson	Most sensitive during open water season. Salt marsh and inundated low-lying tundra shorelines.	C-13 or C-14	600'
PS62	Lagoon 0.75 miles east of Pt. Thomson Unit #4	Most sensitive during open water season. Salt marsh and inundated low-lying tundra shorelines.	C-13 or C-14	1,000'
PS63	Lagoon 1 mile west of Pt. Hopson	Most sensitive during open water season. Salt marsh and inundated low-lying tundra shorelines.	C-13 or C-14	100'
PS64	Inlet to salt marsh 0.5 miles east of Pt. Hopson	Most sensitive during open water season. Salt marsh and inundated low-lying tundra shorelines.	C-13 or C-14	200'
PS65A	Inlet to salt marsh 0.9 miles east of Pt. Hopson	Most sensitive during open water season. Salt marsh and inundated low-lying tundra shorelines.	C-13 or C-14	400'
PS65B	Inlet to salt marsh 1.1 miles east of Pt. Hopson	Most sensitive during open water season. Salt marsh and inundated low-lying tundra shorelines.	C-13 or C-14	750'
PS66	Inlet to salt marsh 1.5 miles east of Pt. Hopson	Most sensitive during open water season. Salt marsh and inundated low-lying tundra shorelines.	C-13 or C-14	600'

GENERAL SENSITIVITIES

- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- Shoreline and offshore areas support molting Oldsquaws and eiders, and brood-rearing eiders. This is also a staging area for migrating Phalaropes (shorebirds). Birds are present in June through September.
- Plan to deploy bird-hazing systems during the open-water season.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

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AIR ACCESS*

- Bullen Point airstrip (Sheet 101) is located approximately 5 miles west of Point Gordon. This is an unattended, 2,900-ft gravel airstrip. The extreme west end of the strip reportedly tends to be soft.
- Point Thomson Air Strip (Sheet 104) is located approximately 1.5 miles south of Point Thomson Unit Central Pad. This is a private use 5000 –ft maintained gravel airstrip.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- Water depths near the mainland shore are shallow and changeable due to growth and change in bars and spits just offshore.

COUNTERMEASURES CONSIDERATIONS

- Gravel beaches are often “perched” on tundra vegetation, complicating response measures.
- Embayments and inlets on coast will collect surface oil during sustained west and northwest winds.

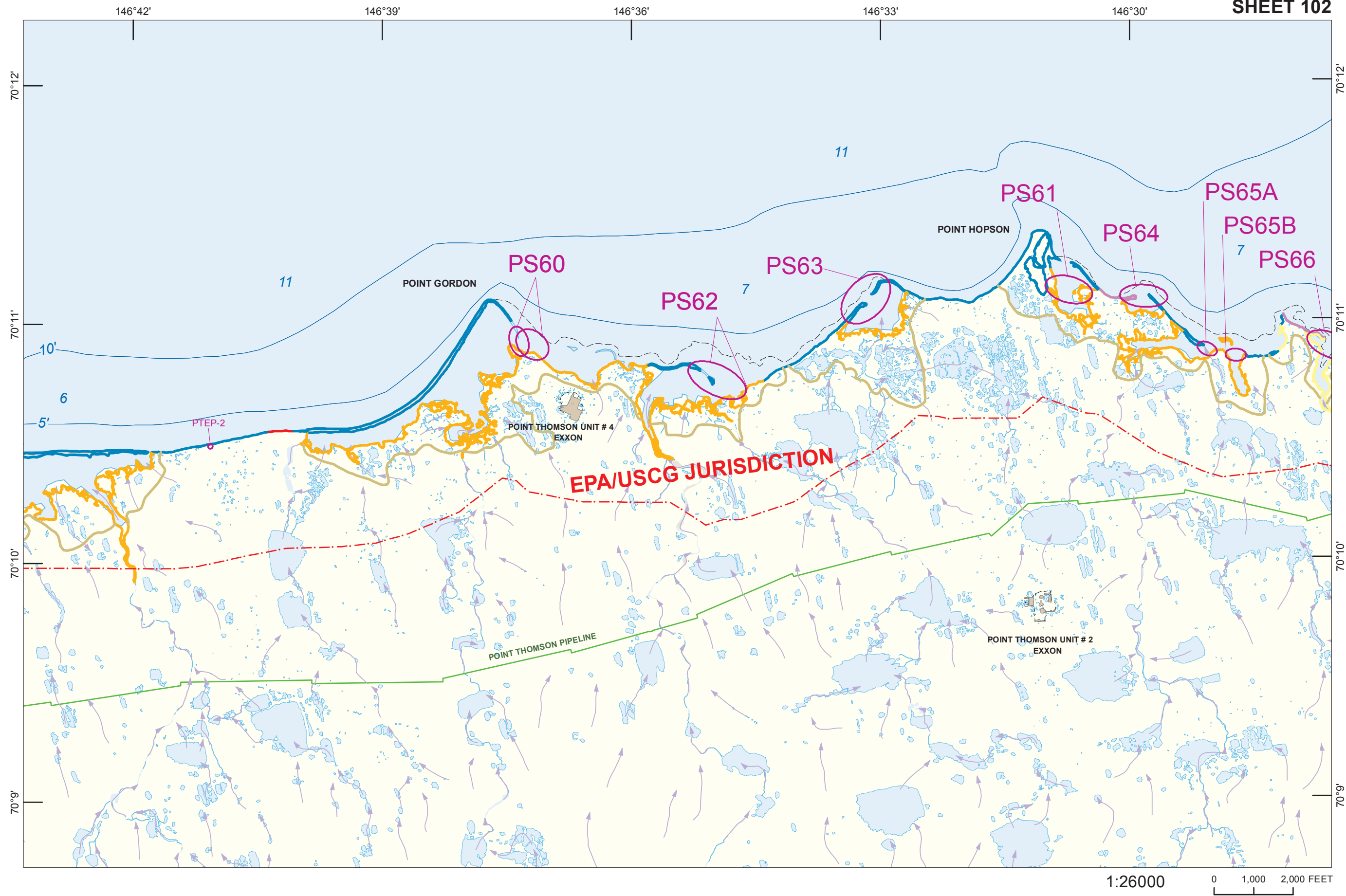
STAGING AREAS AND PRESTAGED EQUIPMENT

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
PTEP-2	Coast west of PTU #4	Boom	2,000'	Boom and anchor systems

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 101

Continue on sheet 103



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PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS65A	Inlet to salt marsh 1.3 miles west of Pt. Sweeney	Most sensitive during open water season. Salt marsh and inundated low-lying tundra shorelines.	C-13 or C-14	400'
PS65B	Inlet to salt marsh 1.1 miles west of Pt. Sweeney	Most sensitive during open water season. Salt marsh and inundated low-lying tundra shorelines.	C-13 or C-14	750'
PS66	Inlet to salt marsh 0.75 miles west of Pt. Sweeney	Most sensitive during open water season. Salt marsh and inundated low-lying tundra shorelines.	C-13 or C-14	600'
PS66A	Lagoon on east side of Pt. Sweeney	Most sensitive during open water season. Salt marsh and inundated low-lying tundra shorelines.	C-13 or C-14	200'
PS67	Inlet to salt marsh 0.5 miles east of Pt. Sweeney	Most sensitive during open water season. Salt marsh and inundated low-lying tundra shorelines.	C-13 or C-14	200'
PS68	Inlet to salt marsh 1.5 miles east of Pt. Sweeney	Most sensitive during open water season. Salt marsh and inundated low-lying tundra shorelines.	C-13 or C-14	1,000'
PS69	Inlet to salt marsh immediately north of Pt. Thomson Unit #1	Most sensitive during open water season. Salt marsh and inundated low-lying tundra shorelines.	C-13 or C-14	500'
PS70	Lagoon 0.5 miles west of Pt. Thomson Unit #3	Most sensitive during open water season. Salt marsh and inundated low-lying tundra shorelines.	C-13 or C-14	200'
PS71	Inlet to salt marsh and creek mouth 0.5 miles south of Pt. Thomson Unit #3	Most sensitive during open water season. Salt marsh and inundated low-lying tundra shorelines.	C-13 or C-14	500'

GENERAL SENSITIVITIES

- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- Shoreline and offshore areas support molting Oldsquaws and eiders, and brood-rearing eiders. This is also a staging area for migrating Phalaropes (shorebirds). Birds are present in June through September.
- This is the edge of a major molting and staging area for Oldsquaw in August and September. The area extends eastward on the lee side of the barrier islands.
- Plan to deploy bird-hazing systems during the open-water season.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

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Response Considerations

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AIR ACCESS*

- Bullen Point airstrip (Sheet 101) is located approximately 9 miles west of Point Sweeney. This is an unattended, 2,900-ft gravel airstrip. The extreme west end of the strip reportedly tends to be soft.
- Point Thomson Air Strip (Sheet 104) is located approximately 1.5 miles south of Point Thomson Unit Central Pad. This is a private use 5000 –ft maintained gravel airstrip.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- Water depths near the mainland shore are shallow and changeable due to growth and change in bars and spits just offshore.

COUNTERMEASURES CONSIDERATIONS

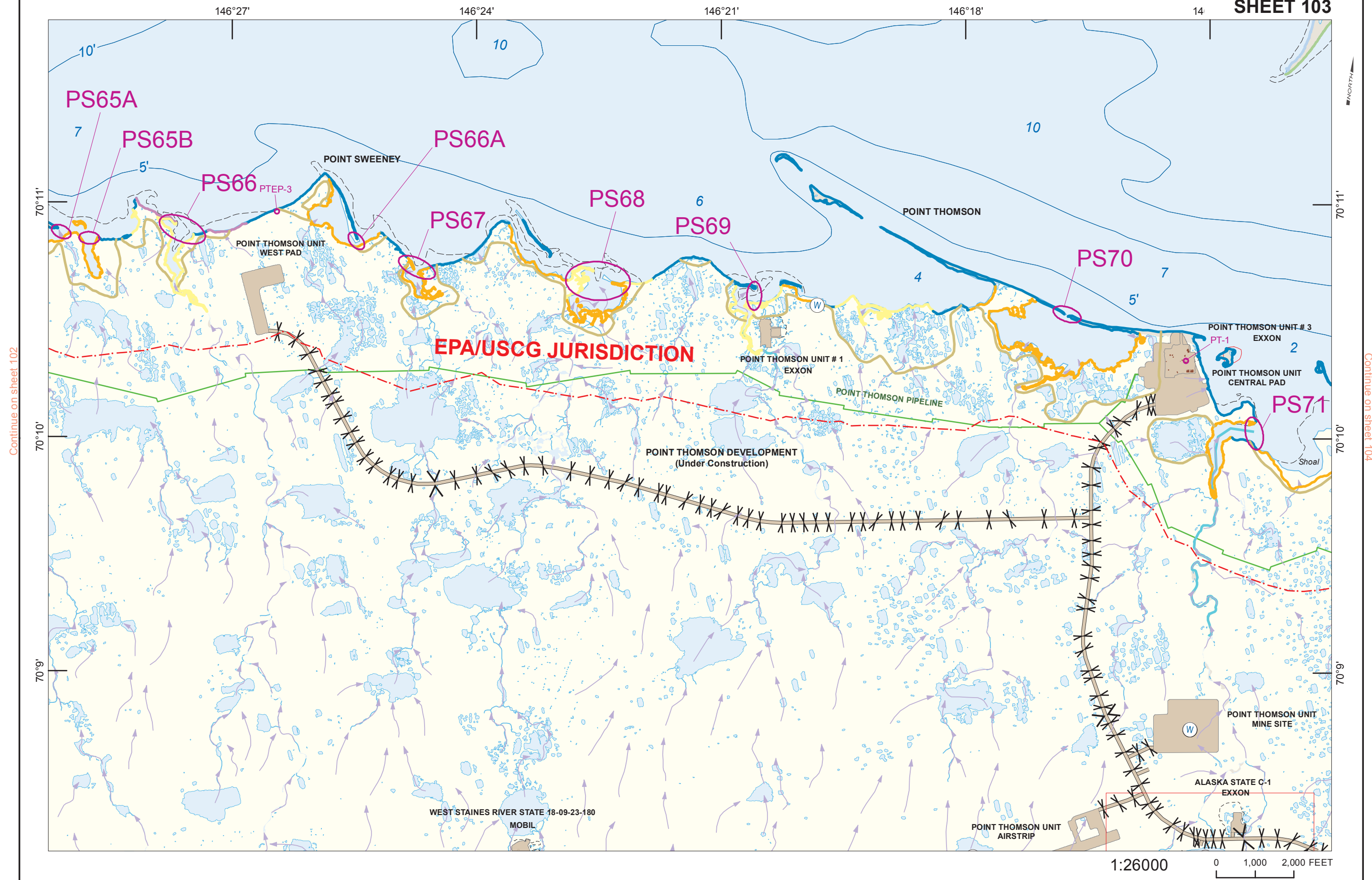
- Gravel beaches are often “perched” on tundra vegetation, complicating response measures.
- Numerous embayments and inlets on the coastline will trap oil during sustained west and northwest winds.

STAGING AREAS AND PRESTAGED EQUIPMENT

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QTY	TYPE
PT-1	Pt. Thomson Pad	Boom	2	NOFI Boom Bags @ 492'/ea Kepner Harbor Boom, 11”x15” complete reel packs with HYPUs in 20’ conx @ 1000’/ea Shore Seal Boom Delta Boom, 8"x6"
			2	
			600'	
			2,300'	
		Pumps	1	2” Elastec E150 centrifugal pump, hydraulic 2” Trash Pump, Diesel, hydraulic 2” Trash Pump, Diesel, 220 gpm 4” Trash Pump, Diesel, 370 gpm/ea 3” Diaphragm Pump, Diesel, 100 gpm
			1	
			1	
			2	
			1	
		Skimmers	1	4” Rope Mop Skimmer, Electric = 14bbls/hr Elastec TDS 118, Groovy & Smooth Drums w/HYPU Elastec Magnum 100, Groovy & Smooth Drums w/HYPU Steam Unit outfitted for both Elastec skimmers Elastec All terrain Vac Unit with All Terrain Tank
			1	
			1	
			1	
			1	
		Storage	2	Fast Tanks @ 1,500 gallons Fast Tanks @ 600 gallons Fast Tanks @ 150 gallons 125 bbl Mini Barge 249 bbl Fast Tow Mini Barge 570 bbl Tiger Tank
			2	
			2	
			1	
			1	
		Boats	1	36’ Riddle Shallow Water Landing Craft, Jets, Diesel 22’ Phantom Shallow Water, Jet, Diesel 21’ Aluminum Work Skiff, Dual 90 hp prop, gas 28’ x 10’ Freighter Landing Craft Airboat, Diesel 22’ x 9’ Airboats, Diesel 11.5’ Achilles Inflatable with 20 hp prop, gas
			2	
			1	
PTEP-3	Coast north of PTU West Pad	Boom	2,000'	Boom and anchor systems

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

NOTE: All values given on these pages are for planning purposes only.



Continue on sheet 102

Continue on sheet 104

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PRIORITY PROTECTION SITES				
SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS70	Lagoon 0.5 miles west of Pt. Thomson Unit #3	Most sensitive during open water season. Salt marsh and inundated low-lying tundra shorelines.	C-13 or C-14	500'
PS71	Inlet to salt marsh and creek mouth 0.5 miles south of Pt. Thomson Unit #3	Most sensitive during open water season. Salt marsh and inundated low-lying tundra shorelines.	C-13 or C-14	500'
PS72	Inlet at creek mouth 1 mile NW of North Staines River #1	Most sensitive during open water season. Inundated low-lying tundra shorelines.	C-13 or C-14	500"
PS73	Creek mouth 0.5 mile SE of North Staines River #1	Most sensitive during open water season. Salt marsh and peat shorelines.	C-13 or C-14	500"

GENERAL SENSITIVITIES

Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.

Shoreline and offshore areas support molting Oldsquaws and eiders, and brood-rearing eiders. This is also a staging area for migrating Phalaropes (shorebirds). Birds are present in June through September.

This is the edge of a major molting and staging area for Oldsquaw in August and September. The area extends eastward on the lee side of the barrier islands.

Plan to deploy bird-hazing systems during the open-water season.

The Staines River provides habitat for anadromous char and for resident fish.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.

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NOTE: All values given on these pages are for planning purposes only.

Response Considerations

ACS

North Slope Spill Response

A World Class Organization

ACS

North Slope Spill Response

A World Class Organization

AIR ACCESS*				
<div><div>Bullen Point airstrip (Sheet 101) is located approximately 14 miles west of Point Thomson Unit #3. This is an untended, 2,900-ft gravel airstrip. The extreme west end of the strip reportedly tends to be soft.</div><div>Point Thomson Air Strip (Sheet 104) is located approximately 1.5 miles south of Point Thomson Unit Central Pad. This is a private use 5000 –ft maintained gravel airstrip.</div></div>				
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS				
<div><div>Water depths near mainland shore are shallow and changing due to growth and change in bars and spits just offshore.</div><div>Lagoon areas are very shallow. Sand-silt beaches are narrow (less than 20 ft wide) and often backed by ice-rich undercut scarps up to 5 ft high.</div><div>Extensive shoaling between the shoreline and Flaxman Island (Sheet 100). Water depths range from 3 to 6 ft.</div><div>Annual average discharge of the Staines River is 14 cfs.</div></div>				
COUNTERMEASURES CONSIDERATIONS				
<div><div>Gravel beaches are often “perched” on tundra vegetation, complicating response measures.</div><div>River delta areas are complex shorelines with potentially unstable sand-silt and mud tidal flats present.</div><div>Numerous embayments and inlets on the coastline will trap oil during sustained west and northwest winds.</div></div>				
STAGING AREAS AND PRESTAGED EQUIPMENT				
PRESTAGED EQUIP. AREA	LOCATION	ITEM	QTY	TYPE
PT-1	Pt. Thomson Pad	Boom	2	NOFI Boom Bags @ 492'/ea Kepner Harbor Boom, 11"x15" complete reel packs with HYPUs in 20' conx @ 1000'/ea Shore Seal Boom Delta Boom, 8"x6"
			2	
			600'	
			2,300'	
		Pumps	1	2" Elastec E150 centrifugal pump, hydraulic 2" Trash Pump, Diesel, hydraulic 2" Trash Pump, Diesel, 220 gpm 4" Trash Pump, Diesel, 370 gpm/ea 3" Diaphragm Pump, Diesel, 100 gpm
			1	
			1	
			2	
			1	
		Skimmers	1	4" Rope Mop Skimmer, Electric = 14bbls/hr Elastec TDS 118, Groovy & Smooth Drums w/HYPU Elastec Magnum 100, Groovy & Smooth Drums w/HYPU Steam Unit outfitted for both Elastec skimmers Elastec All terrain Vac Unit with All Terrain Tank
			1	
			1	
			1	
			1	
		Storage	2	Fast Tanks @ 1,500 gallons Fast Tanks @ 600 gallons Fast Tanks @ 150 gallons 125 bbl Mini Barge 249 bbl Fast Tow Mini Barge 570 bbl Tiger Tank
			2	
			2	
			1	
			1	
		Boats	1	36' Riddle Shallow Water Landing Craft, Jets, Diesel 22' Phantom Shallow Water, Jet, Diesel 21' Aluminum Work Skiff, Dual 90 hp prop, gas 28' x 10' Freighter Landing Craft Airboat, Diesel 22' x 9' Airboats, Diesel 11.5' Achilles Inflatable with 20 hp prop, gas
			2	
			1	
			1	
			2	

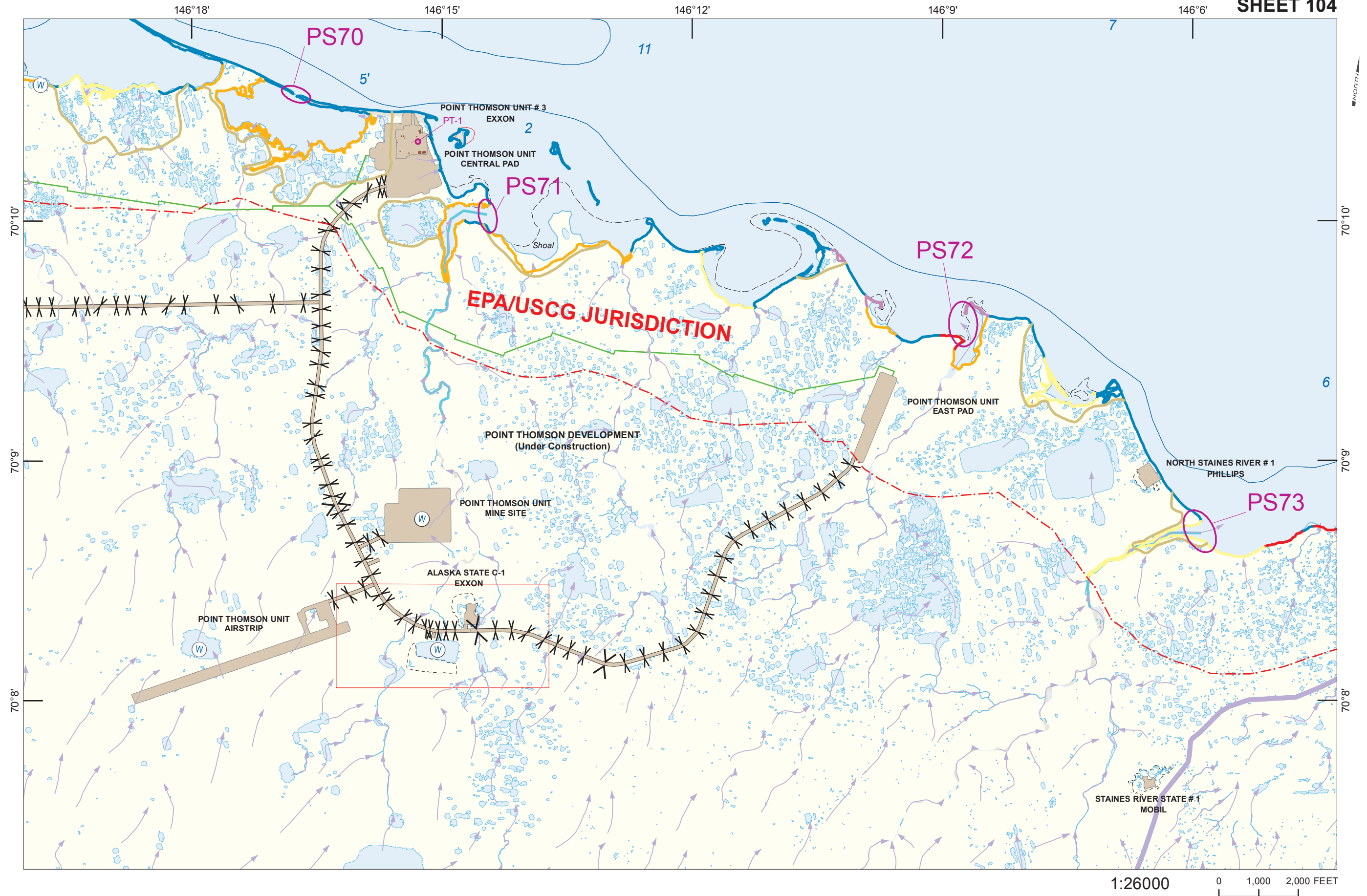
*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

NOTE: All values given on these pages are for planning purposes only.

NOTE: All values given on these pages are for planning purposes only.

Continue on sheet 103

Continue on sheet 105





PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS56	Lagoon on Flaxman Island	Most sensitive during open water season. Keep oil from entering lagoon. Salt marsh and/or inundated low-lying tundra shore-line.	C-13 or C-14	500'
PS57	Salt marsh and inundated tundra shoreline on east side of Flaxman Island	Most sensitive during open water season. Keep oil from entering salt marsh and/or inundated low-lying tundra shoreline.	C-13 or C-14	3,000'
PS74	Gap between Flaxman Island and Brownlow Point	Most sensitive during open water season. Keep oil from entering Lion Bay. Tundra cliffs and mixed sand and gravel beaches on Flaxman Island.	C-13 or C-14	3,000"

GENERAL SENSITIVITIES

- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- Shoreline and offshore areas support molting Oldsquaws and eiders, and brood-rearing eiders. This is also a staging area for migrating Phalaropes (shorebirds). Birds are present in June through September.
- This is the edge of a major molting and staging area for Oldsquaw in August and September. The area extends eastward on the lee side of the barrier islands.
- Plan to deploy bird-hazing systems during the open-water season.
- The Canning River is a migratory pathway for arctic char and a possible overwintering area.
- The Staines River provides habitat for anadromous char and for resident fish.
- Polar bear dens have been found in this area. Dens may be in use from October through April.

CULTURAL SITES

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Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- Bullen Point airstrip (Sheet 101) is located approximately 20 miles west of the mouth of the Staines River. This is an unattended, 2,900-ft gravel airstrip. The extreme west end of the strip reportedly tends to be soft.
- Point Thomson Air Strip (Sheet 104) is located approximately 1.5 miles south of Point Thomson Unit Central Pad. This is a private use 5000 –ft maintained gravel airstrip.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- Lagoon areas are very shallow. There is extensive shoaling between the shoreline and Flaxman Island. Water depths range from 3 to 6 ft.
- There is passage between Flaxman Island and Brownlow Point. The channel is close to the east end of the island and has depths of 8 ft, which shoal to 4 ft in the lagoon.
- Annual average discharge of the Staines River is 14 cfs.

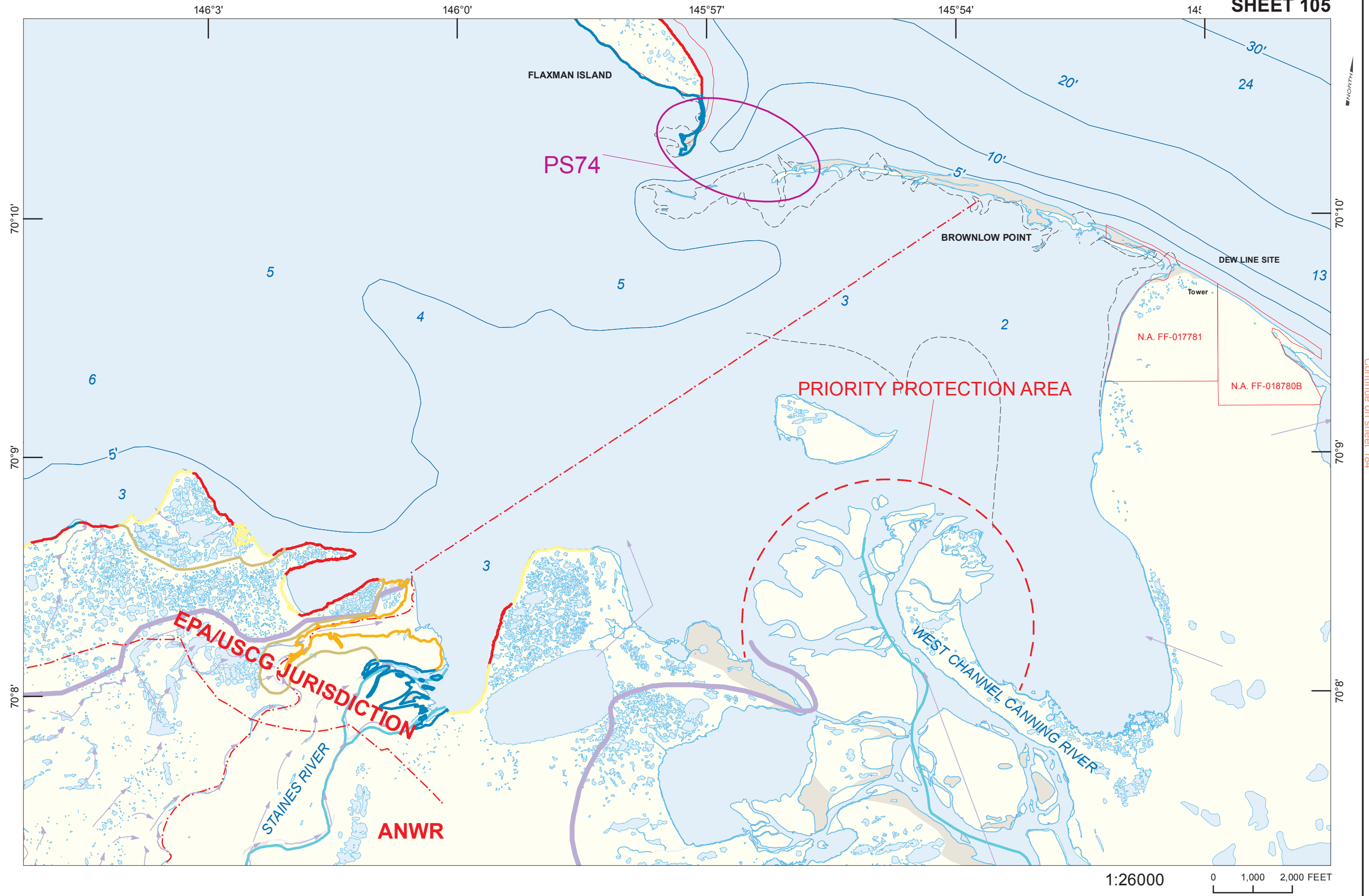
COUNTERMEASURES CONSIDERATIONS

- Sand-silt beaches are narrow and often “perched” on tundra vegetation.
- River delta areas are complex shorelines with potentially unstable sand-silt and mud tidal flats present.
- Numerous embayments and inlets on the coastline will trap oil during sustained west and northwest winds.


*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 104

Continue on sheet 184



Continue on sheet 184



PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.


GENERAL SENSITIVITIES

- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- Plan to deploy bird-hazing systems during the open-water season.
- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- The Kalikpik River provides habitat for anadromous whitefish and resident fish.

CULTURAL SITES

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AIR ACCESS*

- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 25 miles to the southeast. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- There is a landing strip near the Kogru River inlet approximately 5 miles west of Saktuina Point (Sheet 1). (Landing strip is west of the area covered by Sheet 1).
- Emergency landing for fixed-wing aircraft is available on the sand flats near the mouth of the Tingmeachsiovik River and on the sand flats west of the Nechelik Channel (Sheet 7).

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shoreline on this sheet.

COUNTERMEASURES CONSIDERATIONS

- The delta of the Kalikpik River is a very complex polygonal tundra and sand-silt flats area. Access is uncertain.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 157

SHEET 112


Continue on sheet 157

Continue on sheet 162

Continue on sheet 113



1:26000
0 1,000 2,000 FEET



PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.


GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Polar bear dens have been found in this area. Dens may be in use from October through April.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

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AIR ACCESS*

- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 20 miles to the southeast. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- There is a landing strip near the Kogru River inlet approximately 5 miles west of Saktuina Point (Sheet 1). (Landing strip is west of the area covered by Sheet 1).
- Emergency landing for fixed-wing aircraft is available on the sand flats near the mouth of the Tingmeachsiovik River and on the sand flats west of the Nechelik Channel (Sheet 7).

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shoreline on this sheet.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 4

SHEET 113

Continue on sheet 5




Continue on sheet 112




Continue on sheet 118

Continue on sheet 114




PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.



GENERAL SENSITIVITIES


- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Polar bear dens have been found in this area. Dens may be in use from October through April.



CULTURAL SITES


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AIR ACCESS*

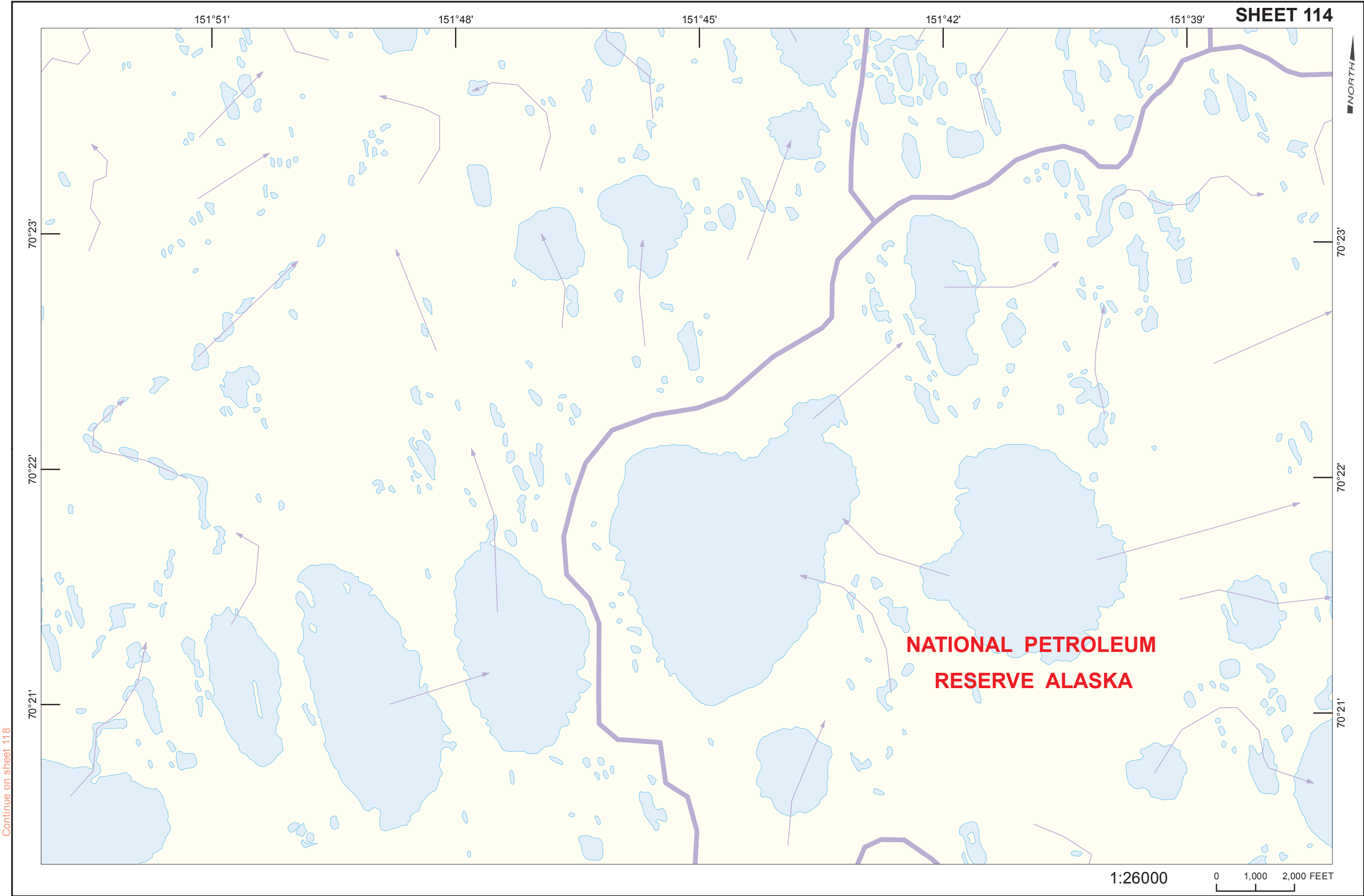
- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 20 miles to the east. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Emergency landing for fixed-wing aircraft is available on the sand flats near the mouth of the Tingmeachsiovik River and on the sand flats west of the Nechelik Channel (Sheet 7).



VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shoreline on this sheet.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.



Continue on sheet 118

Continue on sheet 115



PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- The Tingmeachsiovik River provides habitat for anadromous whitefish and resident fish.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

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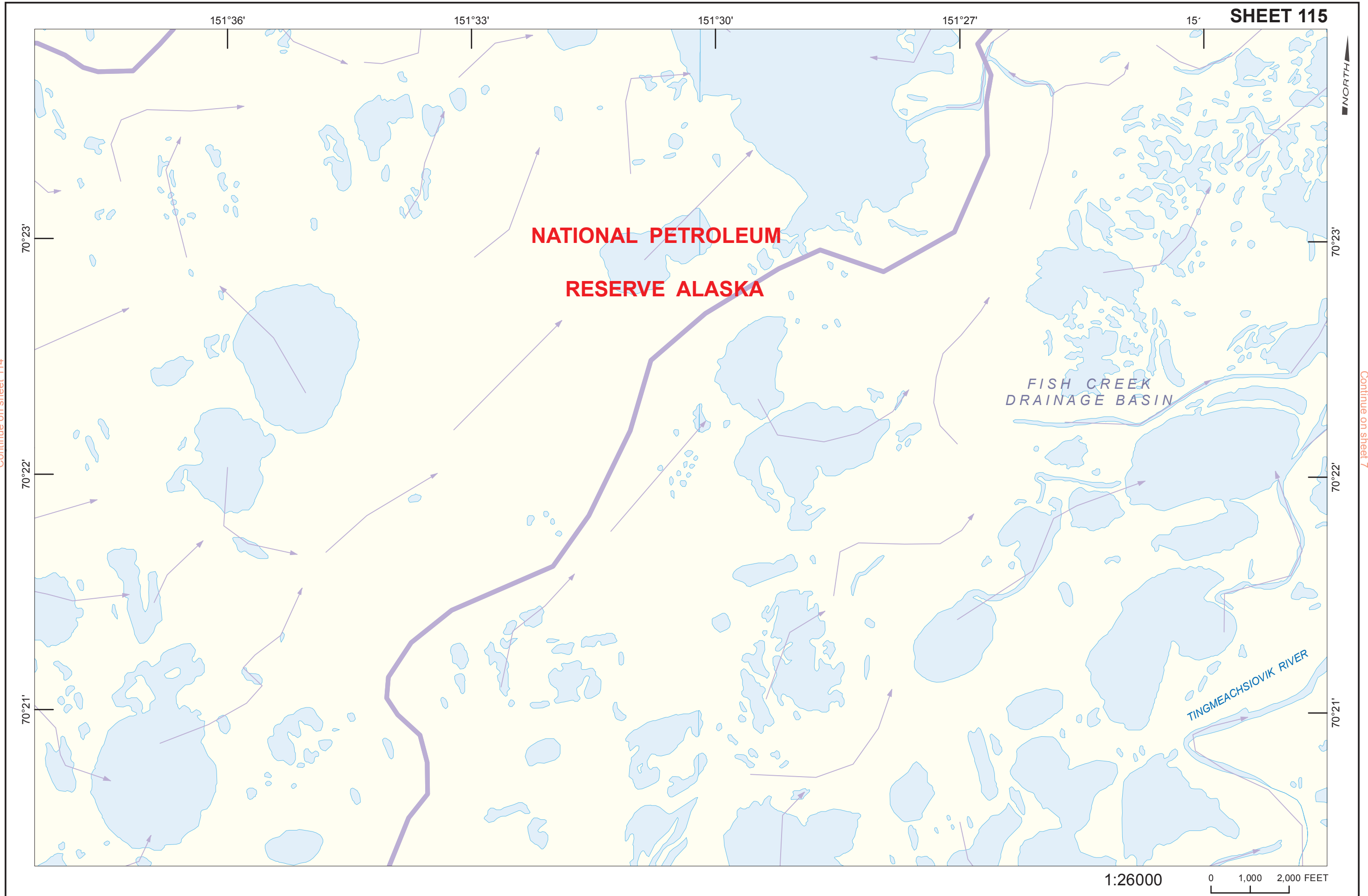
AIR ACCESS*


- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 15 miles to the east. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Emergency landing for fixed-wing aircraft is available on the sand flats near the mouth of the Tingmeachsiovik River and on the sand flats west of the Nechelik Channel (Sheet 7).
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 16 miles to the southeast. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shoreline on this sheet.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.





PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.


GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

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AIR ACCESS*

- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 26 miles east of W Fish Creek 1. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- There is a landing strip near the Kogru River inlet approximately 5 miles west of Saktuina Point (Sheet 1). (Landing strip is west of the area covered by Sheet 1).
- Emergency landing for fixed-wing aircraft is available on the sand flats near the mouth of the Tingmeachsiovik River and on the sand flats west of the Nechelik Channel (Sheet 7).

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shoreline on this sheet.


*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 162

Continue on sheet 114


Continue on sheet 119






PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.



GENERAL SENSITIVITIES


- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Fish Creek provides habitat for anadromous whitefish and resident fish.



CULTURAL SITES


The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 18 miles to the east. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- There is a landing strip near the Kogru River inlet approximately 5 miles west of Saktuina Point (Sheet 1). (Landing strip is west of the area covered by Sheet 1).
- Emergency landing for fixed-wing aircraft is available on the sand flats near the mouth of the Tingmeachsiovik River and on the sand flats west of the Nechelik Channel (Sheet 7).



VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

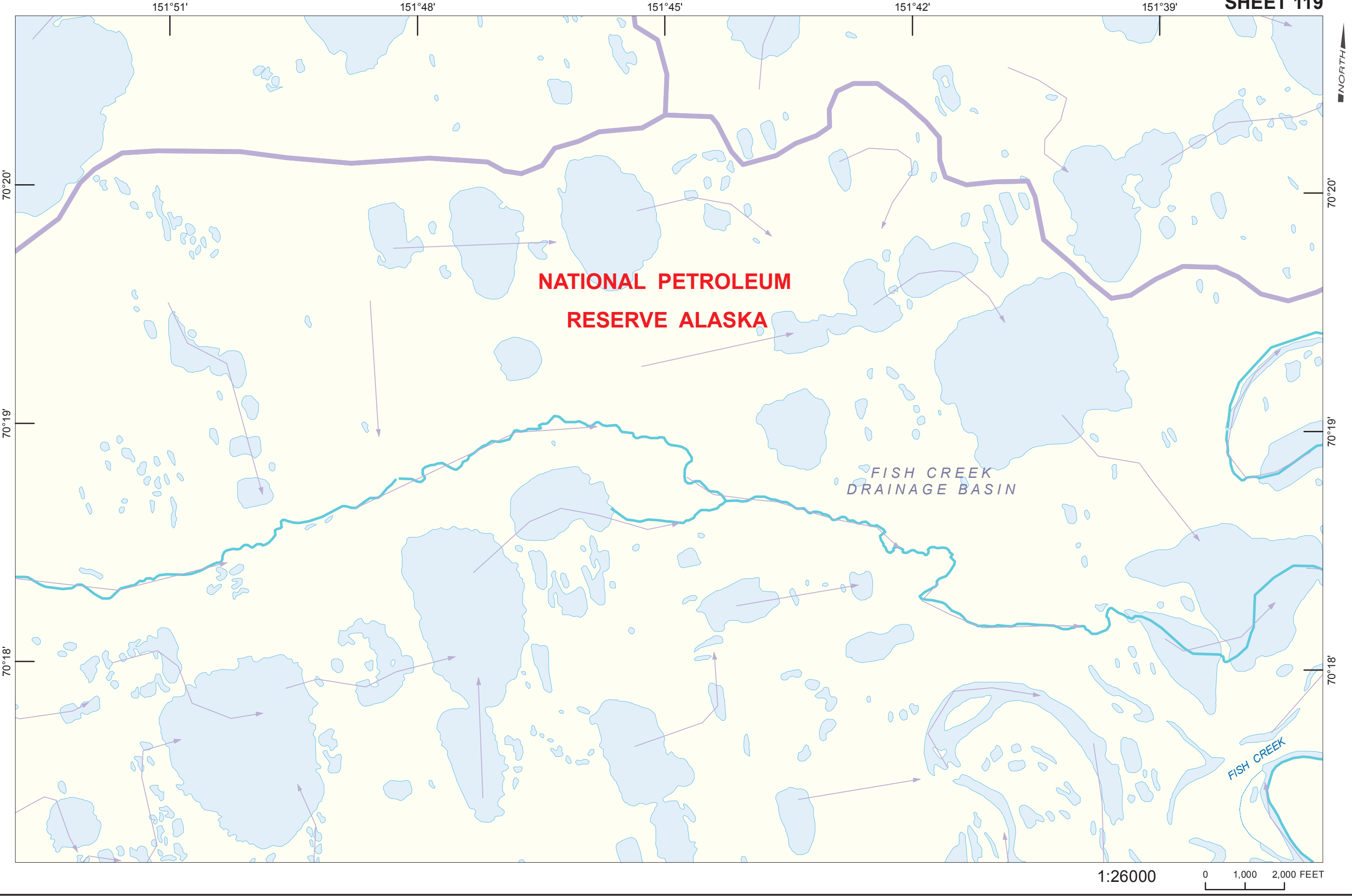
- There are no marine waters or shoreline on this sheet.


*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 118

Continue on sheet 123

Continue on sheet 120





PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.


GENERAL SENSITIVITIES

- Areas south of Fish Creek are subsistence use areas..
- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- The Tingmeachsiovik River and Fish Creek provide habitat for anadromous whitefish and resident fish.

CULTURAL SITES

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AIR ACCESS*

- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 13 miles to the east. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Emergency landing for fixed-wing aircraft is available on the sand flats near the mouth of the Tingmeachsiovik River and on the sand flats west of the Nechelik Channel (Sheet 7).
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 13 miles to the southeast. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

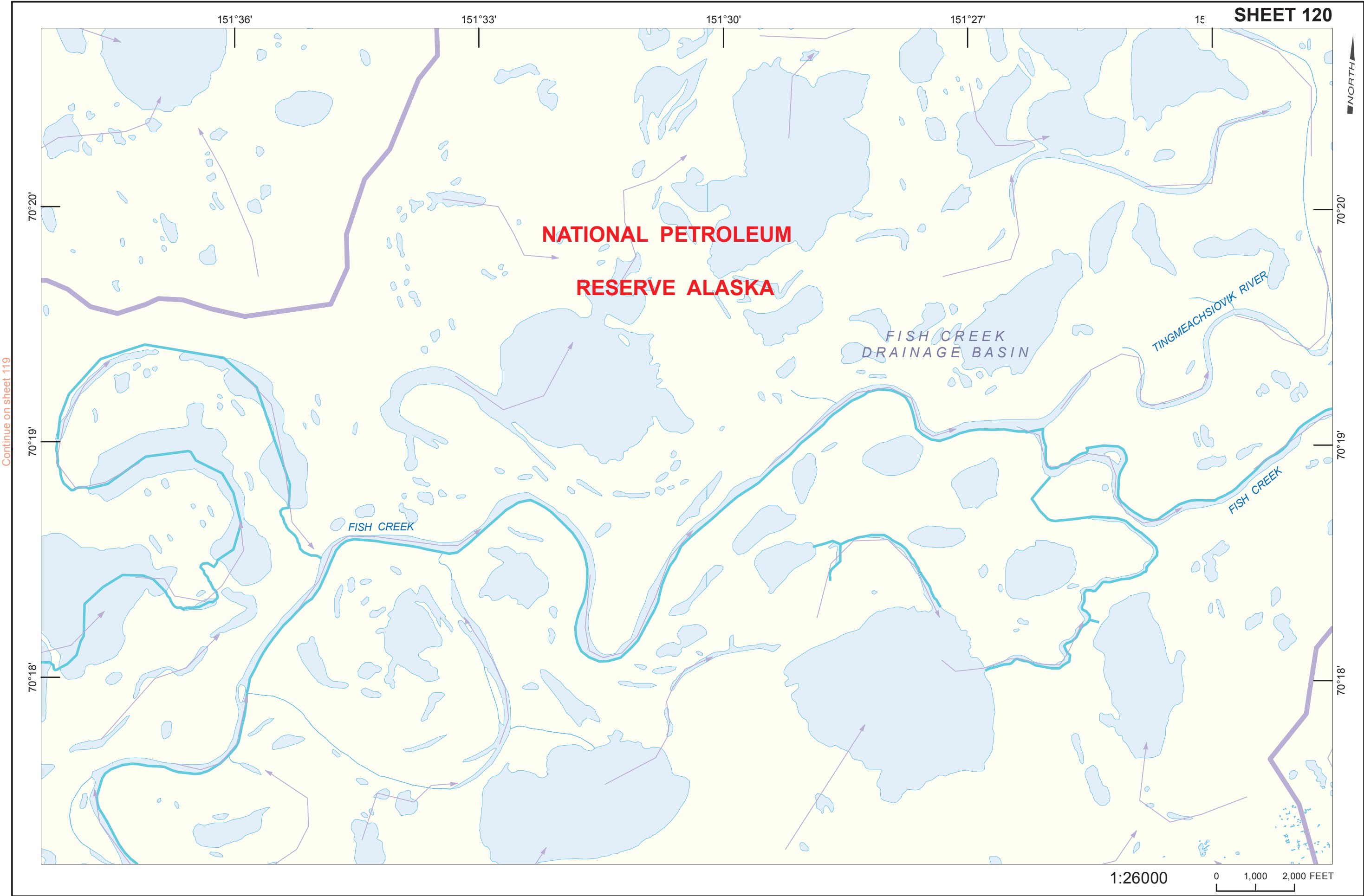
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS


- There are no marine waters or shoreline on this sheet.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 119

Continue on sheet 121





NORTH SLOPE SPILL RESPONSE

ACS

A WORLD CLASS ORGANIZATION

PRIORITY PROTECTION SITES

• There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

• The area surrounding the Ublutuocho River is a subsistence use area.

• Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.

• The Tingmeachsiovik and Ublutuocho rivers and Fish Crrek provide habitat for anadromous whitefish and resident fish.

• The Colville River delta is a polar bear denning area.

CULTURAL SITES


The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.

ACS Tech. Manual Vol. 2, 12/17

NOTE: All values given on these pages are for planning purposes only.

Response Considerations



NORTH SLOPE SPILL RESPONSE

ACS

A WORLD CLASS ORGANIZATION

AIR ACCESS*

• There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 7 miles to the east. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.

• Emergency landing for fixed-wing aircraft is available on the sand flats near the mouth of the Tingmeachsiovik River and on the sand flats west of the Nechelik Channel (Sheet 7).

• Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 9 miles to the southeast. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

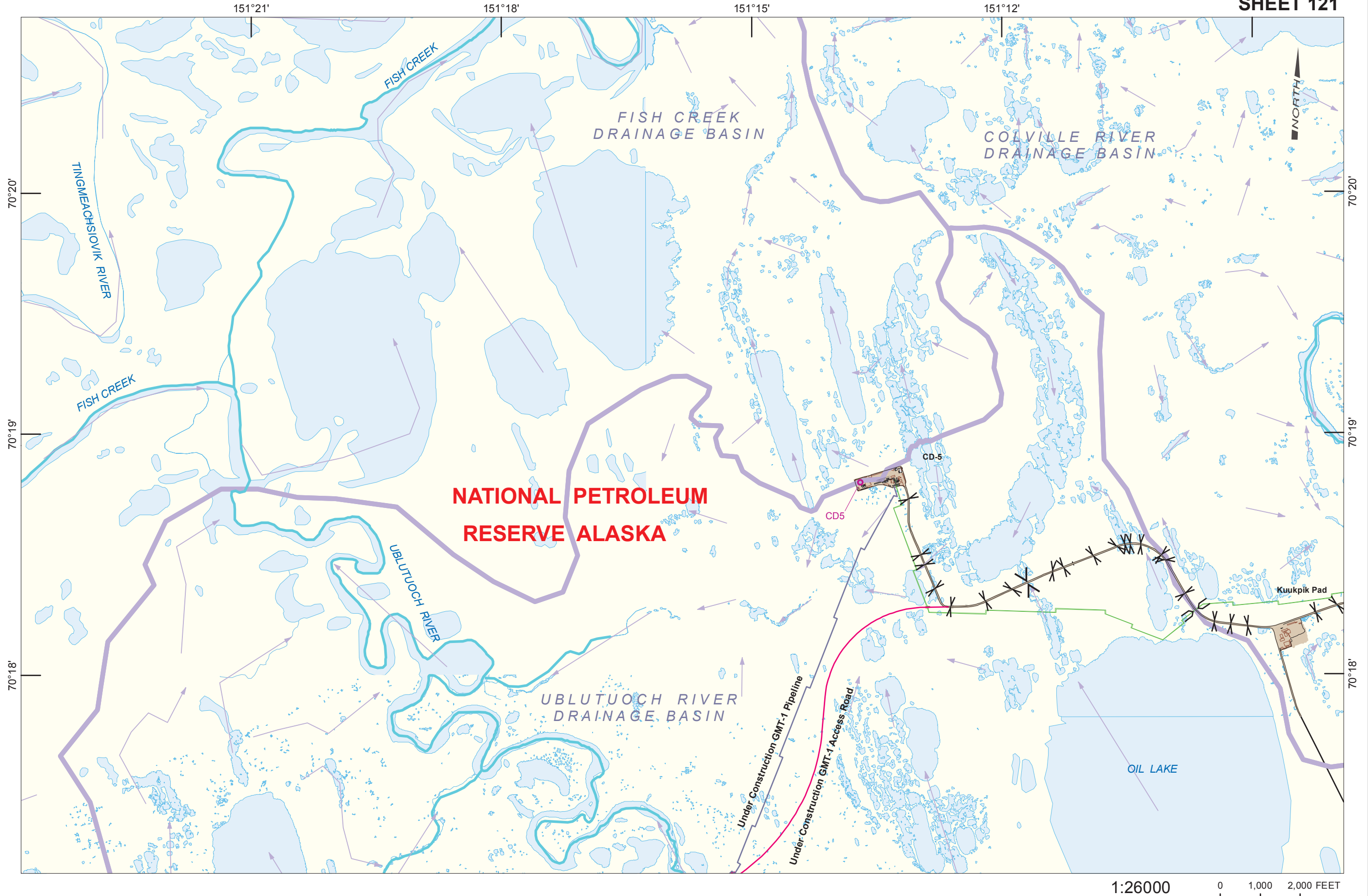
• There are no marine waters or shoreline on this sheet.


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NOTE: All values given on these pages are for planning purposes only.

Continue on sheet 120

Continue on sheet 20





PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.


GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Fish Creek provides habitat for anadromous whitefish and resident fish.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

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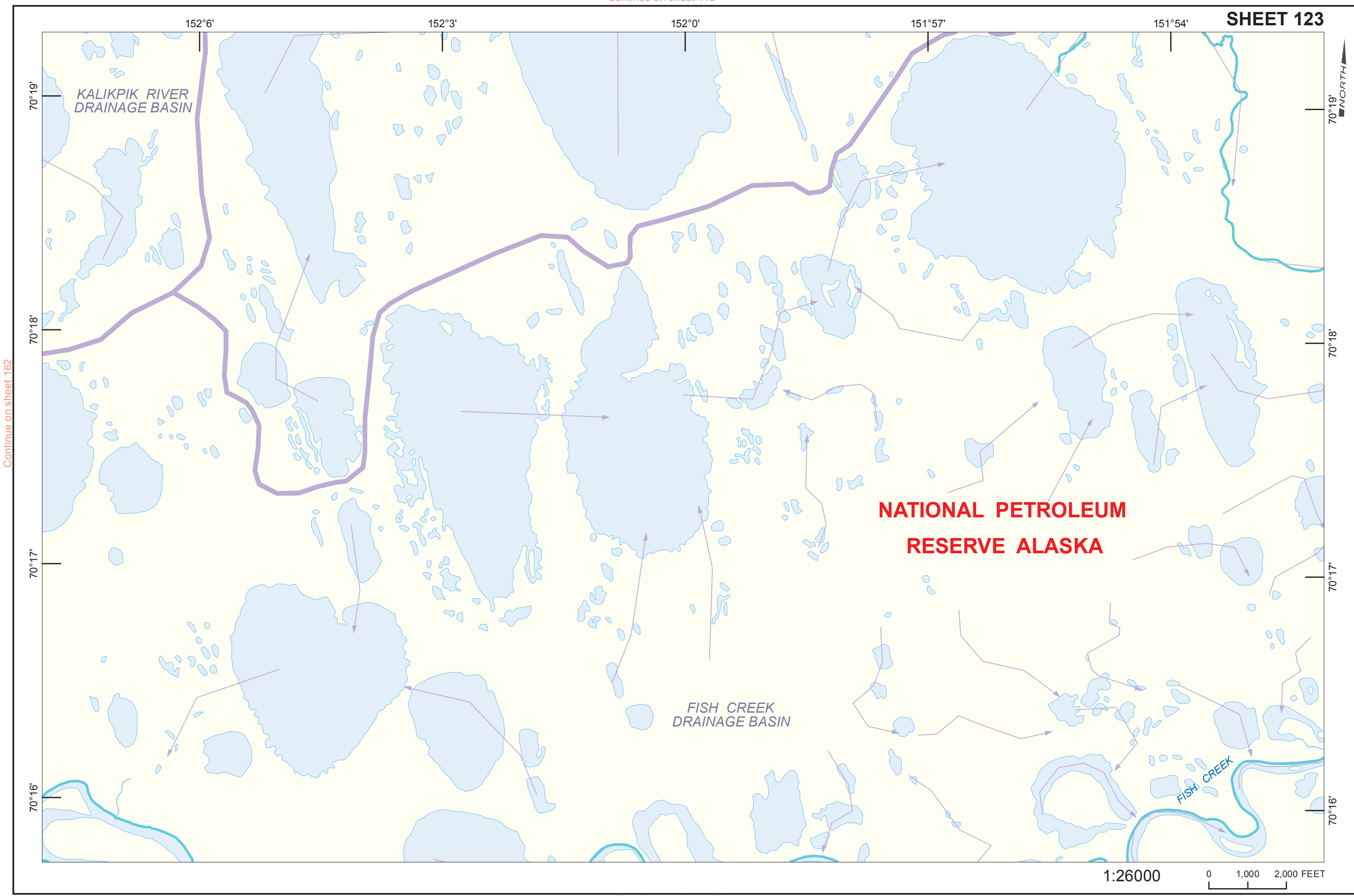
AIR ACCESS*

- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 25 miles to the northeast. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Emergency landing for fixed-wing aircraft is available on the sand flats near the mouth of the Tingmeachsiovik River and on the sand flats west of the Nechelik Channel (Sheet 7).

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shoreline on this sheet.

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PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

- The area east of Judy Creek and south of Fish Creek is a subsistence use area.
- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Fish and Judy creeks provide habitat for anadromous whitefish and resident fish.

CULTURAL SITES

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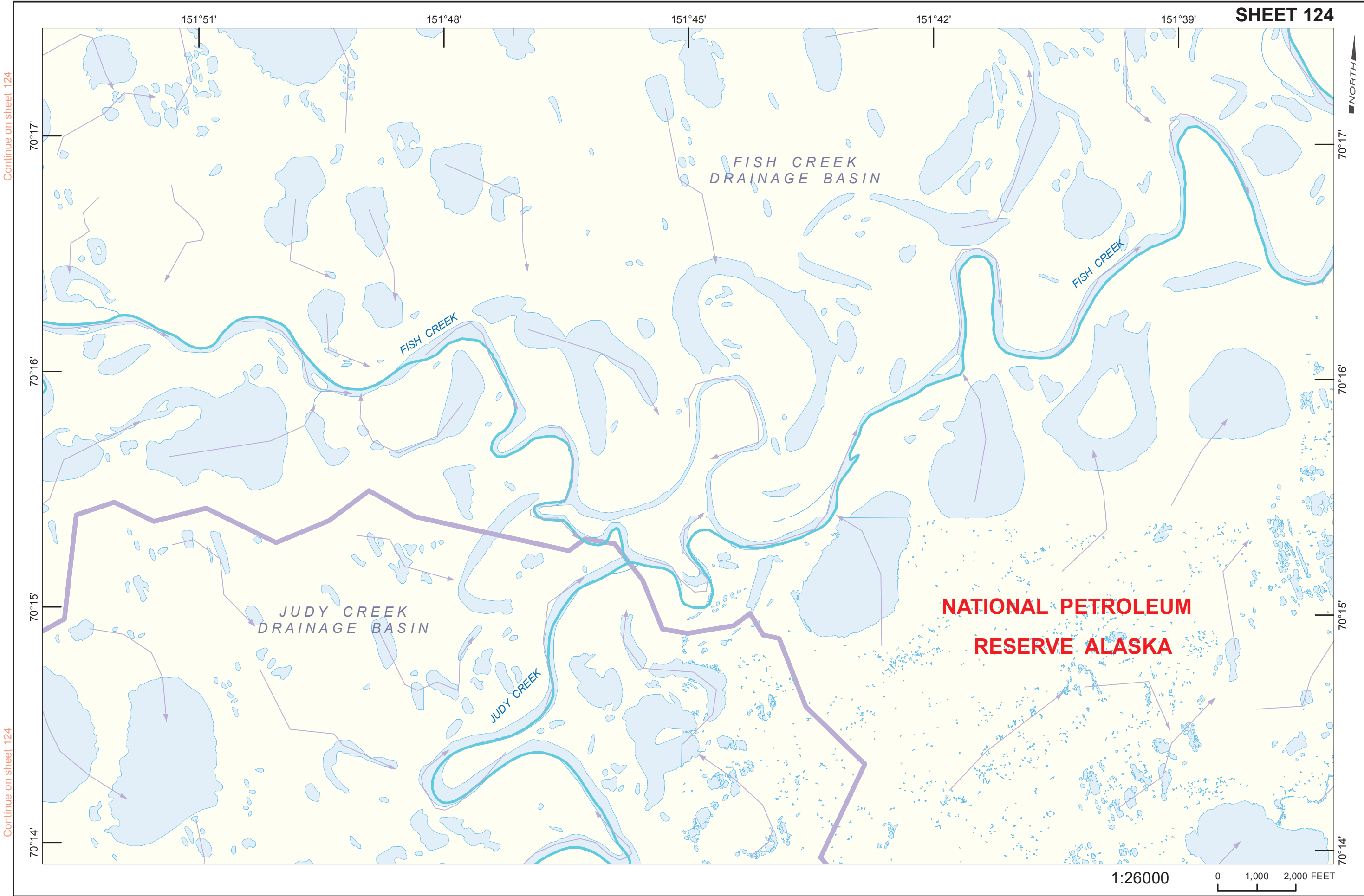
AIR ACCESS*


- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 20 miles to the northeast. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Emergency landing for fixed-wing aircraft is available on the sand flats near the mouth of the Tingmeachsiovik River and on the sand flats west of the Nechelik Channel (Sheet 7).

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shoreline on this sheet.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.





PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.


GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Fish Creek provides habitat for anadromous whitefish and resident fish.

CULTURAL SITES

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AIR ACCESS*

- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 15 miles to the northeast. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Emergency landing for fixed-wing aircraft is available on the sand flats near the mouth of the Tingmeachsiovik River and on the sand flats west of the Nechelik Channel (Sheet 7).
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 12 miles to the southeast. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

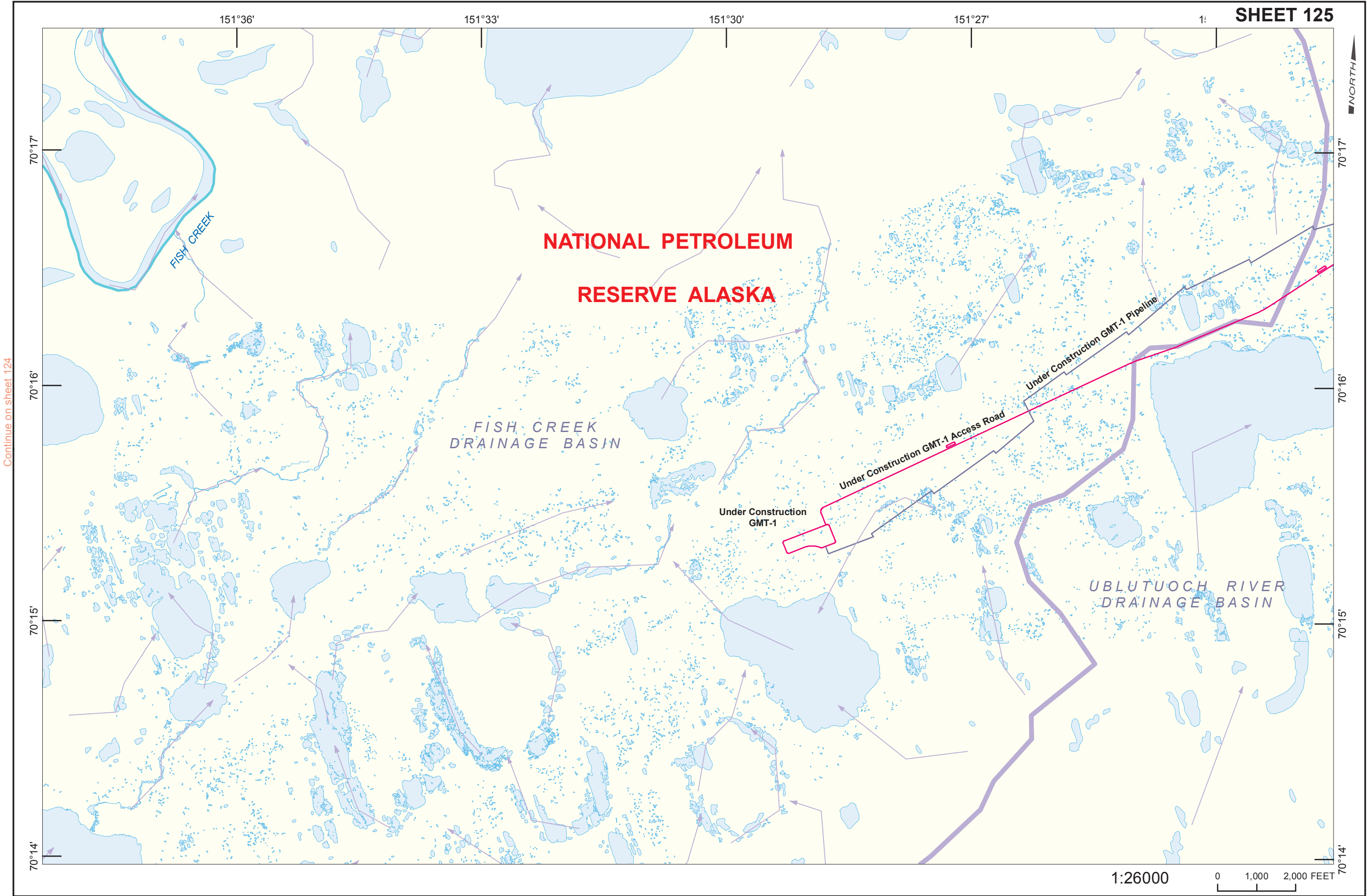
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shoreline on this sheet.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 124

Continue on sheet 126





PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- The Ublutuoch River provides habitat for anadromous whitefish and resident fish.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



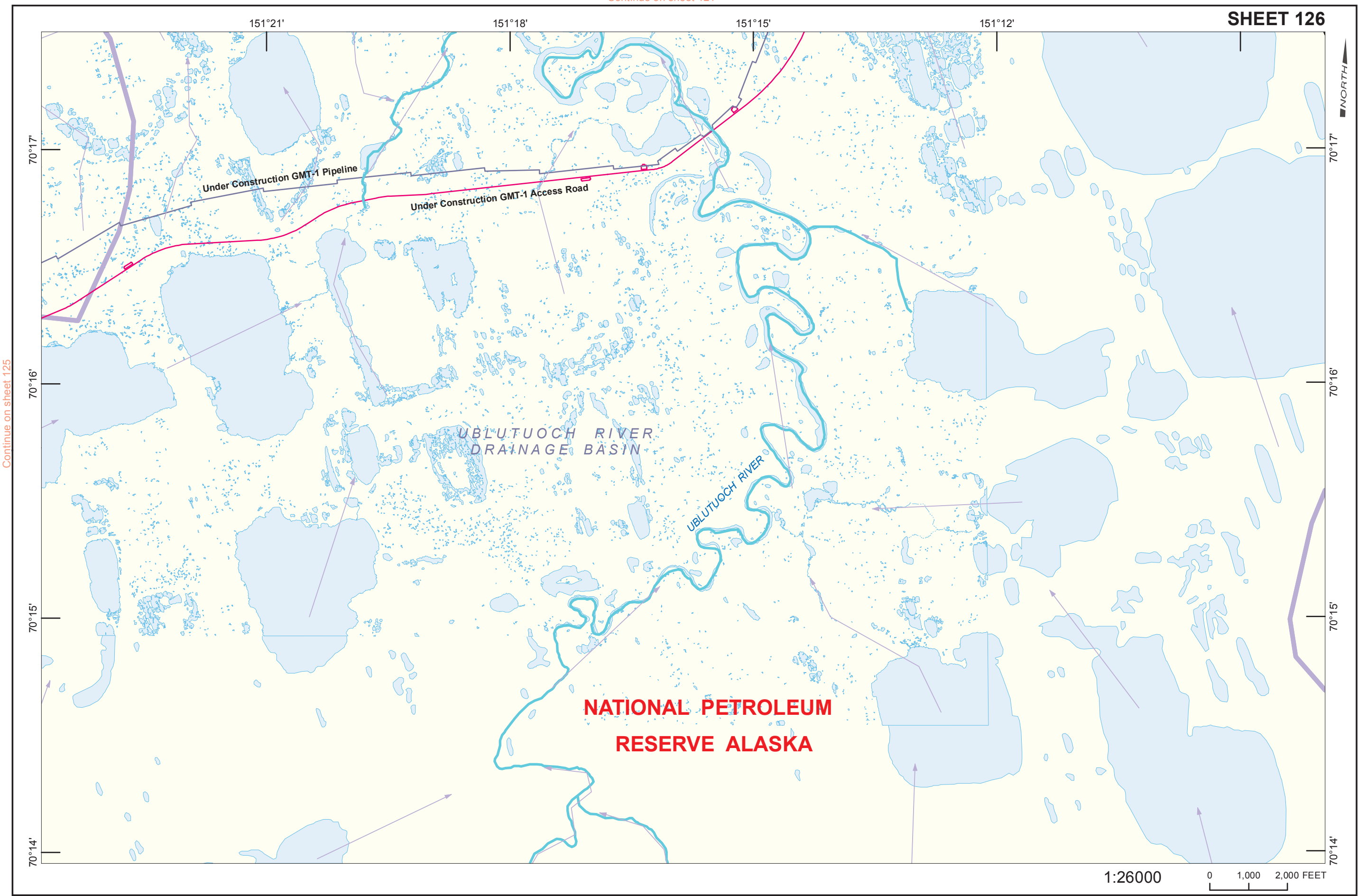
AIR ACCESS*

- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 10 miles to the northeast. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Emergency landing for fixed-wing aircraft is available on the sand flats near the mouth of the Tingmeachsiovik River and on the sand flats west of the Nechelik Channel (Sheet 7).
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 7 miles to the southeast. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shoreline on this sheet.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.





PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Fish Creek provides habitat for anadromous whitefish and resident fish.
- Judy Creek and its tributary provide habitat for anadromous whitefish and resident fish.

CULTURAL SITES

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AIR ACCESS*

- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 25 miles to the northeast. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Emergency landing for fixed-wing aircraft is available on the sand flats near the mouth of the Tingmeachsiovik River and on the sand flats west of the Nechelik Channel (Sheet 7).

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shoreline on this sheet.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 123

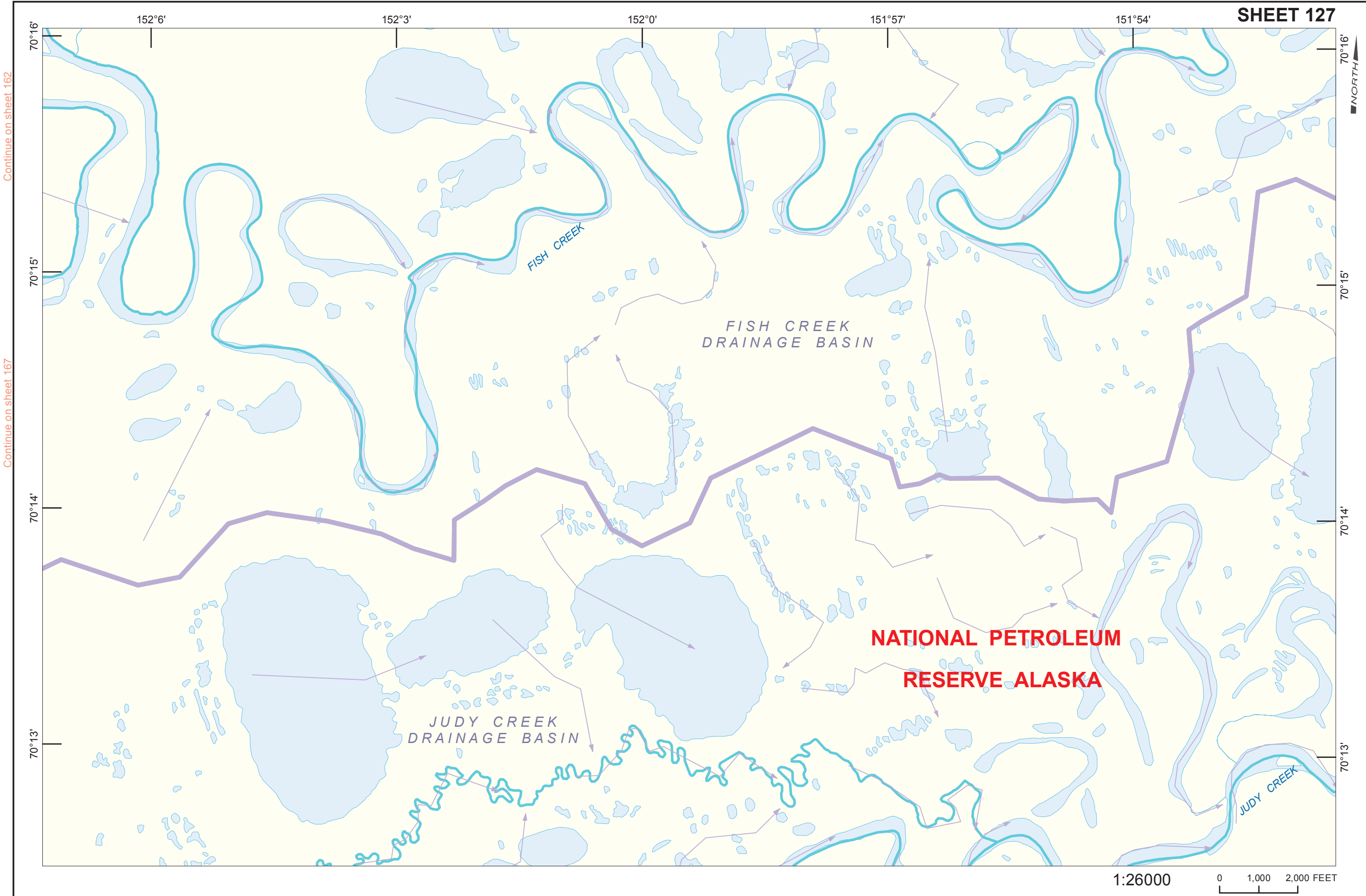
SHEET 127

Continue on sheet 162

Continue on sheet 167

Continue on sheet 124

Continue on sheet 128



Continue on sheet 131

Continue on sheet 132



PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

- The area east of Judy Creek near the top of this sheet is a subsistence use area.
- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Judy Creek provides habitat for anadromous whitefish and resident fish.

CULTURAL SITES

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AIR ACCESS*

- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 20 miles to the northeast. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Emergency landing for fixed-wing aircraft is available on the sand flats near the mouth of the Tingmeachsiovik River and on the sand flats west of the Nechelik Channel (Sheet 7).

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

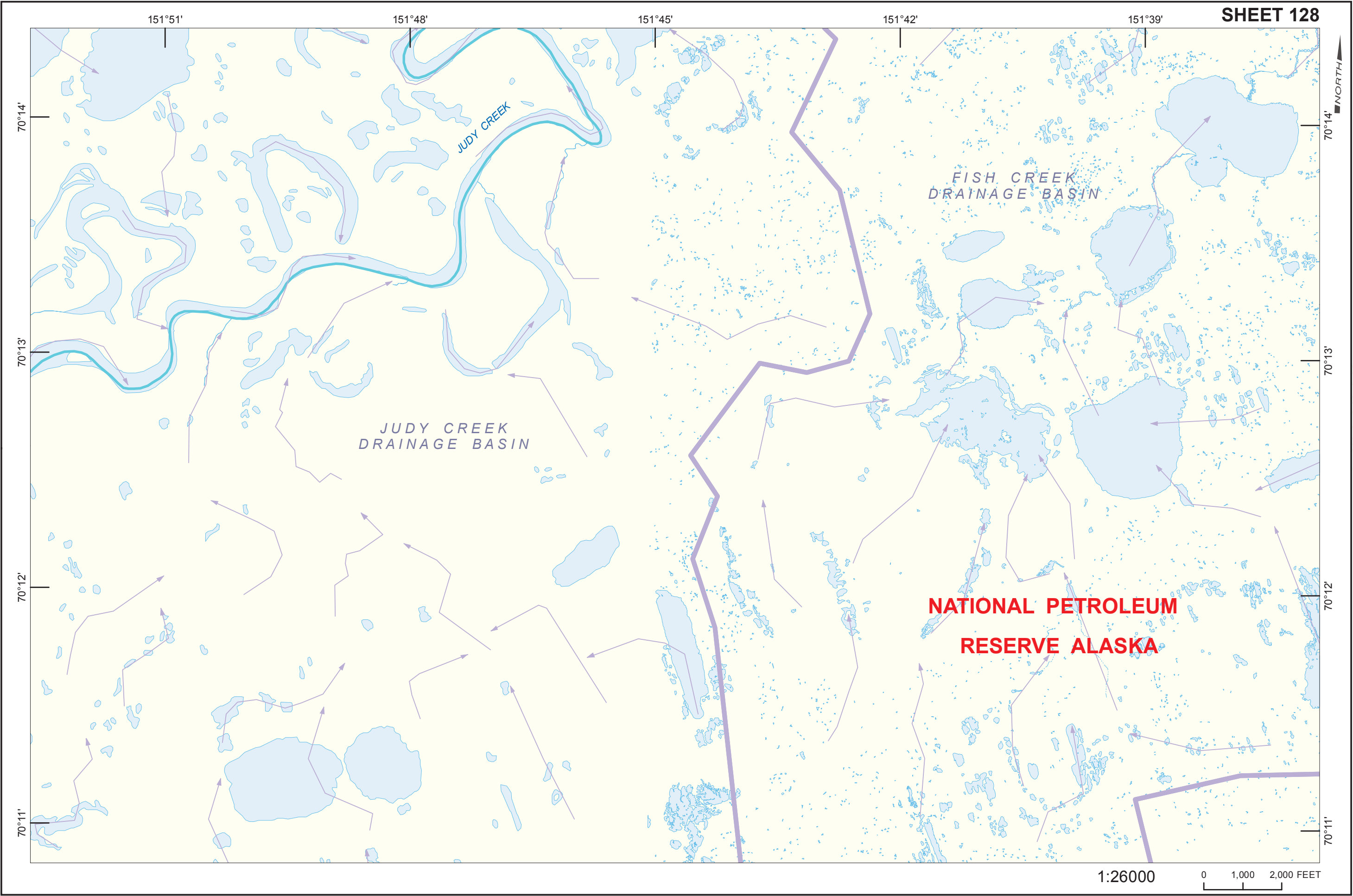
- There are no marine waters or shoreline on this sheet.


*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 127

Continue on sheet 132

Continue on sheet 129





PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.


GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- The Ublutuoch River provides habitat for anadromous whitefish and resident fish.

CULTURAL SITES

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AIR ACCESS*

- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 15 miles to the northeast. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Emergency landing for fixed-wing aircraft is available on the sand flats near the mouth of the Tingmeachsiovik River and on the sand flats west of the Nechelik Channel (Sheet 7).
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 11 miles to the east. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

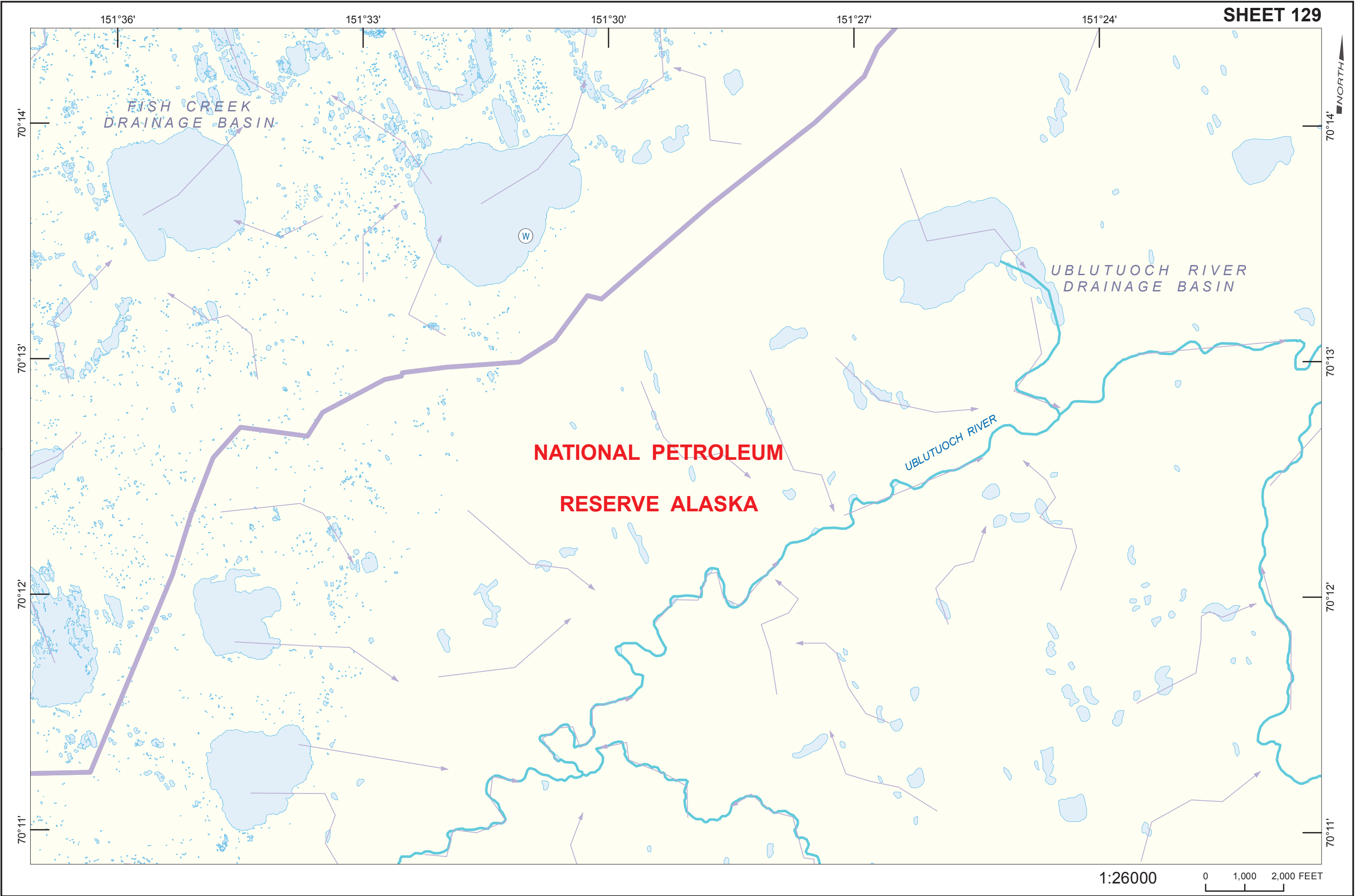
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shoreline on this sheet.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 128

Continue on sheet 130





PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- The Ublutuoch River provides habitat for anadromous whitefish and resident fish.

CULTURAL SITES

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AIR ACCESS*

- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 10 miles to the northeast. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Emergency landing for fixed-wing aircraft is available on the sand flats near the mouth of the Tingmeachsiovik River and on the sand flats west of the Nechelik Channel (Sheet 7).
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 5 miles to the east. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shoreline on this sheet.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.




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Continue on sheet 129

Continue on sheet 24


Continue on sheet 136

Continue on sheet 137




PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.



GENERAL SENSITIVITIES


- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Judy Creek and its tributary provide habitat for anadromous whitefish and resident fish.



CULTURAL SITES


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AIR ACCESS*

- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 30 miles to the northeast. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 25 miles to the east. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.



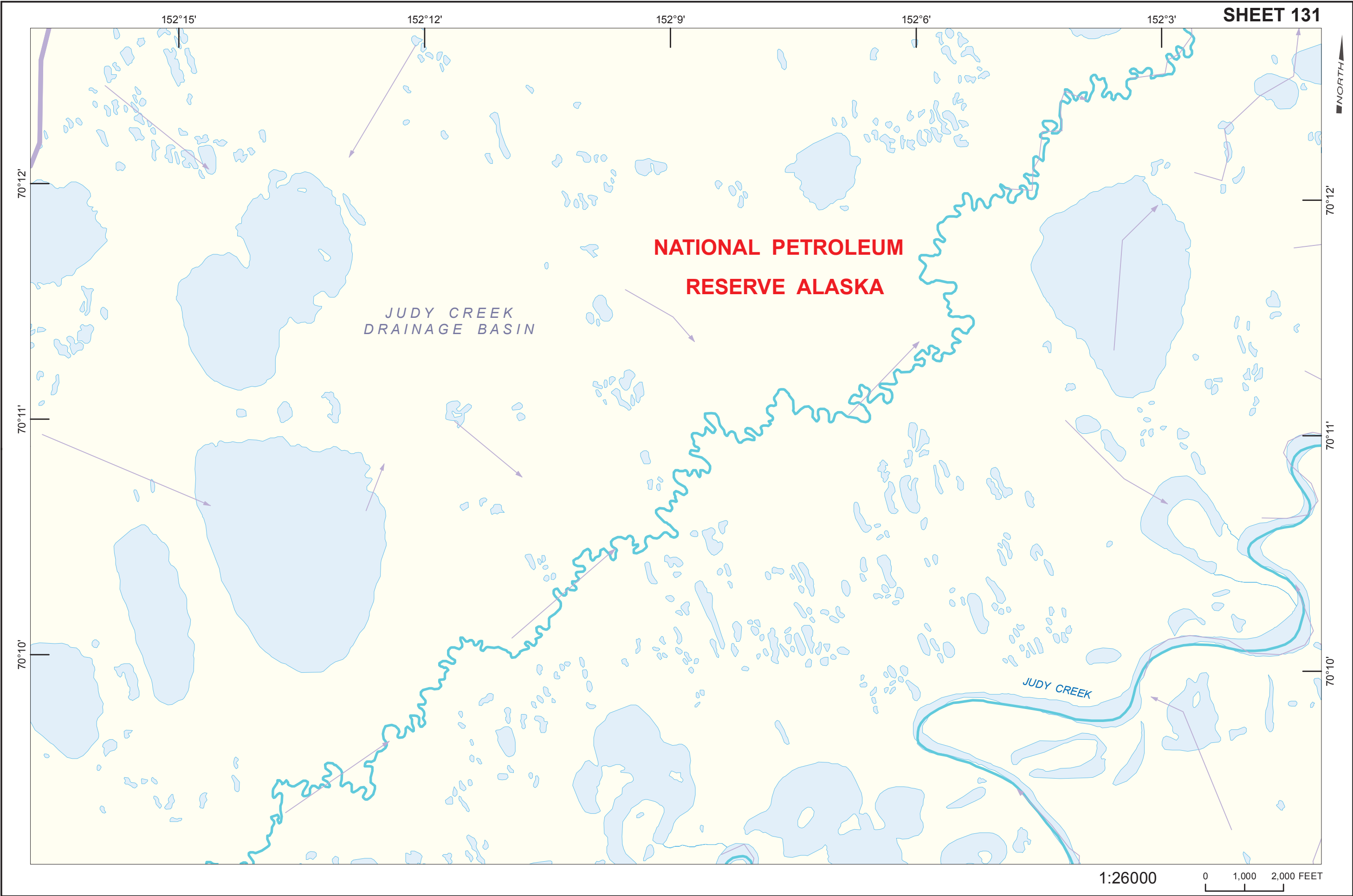
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS


- There are no marine waters or shoreline on this sheet.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 167


Continue on sheet 132






PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.



GENERAL SENSITIVITIES


- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Judy Creek provides habitat for anadromous whitefish and resident fish.



CULTURAL SITES


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AIR ACCESS*

- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 25 miles to the northeast. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 21 miles to the east. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.



VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shoreline on this sheet.


*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 131

Continue on sheet 128


Continue on sheet 133






PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.



GENERAL SENSITIVITIES


- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- The Ublutuoch River and its tributary provide habitat for resident fish.



CULTURAL SITES


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AIR ACCESS*

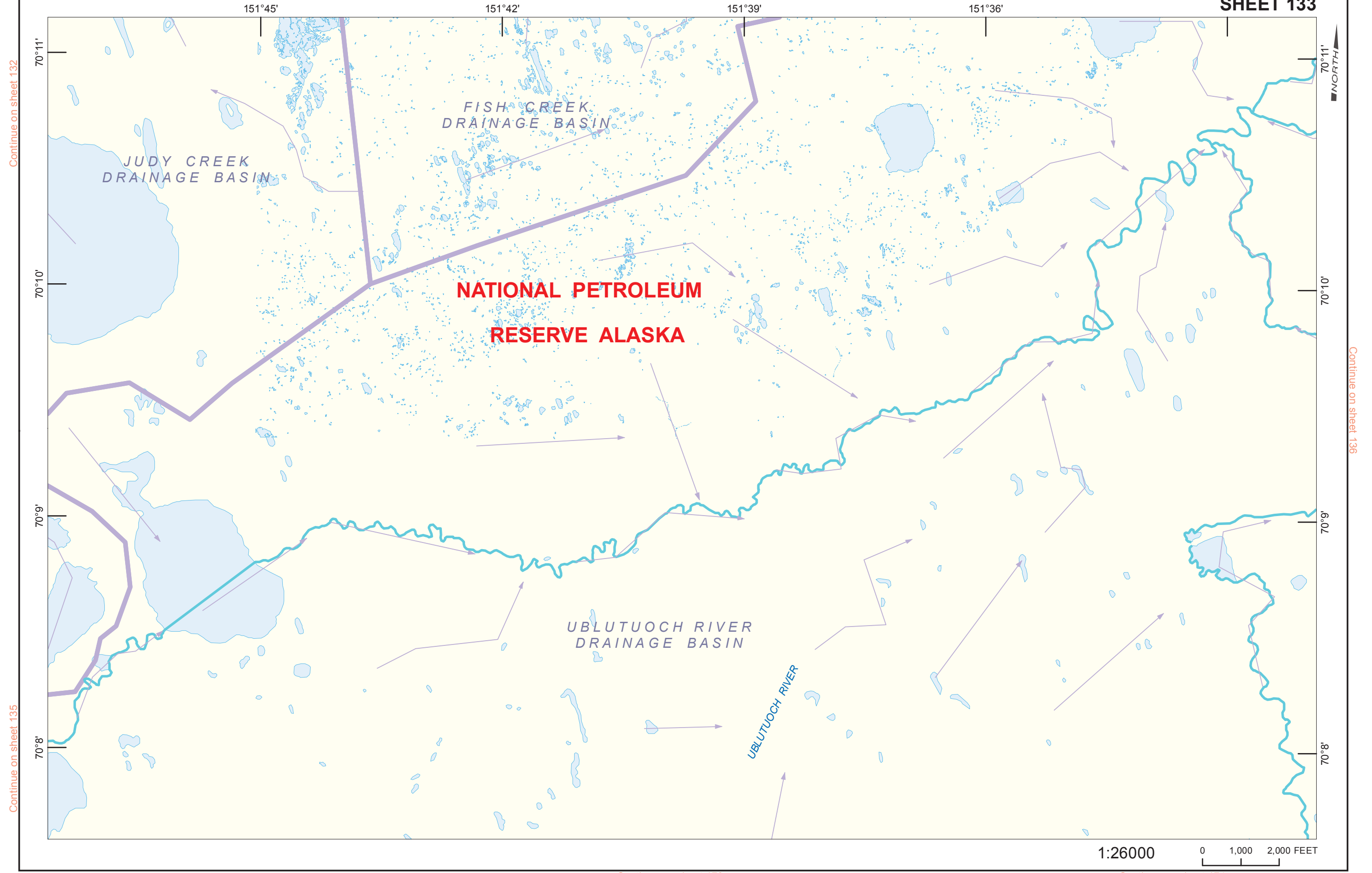
- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 20 miles to the northeast. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 15 miles to the northeast. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.



VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shoreline on this sheet.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.





PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Judy Creek and its tributary provide habitat for anadromous whitefish and resident fish.

CULTURAL SITES

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AIR ACCESS*

- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 30 miles to the northeast. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 27 miles to the northeast. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

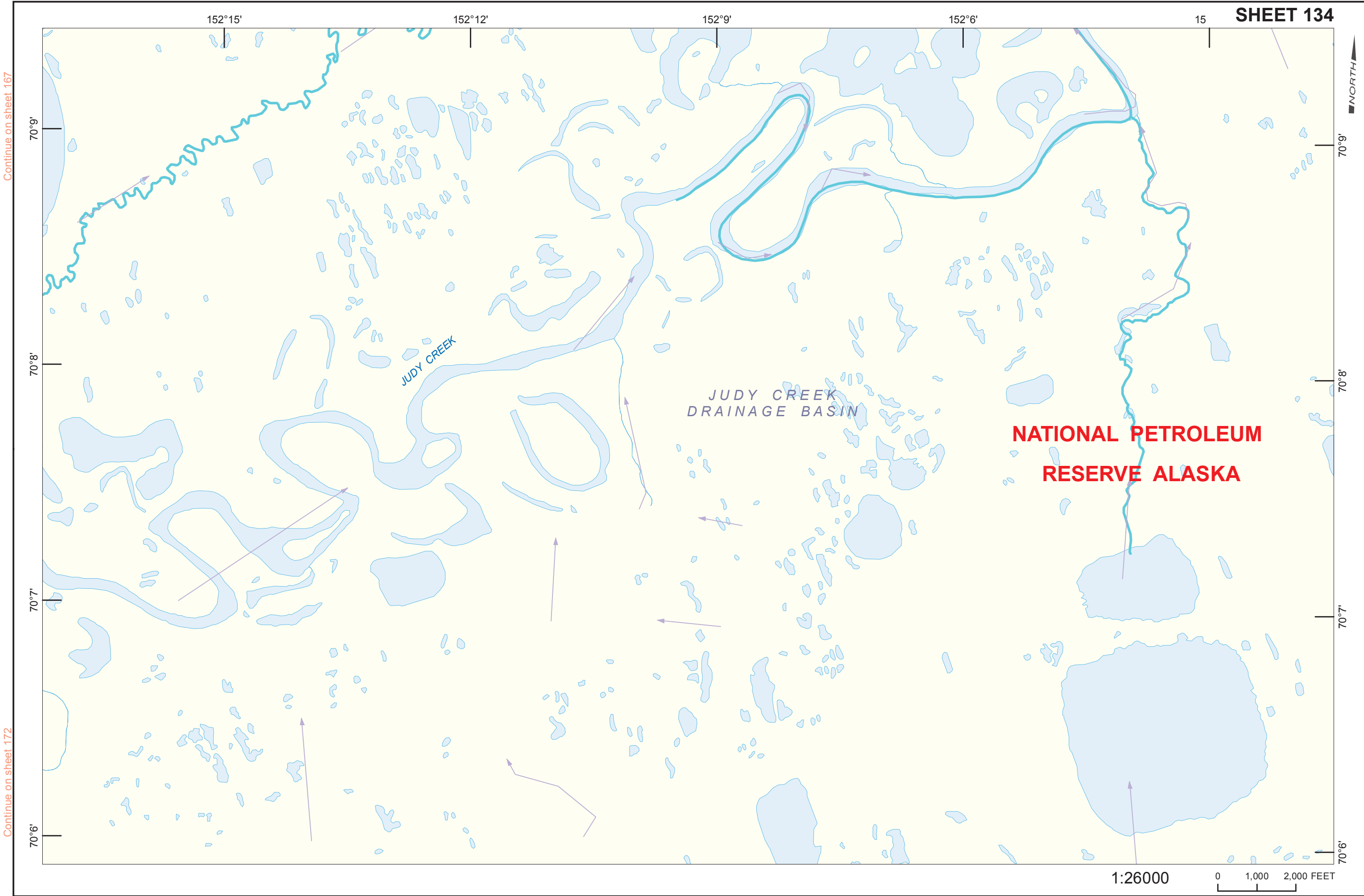
- There are no marine waters or shoreline on this sheet.


*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 167

Continue on sheet 172

Continue on sheet 135





PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.


GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.

CULTURAL SITES

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AIR ACCESS*

- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 25 miles to the northeast. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 22 miles to the northeast. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

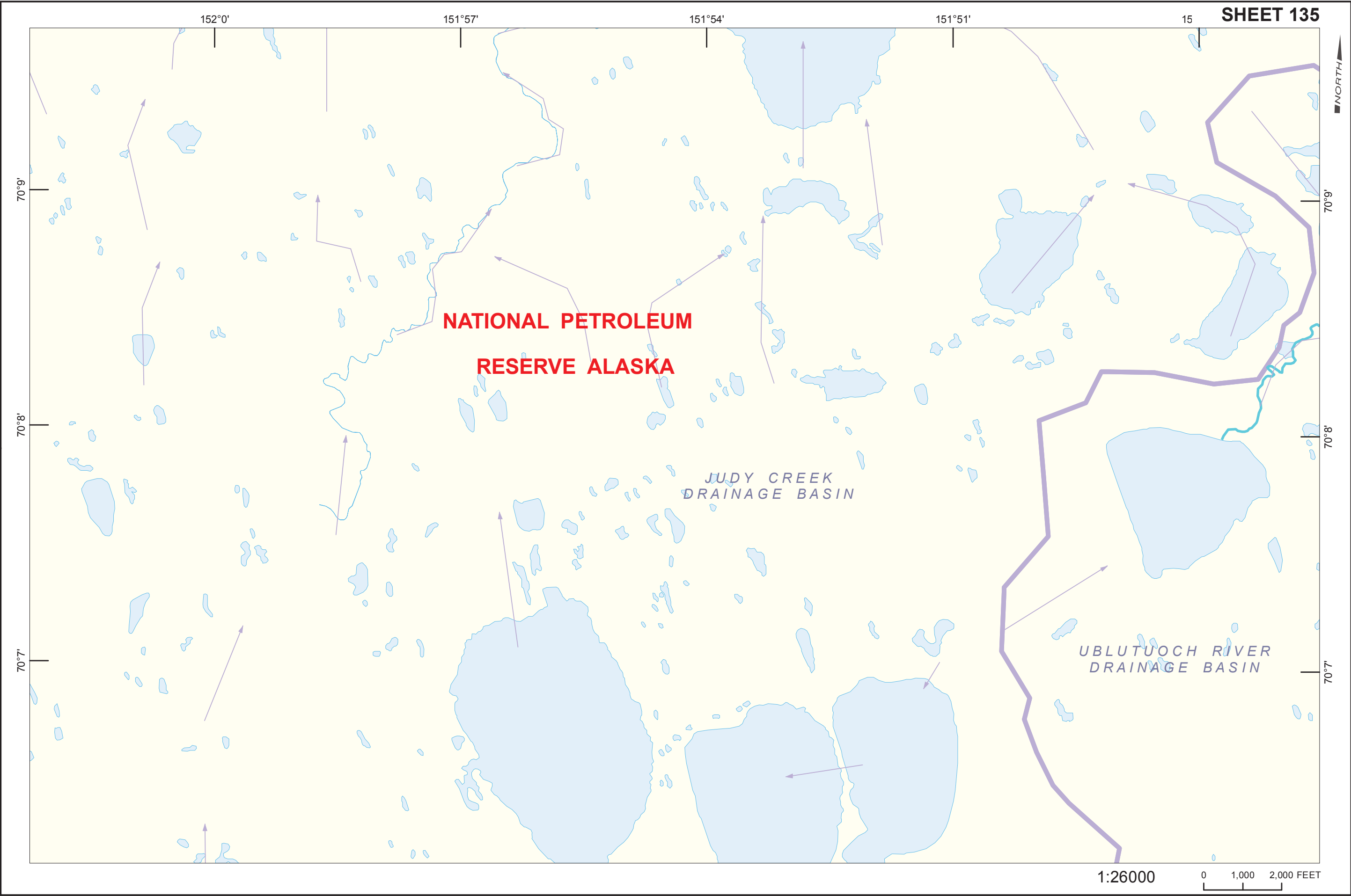
- There are no marine waters or shoreline on this sheet.


*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 134

Continue on sheet 133

Continue on sheet 173





PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.


GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- The Ublutuoch River and its tributary provide habitat for resident fish.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

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AIR ACCESS*

- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 15 miles to the northeast. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 11 miles to the northeast. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS


- There are no marine waters or shoreline on this sheet.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 133

Continue on sheet 137





PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.


GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.

CULTURAL SITES

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- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 6 miles to the northeast. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

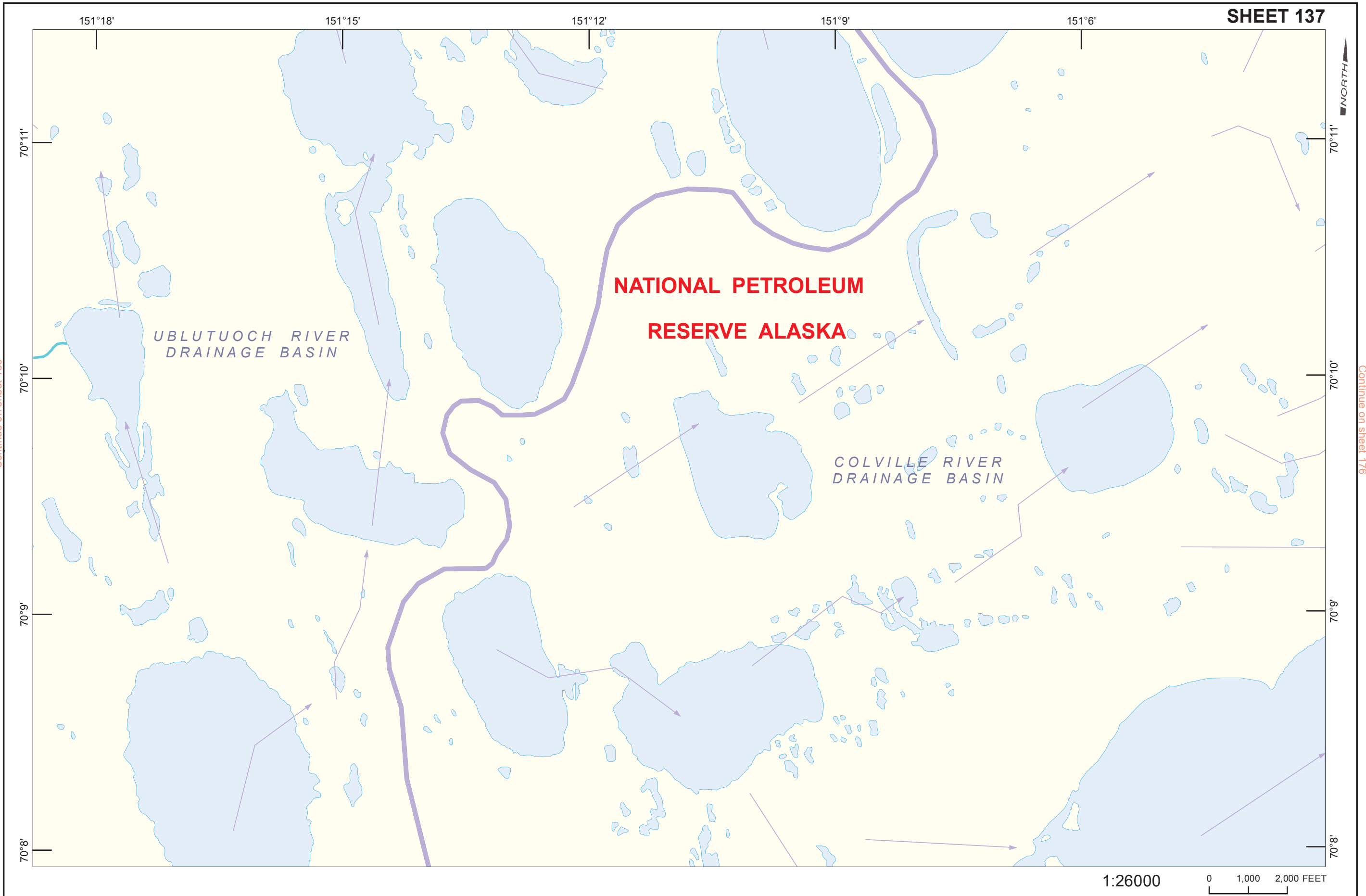
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shoreline on this sheet.


*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 136

Continue on sheet 176



Continue on sheet 174



PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.


GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- The delta at the mouth of the Piasuk River is a haulout area for spotted seals.
- The Alaktak River and Pittalukruak Lake provide habitat for fish.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

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AIR ACCESS*

- There is an aircraft landing strip located at Dew Line Site Lonely (Sheet 141) approximately 45 miles northeast of Pittalukruak Lake. This 5,000-ft gravel airstrip unattended and closed to the public. Runway is not maintained and condition is unknown.
- Commercial and air freight services are available at the Barrow airport (not on maps) approximately 50 miles to the northwest. This is a 6,500-ft asphalt airstrip.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- The Piasuk River is generally less than 3 feet deep with extensive shoaling and sandbars across the entrance to Smith Bay.

COUNTERMEASURES CONSIDERATIONS

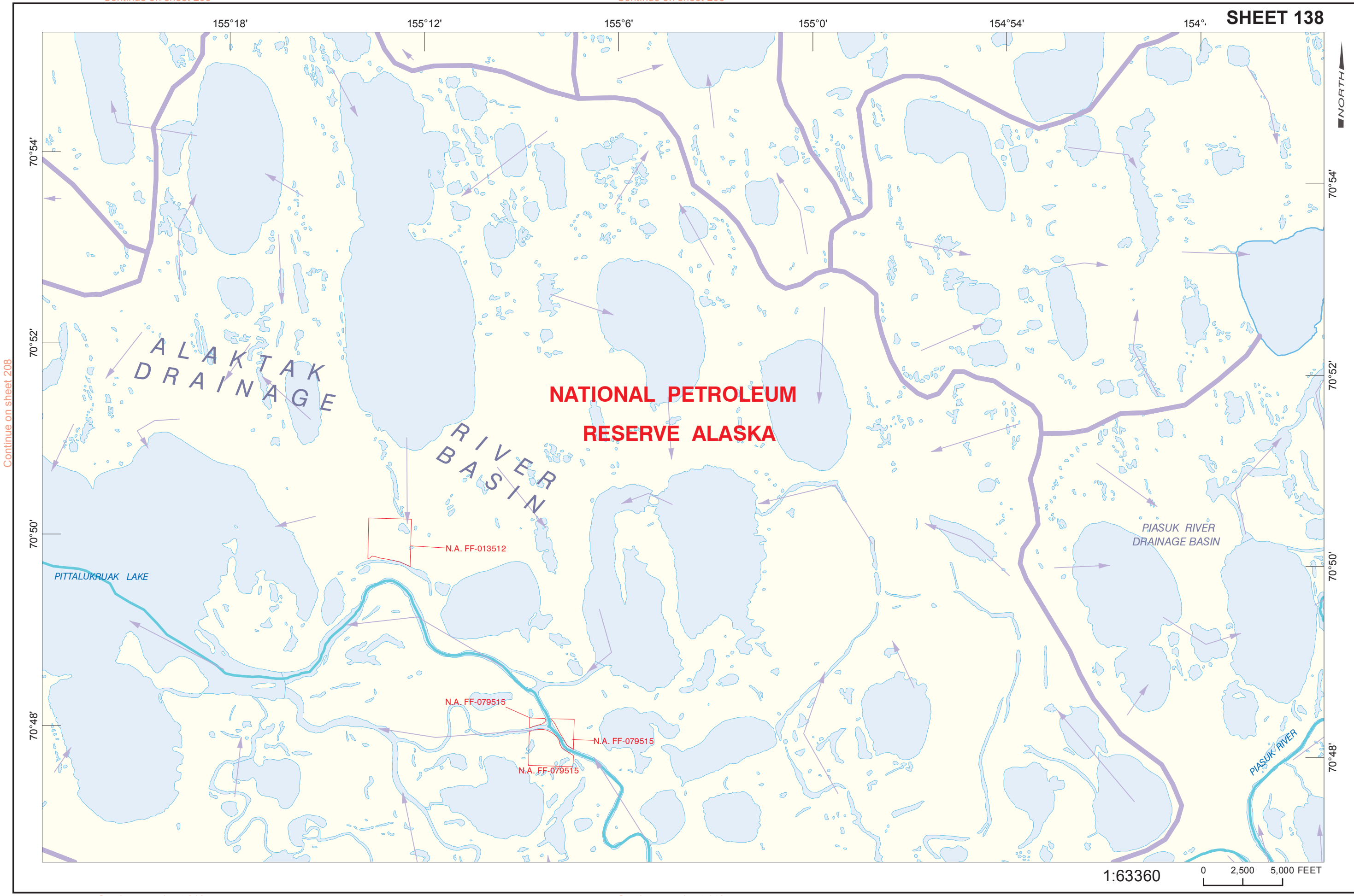
- Peat deposits fronting vegetated shorelines make access very difficult. Water depths, especially at the delta of the Piasuk River, are uncertain.
- The inlet forming the north side of the Piasuk River delta is a natural catchment area during sustained east and north-east winds.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

NOTE: All values given on these pages are for planning purposes only.

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Continue on sheet 139





PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS127	Mouth of the Plasuk River and barrier island.	Most sensitive during open water season. Prevent oil from entering the river.	C-13 or C-14	1200'
PS128	West side of the Plasuk River delta north to the mainland shore.	Most sensitive during open water season. Prevent oil from entering the inlet).	C-13 or C-14	4000'
* Priority Protection Area -- The entire Ikpikpuk River delta region is one large Priority Protection Area due to its size and numerous geographical features. On-site conditions may require the use of open water tactics to prevent oil migration into the delta.				

GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- The delta at the mouth of the Piasuk River is a haulout area for spotted seals.
- Feeding bowhead whales are known to congregate from August to October between Pitt Point (Sheet 141) and Point Barrow to the west.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

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AIR ACCESS*

- There is an aircraft landing strip located at Dew Line Site Lonely (Sheet 141) approximately 26 miles northeast of the Ikpikpuk River delta. This 5,000-ft gravel airstrip is unattended and closed to the public. Runway is not maintained and condition is unknown.
- Commercial and air freight services are available at the Barrow airport (not on maps) approximately 60 miles to the northwest. This is a 6,500-ft asphalt airstrip.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- Access is limited to shallow-draft vessels.
- The Piasuk River is generally less than 3 feet deep with extensive shoaling and sandbars across the entrance to Smith Bay.
- Extensive shoaling and sediment deposition by Ikpikpuk River impede navigation in Smith Bay.
- Ikpikpuk River average annual discharge rate of 2,270 cfs is sufficiently large to keep most floating oils off deltaic flats except during storm surge conditions from west or northwest winds.

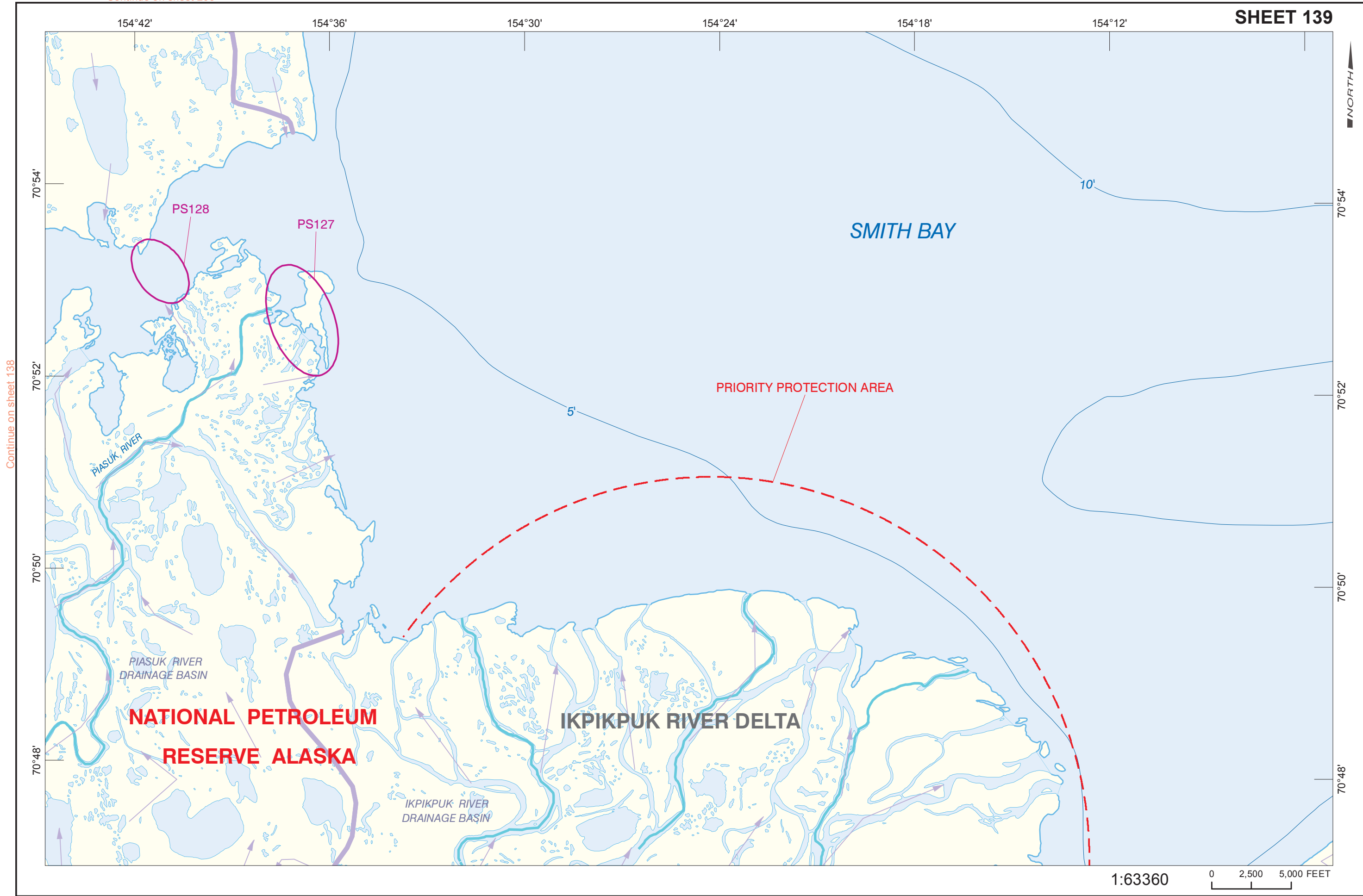
COUNTERMEASURES CONSIDERATIONS

- The inlet forming the north side of the Piasuk River delta is a natural catchment area during sustained east and north-east winds.
- This is a very complex shoreline area with many inlets, areas of washover, and polygonal subsiding tundra. Access is difficult. Large numbers of personnel may damage vegetation, causing excessive erosion.
- Peat deposits fronting vegetated shorelines make access very difficult. Water depths, especially at the delta of the Piasuk River, are uncertain.

*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

Continue on sheet 138

Continue on sheet 140





PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS125	Tidal breach area of coastal pond.	Most sensitive during open water season. Prevent oil from entering the pond.	C-14	400'
PS126	Outlet of small creek.	Most sensitive during open water season. Prevent oil from entering the creek.	C-14	200'

GENERAL SENSITIVITIES

- Nearshore areas are important staging sites for Oldsquaw, eiders, and phalaropes in August and September.
- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Feeding bowhead whales are known to congregate from August to October between Pitt Point (Sheet 141) and Point Barrow to the west.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- There is an aircraft landing strip located at Dew Line Site Lonely (Sheet 141) approximately 16 miles east of Drew Point. This 5,000-ft gravel airstrip is unattended and closed to the public. Runway is not maintained and condition is unknown.
- Commercial and air freight services are available at the Barrow airport (not on maps) approximately 75 miles northwest of Drew Point. This is a 6,500-ft, asphalt airstrip.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- Access is limited to shallow-draft vessels.
- Small boat shelter may be possible at Drew Pt.
- Extensive shoaling and sediment deposition by Ikpikpuk River impede navigation in Smith Bay.
- Ikpikpuk River average annual discharge rate of 2,270 cfs is sufficiently large to keep most floating oils off deltaic flats except during storm surge conditions from west or northwest winds.

COUNTERMEASURES CONSIDERATIONS

- Access east of Ikpikpuk River delta is very poor because of slumping bluffs and peat shores. Caution should be taken to prevent loss of equipment or further bluff erosion.
- Intermittent bluffs along the east shore of Smith Bay restrict access to beach and tundra surfaces.
- Beaches, where present, are very narrow. Beaches near Pt. McLeod have a sand/shell matrix with low load-bearing capacity. Peat shores south of Drew Pt. are accessible by foot only.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 139

Continue on sheet 141



1:63360

0 2,500 5,000 FEET



AIR ACCESS*

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS119	Eastern entrance to Pogik Bay.	Most sensitive during open water season. Prevent oil from entering the bay.	C-13 or C-14	2500'
PS120	Pogik Point to mainland across western entrance to Pogik Bay.	Most sensitive during open water season. Prevent oil from entering the bay.	C-13 or C-14	5000'
PS121	Outlet of small creek.	Most sensitive during open water season. Prevent oil from entering the creek.	C-14	200'
PS122	Tidal breach area of coastal pond.	Most sensitive during open water season. Tidal flats. Prevent oil from entering the pond.	C-14	200'
PS123	Tidal breach area of two coastal pond.	Most sensitive during open water season. Tidal flats. Prevent oil from entering the pond.	C-14	200'
PS124	Tidal breach area of coastal pond.	Most sensitive during open water season. Tidal flats. Prevent oil from entering the pond.	C-14	200'

COUNTERMEASURES CONSIDERATIONS

- Nearshore areas around Pitt Pt. are important staging sites for Oldsquaw, eiders, and phalaropes in August and September.
- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Feeding bowhead whales are known to congregate from August to October between Pitt Point (Sheet 141) and Point Barrow to the west.
- The Smith River provides habitat for fish.

- There is an aircraft landing strip located at Dew Line Site Lonely. This 5,000-ft gravel airstrip is unattended and closed to the public. Runway is not maintained and condition is unknown.
- Commercial and air freight services are available at the Barrow airport (not on maps) approximately 90 miles northwest of Pitt Point. This is a 6,500-ft, asphalt airstrip.

COUNTERMEASURES CONSIDERATIONS

- Beaufort Sea depths range from 8 to 10 ft only 200 meters offshore of the Pitt Pt. area.
- Lagoon southeast of Pitt Pt. is very shallow. Entrances across sand spits open and close with heavy seas and along-shore transport.
- Pogik Bay has large shoals blocking marine access. Water depths are probably less than 4 ft.

- Heavy peat deposits over much of the shoreline around Pogik Bay make access difficult. Caution should be taken to prevent loss of equipment or further bluff erosion. Mud tidal flats have little load-bearing capacity. Low slumping vegetated shorelines make footing unstable.
- Beaches west of Lonely have a sand/shell matrix with low load-bearing capacity. Access to sand/gravel beaches north and east of Lonely is good.
- The entire area around Okalik Lake is wet tundra and unsuitable for overland travel.
- Pogik Bay will tend to collect floating oil from either an east or west prevailing wind.

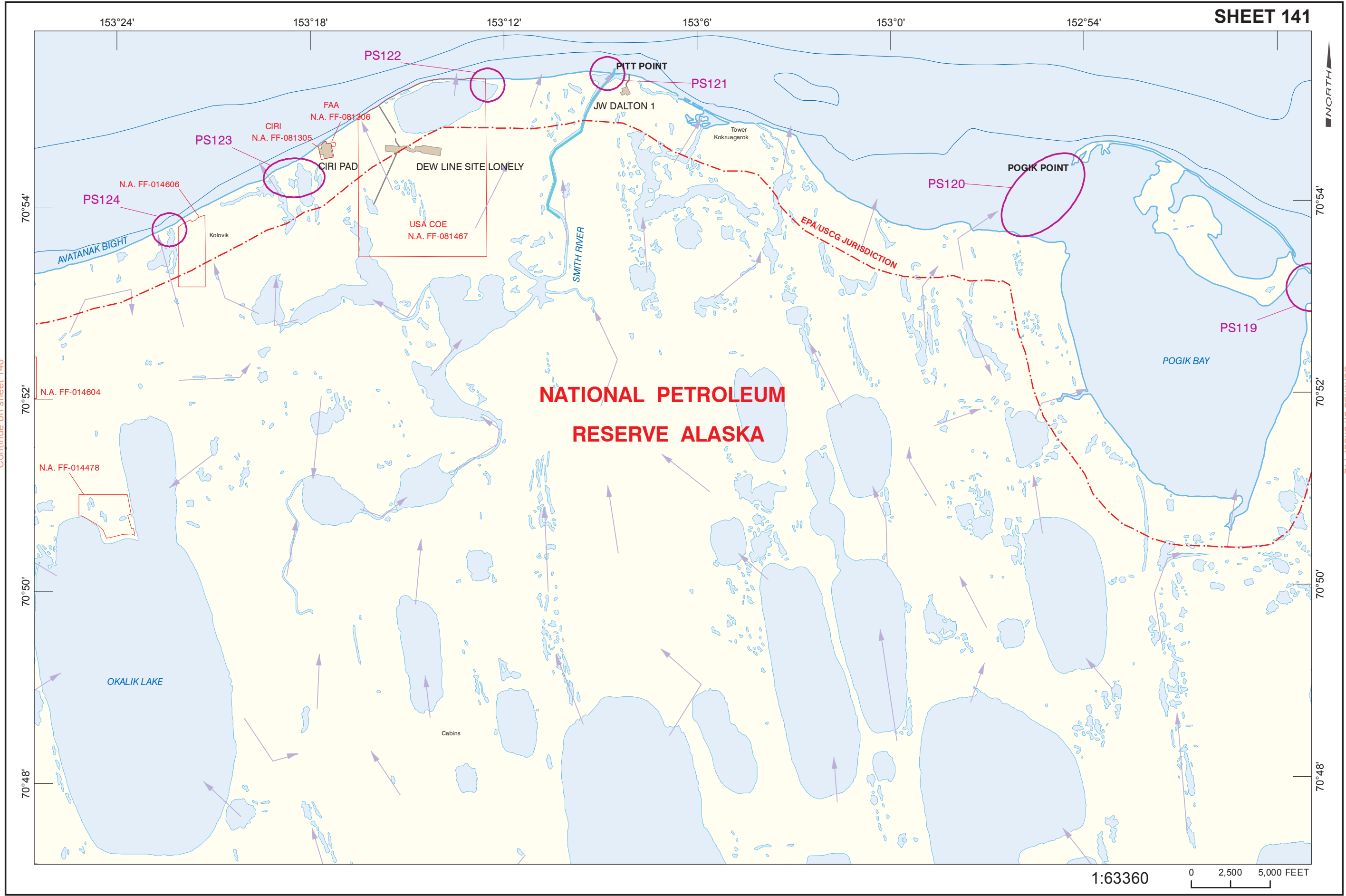
COUNTERMEASURES CONSIDERATIONS

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

NOTE: All values given on these pages are for planning purposes only.





PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS117	Ocean access to tidal pool.	Most sensitive during open water season. Prevent oil from entering the pool.	C-14	200'
PS118	Narrow inlet to a lake.	Most sensitive during open water season. Prevent oil from entering the lake.	C-13 or C-14	800'
PS119	Eastern entrance to Pogik Bay.	Most sensitive during open water season. Prevent oil from entering the bay.	C-13 or C-14	2500'

GENERAL SENSITIVITIES

- Nearshore areas around Cape Halkett are important staging sites for Oldsquaw, eiders, and phalaropes in August and September.
- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- There is an aircraft landing strip located at Dew Line Site Lonely (Sheet 141) approximately 14 miles west of Cameron Pt. This 5,000-ft gravel airstrip is unattended and closed to the public. Runway is not maintained and condition is unknown.
- Commercial and air freight services are available at the Barrow airport (not on maps) approximately 100 miles north-west of Cameron Point. This is a 6,500-ft, asphalt airstrip.

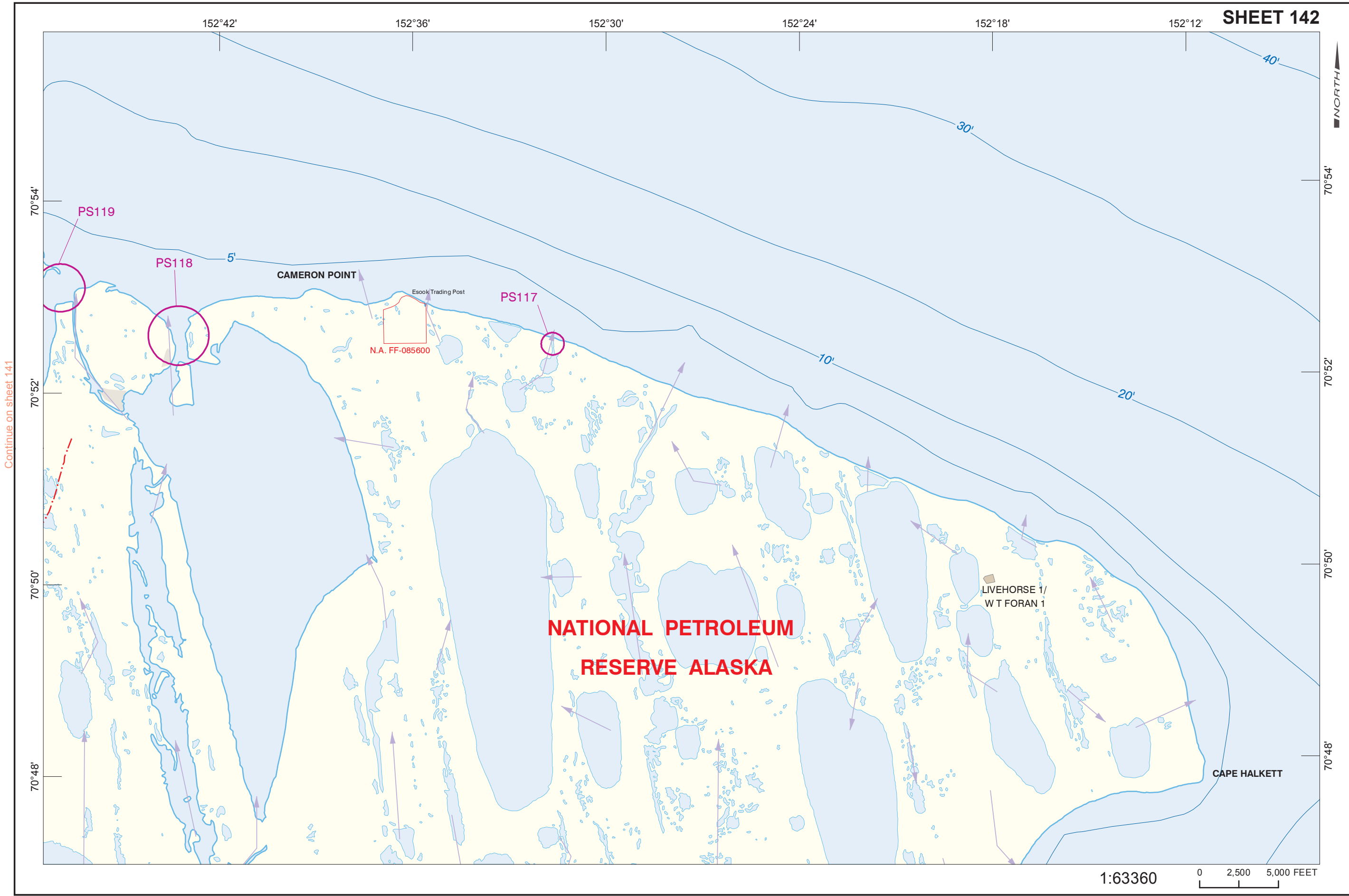
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS


- Pogik Bay and the large inlet west of Cameron Pt. have large shoals blocking marine access. Water depths are probably less than 4 ft.
- Sand shoals are present 0.7 miles east of Cape Halkett with 5 ft of water between cape and shoaling.

COUNTERMEASURES CONSIDERATIONS

- Heavy peat deposits and low slumping vegetated shoreline make access difficult and may preclude vehicular access. The area is backed by wet tundra. Caution should be taken to prevent loss of equipment or further bluff erosion. Mud tidal flats have little load-bearing capacity.
- Pogik Bay will tend to collect floating oil from either an east or west prevailing wind.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.





PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.


GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- The Alaktak and Ikpikpuk rivers provide habitat for fish.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- There is an aircraft landing strip located at Dew Line Site Lonely (Sheet 141) approximately 35 miles to the northeast. This 5,000-ft gravel airstrip is unattended and closed to the public. Runway is not maintained and condition is unknown.
- Commercial and air freight services are available at the Barrow airport (not on maps) approximately 55 miles to the northwest. This is a 6,500-ft, asphalt airstrip.

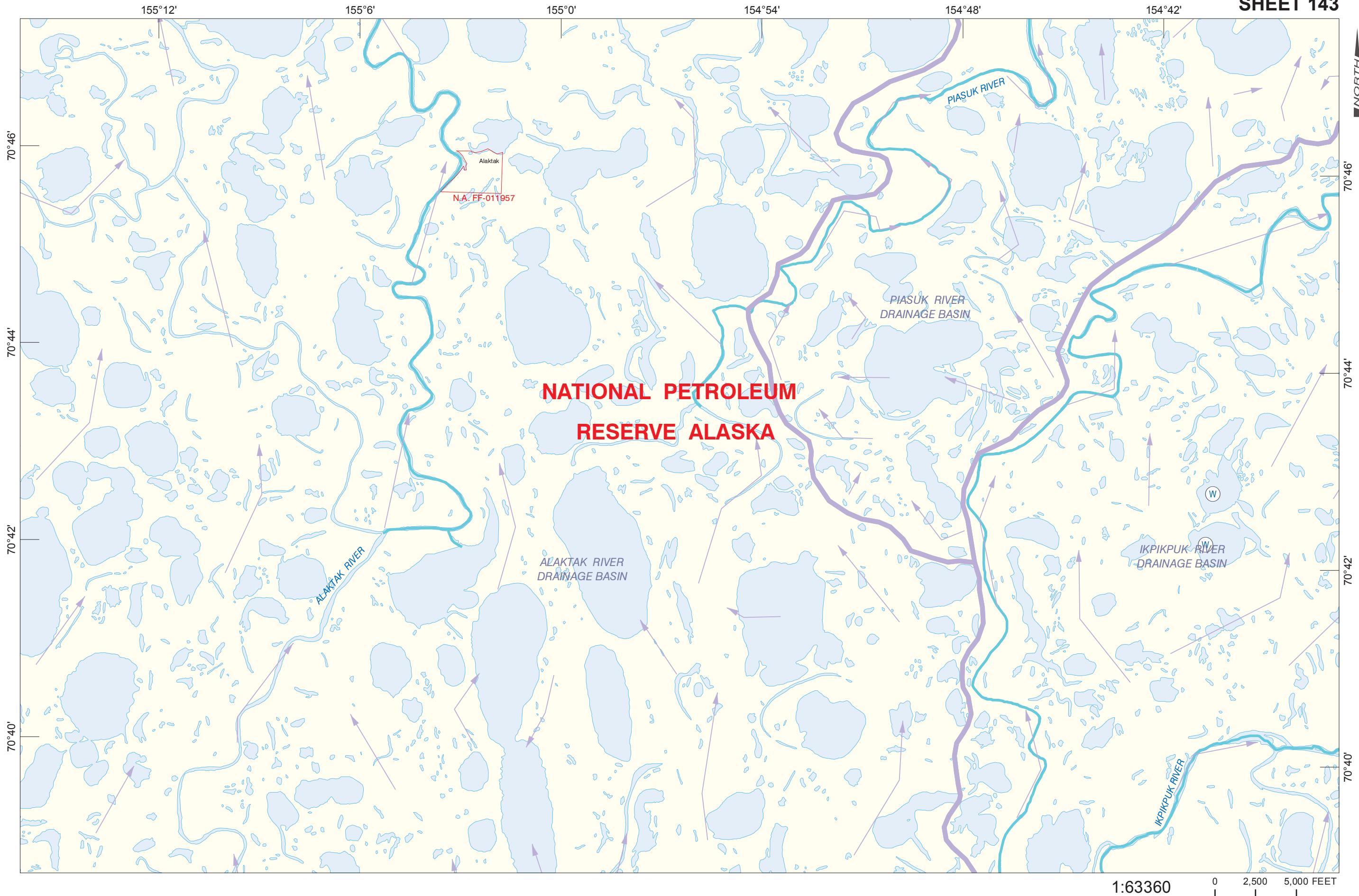
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 210

Continue on sheet 144



1:63360

0 2,500 5,000 FEET



PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

- Coastal areas and areas west and north of Teshekpuk Lake support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- The Miguakiak and Ikpihpuk rivers provide habitat for fish.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- There is an aircraft landing strip located at Dew Line Site Lonely (Sheet 141) approximately 24 miles northeast of Smith Bay. This 5,000-ft gravel airstrip is unattended and closed to the public. Runway is not maintained and condition is unknown.
- Commercial and air freight services are available at the Barrow airport (not on maps) approximately 70 miles to the northwest. This is a 6,500-ft, asphalt airstrip.
- An small, uncontrolled, unmaintained aircraft landing strip is reportedly located near the center of this map. Exact location, runway orientation, length, composition, and condition are unknown. No further information is available. Exercise extreme caution and perform visual inspection if considering for emergency use.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- Extensive shoaling and sediment deposition by Ikpihpuk River impede navigation in Smith Bay.
- Ikpihpuk River average annual discharge rate of 2,270 cfs is sufficiently large to keep most floating oils off deltaic flats except during storm surge conditions from west or northwest winds.

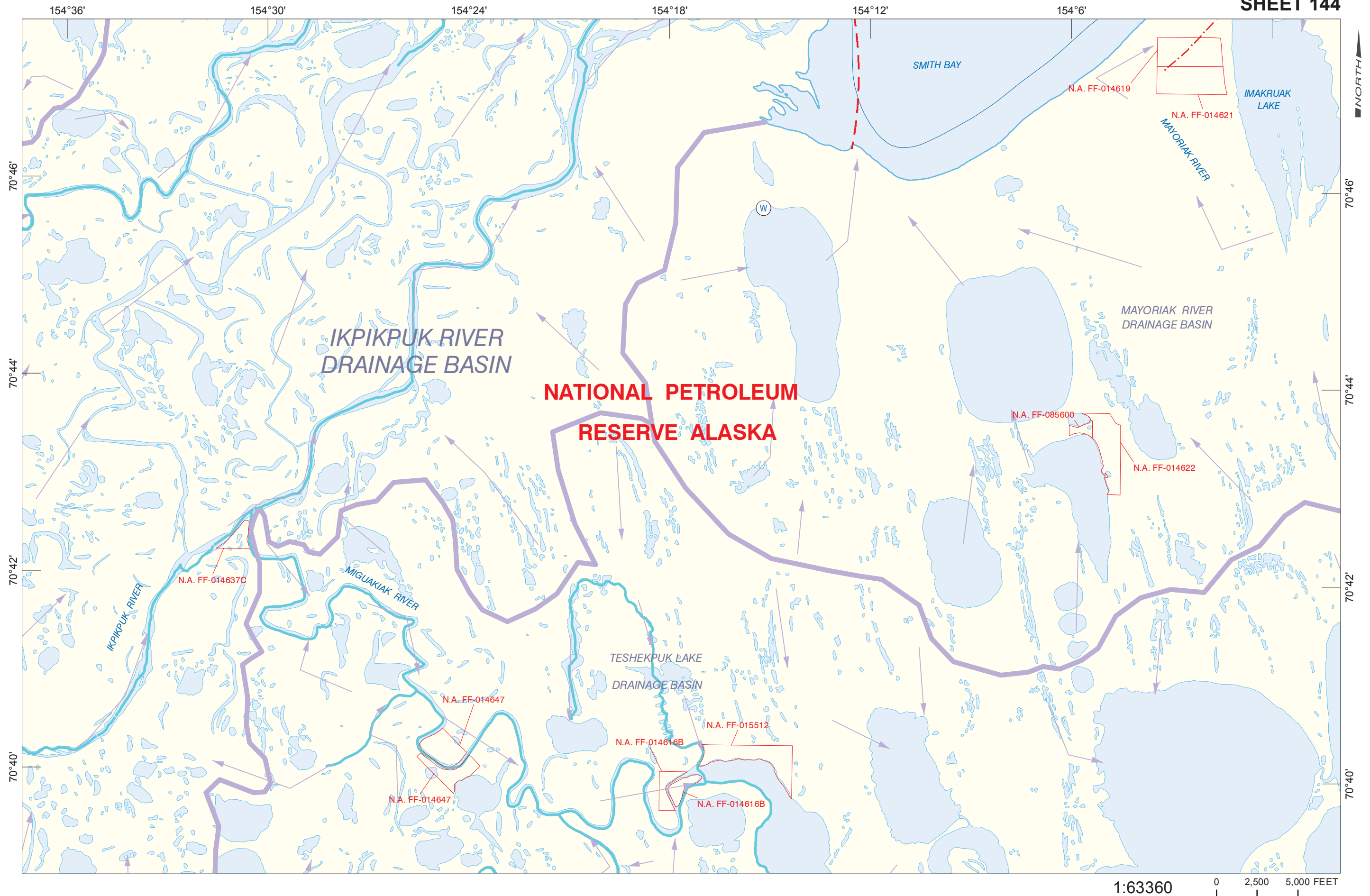
COUNTERMEASURES CONSIDERATIONS

- Access east of Ikpihpuk River delta is very poor because of slumping bluffs and peat shores. Caution should be taken to prevent loss of equipment or further bluff erosion.
- Intermittent bluffs along east shore of Smith Bay restrict access to beach and tundra surfaces.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.


Continue on sheet 143

Continue on sheet 145



1:63360

0 2,500 5,000 FEET



PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.


GENERAL SENSITIVITIES

- Coastal areas and areas west and north of Teshekpuk Lake support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Teshekpuk Lake provides habitat for fish.

CULTURAL SITES

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AIR ACCESS*

- There is an aircraft landing strip located at Dew Line Site Lonely (Sheet 141) approximately 15 miles northeast of Teshekpuk Lake. This 5,000-ft gravel airstrip is unattended and closed to the public. Runway is not maintained and condition is unknown.
- Commercial and air freight services are available at the Barrow airport (not on maps) approximately 80 miles northwest of Teshekpuk Lake. This is a 6,500-ft, asphalt airstrip.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

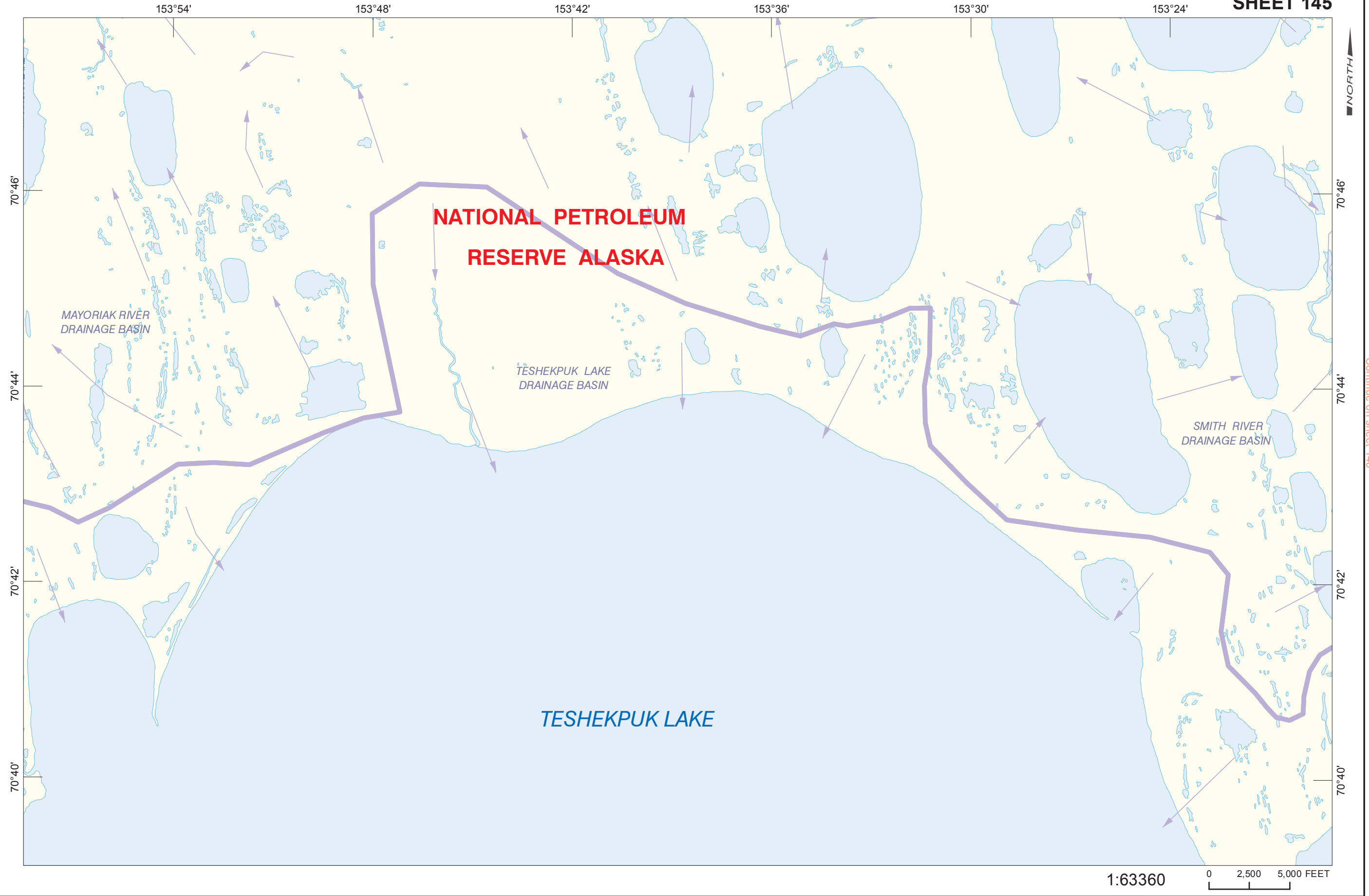
Continue on sheet 140

Continue on sheet 141

SHEET 145

Continue on sheet 144

Continue on sheet 146



Continue on sheet 149

Continue on sheet 150



PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

- Coastal areas and areas between Teshekpuk Lake and the coast support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of geese molt in the area north and east of Teshekpuk Lake in July and early August.
- Teshekpuk Lake provides habitat for fish.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

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AIR ACCESS*

- There is an aircraft landing strip located at Dew Line Site Lonely (Sheet 141) approximately 16 miles north of Teshekpuk Lake. This 5,000-ft gravel airstrip is unattended and closed to the public. Runway is not maintained and condition is unknown.
- There is an aircraft landing strip located at the Dew Line Site on the north shore of Kogru River inlet (Sheet 152) approximately 20 miles to the southeast. This an 1,800-ft gravel airstrip. Runway condition is unknown.
- Commercial and air freight services are available at the Barrow airport (not on maps) approximately 95 miles northwest of Teshekpuk Lake. This is a 6,500-ft, asphalt airstrip.

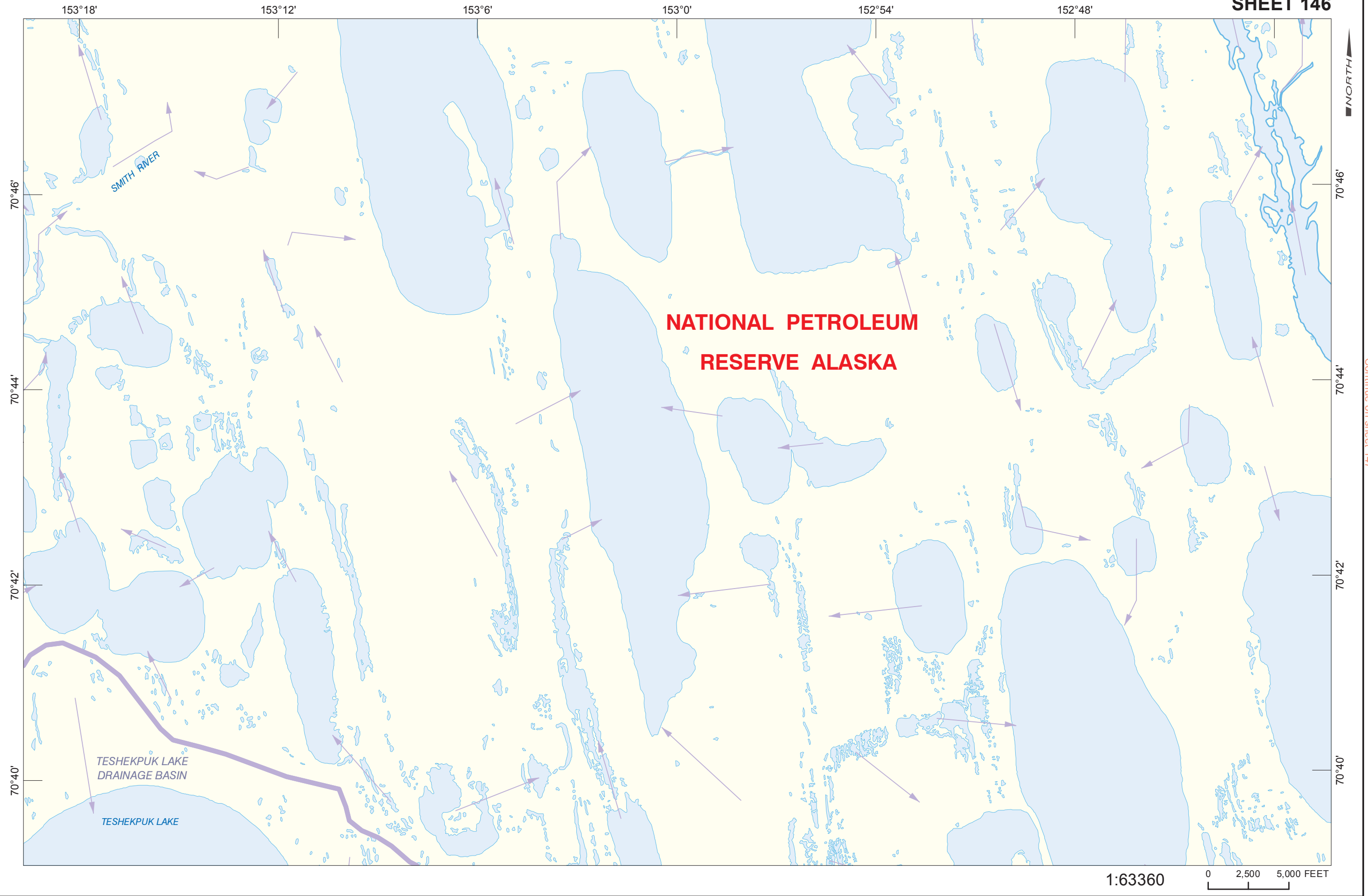
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.


Continue on sheet 145

Continue on sheet 147



Continue on sheet 150

Continue on sheet 151



PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS115	Co-located outlets of two unnamed small creeks.	Most sensitive during open water season. Prevent oil from entering the creeks.	C-14	100'
PS116	Small inlet being fed by a marsh drainage river.	Most sensitive during open water season. Prevent oil from migrating inland.	C-13 or C-14	3000'


GENERAL SENSITIVITIES

- Coastal areas and areas between Teshekpuk Lake and the coast support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Nearshore areas around Cape Halkett are important staging sites for Oldsquaw, eiders, and phalaropes in August and September.
- Concentrations of geese molt in the area north and east of Teshekpuk Lake in July and early August.

CULTURAL SITES

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AIR ACCESS*

- There is an aircraft landing strip located at Dew Line Site Lonely (Sheet 141) approximately 25 miles to the northwest. This 5,000-ft gravel airstrip is unattended and closed to the public. Runway is not maintained and condition is unknown.
- There is an aircraft landing strip located at the Dew Line Site on the north shore of Kogru River inlet (Sheet 152) approximately 10 miles to the south. This an 1,800-ft gravel airstrip. Runway condition is unknown.
- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 45 miles to the southeast. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 50 miles to the southeast. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- The Pacific Shoal, with water depths of 3 to 6 ft, begins 5 miles southeast of Cape Halkett (Sheet 142) and extends 5 miles south toward Atigaru Point (Sheet 2).
- Extensive shoaling occurs along the shoreline and near the embayment of the unnamed stream near the center of this map.

COUNTERMEASURES CONSIDERATIONS

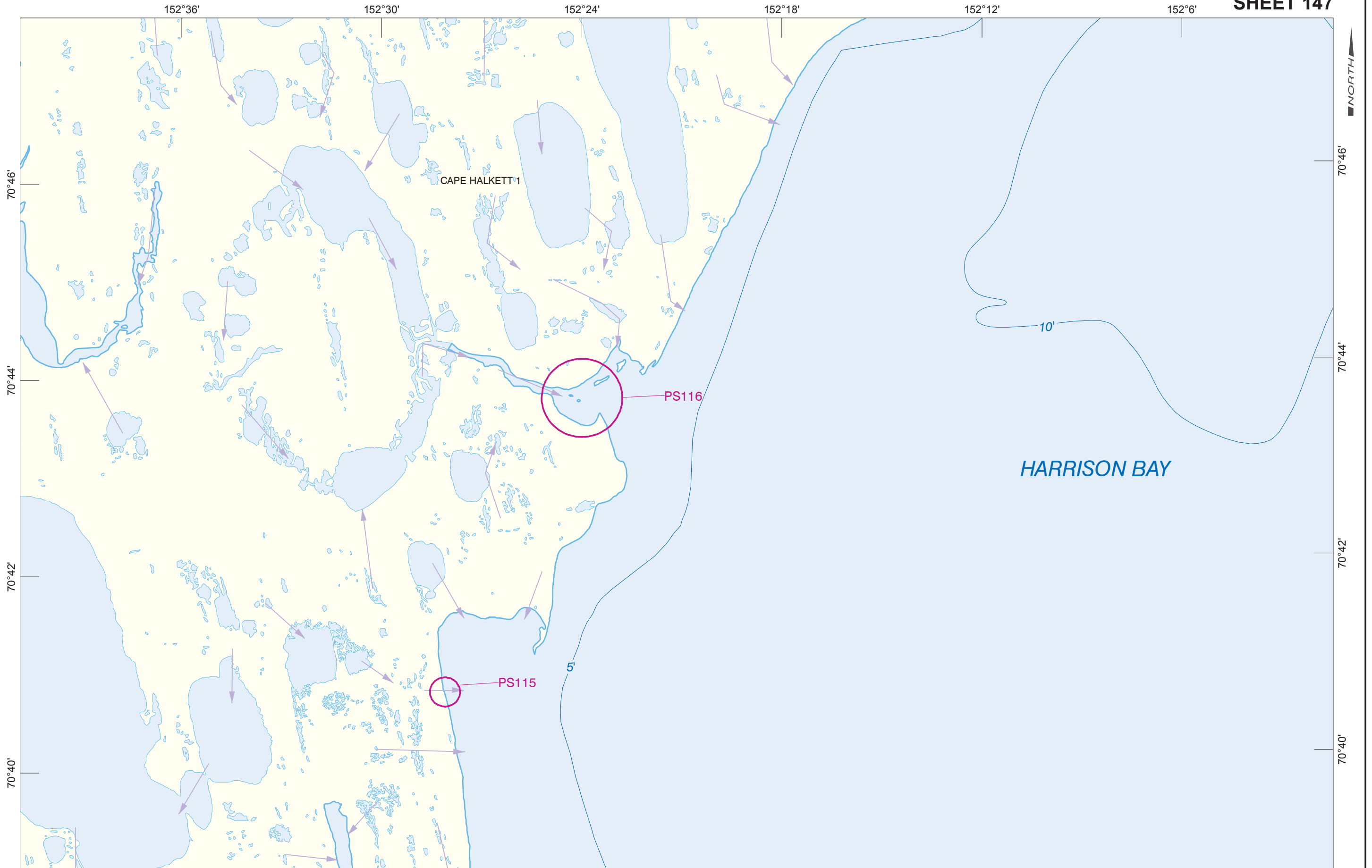
- Peat shores and vegetated shoreline south of Cape Halkett preclude anything but foot access. Caution should be exercised to prevent loss of equipment or bluff erosion.
- The small lagoon below and left of the center of the map will collect current-swept floating oil and trap it behind the sand spit at the eastern side of the lagoon.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 142

SHEET 147

Continue on sheet 146




70°46'
70°44'
70°42'
70°40'

1:63360 0 2,500 5,000 FEET

Continue on sheet 151

Continue on sheet 152



PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.


GENERAL SENSITIVITIES

- The Chipp and Ikpikpuk rivers provide habitat for fish.

CULTURAL SITES

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AIR ACCESS*

- There is an aircraft landing strip located at Dew Line Site Lonely (Sheet 141) approximately 45 miles to the northeast. This 5,000-ft gravel airstrip is unattended and closed to the public. Runway is not maintained and condition is unknown.
- Commercial and air freight services are available at the Barrow airport (not on maps) approximately 65 miles to the northwest. This is a 6,500-ft, asphalt airstrip.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

NOTE: All values given on these pages are for planning purposes only.

Continue on sheet 211

Continue on sheet 149



1:63360

0 2,500 5,000 FEET



PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

- Coastal areas and areas west and north of Teshekpuk Lake support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- The Miguakiak River and Teshekpuk Lake provide habitat for fish.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

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AIR ACCESS*

- There is an aircraft landing strip located at Dew Line Site Lonely (Sheet 141) approximately 30 miles to the northeast. This 5,000-ft gravel airstrip is unattended and closed to the public. Runway is not maintained and condition is unknown.
- Commercial and air freight services are available at the Barrow airport (not on maps) approximately 75 miles to the northwest. This is a 6,500-ft, asphalt airstrip.

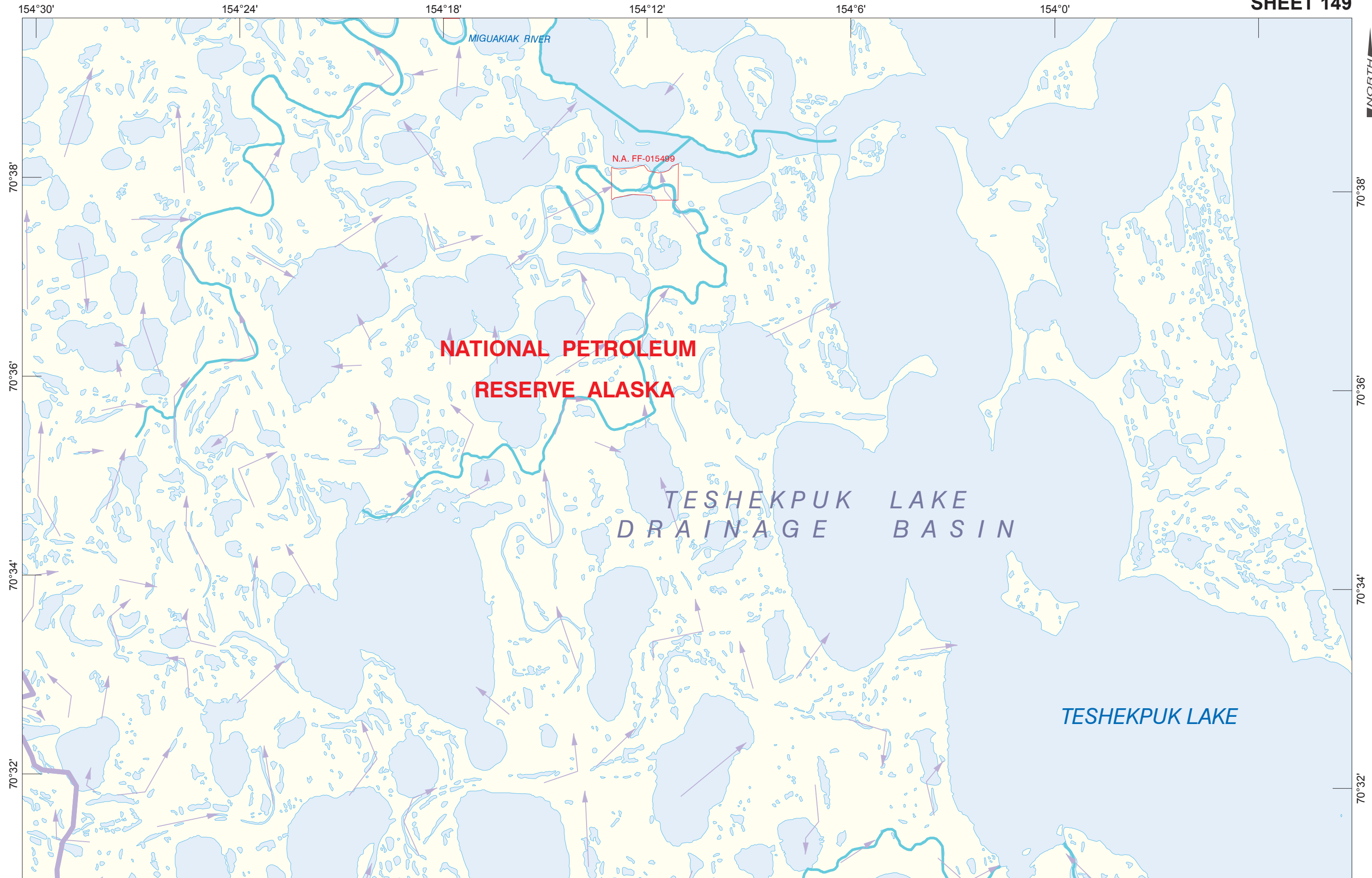
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 148

Continue on sheet 150



TESHEKPUK LAKE

TESHEKPUK LAKE
DRAINAGE BASIN

NATIONAL PETROLEUM
RESERVE ALASKA

MIGUAKIAK RIVER

N.A. FF-015409

1:63360 0 2,500 5,000 FEET



PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

- Coastal areas and areas between Teshekpuk Lake and the coast support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of geese molt in the area north and east of Teshekpuk Lake in July and early August.
- Teshekpuk Lake provides habitat for fish.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

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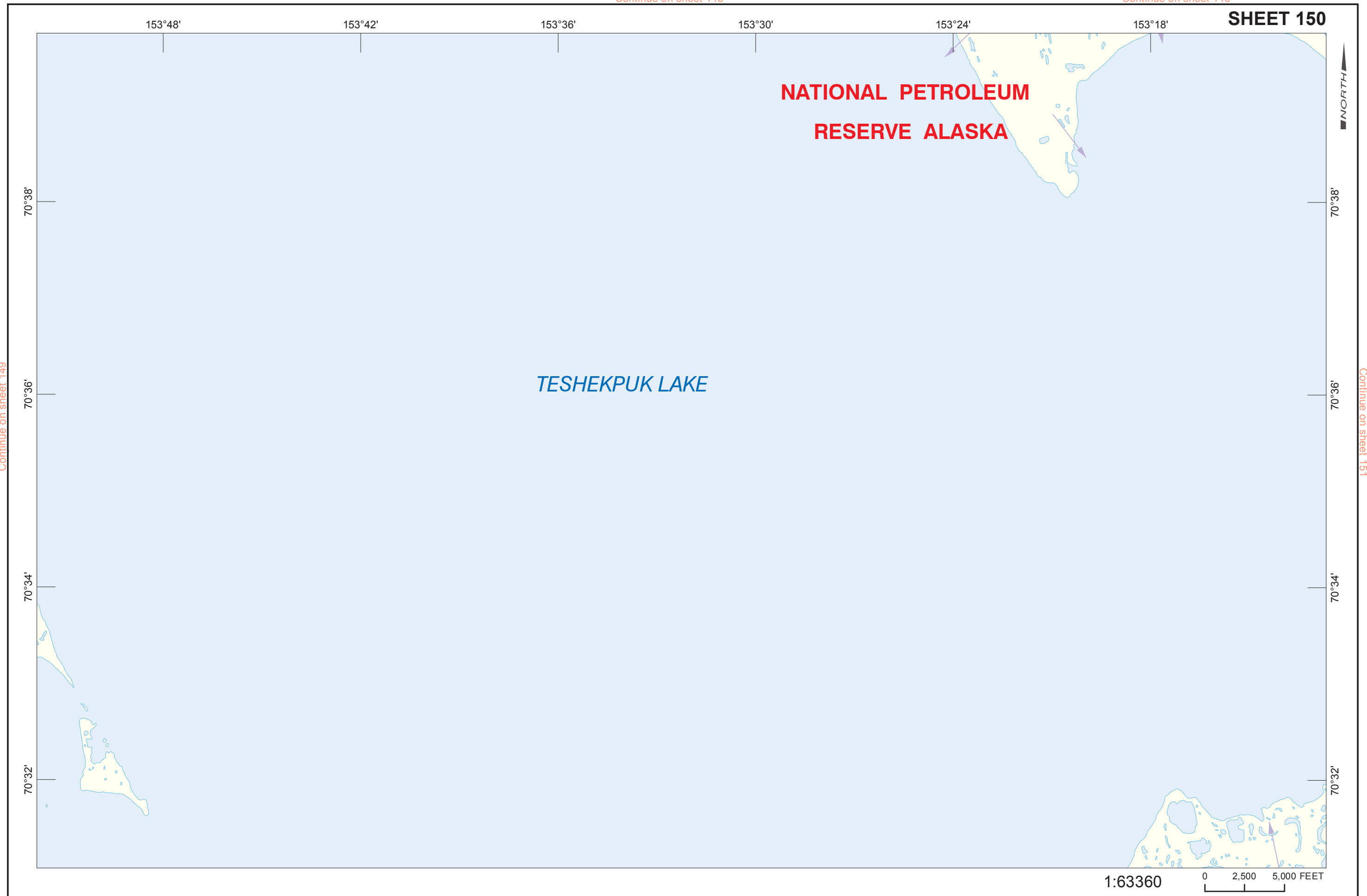
AIR ACCESS*

- There is an aircraft landing strip located at Dew Line Site Lonely (Sheet 141) approximately 23 miles to the north. This 5,000-ft gravel airstrip is unattended and closed to the public. Runway is not maintained and condition is unknown.
- Commercial and air freight services are available at the Barrow airport (not on maps) approximately 90 miles to the northwest. This is a 6,500-ft, asphalt airstrip.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.





PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

- Coastal areas and areas between Teshekpuk Lake and the coast support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of geese molt in the area north and east of Teshekpuk Lake in July and early August.
- Teshekpuk Lake provides habitat for fish.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



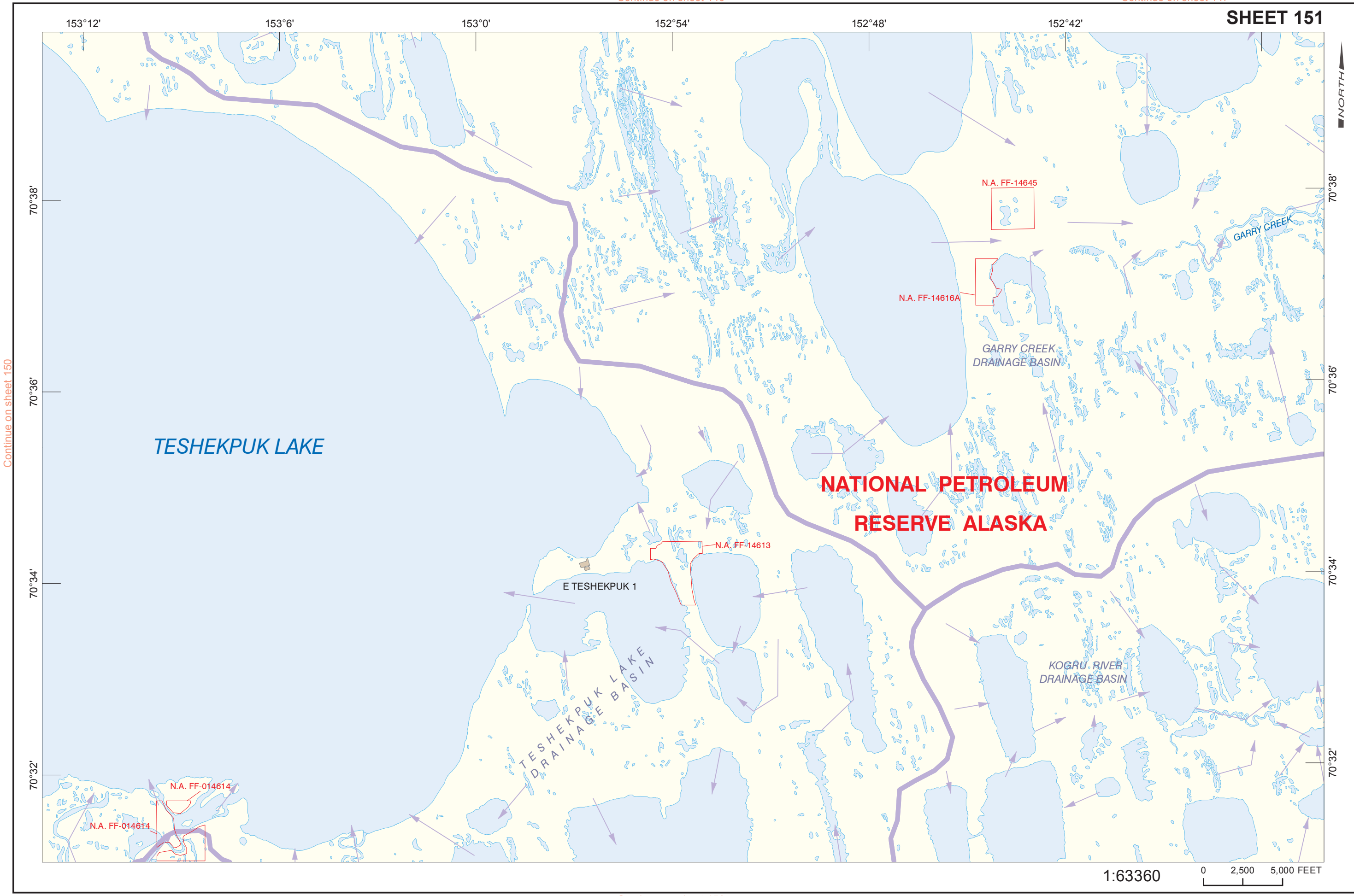
AIR ACCESS*

- There is an aircraft landing strip located at the Dew Line Site on the north shore of Kogru River inlet (Sheet 152) approximately 16 miles east of E. Teshekpuk 1. This an 1,800-ft gravel airstrip. Runway condition is unknown.
- There is an aircraft landing strip located at Dew Line Site Lonely (Sheet 141) approximately 24 miles north of E. Teshekpuk 1. This 5,000-ft gravel airstrip is unattended and closed to the public. Runway is not maintained and condition is unknown.
- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 50 miles to the southeast. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 50 miles to the southeast. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS


- There are no marine waters or shorelines on this map.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.



Continue on sheet 150

Continue on sheet 152



NORTH SLOPE SPILL RESPONSE

ACS

A WORLD CLASS ORGANIZATION

PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS53	Tidal pond	Most sensitive during open water season. Peat shoreline. Prevent oil from entering the ond.	C-13 or C-14	500'
PS112	Shore to shore across the mouth of the Kogru River.	Most sensitive during open water season. Tundra cliffs and vegetated low banks. Prevent oil from entering the river.	C-13 or C-14	4,000'
PS113	Entrance and ocean-fac-ing extent of a small inlet.	Most sensitive during open water season. Prevent oil from entering the inlet.	C-13 or C-14	400'
PS114	Shore to shore across the mouth of Garry Creek.	Most sensitive during open water season. Prevent oil from entering the creek.	C-13 or C-14	2,000'


GENERAL SENSITIVITIES

- Coastal areas and areas between Teshekpuk Lake and the coast support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of geese molt in the area north and east of Teshekpuk Lake in July and early August.

CULTURAL SITES

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NORTH SLOPE SPILL RESPONSE

ACS

A WORLD CLASS ORGANIZATION

AIR ACCESS*

- There is an aircraft landing strip located at the Dew Line Site on the north shore of Kogru River inlet. This an 1,800-ft gravel airstrip. Runway condition is unknown.
- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 30 miles southeast of Saktuina Pt. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 35 miles southeast of Saktuina Pt. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- Severe shoaling and sediment transport occur in nearshore areas and restrict water depths across the mouth of the Kogru River inlet to 3 to 5 ft. Water depths in the inlet are generally 5 to 8 ft. Boat access to the inlet must proceed from the north through the passage between Saktuina Pt. and the Eskimo Islands.

COUNTERMEASURES CONSIDERATIONS

- Access is very poor due to wide and extensive peat deposits along the shoreline. Extreme caution should be used to prevent loss of equipment. Nearshore waters are very shallow, precluding most vessel access.
- Beaches are very narrow and are often interrupted by vegetated shoreline or bluffs.
- All of Kogru River inlet will tend to trap westerly transport of floating oil.

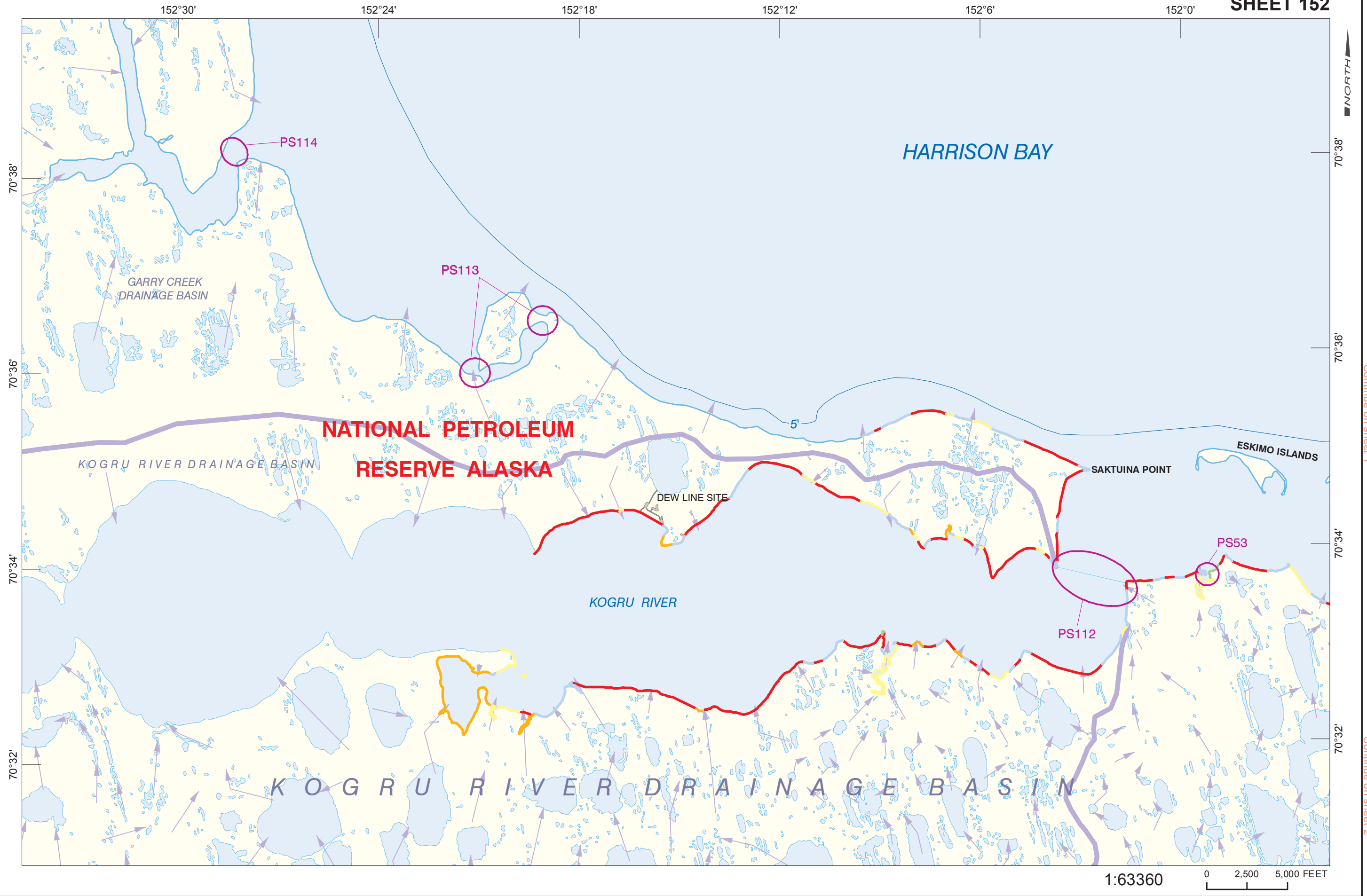
*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.


NOTE: All values given on these pages are for planning purposes only.

Continue on sheet 151

Continue on sheet 1

Continue on sheet 2





PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.


GENERAL SENSITIVITIES

- The Chipp and Ikpikpuk rivers provide habitat for fish.

CULTURAL SITES

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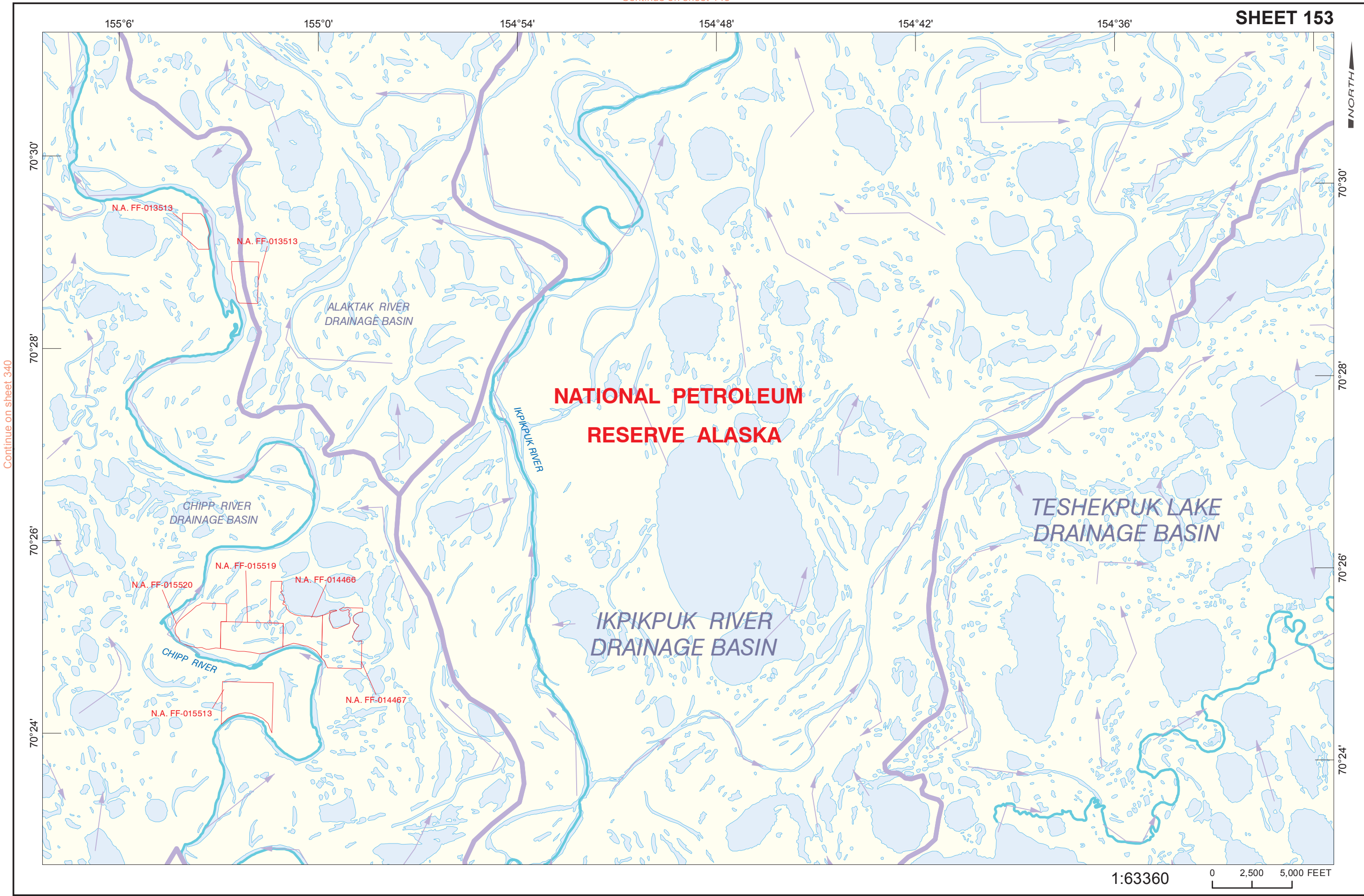
AIR ACCESS*


- There is an aircraft landing strip located at Dew Line Site Lonely (Sheet 141) approximately 50 miles to the northeast. This 5,000-ft gravel airstrip is unattended and closed to the public. Runway is not maintained and condition is unknown.
- Commercial and air freight services are available at the Barrow airport (not on maps) approximately 70 miles to the northwest. This is a 6,500-ft, asphalt airstrip.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.





PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.


GENERAL SENSITIVITIES

- Teshkepuk Lake provides habitat for fish.

CULTURAL SITES

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AIR ACCESS*

- There is an aircraft landing strip located at Dew Line Site Lonely (Sheet 141) approximately 40 miles northeast of Ikpikpuk Test 1. This 5,000-ft gravel airstrip is unattended and closed to the public. Runway is not maintained and condition is unknown.
- Commercial and air freight services are available at the Barrow airport (not on maps) approximately 80 miles to the northwest. This is a 6,500-ft, asphalt airstrip.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.



Continue on sheet 153

Continue on sheet 155



PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

- Teshekpuk Lake provides habitat for fish.

CULTURAL SITES

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AIR ACCESS*

- There is an aircraft landing strip located at the Dew Line Site on the north shore of Kogru River inlet (Sheet 152) approximately 30 miles to the northeast. This an 1,800-ft gravel airstrip. Runway condition is unknown.
- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 60 miles to the east. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 60 miles to the southeast. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS


- There are no marine waters or shorelines on this map.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 154

Continue on sheet 156





PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.


GENERAL SENSITIVITIES

- Coastal areas and areas between Teshekpuk Lake and the coast support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.

CULTURAL SITES

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AIR ACCESS*

- There is an aircraft landing strip located at the Dew Line Site on the north shore of Kogru River inlet (Sheet 152) approximately 20 miles to the northeast. This an 1,800-ft gravel airstrip. Runway condition is unknown.
- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 45 miles to the east. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 50 miles to the southeast. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.


*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 155

Continue on sheet 157



1:63360 0 2,500 5,000 FEET



PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS48	Kalikpik River mouth and adjoining inlet	Most sensitive during open water season. Peat shoreline. Keep oil from entering river.	C-13 or C-14	2,300'
PS49	Kalikpik River northern channel mouth	Most sensitive during open water season. Inundated low-lying tundra shoreline and peat shoreline. Keep oil from entering channel.	C-13 or C-14	1,300'


GENERAL SENSITIVITIES

- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- Plan to deploy bird-hazing systems during the open-water season.
- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- The Kalikpik River and its tributary provide habitat for anadromous whitefish and resident fish.

CULTURAL SITES

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AIR ACCESS*

- There is an aircraft landing strip located at the Dew Line Site on the north shore of Kogru River inlet (Sheet 152) approximately 5 miles north of North Kalikpik 1. This an 1,800-ft gravel airstrip. Runway condition is unknown.
- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 35 miles southeast of North Kalikpik 1. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 38 miles southeast of North Kalikpik 1. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- Extensive shoaling and high sediment transport limit or restrict navigation by sea. Water depths ranging from 2 to 3 ft restrict or preclude marine access.
- Water depths are very shallow in the nearshore areas.
- Kalikpik River annual average discharge rate is 55 cfs.

COUNTERMEASURES CONSIDERATIONS

- Sand-silt beaches are very narrow (less than 20 ft wide). Bluffs are often too high for backshore access.
- The delta of the Kalikpik River is a very complex polygonal tundra and sand-silt flats area. Access is uncertain.
- The west end of Harrison Bay and the mouth of the Kalikpik River will collect floating oil during sustained east or northeast winds.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

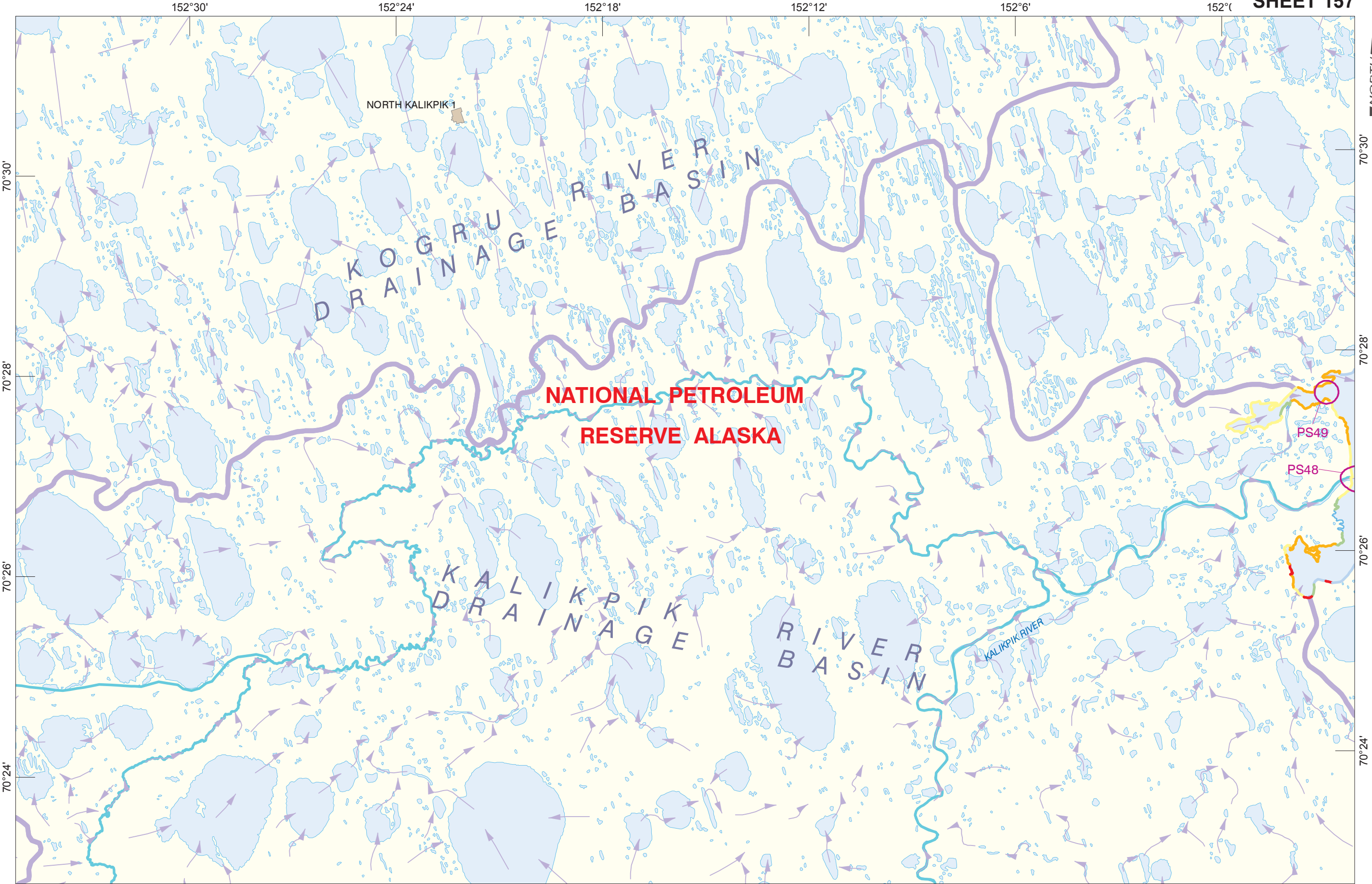
NOTE: All values given on these pages are for planning purposes only.

Continue on sheet 156

Continue on sheet 3

Continue on sheet 4

Continue on sheet 113



NORTH

70°30'


70°28'

70°26'

70°24'

1:63360

0 2,500 5,000 FEET



PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.


GENERAL SENSITIVITIES

- The Oumalik and Ikpikpuk rivers provide habitat for fish.

CULTURAL SITES

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AIR ACCESS*

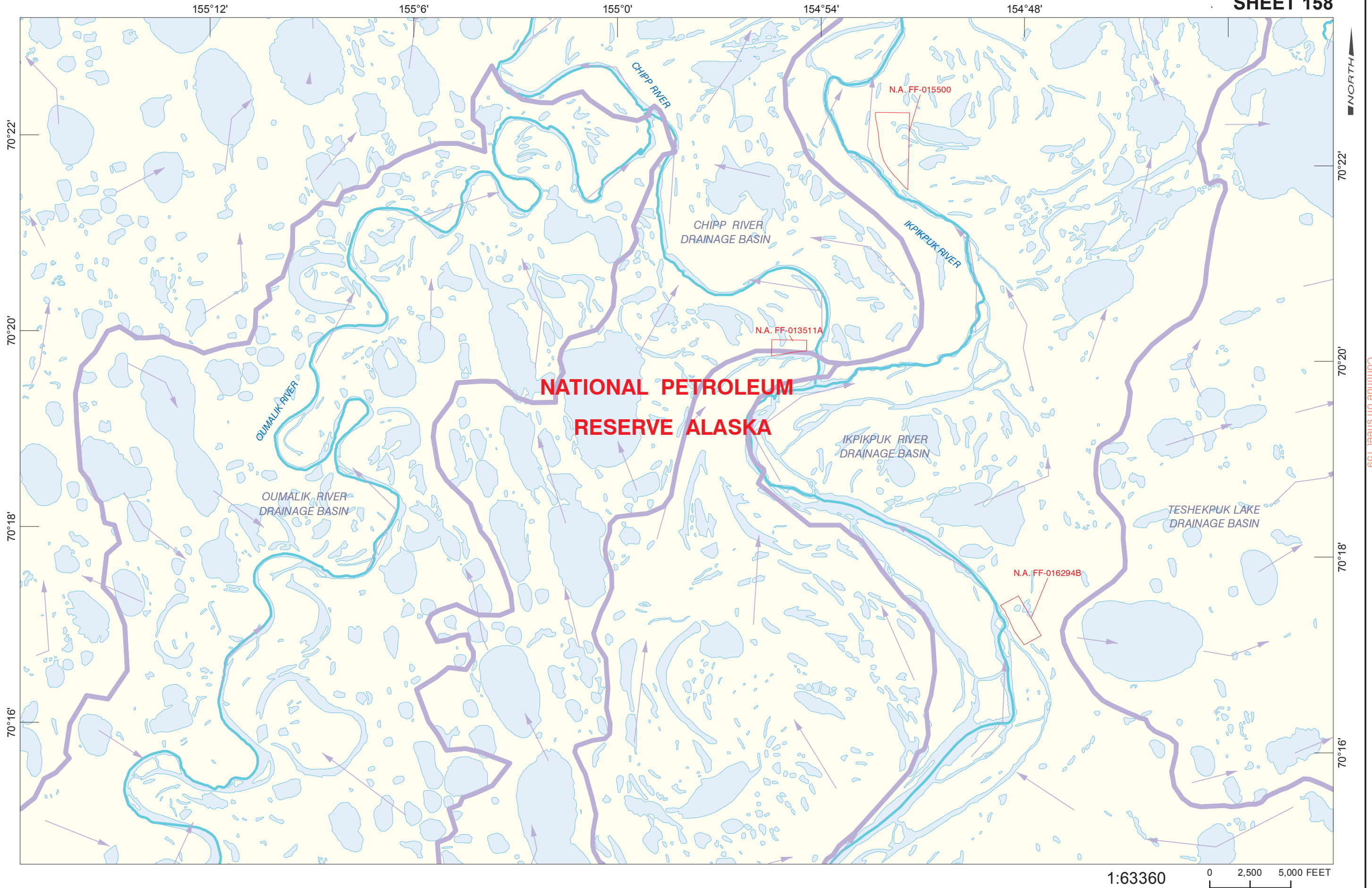
- There is an aircraft landing strip located at Dew Line Site Lonely (Sheet 141) approximately 60 miles to the northeast. This 5,000-ft gravel airstrip is unattended and closed to the public. Runway is not maintained and condition is unknown.
- Commercial and air freight services are available at the Barrow airport (not on maps) approximately 80 miles to the northwest. This is a 6,500-ft, asphalt airstrip.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

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PRIORITY PROTECTION SITES

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AIR ACCESS*

- There is an aircraft landing strip located at the Dew Line Site on the north shore of Kogru River inlet (Sheet 152) approximately 50 miles to the northeast. This an 1,800-ft gravel airstrip. Runway condition is unknown.
- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 80 miles to the east. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 80 miles to the southeast. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

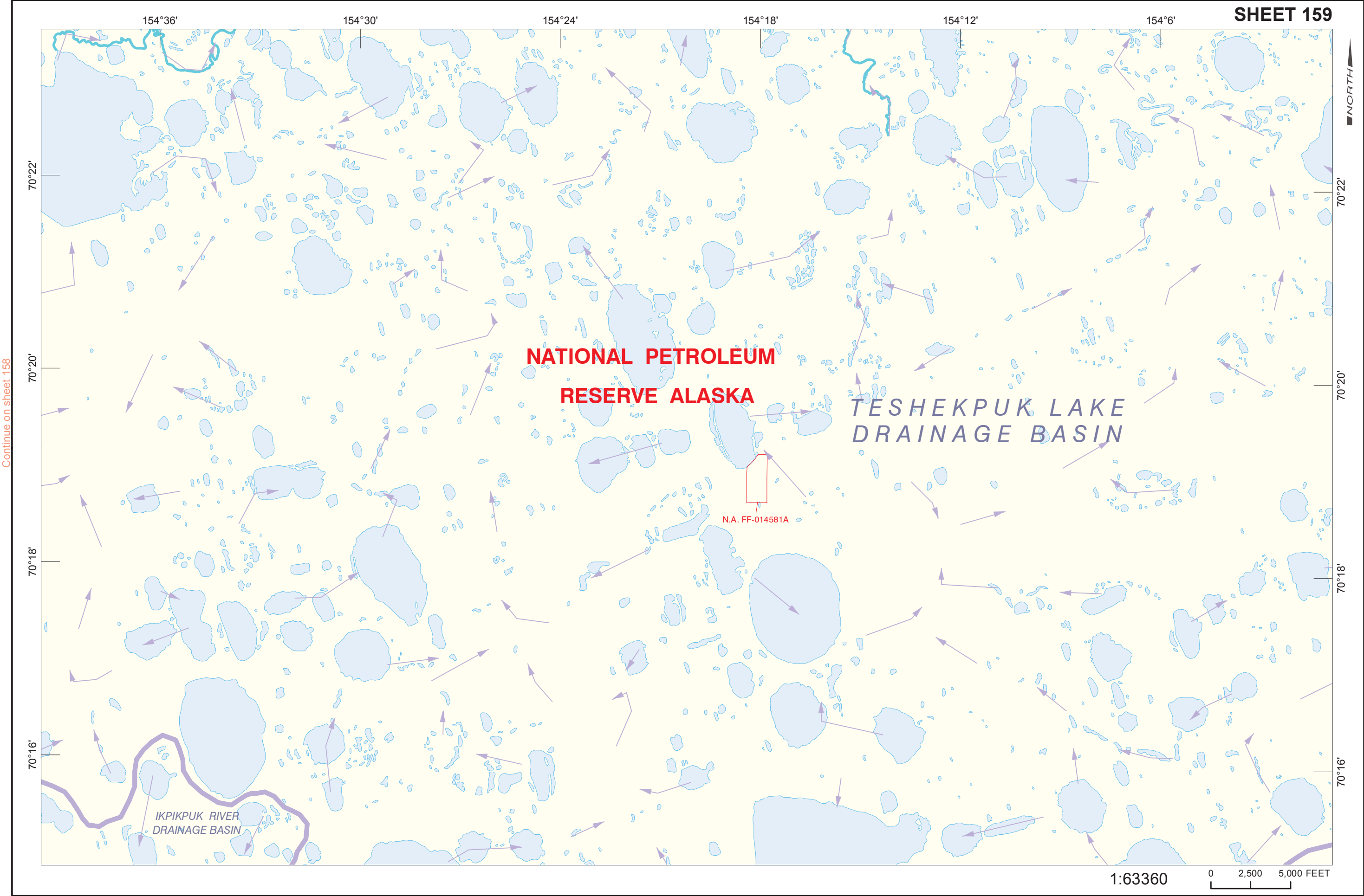
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS


- There are no marine waters or shorelines on this map.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 158


Continue on sheet 160





PRIORITY PROTECTION SITES


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CULTURAL SITES


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AIR ACCESS*

- There is an aircraft landing strip located at the Dew Line Site on the north shore of Kogru River inlet (Sheet 152) approximately 35 miles northeast of Kealok Creek. This an 1,800-ft gravel airstrip. Runway condition is unknown.
- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 65 miles to the east. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 65 miles to the southeast. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.



VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

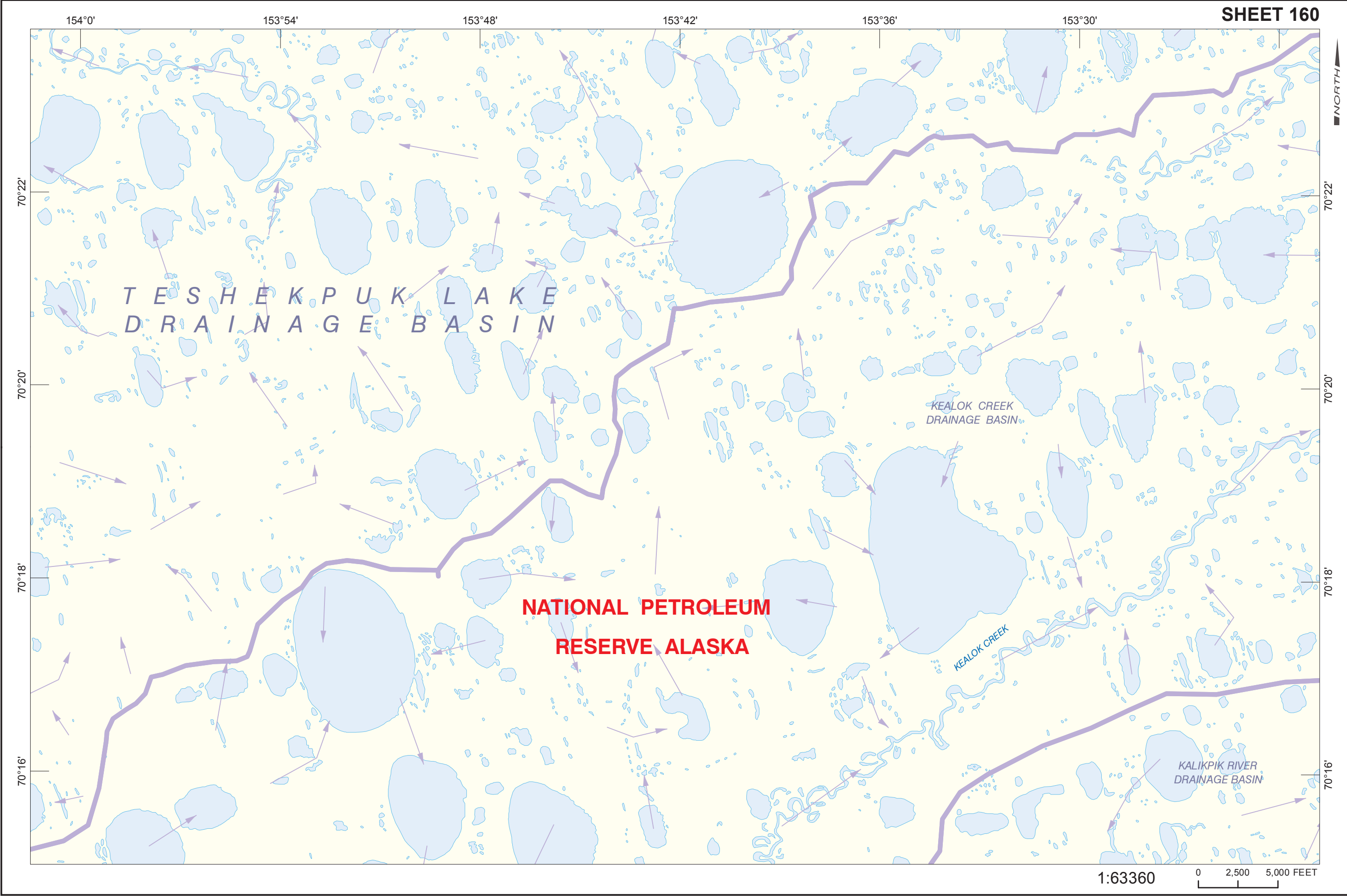



*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

NOTE: All values given on these pages are for planning purposes only.

Continue on sheet 159


Continue on sheet 161





PRIORITY PROTECTION SITES


- There are no priority protection sites on this sheet.



CULTURAL SITES


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AIR ACCESS*

- There is an aircraft landing strip located at the Dew Line Site on the north shore of Kogru River inlet (Sheet 152) approximately 25 miles to the northeast. This an 1,800-ft gravel airstrip. Runway condition is unknown.
- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 50 miles to the east. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 50 miles to the southeast. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.



VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS


- There are no marine waters or shorelines on this map.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 160

Continue on sheet 162





PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.


GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- The Kalikpik River provides habitat for resident fish.
- Fish Creek provides habitat for anadromous whitefish and resident fish.

CULTURAL SITES

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AIR ACCESS*

- There is an aircraft landing strip located at the Dew Line Site on the north shore of Kogru River inlet (Sheet 152) approximately 25 miles north of Fish Creek. This an 1,800-ft gravel airstrip. Runway condition is unknown.
- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 30 miles northeast of Fish Creek. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 26 miles east of Fish Creek. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

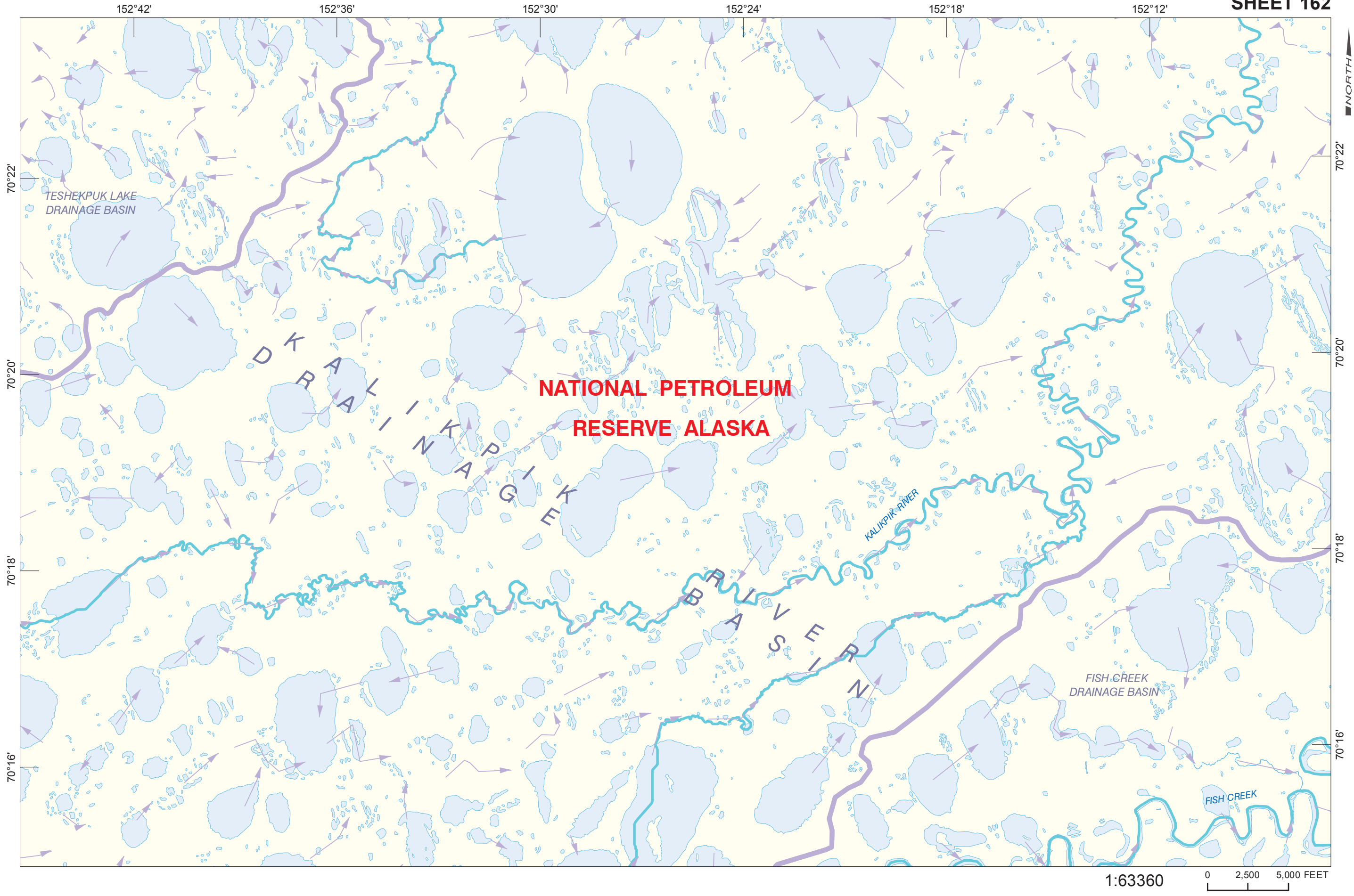
NOTE: All values given on these pages are for planning purposes only.


Continue on sheet 161

Continue on sheet 118

Continue on sheet 123

Continue on sheet 127





PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.


GENERAL SENSITIVITIES

- The Oumalik and Ikpikpuk rivers provide habitat for fish.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

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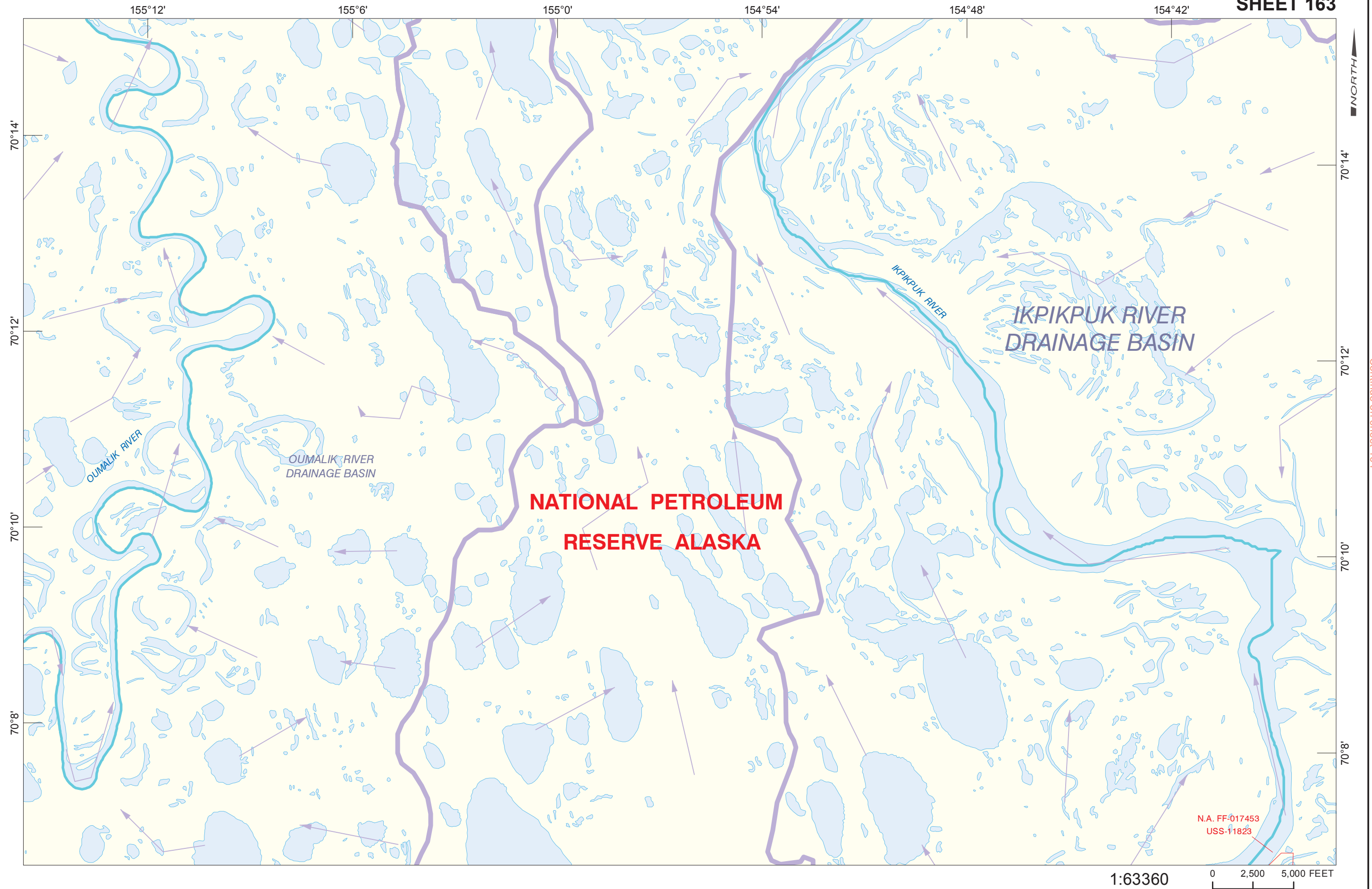
AIR ACCESS*

- There is an aircraft landing strip located at Inigok Test 1 (Sheet 171) approximately 45 miles to the southeast. This an approximately 5,000-ft gravel airstrip. Runway condition is unknown.
- Commercial and air freight services are available at the Barrow airport (not on maps) approximately 85 miles to the northwest. This is a 6,500-ft, asphalt airstrip.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

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PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

CULTURAL SITES

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AIR ACCESS*

- There is an aircraft landing strip located at Inigok Test 1 (Sheet 171) approximately 30 miles to the southeast. This an approximately 5,000-ft gravel airstrip. Runway condition is unknown.
- Commercial and air freight services are available at the Barrow airport (not on maps) approximately 95 miles to the northwest. This is a 6,500-ft, asphalt airstrip.


VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

Continue on sheet 163


Continue on sheet 165





PRIORITY PROTECTION SITES


- There are no priority protection sites on this sheet.



CULTURAL SITES


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AIR ACCESS*

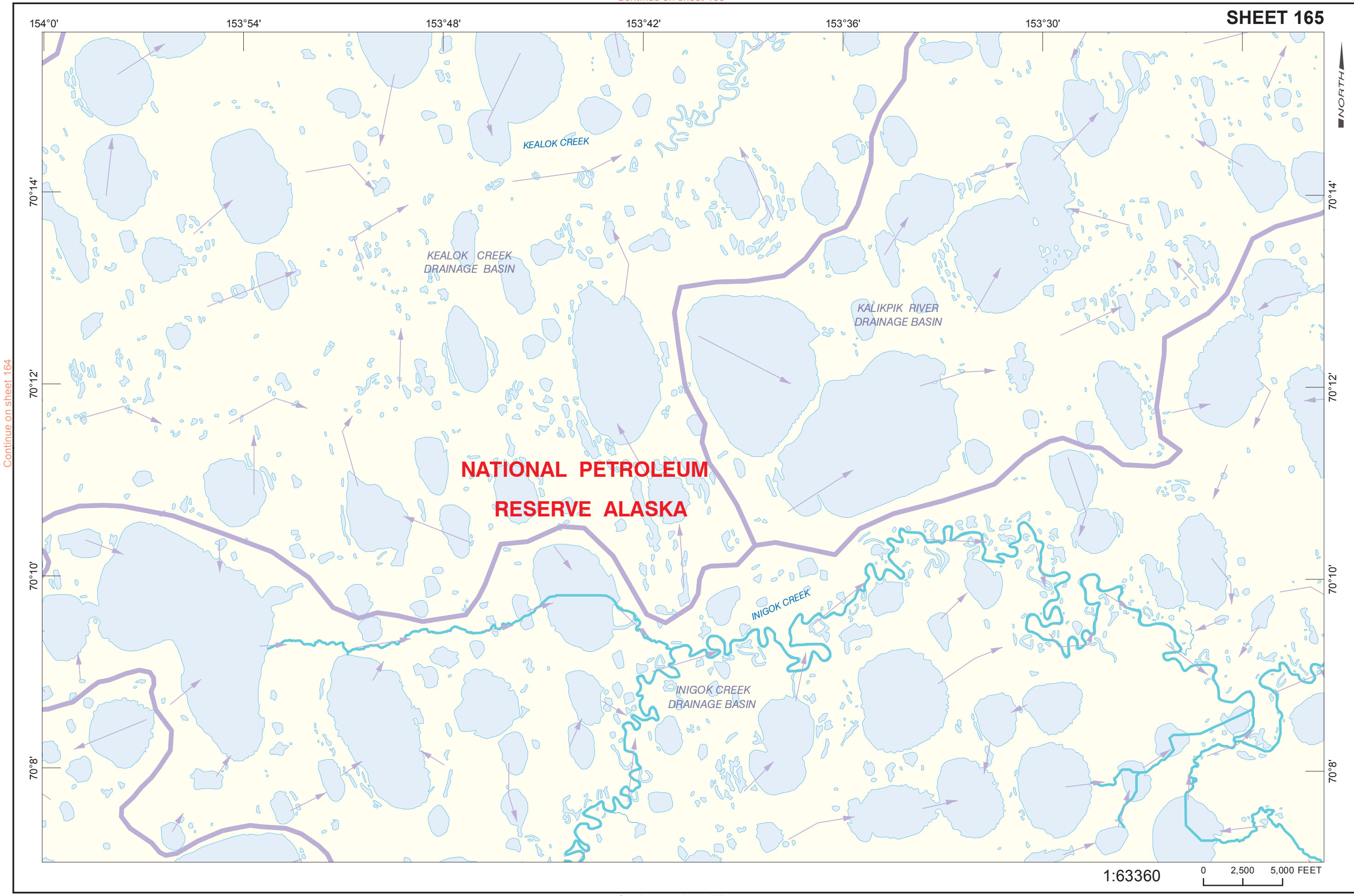
- There is an aircraft landing strip located at Inigok Test 1 (Sheet 171) approximately 20 miles to the southeast. This an approximately 5,000-ft gravel airstrip. Runway condition is unknown.
- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 65 miles to the northeast. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 65 miles to the east. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.



VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS


- There are no marine waters or shorelines on this map.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.




Continue on sheet 164

Continue on sheet 166



PRIORITY PROTECTION SITES


- There are no priority protection sites on this sheet.



CULTURAL SITES


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AIR ACCESS*

- There is an aircraft landing strip located at Inigok Test 1 (Sheet 171) approximately 20 miles southeast of N Inigok 1. This an approximately 5,000-ft gravel airstrip. Runway condition is unknown.
- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 45 miles northeast of N Inigok 1. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 43 miles east of N Inigok 1. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.



VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

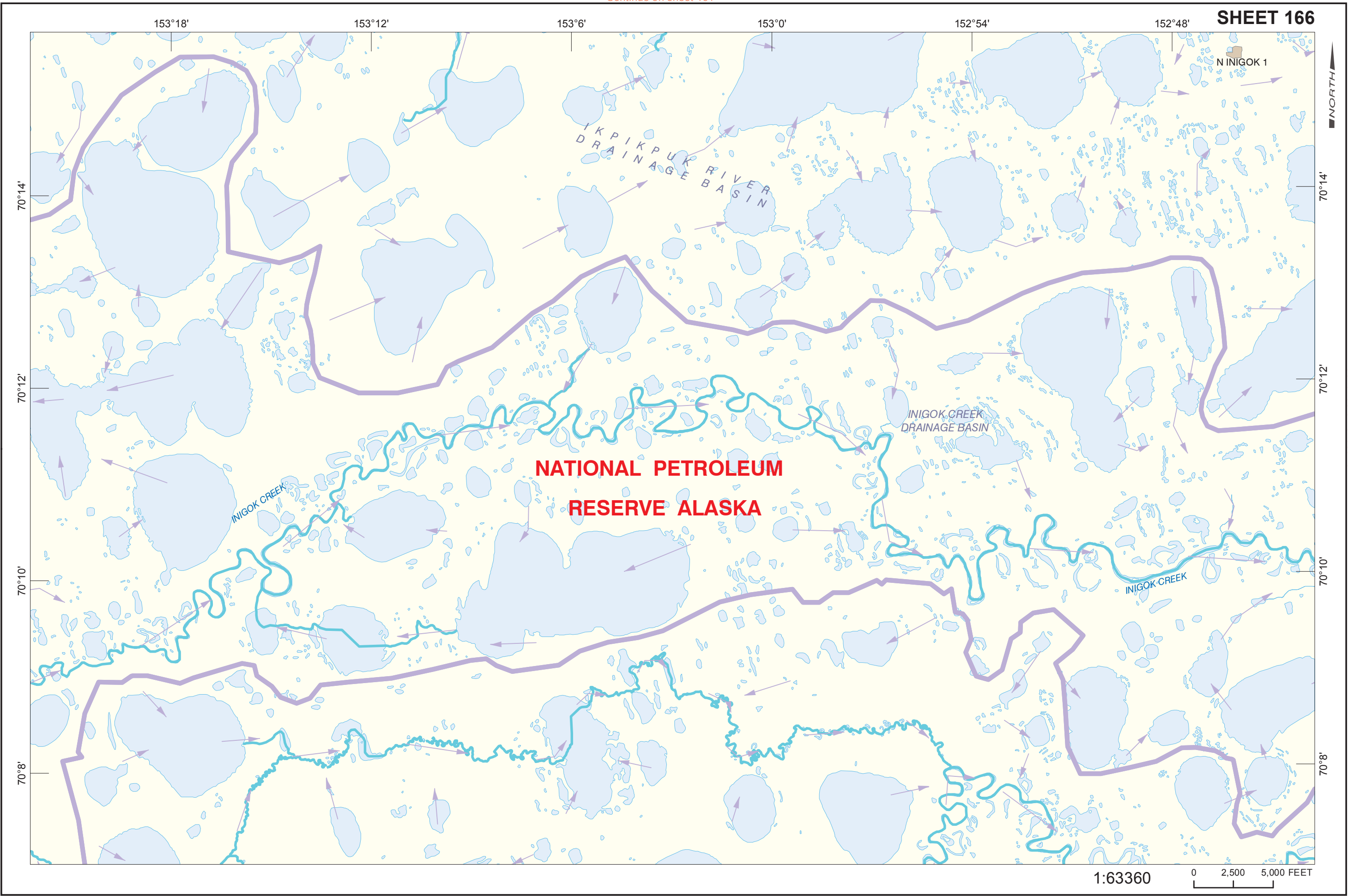
- There are no marine waters or shorelines on this map.


*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

NOTE: All values given on these pages are for planning purposes only.

Continue on sheet 165

Continue on sheet 167





PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.


GENERAL SENSITIVITIES

- Fish Creek provides habitat for anadromous whitefish and resident fish.
- Judy Creek and its tributary provide habitat for anadromous whitefish and resident fish.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

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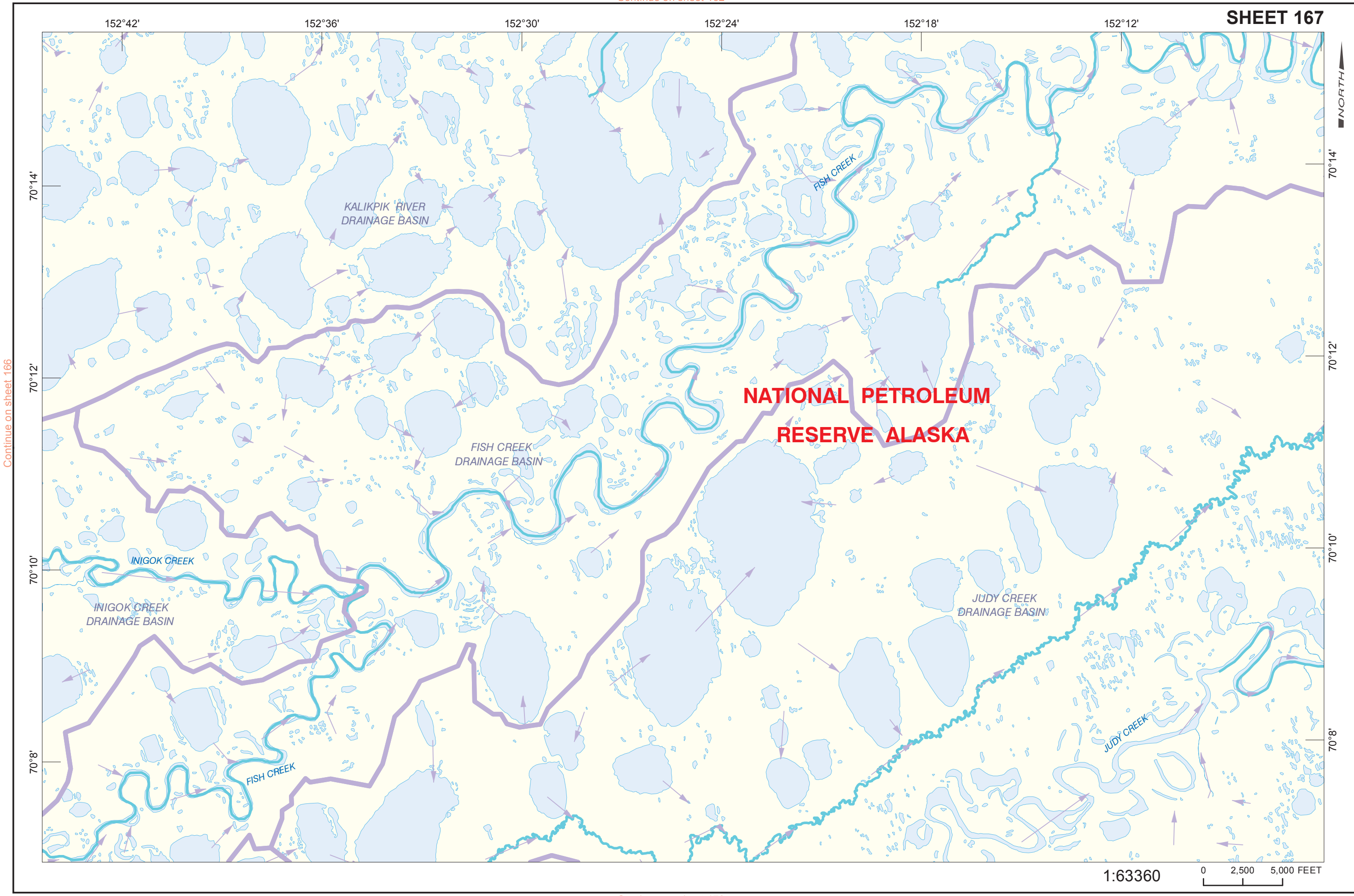
AIR ACCESS*

- There is an aircraft landing strip located at Inigok Test 1 (Sheet 171) approximately 20 miles to the southwest. This an approximately 5,000-ft gravel airstrip. Runway condition is unknown.
- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 35 miles to the northeast. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 35 miles to the east. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.




Continue on sheet 166

Continue on sheet 127

Continue on sheet 131

Continue on sheet 134



PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.


GENERAL SENSITIVITIES

- The Oumalik and Ikpikpuk rivers provide habitat for fish.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



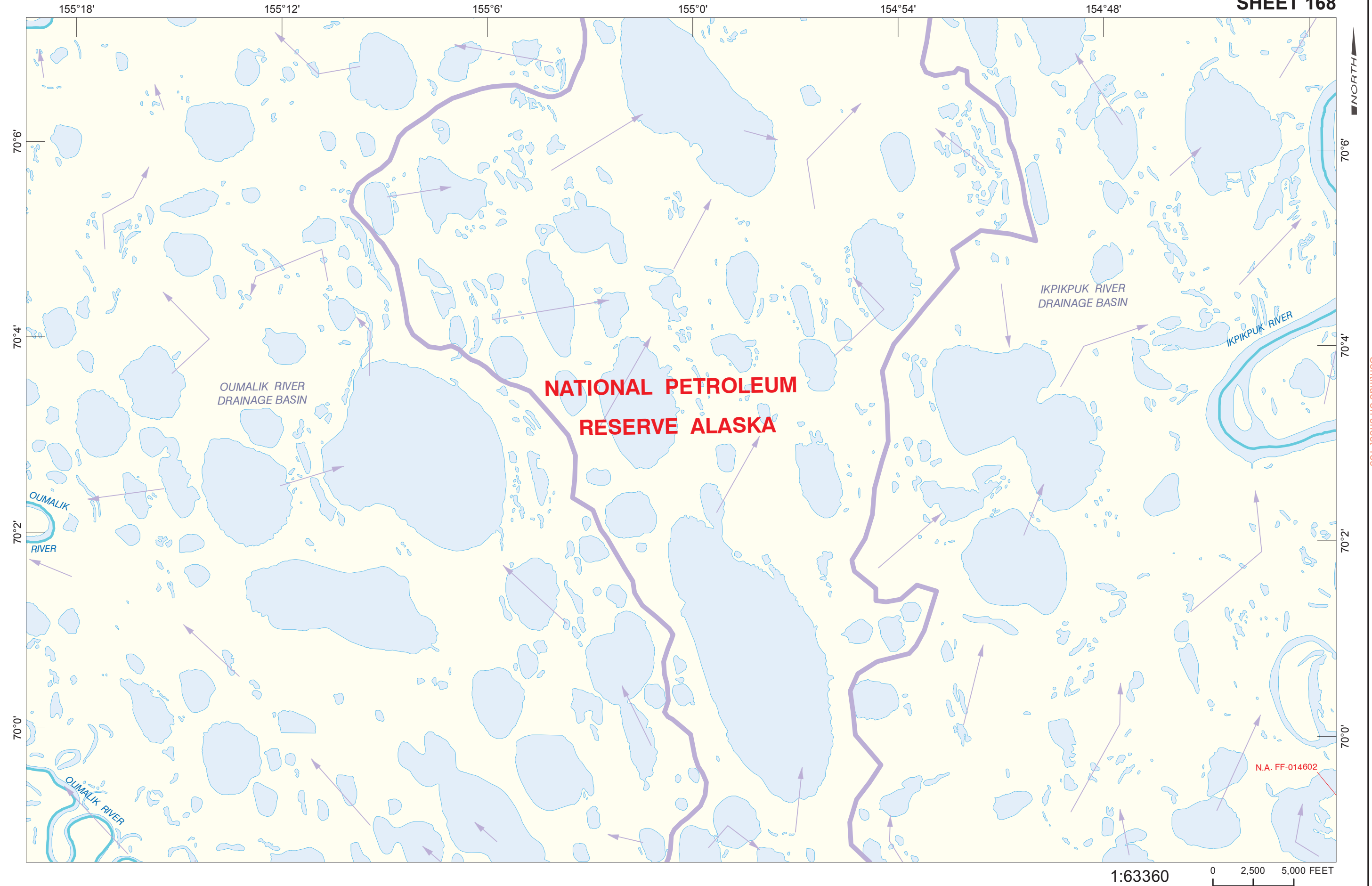
AIR ACCESS*


- There is an aircraft landing strip located at Inigok Test 1 (Sheet 171) approximately 40 miles east of the Ikpikpuk River. This an approximately 5,000-ft gravel airstrip. Runway condition is unknown.
- Commercial and air freight services are available at the Barrow airport (not on maps) approximately 95 miles to the northwest This is a 6,500-ft, asphalt airstrip.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.





PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.


GENERAL SENSITIVITIES

- The Ikpikpuk River provides habitat for fish.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

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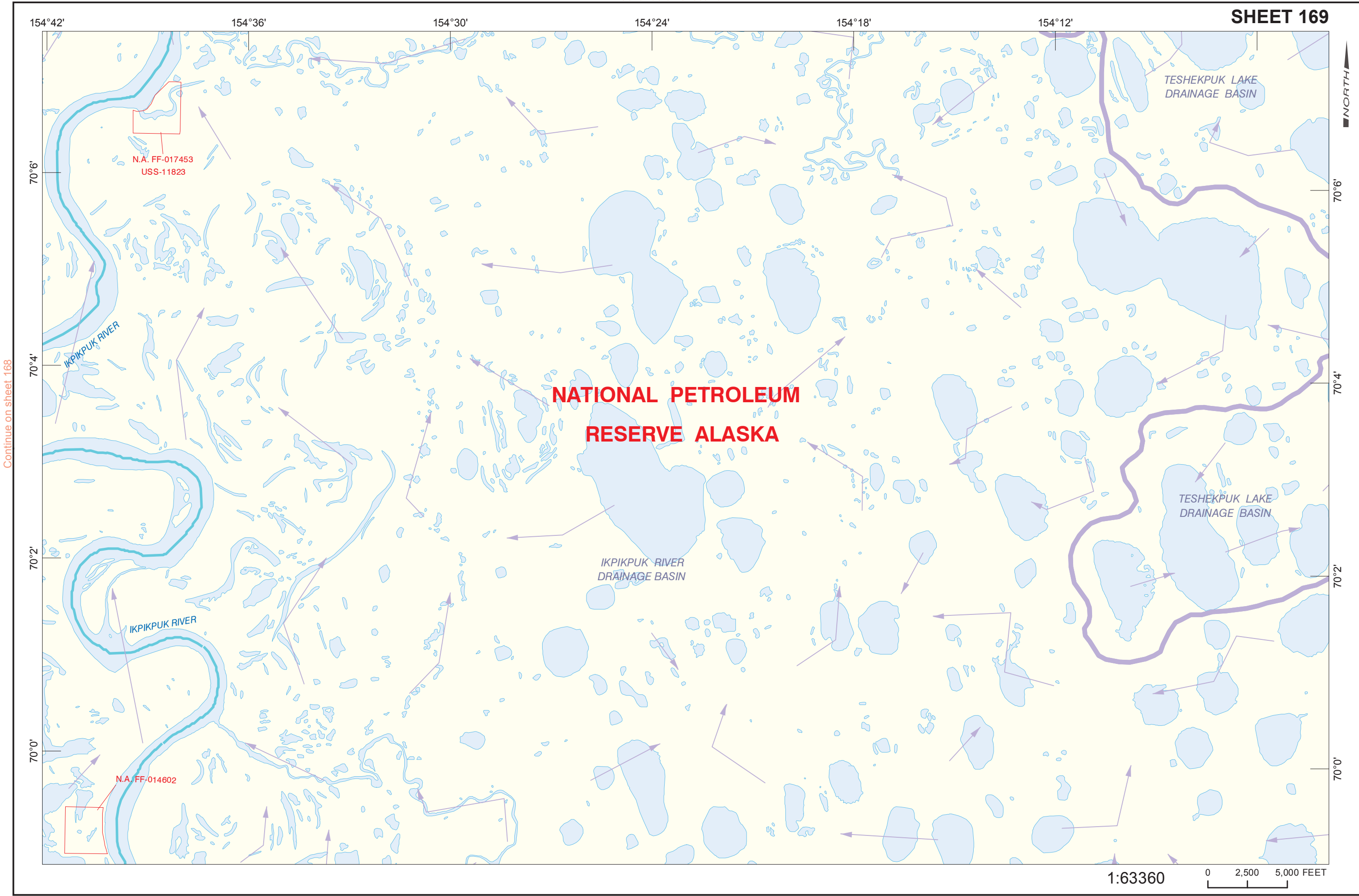
AIR ACCESS*

- There is an aircraft landing strip located at Inigok Test 1 (Sheet 171) approximately 35 miles east of the Ikpikpuk River. This an approximately 5,000-ft gravel airstrip. Runway condition is unknown.
- Commercial and air freight services are available at the Barrow airport (not on maps) approximately 105 miles to the northwest. This is a 6,500-ft, asphalt airstrip.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.





PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

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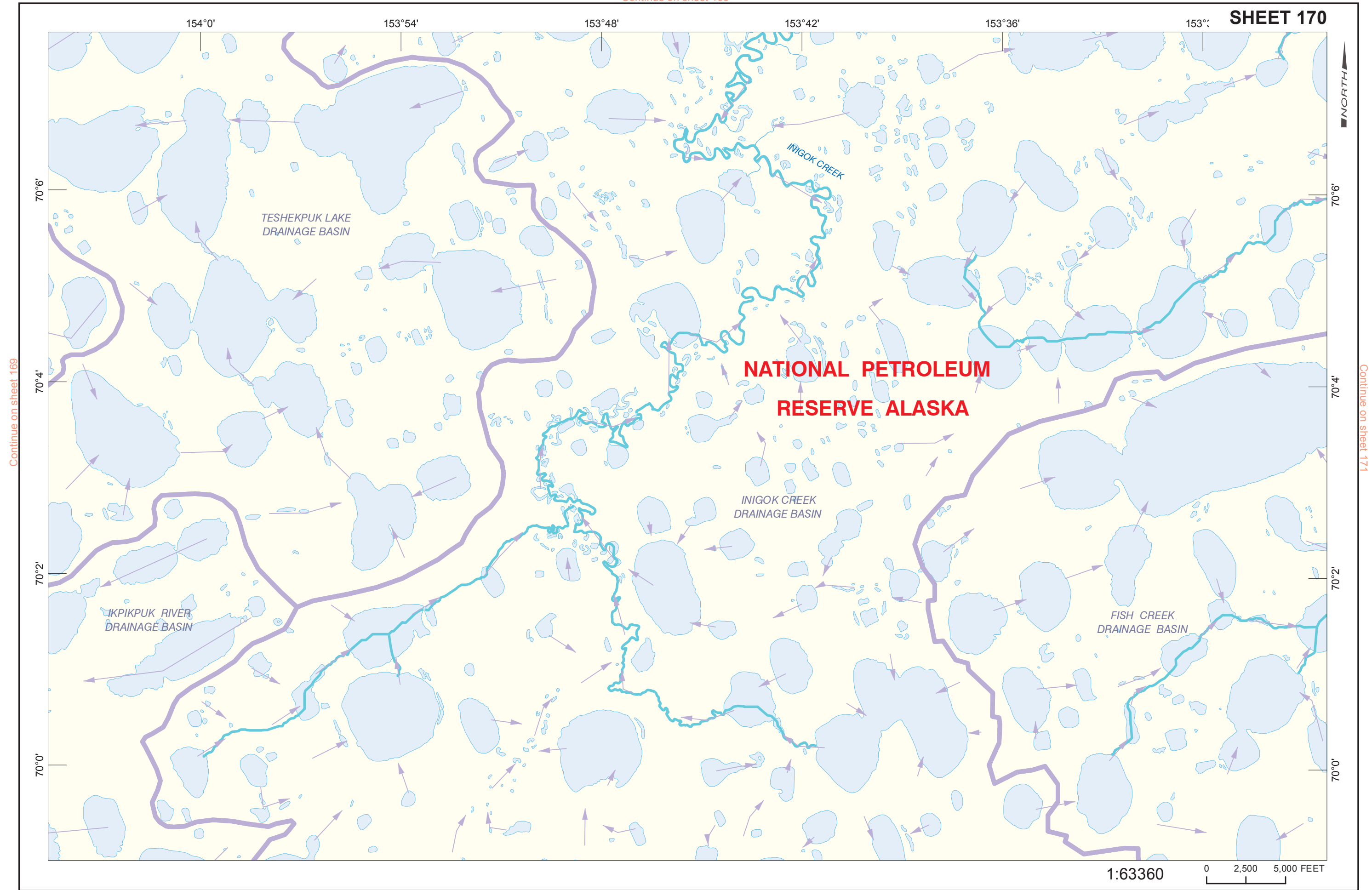
AIR ACCESS*

- There is an aircraft landing strip located at Inigok Test 1 (Sheet 171) approximately 16 miles to the east. This an approximately 5,000-ft gravel airstrip. Runway condition is unknown.
- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 70 miles to the northeast. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 65 miles to the northeast. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.





PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

CULTURAL SITES

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AIR ACCESS*

- There is an aircraft landing strip located at Inigok Test 1. This an approximately 5,000-ft gravel airstrip. Runway condition is unknown.
- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 56 miles northeast of Inigok Test 1. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 52 miles northeast of Inigok Test 1. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

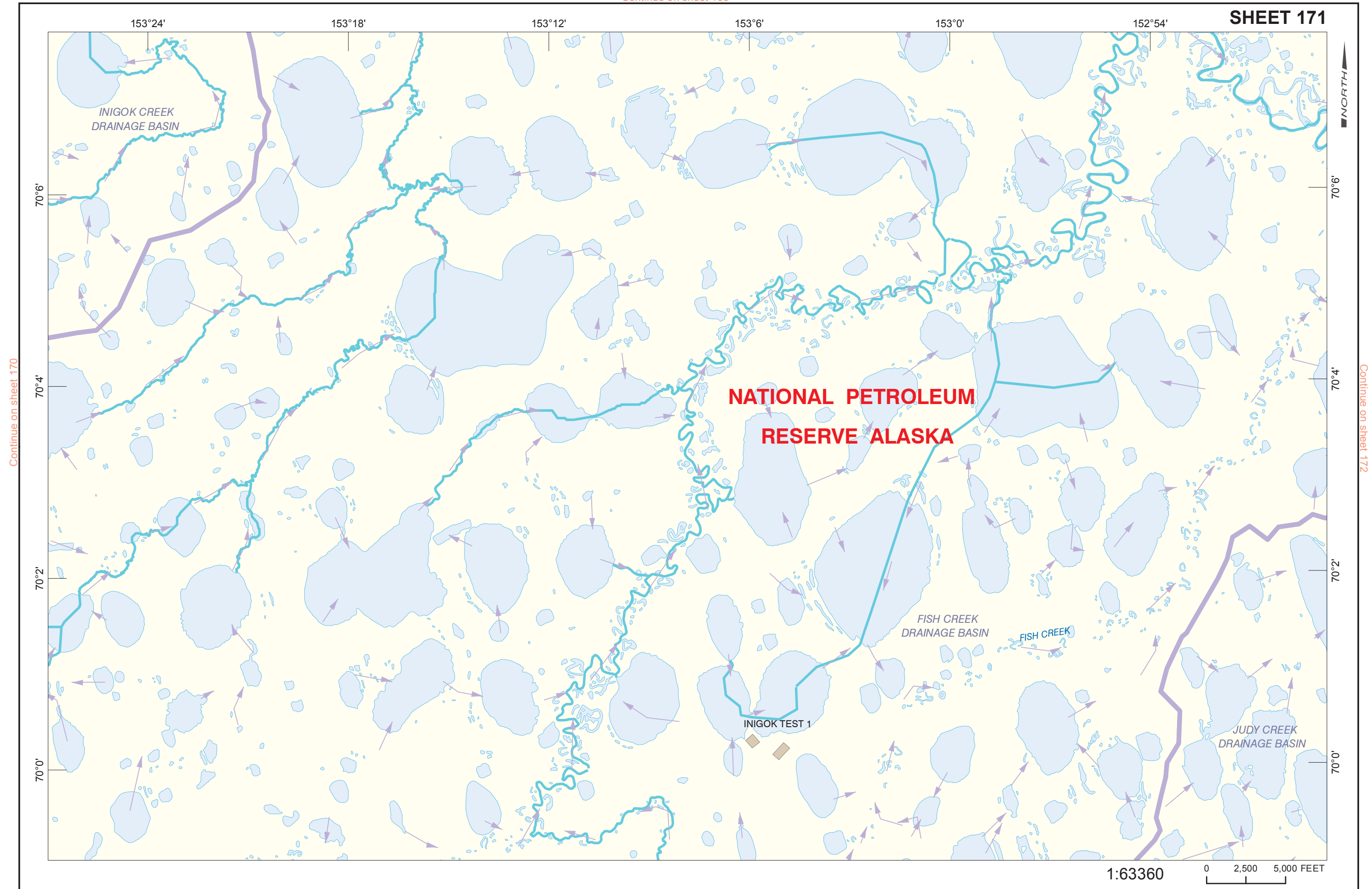
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS


- There are no marine waters or shorelines on this map.

STAGING AREAS AND PRESTAGED EQUIPMENT

- Two gravel pads adjacent to the Inigok Test 1 airstrip could be used as staging areas; however, their condition is unknown.


*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.






PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.



GENERAL SENSITIVITIES


- The tributary of Judy Creek provides habitat for fish.



CULTURAL SITES


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AIR ACCESS*

- There is an aircraft landing strip located at Inigok Test 1 (Sheet 171) approximately 15 miles to the west. This an approximately 5,000-ft gravel airstrip. Runway condition is unknown.
- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 45 miles to the northeast. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 35 miles to the northeast. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

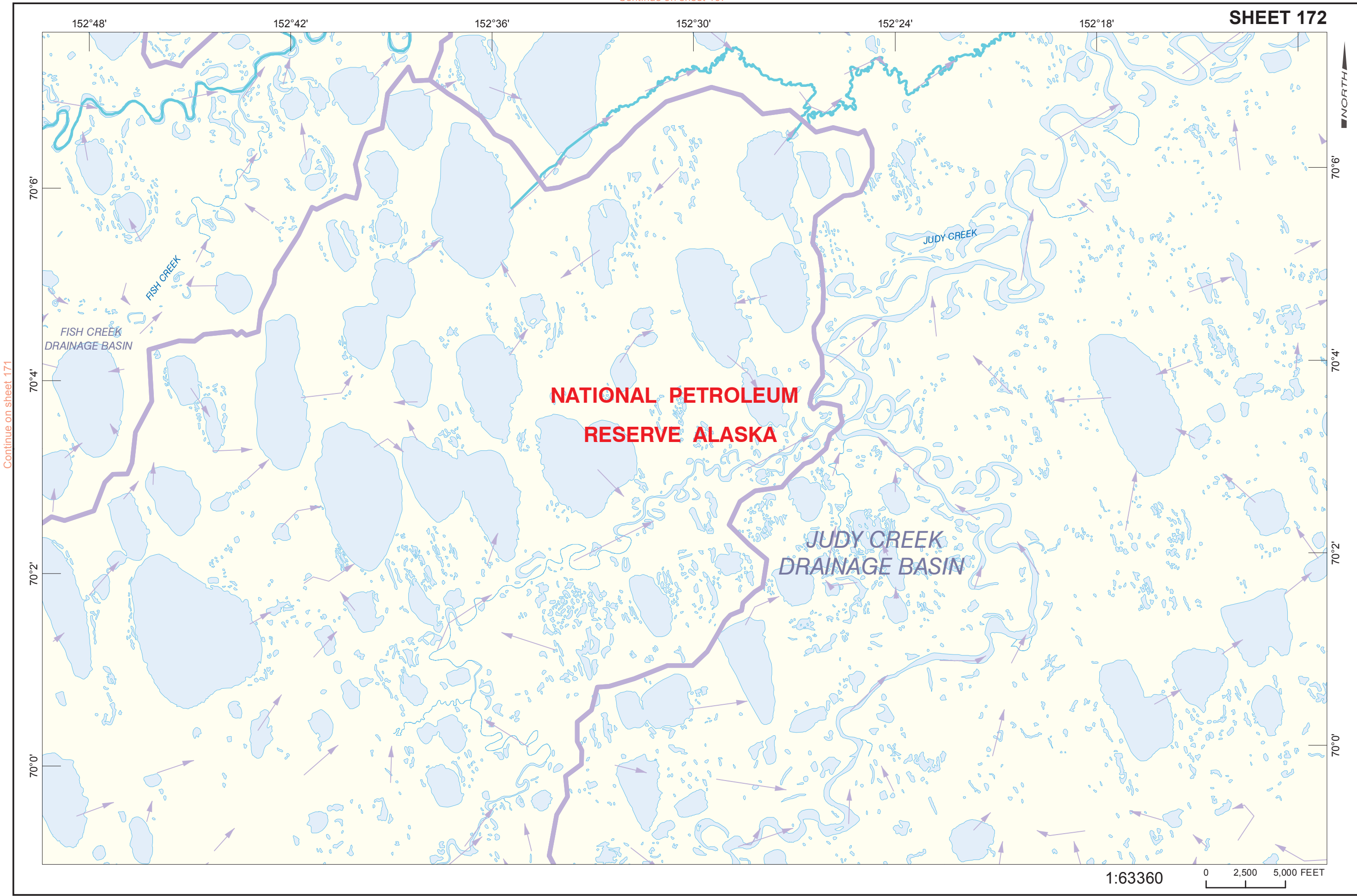



VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.


NOTE: All values given on these pages are for planning purposes only.






PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.



GENERAL SENSITIVITIES


- The Colville River is a migratory pathway for char, cisco, and whitefish.



CULTURAL SITES


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AIR ACCESS*

- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 35 miles northeast of the Colville River. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 30 miles northeast of the Colville River. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.



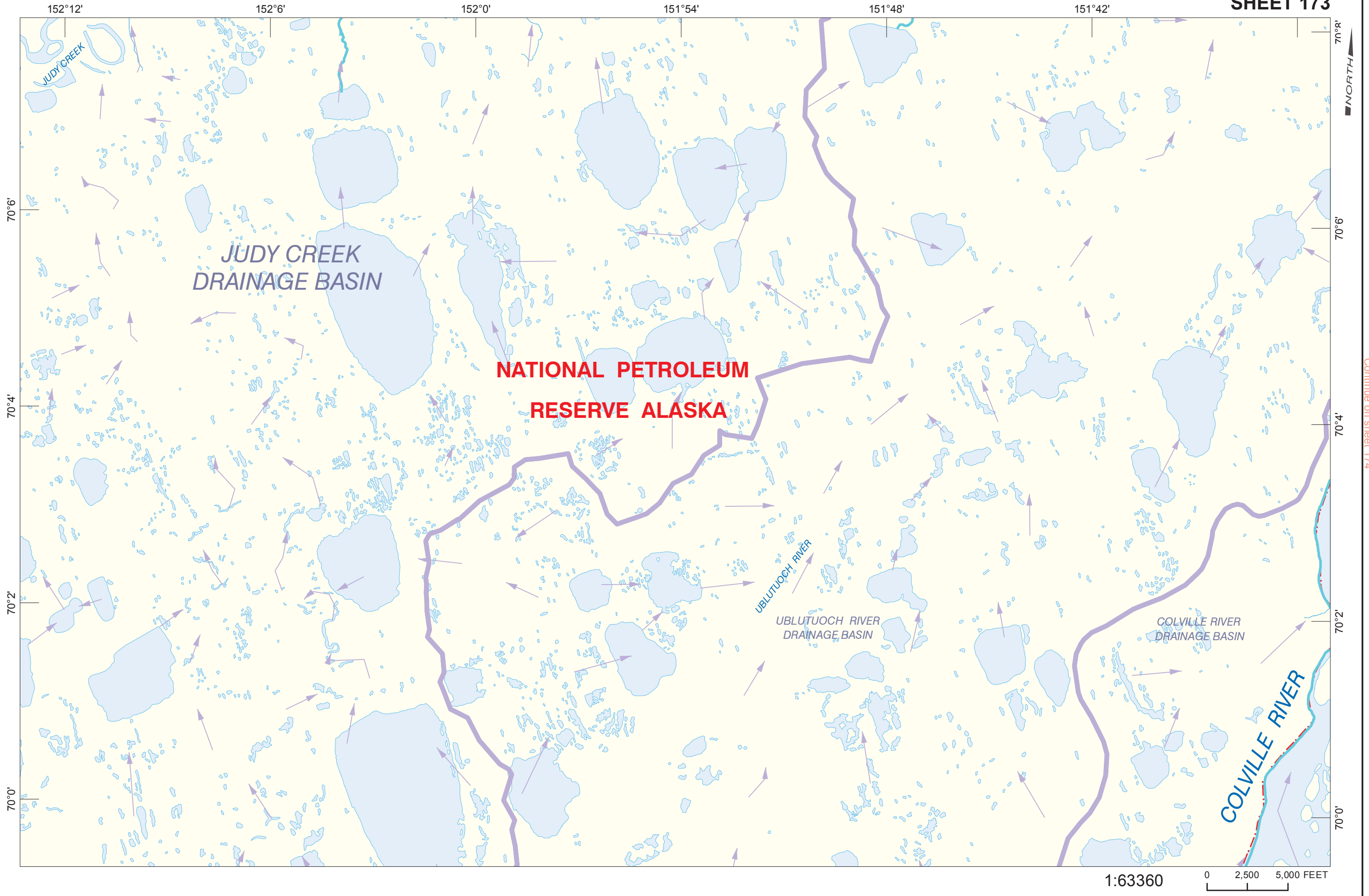
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS


- There are no marine waters or shorelines on this map.
- Main channel of the Colville River generally maintains a 3-ft water depth and is usually navigable 70 miles upriver to the rapids below the mouth of the Anaktuvuk River.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 172

Continue on sheet 174





PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.


GENERAL SENSITIVITIES

- The Colville River is a migratory pathway for char, cisco, and whitefish.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

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AIR ACCESS*

- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 30 miles to the northeast. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 15 miles to the northeast. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.
- Main channel of the Colville River generally maintains a 3-ft water depth and is usually navigable 70 miles upriver to the rapids below the mouth of the Anaktuvuk River.

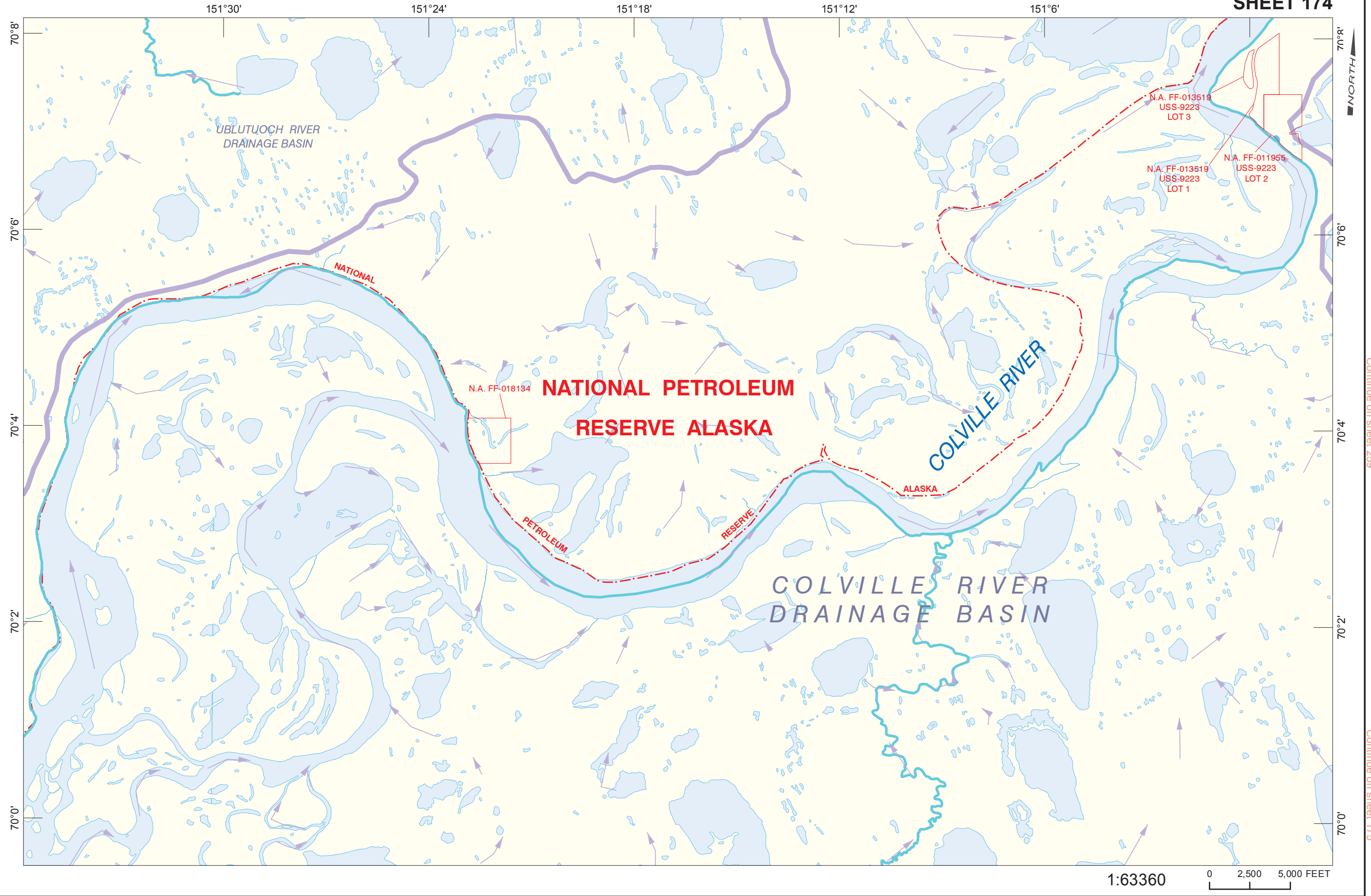
*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 173

Continue on sheet 257

Continue on sheet 259

Continue on sheet 175





PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

- The Colville River is a migratory pathway for char, cisco, and whitefish.
- The Itkillik River provides habitat for fish.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

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AIR ACCESS*

- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 31 miles northwest of DS 2P. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 17 miles northwest of DS 2P. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.
- Main channel of the Colville River generally maintains a 3-ft water depth and is usually navigable 70 miles upriver to the rapids below the mouth of the Anaktuvuk River.

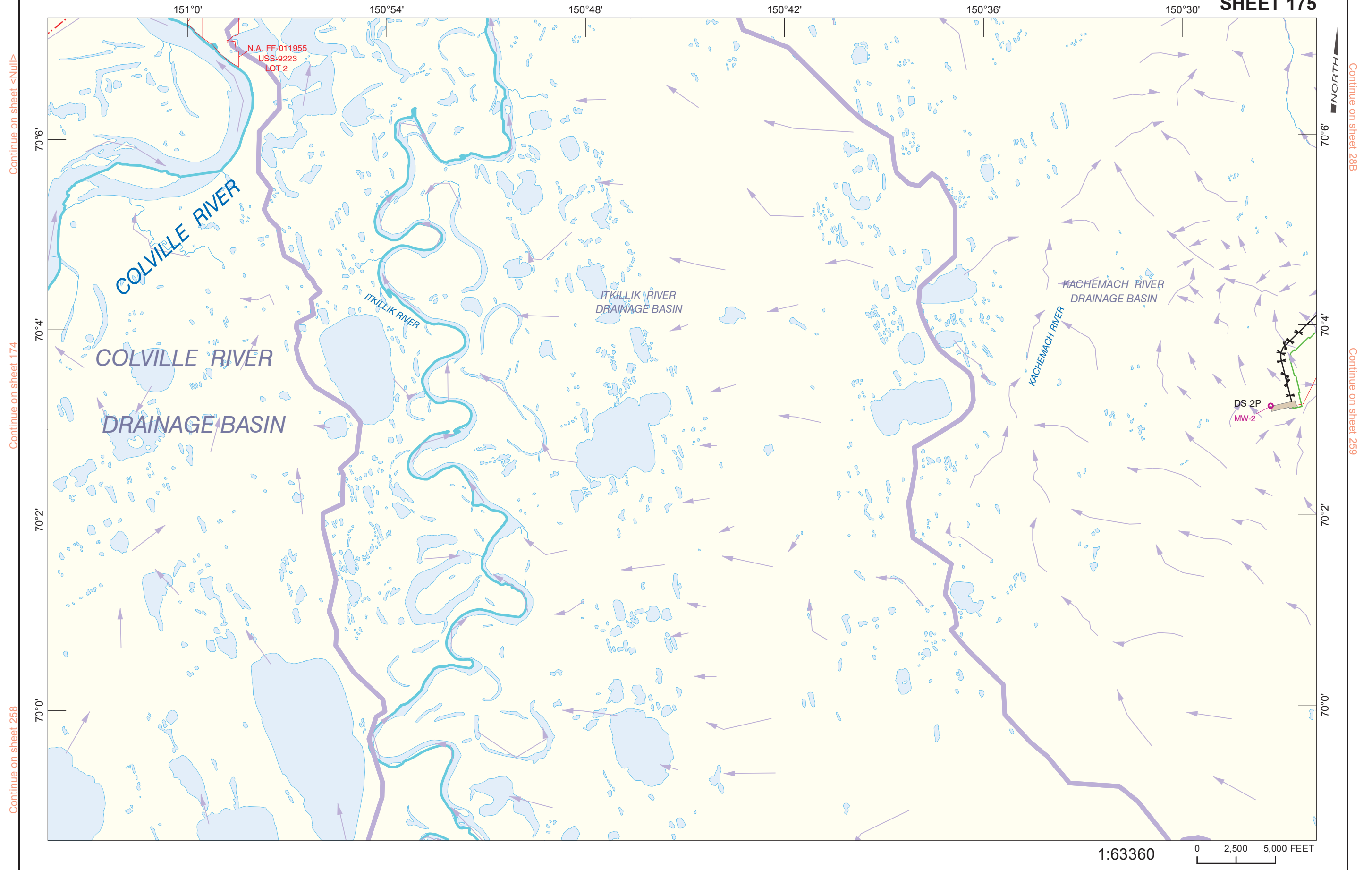
STAGING AREAS AND PRESTAGED EQUIPMENT

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
MW-2	DS 2P	Pipe Plastic sheeting Sandbags	40' 2 rolls Variable (sufficient to block tributary)	6" diameter Visqueen

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 176

SHEET 175



Continue on sheet 259



PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

GENERAL SENSITIVITIES

- The Colville River is a migratory pathway for char, cisco, and whitefish.
- The Kachemach River provides habitat for anadromous whitefish and for resident fish.
- The Itkillik River provides habitat for fish.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

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AIR ACCESS*

- Commercial and air freight services are available at the City of Nuiqsut airport. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.
- Main channel of the Colville River generally maintains a 3-ft water depth and is usually navigable 70 miles upriver to the rapids below the mouth of the Anaktuvuk River.

STAGING AREAS AND PRESTAGED EQUIPMENT

- Boom is typically predeployed seasonally on the Kachemach River immediately north of the Alpine pipeline crossing and approximately 1/4 mile northwest of the pipeline crossing.

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
ALP-2	On east bank of Kachemach River north of Alpine pipeline crossing	Boom	1,425'	8" x 6" river
		Pump	1	3" trash, diesel
		Skimmer	2	Drum or brush
		Skimmer	1	Rope mop
		Storage	1	500-gal. bladder, helicopter
		Storage	1	500-gal. bladder, liftable
		Storage	4	2,500-gal. open top
		Anchor System	1	18-lb. Davis system

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 22

Continue on sheet 25

Continue on sheet 26

SHEET 176

Continue on sheet 24

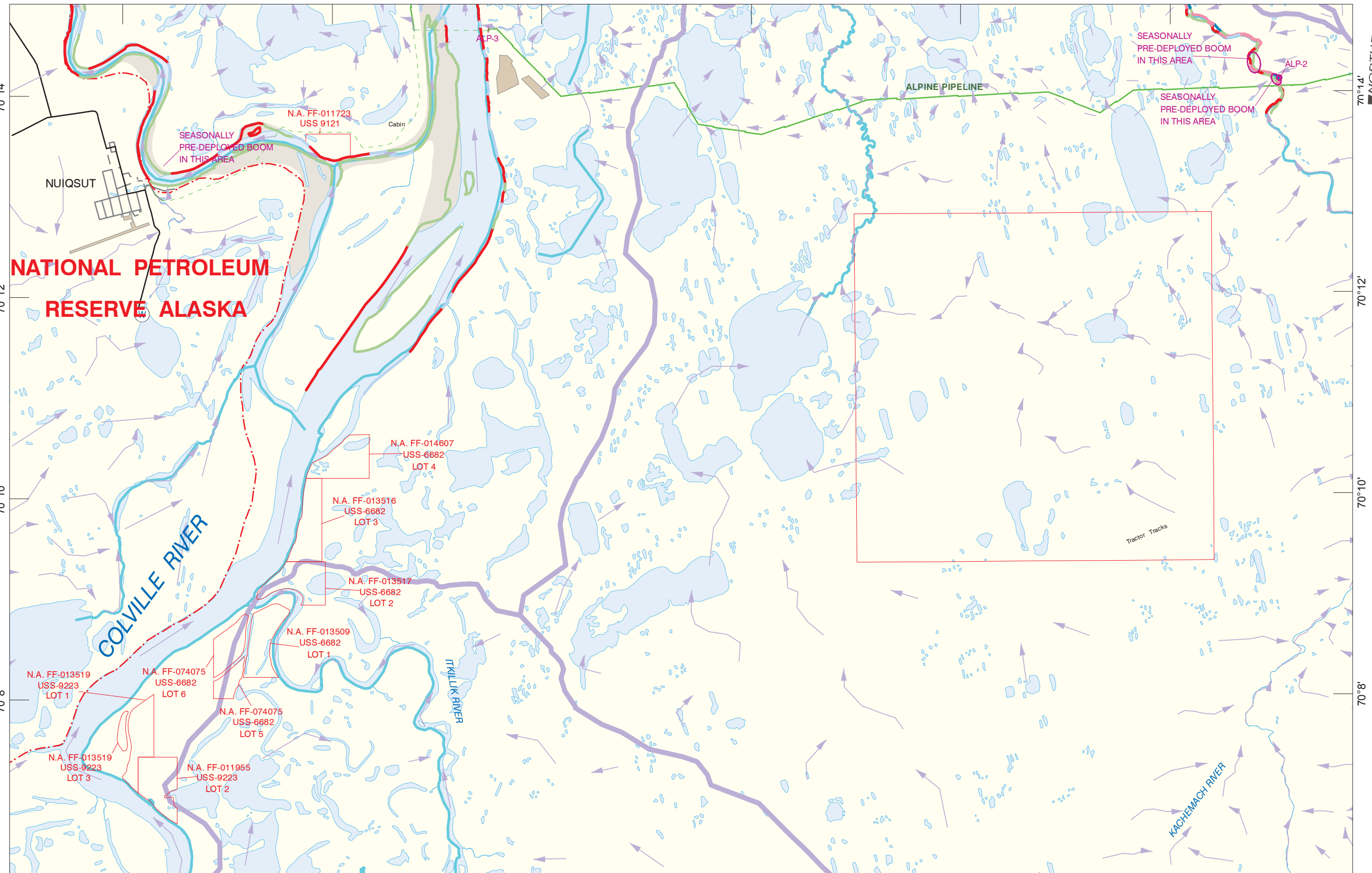
Continue on sheet 137

Continue on sheet 174

Continue on sheet 27

Continue on sheet 28


Continue on sheet 28A



1:63360


0 2,500 5,000 FEET

Continue on sheet 175




PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.



GENERAL SENSITIVITIES


- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during the open water months (generally April - October). Expect to deploy bird hazing systems.
- Known spectacled eider nesting area.
- Polar bear dens may be present where typographical features provide adequate snow cover.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats.
- Anadromous and resident fish present in Sakonowyak and Kuparuk Rivers.



CULTURAL SITES


The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

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AIR ACCESS*

- Ugnu-Kuparuk (Sheet 51) is a continuously attended, 6,551x150 ft. asphalt private airstrip serving the Kuparuk facilities. It is located approximately 8 miles to the Northwest.
- Commercial and air freight services are available at Deadhorse airport (Sheet 81), located approximately 22 miles to the East-Southeast. Its runway is 6,500 ft. asphalt.



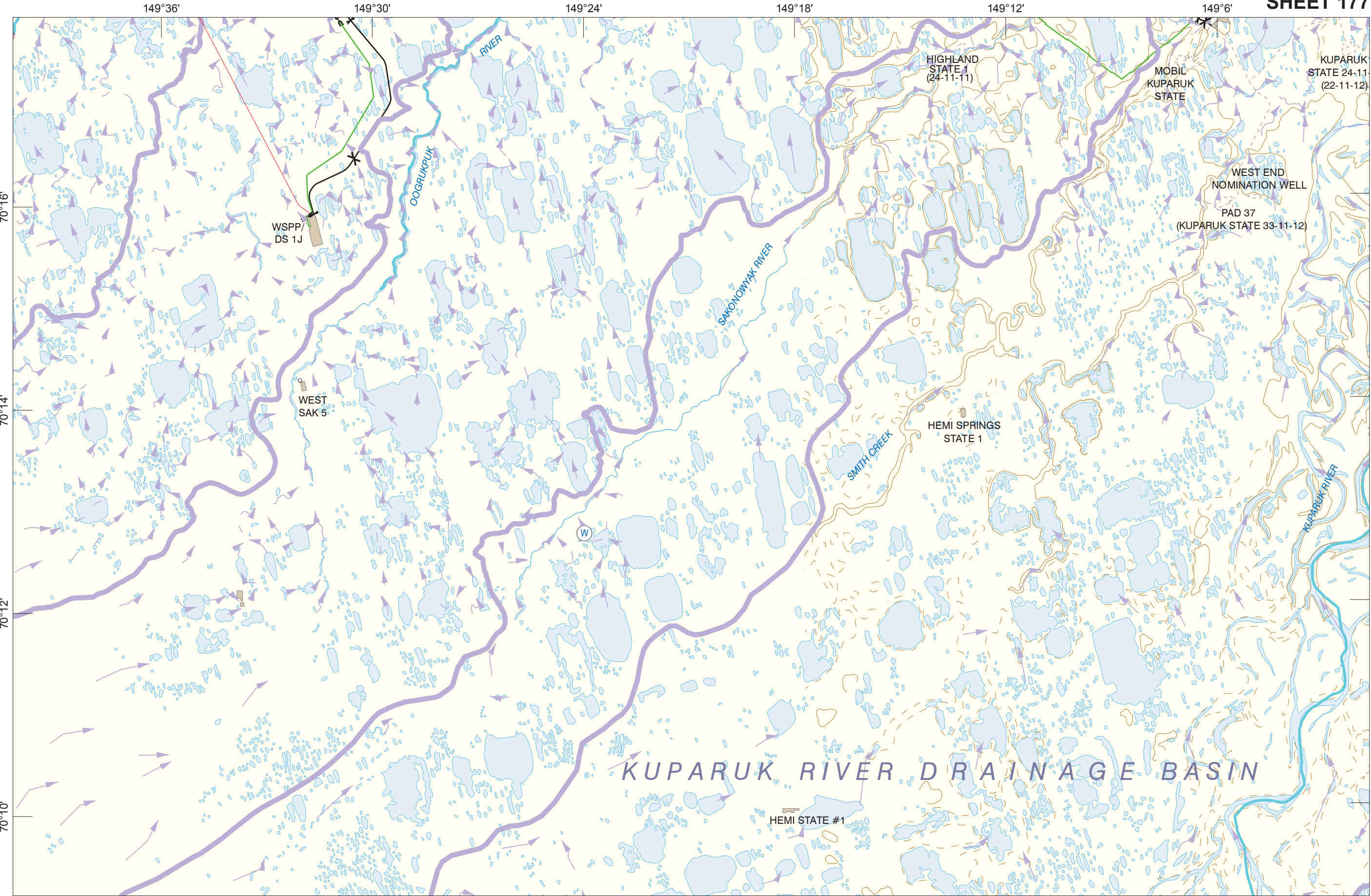
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.



*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

NOTE: All values given on these pages are for planning purposes only.



1:63360

0 2,500 5,000 FEET



PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during the open water months (generally April - October). Expect to deploy bird hazing systems.
- Known spectacled eider nesting area.
- Caribou wintering grounds.
- Polar bear dens may be present where typographical features provide adequate snow cover.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats.
- Anadromous and resident fish present in Sakonowyak and Kuparuk Rivers.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

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AIR ACCESS*

- Ugnu-Kuparuk (Sheet 51) is a continuously attended, 6,551x150 ft. asphalt private airstrip serving the Kuparuk facilities. It is located approximately 15 miles to the North-Northwest.
- Commercial and air freight services are available at Deadhorse airport (Sheet 81), located approximately 23 miles to the East-Northeast. Runway is 6,500 ft. asphalt.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 213

Continue on sheet 283

Continue on sheet 284



1:63360 0 2,500 5,000 FEET



PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during the open water months (generally April - October). Expect to deploy bird hazing systems.
- Known spectacled eider nesting area.
- Caribou wintering and calving grounds.
- Polar bear dens may be present where typographical features provide adequate snow cover.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats.
- Anadromous and resident fish present in Kuparuk River.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

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AIR ACCESS*

- Ugnu-Kuparuk (Sheet 51) is a continuously attended, 6,551x150 ft. asphalt private airstrip serving the Kuparuk facilities. It is located approximately 22 miles to the North.
- Commercial and air freight services are available at Deadhorse airport (Sheet 81), located approximately 23 miles to the East-Northeast. Runway is 6,500 ft. asphalt.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 178

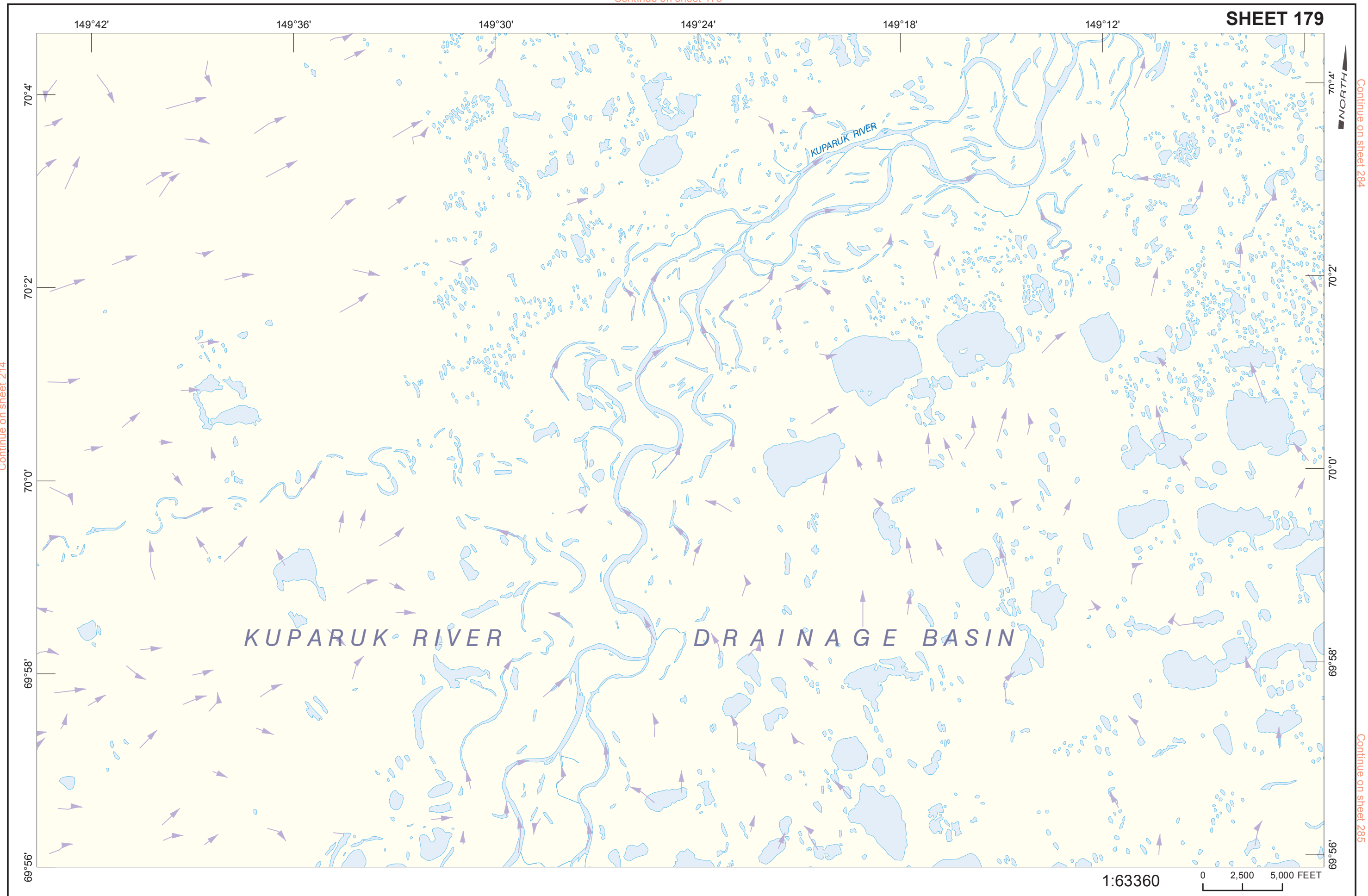
SHEET 179

Continue on sheet 284

Continue on sheet 285

Continue on sheet 214

Continue on sheet 216





PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during the open water months (generally April - October). Expect to deploy bird hazing systems.
- Known spectacled eider nesting area.
- Caribou present May through June.
- Polar bear dens may be present where topographical features provide adequate snow cover.
- Anadromous and resident fish present in Sagavanirktok River.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

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AIR ACCESS*

AIRFIELD	RUNWAY DESCRIPTION	FIXED WING MINIMUMS	FUEL / SERVICES	ATC
Deadhorse Airport	6,500 ft. asphalt	VFR: 1 mi vis. clear of clouds IFR: 0.5 mi vis. (ILS)	100-octane avgas, Jet B, Mogas	Deadhorse Tower

- Coastal Landing Strip is an unattended 2,500 ft. gravel airstrip serving Sag Delta 31-10-16. Condition unknown, use caution.
- Kadler Landing Strip is an unattended 2,500 ft. gravel airstrip serving Kadler State 1. Condition unknown, use caution.
- Kad River Landing Strip (Sheet 183) is an unattended 6,000 ft. gravel airstrip located approximately 10 miles southeast of Kadler Landing Strip. Condition unknown, use caution.
- Pingo H Landing Strip (Sheet 183) is an unattended 6,000 ft. gravel airstrip located approximately 10 miles southeast of Kadler Landing Strip. Condition unknown, use caution.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.
- Annual average flow rate of the Sagavanirktok River is 2,770 cfs.

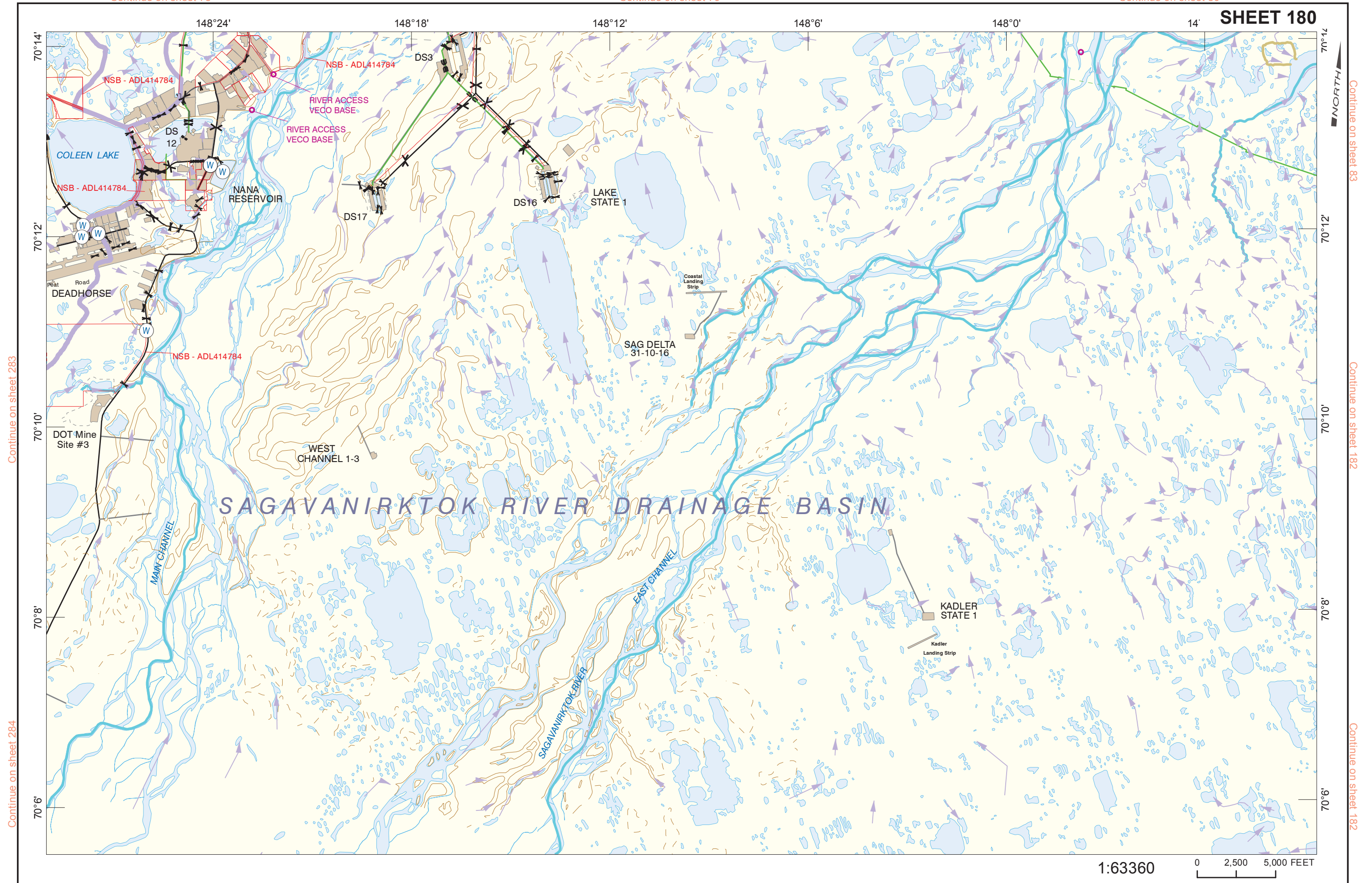
*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 78

Continue on sheet 79

Continue on sheet 80

SHEET 180



Continue on sheet 283

Continue on sheet 284

Continue on sheet 83

Continue on sheet 182

Continue on sheet 182

Continue on sheet 181



PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during the open water months (generally April - October). Expect to deploy bird hazing systems.
- Caribou present May through June.
- Polar bear dens may be present where topographical features provide adequate snow cover.
- Anadromous and resident fish present in Sagavanirktok River.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

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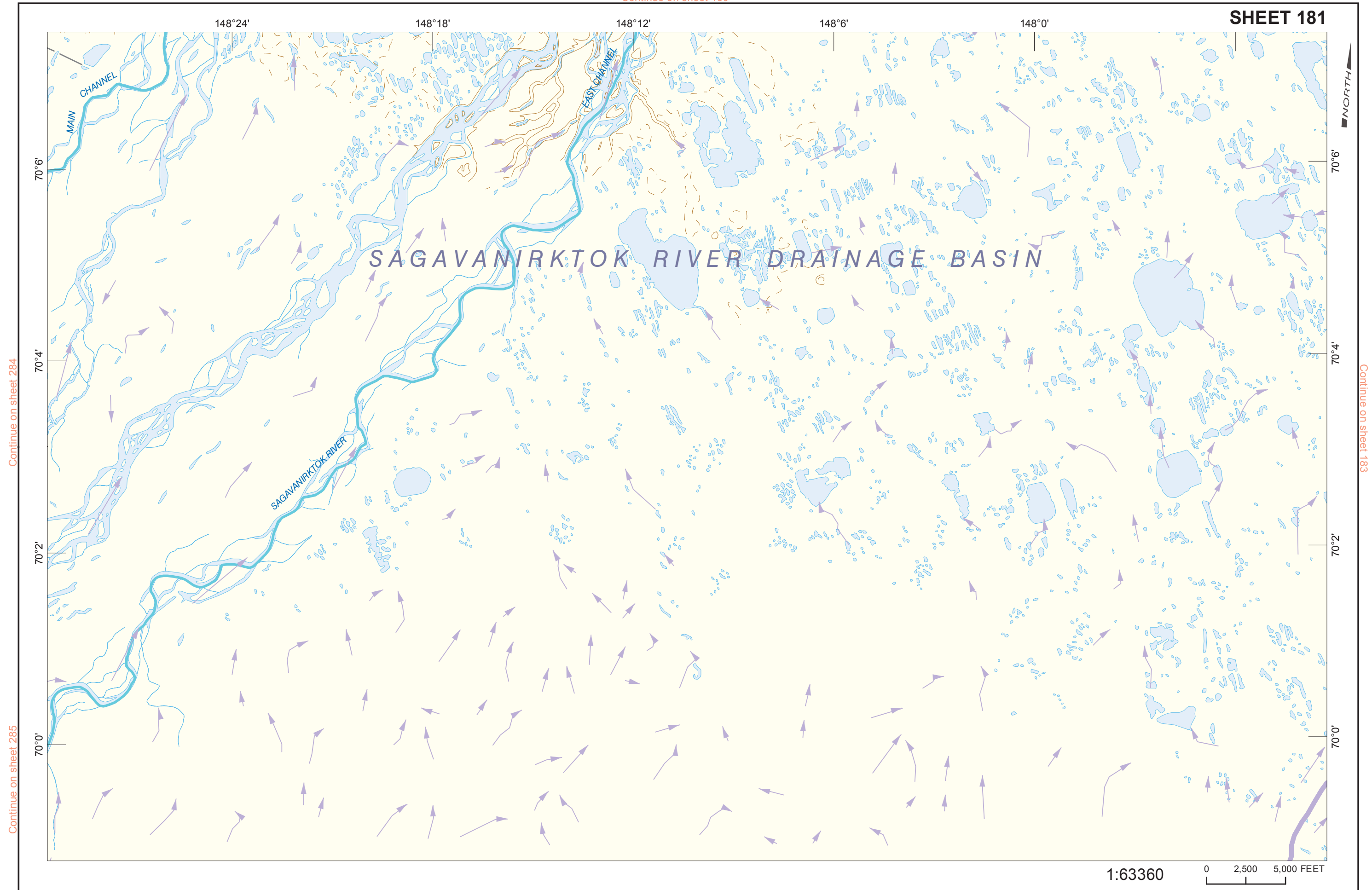
AIR ACCESS*

- Kadler Landing Strip (Sheet 180) is an unattended 2,500 ft. gravel airstrip located approximately 6 miles north-northeast from the center of this sheet. Condition unknown, use caution.
- Coastal Landing Strip (Sheet 180) is an unattended 2,500 ft. gravel airstrip located approximately 8 miles north from the center of this sheet. Condition unknown, use caution.
- Pingo H Landing Strip (Sheet 183) is an unattended 6,000 ft. gravel airstrip located approximately 10 miles east-southeast from the center of this sheet. Condition unknown, use caution.
- Kad River Landing Strip (Sheet 183) is an unattended 6,000 ft. gravel airstrip located approximately 12 miles east from the center of this sheet. Condition unknown, use caution.
- Commercial and air freight services are available at Deadhorse airport (Sheet 81), located approximately 12 miles northwest from the center of this sheet. Runway is 6,500 ft. asphalt.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.
- Annual average flow rate of the Sagavanirktok River is 2,770 cfs.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.



SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS3B	Inlet mouth 2 miles west of Shavioliok River delta.	Most sensitive during open water season. Inundated, low-lying tundra shorelines.	C-13 or C-14	200'

CULTURAL SITES

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

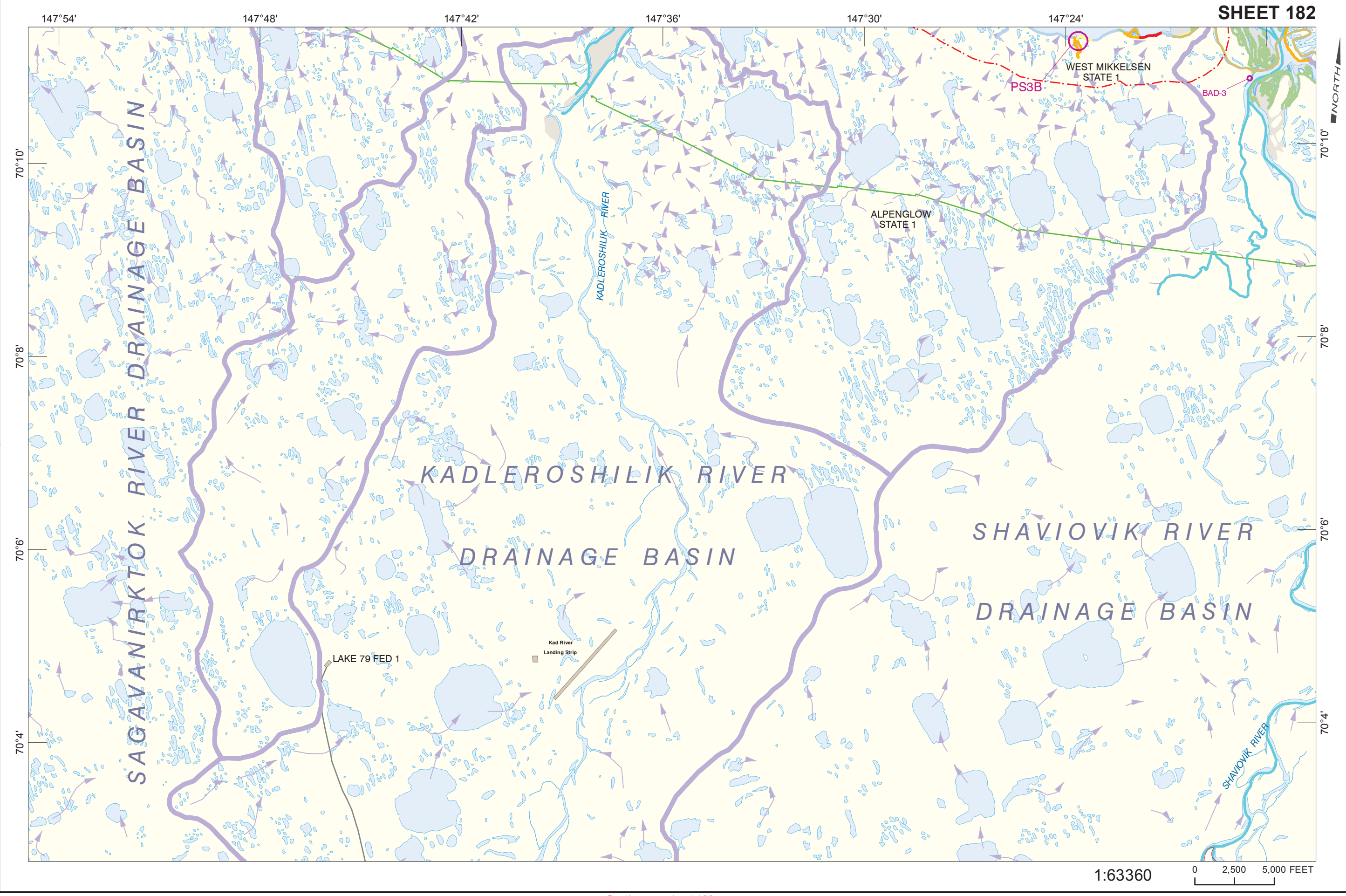
Continue on sheet 180

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Continue on sheet 89

Continue on sheet 90

Continue on sheet 183





PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during the open water months (generally April - October). Expect to deploy bird hazing systems.
- Caribou present May through June.
- Polar bear dens may be present where topographical features provide adequate snow cover.
- Anadromous and resident fish present in Kadleroshilik freshwater rivers and many inland lakes.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

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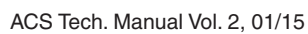
AIR ACCESS*

- Kad River Landing Strip is an unattended 6,000 ft. gravel airstrip just east of the Kad River Fed 1 site. Condition unknown, use caution.
- Pingo H Landing Strip is an unattended 6,000 ft. gravel airstrip south of the Lake 79 Fed 1 site. Condition unknown, use caution.
- Kadler Landing Strip (Sheet 180) is an unattended 2,500 ft. gravel airstrip located approximately 10 miles northwest of the Kad River Landing Strip. Condition unknown, use caution.
- Coastal Landing Strip (Sheet 180) is an unattended 2,500 ft. gravel airstrip located approximately 14 miles northwest of the Kad River Landing Strip. Condition unknown, use caution.
- An unattended, 5,100 ft. gravel private airstrip serving the Badami field (Sheet 91) is located approximately 15 miles to the northeast.
- Commercial and air freight services are available at Deadhorse airport (Sheet 81), located approximately 22 miles to the northwest. Runway is 6,500 ft. asphalt.
- Bullen Point Air Force Station (Sheet 101) is located approximately 20 miles to the northeast. This facility is closed to the public and should be considered for emergency landing only. The unattended, 3,500 ft. gravel runway is not maintained and its condition is unknown. Visual inspection recommended prior to use. May be used for spill response operations upon approval by Elmendorf Air Force Base, 11th Air Force Airfield Management, (907) 552-7384/3636/5265.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.





Response Considerations



SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS74	Gap between Flaxman Island and Brownlow Point.	Most sensitive during open water season. Keep oil from entering Lion Bay. Tundra cliffs and mixed sand and gravel beaches on Flaxman Island.	C-13 or C-14	3000'
PS75	Breach in barrier island.	Most sensitive during open water season. Keep oil from reaching mainland shore.	C-14	200'
PS76	Breach in barrier island.	Most sensitive during open water season. Keep oil from reaching mainland shore.	C-14	200'
PS77	Breach in barrier island.	Most sensitive during open water season. Keep oil from reaching mainland shore.	C-14	400'
PS78	Canning/Tamayariak River delta.	Most sensitive during open water season. Keep oil from entering the river. NOTE: Boom only if PS77 fails.	C-13 or C-14	2000'

* Priority Protection Area -- The entire delta regions of both the Canning and West Canning rivers are large Priority Protection Areas due to their size and numerous geographical features. On-site conditions may require the use of open water tactics to prevent oil migration into these deltas.

GENERAL SENSITIVITIES

- All activities within the Arctic National Wildlife Refuge – Alaska (ANWR).
- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl, diving, shore and sea birds during the open water months (generally April - October). Expect to deploy bird hazing systems.
- Caribou present May through June, with high concentrations east of the Canning River.
- Polar bear dens may be present where topographical features provide adequate snow cover.
- Ringed seals present in coastal waters and/or ice. Ringed seals are associated with shorefast ice in the winter and early summer where they pup. Pups are very sensitive to oil for first 6 to 8 weeks of life (April, May).
- Bearded seals present in the Beaufort Sea.
- Anadromous and resident fish present in freshwater rivers and many inland lakes.
- From August through November, Bowhead whales congregate and feed in Beaufort Sea offshore waters.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.

AIR ACCESS*

- Bullen Point Air Force Station (Sheet 101) is located approximately 26 miles to the West. This facility is closed to the public and should be considered for emergency landing only. The unattended, 3,500 ft. gravel runway is not maintained and its condition is unknown. Visual inspection recommended prior to use. May be used for spill response operations upon approval by Elmendorf Air Force Base, 11th Air Force Airfield Management, (907) 552-7384/3636/5265.
- An unattended, 5,100 ft. gravel private airstrip serving the Badami field (Sheet 91) is located approximately 30 miles to the West.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- The west branch of the Canning River empties into the lagoon southwest of Brownlow Point, with its delta forming extensive shoals in the eastern portion of the lagoon.
- A sand and gravel bar remains partly exposed at high water, extending southeast from Brownlow Point past the Canning River east branch.
- From Brownlow Point to the Canning River east branch, the lagoon between the delta and the barrier bar is about 0.5 miles wide and has depths of 2-3 feet. Discharge from the river discolors the seawater from many miles.
- Southeast of the Canning River east branch is a lagoon that provides excellent small-craft anchorage in depths of 8-10 feet. The best approach from seaward is around the southeast end of the barrier bar at a distance of approximately 0.3 miles.

COUNTERMEASURES CONSIDERATIONS

- Expect inlets, embayments and protruding shoreline features to collect oil during sustained incoming winds.
- Barrier islands are often very low and may not completely protect the mainland shoreline.
- Both gravel and sand-silt beaches are often narrow and/or lying on top of tundra vegetation, presenting potential risk to load-bearing machinery and equipment.
- The steepness of many beaches may largely preclude the use of mechanized equipment.
- River deltas typically present complex shorelines consisting of potentially unstable sand-silt and mud tidal flats.
- Brownlow Point, the northernmost point of the Canning River delta, has elevations up to 25 ft.

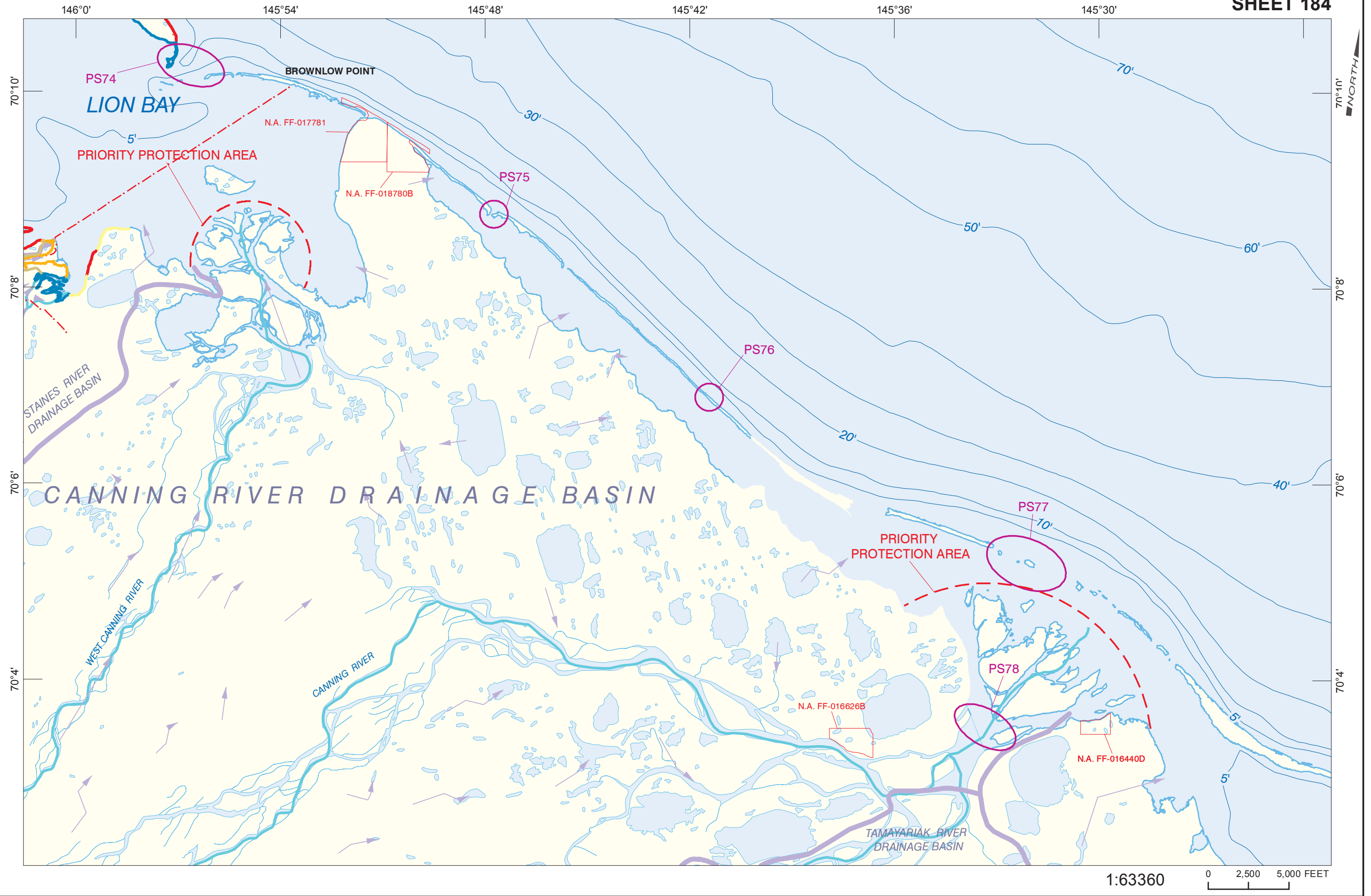
*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

NOTE: All values given on these pages are for planning purposes only.

Continue on sheet 105

SHEET 184

Continue on sheet 105



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0 2,500 5,000 FEET

Continue on sheet 185



PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS78	Canning/Tamayariak River delta.	Most sensitive during open water season. Keep oil from entering the river. NOTE: Boom only if PS77 fails.	C-13 or C-14	2000'
PS79	Gap between barrier island and shore.	Most sensitive during open water season. Keep oil from entering lagoon. NOTE: If booming fails, boom streams behind on the mainland shore.	C-13	4000'
PS80	Small inlet.	Most sensitive during open water season. Keep oil from entering the inlet.	C-13 or C-14	800'
PS81	Boulder patch off Kongan-evik Point.	Most sensitive during open water season. High density of fish.	C-13	5000'
PS82	Inlet.	Most sensitive during open water season. Keep oil from entering the inlet.	C-13 or C-14	2000'
PS83	Mouth of small stream.	Most sensitive during open water season. Keep oil from entering the stream.	C-14	150'
PS84	Mouth of Katakturuk River.	Most sensitive during open water season. Keep oil from entering the river.	C-14	300'
* Priority Protection Area -- The entire delta region of the Canning River is one large Priority Protection Areas due to its size and numerous geographical features. On-site conditions may require the use of open water tactics to prevent oil migration into these deltas.				

GENERAL SENSITIVITIES

- All activities within the Arctic National Wildlife Refuge – Alaska (ANWR).
- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl, diving, shore and sea birds during the open water months (generally April - October). Expect to deploy bird hazing systems.
- Caribou present May through June.
- Polar bear dens may be present where topographical features provide adequate snow cover.
- Ringed seals present in coastal waters and/or ice. Ringed seals are associated with shorefast ice in the winter and early summer where they pup. Pups are very sensitive to oil for first 6 to 8 weeks of life (April, May).
- Bearded seals present in the Beaufort Sea.
- Anadromous and resident fish present in freshwater rivers and many inland lakes.
- From August through November, Bowhead whales congregate and feed in Beaufort Sea offshore waters.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- Bullen Point Air Force Station (Sheet 101) is located approximately 37 miles to the West-Northwest. This facility is closed to the public and should be considered for emergency landing only. The unattended, 3,500 ft. gravel runway is not maintained and its condition is unknown. Visual inspection recommended prior to use. May be used for spill response operations upon approval by Elmendorf Air Force Base, 11th Air Force Airfield Management, (907) 552-7384/3636/5265.
- An unattended, 5,100 ft. gravel private airstrip serving the Badami field (Sheet 91) is located approximately 41 miles to the West-Northwest.
- Barter Island LRRS airstrip (Sheet 188) is located approximately 41 miles to the East-Northeast. Although still owned by the Air Force, it is leased to the North Slope Borough and is open to the public. The airfield is attended, but the 4,800 ft. gravel runway is not monitored and is reported to be soft with ruts the entire length. Visual inspection recommended prior to use.

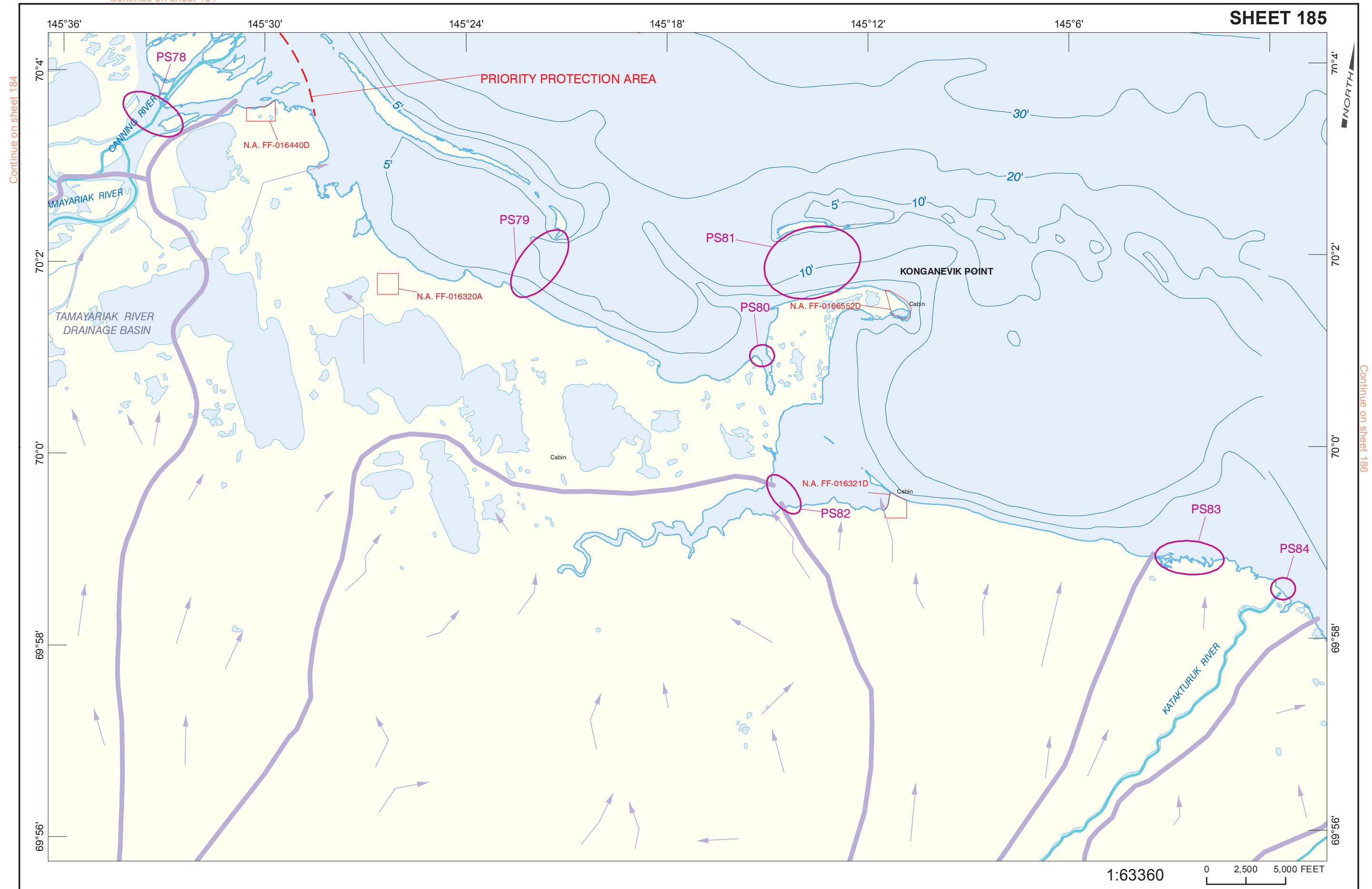
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- Southeast of the Canning River east branch is a lagoon that provides excellent small-craft anchorage in depths of 8-10 feet. The best approach from seaward is around the southeast end of the barrier bar at a distance of approximately 0.3 miles.
- Approximately 1 mile north of Konganevik Point are extensive shoals that are partly awash. Between the shoals and the island is a channel with depths of 7-17 ft.
- Large boulders line the entire shore of Konganevik Point -- use caution when navigating.
- Approximately 2 miles south of Konganevik Point is a small craft anchorage offering protection from all winds in depths of 4 feet.

COUNTERMEASURES CONSIDERATIONS

- Expect inlets, embayments and protruding shoreline features to collect oil during sustained incoming winds.
- Barrier islands are often very low and may not completely protect the mainland shoreline.
- Both gravel and sand-silt beaches are often narrow and/or lying on top of tundra vegetation, presenting potential risk to load-bearing machinery and equipment.
- The steepness of many beaches may largely preclude the use of mechanized equipment.
- River deltas typically present complex shorelines consisting of potentially unstable sand-silt and mud tidal flats.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.





PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS84	Mouth of Katakaturuk River.	Most sensitive during open water season. Keep oil from entering the river.	C-14	300'
PS85	Mouth of small stream.	Most sensitive during open water season. Keep oil from entering the stream.	C-14	200'
PS86	Mouth of Marsh Creek.	Most sensitive during open water season. Keep oil from entering the creek.	C-14	200'
PS87	Mouth of small stream.	Most sensitive during open water season. Keep oil from entering the stream.	C-14	200'
PS88	Mouth of Carter Creek.	Most sensitive during open water season. Keep oil from entering the creek.	C-14	200'
PS89	Mouth of small stream.	Most sensitive during open water season. Keep oil from entering the stream.	C-14	150'
PS90	Mouth of small stream.	Most sensitive during open water season. Keep oil from entering the stream.	C-14	200'
PS91	Breaks in barrier islands at Sadlerochit River mouth.	Most sensitive during open water season. Keep oil from entering the river.	C-13 or C-14	1000'

GENERAL SENSITIVITIES

- All activities within the Arctic National Wildlife Refuge – Alaska (ANWR).
- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl, diving, shore and sea birds during the open water months (generally April - October). Expect to deploy bird hazing systems. Collinson Point in particular is a very important nesting site for Common Eiders.
- Caribou present May through June.
- Polar bear dens may be present where topographical features provide adequate snow cover.
- Bearded seals present in the Beaufort Sea.
- Ringed seals present in coastal waters and/or ice. Ringed seals are associated with shorefast ice in the winter and early summer where they pup. Pups are very sensitive to oil for first 6 to 8 weeks of life (April, May).
- From August through November, Bowhead whales congregate and feed in Beaufort Sea offshore waters.
- Anadromous and resident fish present in freshwater rivers and many inland lakes.

CULTURAL SITES

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Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- Barter Island LRRS airstrip (Sheet 188) is located approximately 26 miles to the East-Northeast. Although still owned by the Air Force, it is leased to the North Slope Borough and is open to the public. The airfield is attended, but the 4,800 ft. gravel runway is not monitored and is reported to be soft with ruts the entire length. Visual inspection recommended prior to use.
- Bullen Point Air Force Station (Sheet 101) is located approximately 50 miles to the West-Northwest. This facility is closed to the public and should be considered for emergency landing only. The unattended, 3,500 ft. gravel runway is not maintained and its condition is unknown. Visual inspection recommended prior to use. May be used for spill response operations upon approval by Elmendorf Air Force Base, 11th Air Force Airfield Management, (907) 552-7384/3636/5265.
- An unattended, 5,100 ft. gravel private airstrip serving the Badami field (Sheet 91) is located approximately 55 miles to the West-Northwest.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- The Katakaturuk River empties into the south side of Camden Bay on the west side of Simpson Cove.
- Simpson Cove has excellent holding ground and affords protection from ice and wind for vessels drawing up to 6 feet. Approach should be made from northeast of Collinson Point. Once inside the cove, depths average from 6-11 feet.
- Anderson Point marks the eastern edge of Camden Bay. South and west of this point, the bottom slopes to depths of 10-12 feet very close to shore.

COUNTERMEASURES CONSIDERATIONS

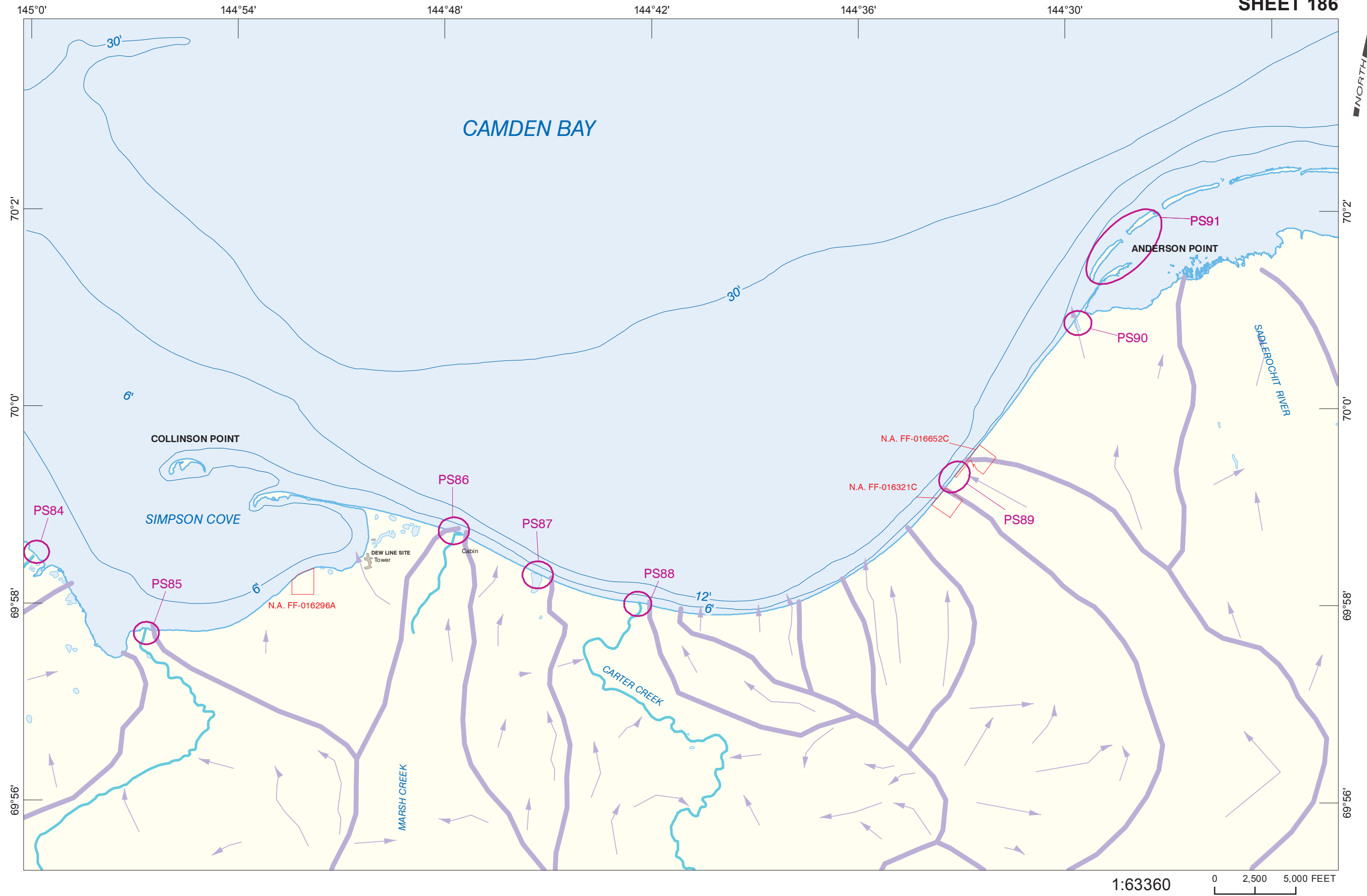
- Expect inlets, embayments and protruding shoreline features to collect oil during sustained incoming winds.
- Barrier islands are often very low and may not completely protect the mainland shoreline.
- Both gravel and sand-silt beaches are often narrow and/or lying on top of tundra vegetation, presenting potential risk to load-bearing machinery and equipment.
- The steepness of many beaches may largely preclude the use of mechanized equipment.
- River deltas typically present complex shorelines consisting of potentially unstable sand-silt and mud tidal flats.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 185

Continue on sheet 187

NORTH

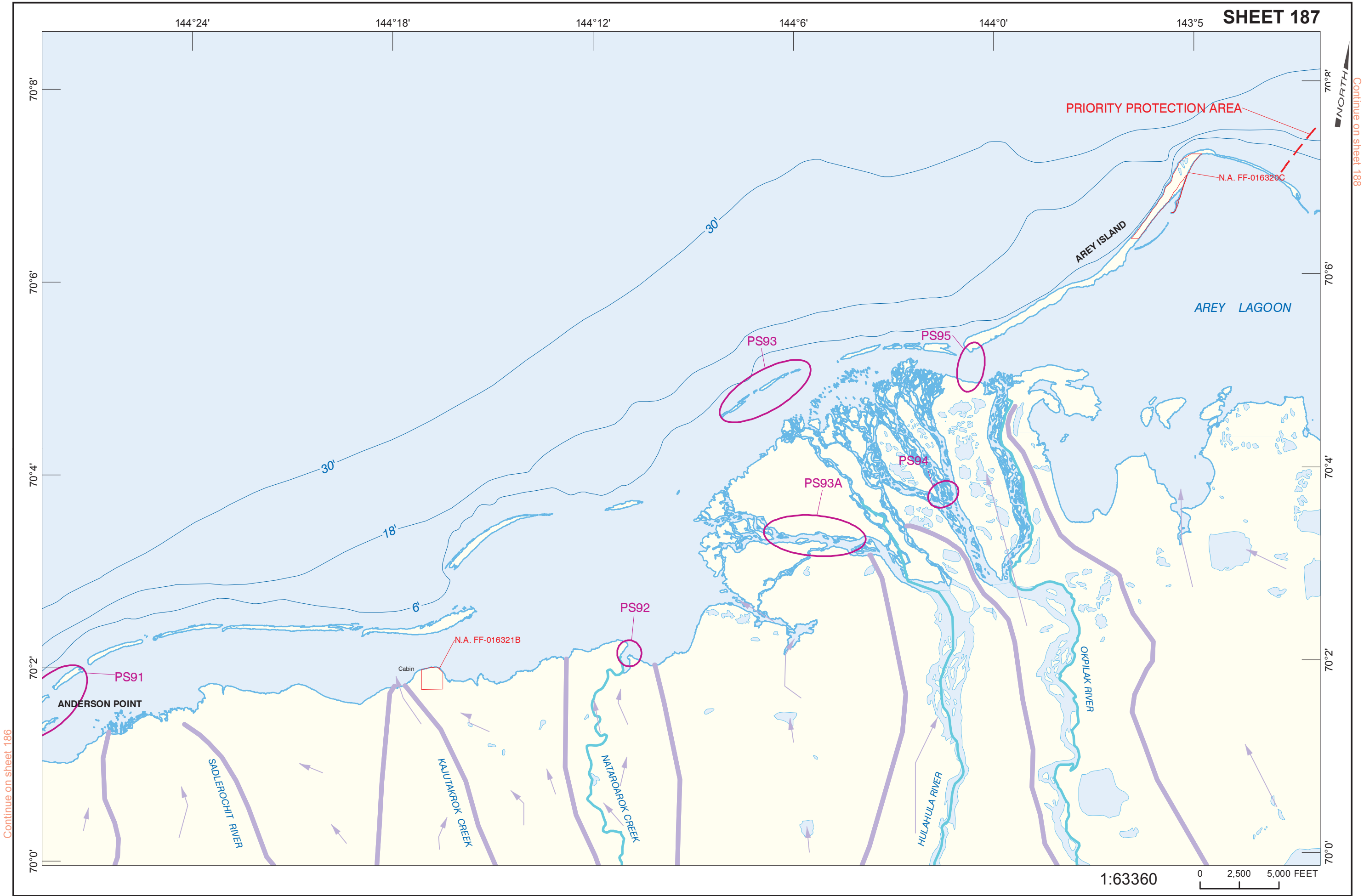


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PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS96	Kuvritovik Entrance.	Most sensitive during open water season. Expect polar bear activity during whaling season. Use hazing and other precautions.	C-13 or C-14	3000'
PS97	Mouth of Bernard Harbor.	Most sensitive during open water season. Expect polar bear activity during whaling season. Use hazing and other precautions.	C-13 or C-14	2000'
PS98	Nelsaluk Pass.	Most sensitive during open water season. Expect polar bear activity during whaling season. Use hazing and other precautions.	C-13 or C-14	1500'
PS99	Jago Entrance.	Most sensitive during open water season. Prevent oil from reaching mainland shore.	C-13	2000'
PS100	Breaks in barrier island southeast of Jago Spit.	Most sensitive during open water season. Prevent oil from reaching the river delta.	C-14	800'
* Priority Protection Area -- Barter Island and adjacent areas should be viewed as one large Priority Protection Area due to a high concentration of polar bears. On-site conditions may require the use of open water tactics to prevent oil migration into sensitive habitat.				

GENERAL SENSITIVITIES

- All activities within the Arctic National Wildlife Refuge – Alaska (ANWR).
- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl, diving, shore and sea birds during the open water months (generally April - October). Expect to deploy bird hazing systems.
- The entire area covered by this sheet is a high recreation, wildlife and subsistence use area.
- Polar bears congregate near, and feed on, the whale bone piles remaining after subsistence hunts.
- Caribou present May through June.
- Polar bear dens may be present where topographical features provide adequate snow cover.
- Bearded seals present in the Beaufort Sea.
- Ringed seals present in coastal waters and/or ice. Ringed seals are associated with shorefast ice in the winter and early summer where they pup. Pups are very sensitive to oil for first 6 to 8 weeks of life (April, May).
- From August through November, Bowhead whales congregate and feed in Beaufort Sea offshore waters.
- Anadromous and resident fish present in freshwater rivers and many inland lakes.

CULTURAL SITES

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AIR ACCESS*

- Barter Island LRRS airstrip is owned by the Air Force, but leased to the North Slope Borough and is open to the public. The airfield is attended, but the 4,800 ft. gravel runway is not monitored and is reported to be soft with ruts the entire length. Visual inspection recommended prior to use.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- Barter Island, elevation 58 ft., is the highest ground in this general area, with bluffs on its seaward side.
- Bernard Harbor lies off the northeast corner of Barter Island, just offshore of the village of Kaktovik. It is protected by Bernard Spit to its north, and has depths of 5-7 ft. over good holding bottom, but can only be entered by vessels drafting 4 ft. or less. Vessels entering from the west should favor the Barter Island shoreline.
- Manning Point is a barrier spit that projects north from the mainland to within 0.2 miles of the northeast end of Barter Island. Kaktovik Lagoon, between the spit and the island, and Jago Lagoon, on the east side of the spit, have depths of 9-12 feet, but cannot be entered by vessels drafting more than 4 ft.
- Jago Spit is a barrier island lying approximately 1 mile north of the shallow Jago River delta.

COUNTERMEASURES CONSIDERATIONS

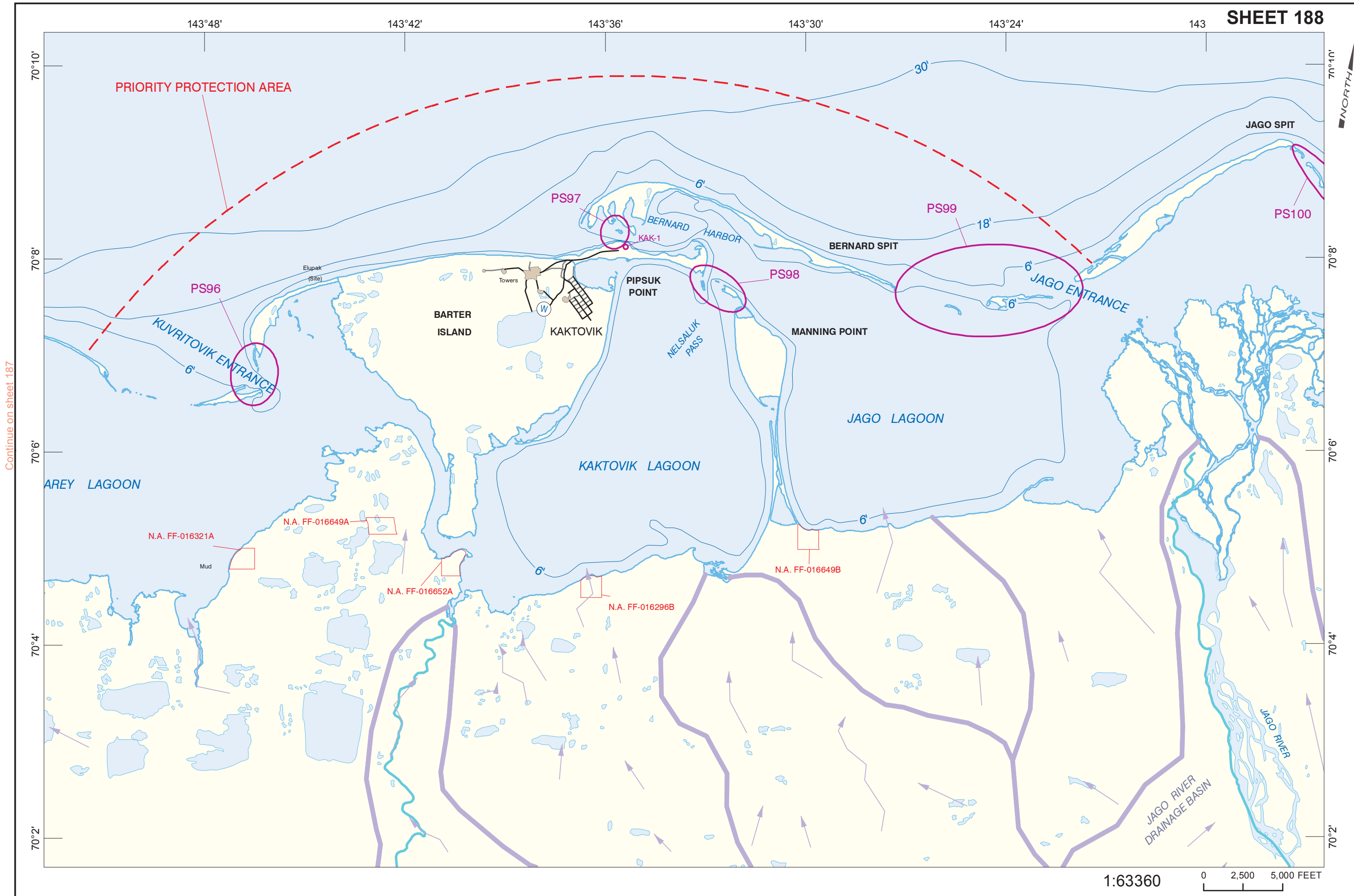
- Expect inlets, embayments and protruding shoreline features to collect oil during sustained incoming winds.
- Barrier islands are often very low and may not completely protect the mainland shoreline.
- Both gravel and sand-silt beaches are often narrow and/or lying on top of tundra vegetation, presenting potential risk to load-bearing machinery and equipment.
- The steepness of many beaches may largely preclude the use of mechanized equipment.
- River deltas typically present complex shorelines consisting of potentially unstable sand-silt and mud tidal flats.

STAGING AREAS AND PRESTAGED EQUIPMENT

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
	Kaktovik			

Currently, this site contains no pre-staged equipment.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.



SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS100	Breaks in barrier island southeast of Jago Spit.	Most sensitive during open water season. Prevent oil from reaching mainland shore.	C-14	800'
PS101	Multiple breaks in barrier island.	Most sensitive during open water season. Prevent oil from reaching mainland shore.	C-13 or C-14	1000'
PS102	Break into northwest corner of Pokok Lagoon.	Most sensitive during open water season. Prevent oil from entering the lagoon.	C-14	300'

- All activities within the Arctic National Wildlife Refuge – Alaska (ANWR).
- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl, diving, shore and sea birds during the open water months (generally April - October). Expect to deploy bird hazing systems.
- Caribou present May through June.
- Polar bear dens may be present where topographical features provide adequate snow cover.
- Bearded seals present in the Beaufort Sea.
- Ringed seals present in coastal waters and/or ice. Ringed seals are associated with shorefast ice in the winter and early summer where they pup. Pups are very sensitive to oil for first 6 to 8 weeks of life (April, May).
- From August through November, Bowhead whales congregate and feed in Beaufort Sea offshore waters. Bowhead whales are present in high concentrations east of Griffin Point.
- Anadromous and resident fish present in freshwater rivers and many inland lakes.

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

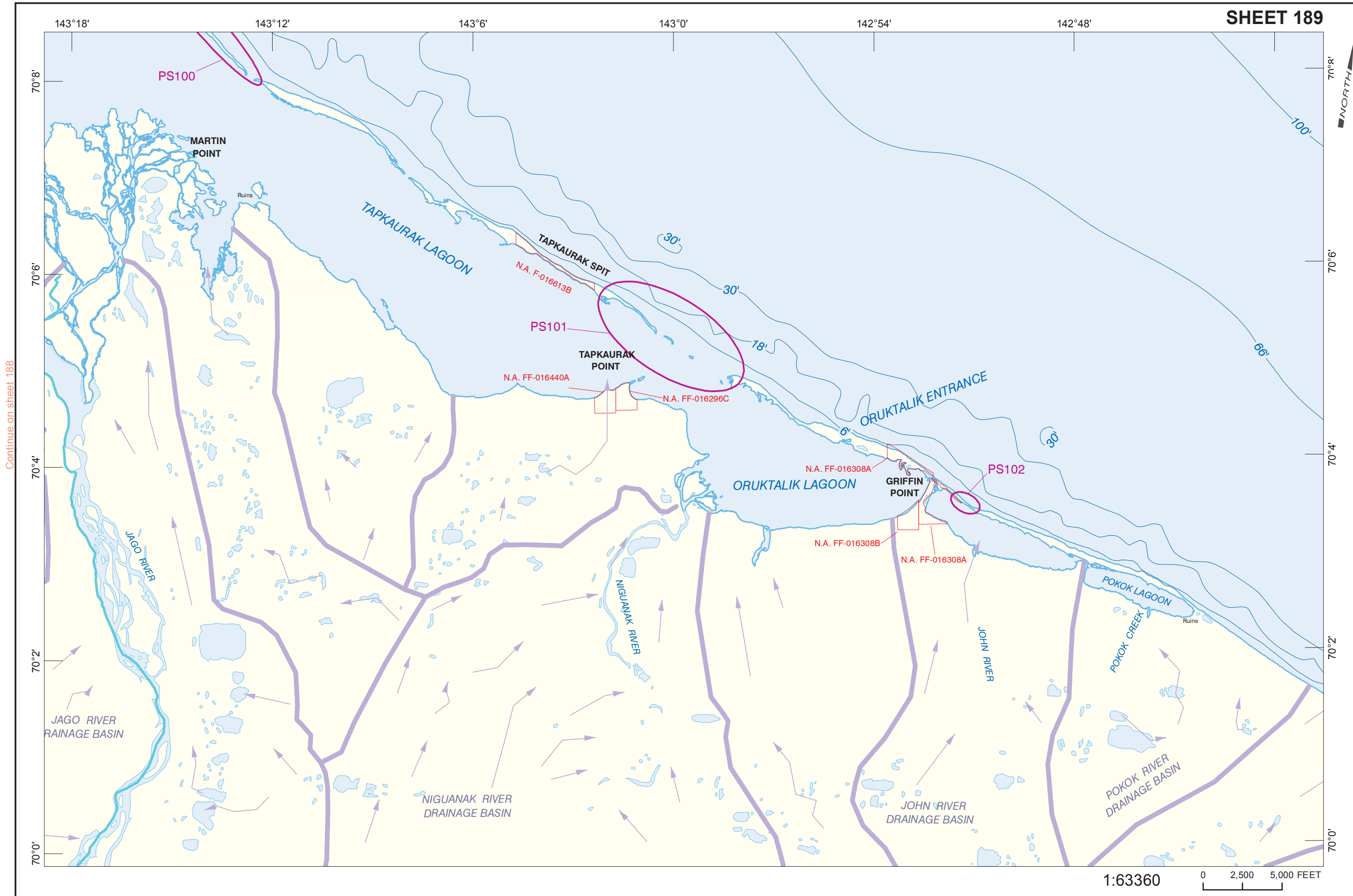
ACS Tech. Manual Vol. 2, 03/12

- Barter Island LRRS airstrip (Sheet 188) is located approximately 14 miles to the West-Northwest. Although still owned by the Air Force, it is leased to the North Slope Borough and is open to the public. The airfield is attended, but the 4,800 ft. gravel runway is not monitored and is reported to be soft with ruts the entire length. Visual inspection recommended prior to use.

- Martin Point, low and irregular, is located on the east side of the shallow Jago River delta.
- From Martin Point southeast to Griffin Point, low barrier islands are separated from the mainland by shallow lagoons. Considerable driftwood has accumulated on the higher parts of the islands. The mainland shores of the lagoons have tundra bluffs up to 20 ft. There is deep water along the seaward side of the barrier islands, and small boats can navigate within a few yards of the beach except near the inlets.
- A mile northwest of Griffin Point is Oruktalik Entrance, a narrow barrier passage through which vessels drafting 5 feet or less may enter Oruktalik Lagoon.
- Small boats can navigate very close to the beach between Griffin Point and Pokok Bay to the southeast.
- Southeast of Pokok Lagoon, the coastline becomes 25-30 ft. bluffs fronted by a narrow steep sand beach.

- Expect inlets, embayments and protruding shoreline features to collect oil during sustained incoming winds.
- Barrier islands are often very low and may not completely protect the mainland shoreline.
- Both gravel and sand-silt beaches are often narrow and/or lying on top of tundra vegetation, presenting potential risk to load-bearing machinery and equipment.
- The steepness of many beaches may largely preclude the use of mechanized equipment.
- River deltas typically present complex shorelines consisting of potentially unstable sand-silt and mud tidal flats.

NOTE: All values given on these pages are for planning purposes only.



PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS103	Entrance to Pokok Bay.	Most sensitive during open water season. Prevent oil from entering the bay.	C-13 or C-14	300'
PS104	Multiple openings into Angun Lagoon.	Most sensitive during open water season. Prevent oil from entering the lagoon.	C-13 or C-14	800'
PS105	Opening in barrier island.	Most sensitive during open water season. Prevent oil from reaching mainland shore.	C-13	1000'

GENERAL SENSITIVITIES

- All activities within the Arctic National Wildlife Refuge – Alaska (ANWR).
- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl, diving, shore and sea birds during the open water months (generally April - October). Expect to deploy bird hazing systems.
- Caribou present May through June.
- Polar bear dens may be present where topographical features provide adequate snow cover.
- Bearded seals present in the Beaufort Sea.
- Ringed seals present in coastal waters and/or ice. Ringed seals are associated with shorefast ice in the winter and early summer where they pup. Pups are very sensitive to oil for first 6 to 8 weeks of life (April, May).
- From August through November, Bowhead whales congregate in high concentrations and feed in Beaufort Sea offshore waters.
- Anadromous and resident fish present in freshwater rivers and many inland lakes.

CULTURAL SITES

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Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.

AIR ACCESS*

- Barter Island LRRS airstrip (Sheet 188) is located approximately 28 miles to the Northwest. Although still owned by the Air Force, it is leased to the North Slope Borough and is open to the public. The airfield is attended, but the 4,800 ft. gravel runway is not monitored and is reported to be soft with ruts the entire length. Visual inspection recommended prior to use.

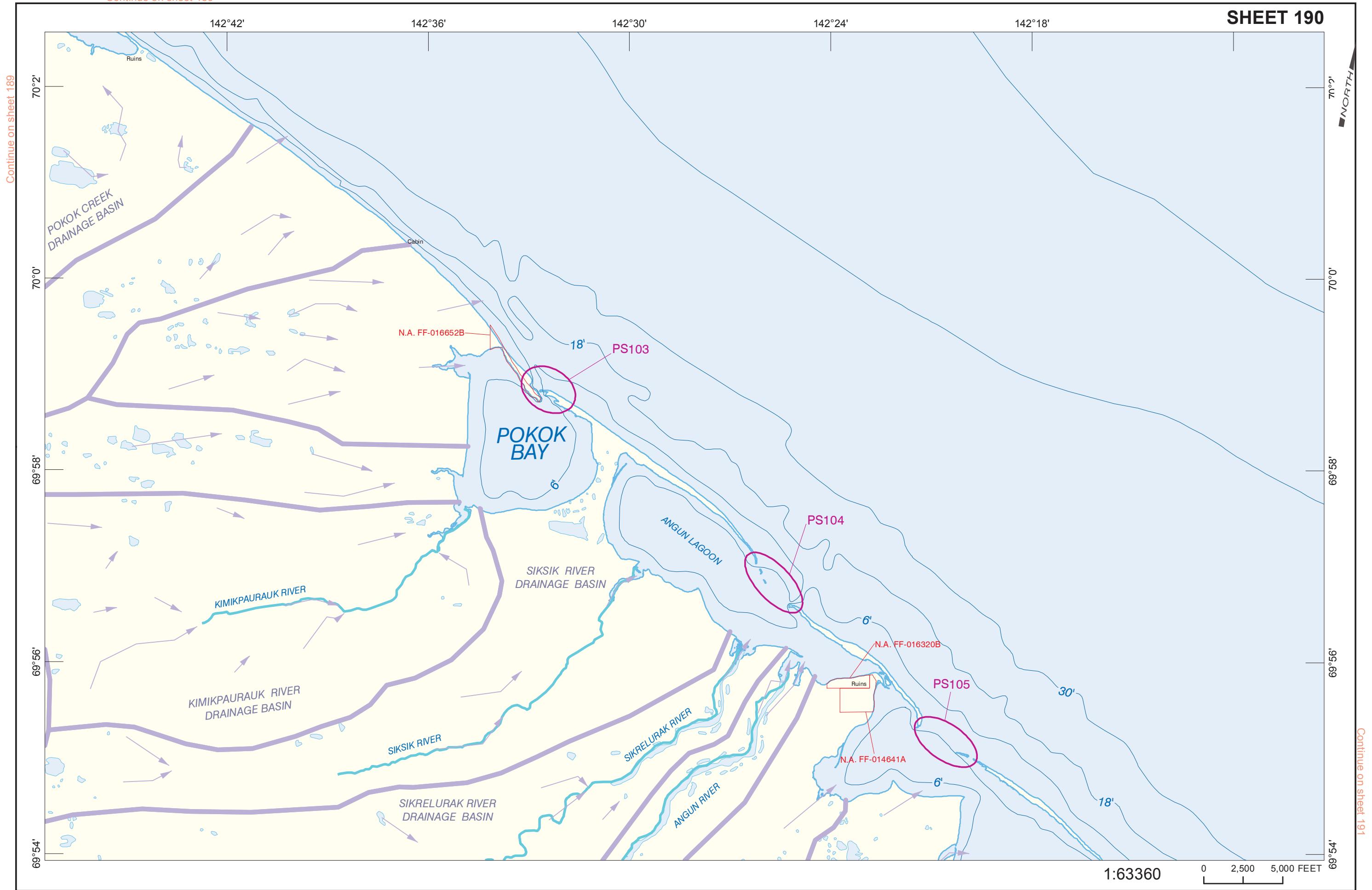
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- Southeast of Pokok Lagoon, the coastline becomes 25-30 ft. bluffs fronted by a narrow steep sand beach all the way to within 1.5 miles of Pokok Bay. Small boats can navigate very close to the beach.
- Pokok Bay, 10-12 ft. depth, has good holding bottom and protection from ice and winds. Bars extend out from both sides of the entrance. Depth of the entrance is approximately 7 ft., with approach from the west recommended.
- Humphrey Point on the southeast side of Pokok Bay has a low bluff and narrow sand beach. Extending southeast are low barrier islands that cover in many places at high water. The seaward sides of these islands are irregular, and small craft must stay well offshore.
- Angun Lagoon, had depths from 10-11 ft. There is a 10-foot bluff at Angun Point. The lagoon entrance is very narrow with a controlling depth of 8 ft. Use caution when entering due to constant shift of the barrier islands.
- Beaufort Lagoon, with depths of 5-12 feet in the middle, extends southeast behind the barrier reef running from Angun Point to Siku Point.

COUNTERMEASURES CONSIDERATIONS

- Expect inlets, embayments and protruding shoreline features to collect oil during sustained incoming winds.
- Barrier islands are often very low and may not completely protect the mainland shoreline.
- Both gravel and sand-silt beaches are often narrow and/or lying on top of tundra vegetation, presenting potential risk to load-bearing machinery and equipment.
- The steepness of many beaches may largely preclude the use of mechanized equipment.
- River deltas typically present complex shorelines consisting of potentially unstable sand-silt and mud tidal flats.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.





PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS105	Opening in barrier island.	Most sensitive during open water season. Prevent oil from reaching mainland shore.	C-13	1000'
PS106	Opening in barrier island.	Most sensitive during open water season. Prevent oil from entering the lagoon.	C-14	200'
PS107	Openings in barrier island at the mouth of the Aichilak River.	Most sensitive during open water season. Prevent oil from reaching the river delta.	C-14	400'
PS108	Openings to Egaksrak Lagoon.	Most sensitive during open water season. Prevent oil from entering the lagoon.	C-13 or C-14	500'

GENERAL SENSITIVITIES

- All activities within the Arctic National Wildlife Refuge – Alaska (ANWR).
- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl, diving, shore and sea birds during the open water months (generally April - October). Expect to deploy bird hazing systems.
- The Kongakut River delta is a high recreation, wildlife and subsistence use area.
- Caribou present May through June.
- Polar bear dens may be present where topographical features provide adequate snow cover.
- Bearded seals present in the Beaufort Sea.
- Ringed seals present in coastal waters and/or ice. Ringed seals are associated with shorefast ice in the winter and early summer where they pup. Pups are very sensitive to oil for first 6 to 8 weeks of life (April, May).
- From August through November, Bowhead whales congregate in high concentrations and feed in Beaufort Sea offshore waters.
- Anadromous and resident fish present in freshwater rivers and many inland lakes.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- Barter Island LRRS airstrip (Sheet 188) is located approximately 40 miles to the Northwest. Although still owned by the Air Force, it is leased to the North Slope Borough and is open to the public. The airfield is attended, but the 4,800 ft. gravel runway is not monitored and is reported to be soft with ruts the entire length. Visual inspection recommended prior to use.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- Beaufort Lagoon, with depths of 5-12 feet in the middle, extends southeast behind the barrier island(s) running from Angun Point to Siku Point. The southeast part of the lagoon from the Aichilik River delta to Siku Point has not been surveyed but the entrances are known to be shallow and subject to change. The principal entrance to the lagoon is a narrow channel with a depth of 2-5 feet, about 1.8 miles southeast of Angun Point; use caution.
- Nuvagapak Lagoon has depths of 8-10 feet in the middle.
- Egaksrak Lagoon has not been surveyed.
- Siku Point is the northwest end of Icy Reef, a barrier island that extends 13 miles southeast to Demarcation Bay without a break. Icy Reef has elevations from 1-10 feet, and is more prominent than its neighboring barrier islands to the northwest. The island has considerable driftwood along its entire length, and water depths of 15 feet are within 100 yards of the beach.

COUNTERMEASURES CONSIDERATIONS

- Expect inlets, embayments and protruding shoreline features to collect oil during sustained incoming winds.
- Barrier islands are often very low and may not completely protect the mainland shoreline.
- Both gravel and sand-silt beaches are often narrow and/or lying on top of tundra vegetation, presenting potential risk to load-bearing machinery and equipment.
- The steepness of many beaches may largely preclude the use of mechanized equipment.
- River deltas typically present complex shorelines consisting of potentially unstable sand-silt and mud tidal flats.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

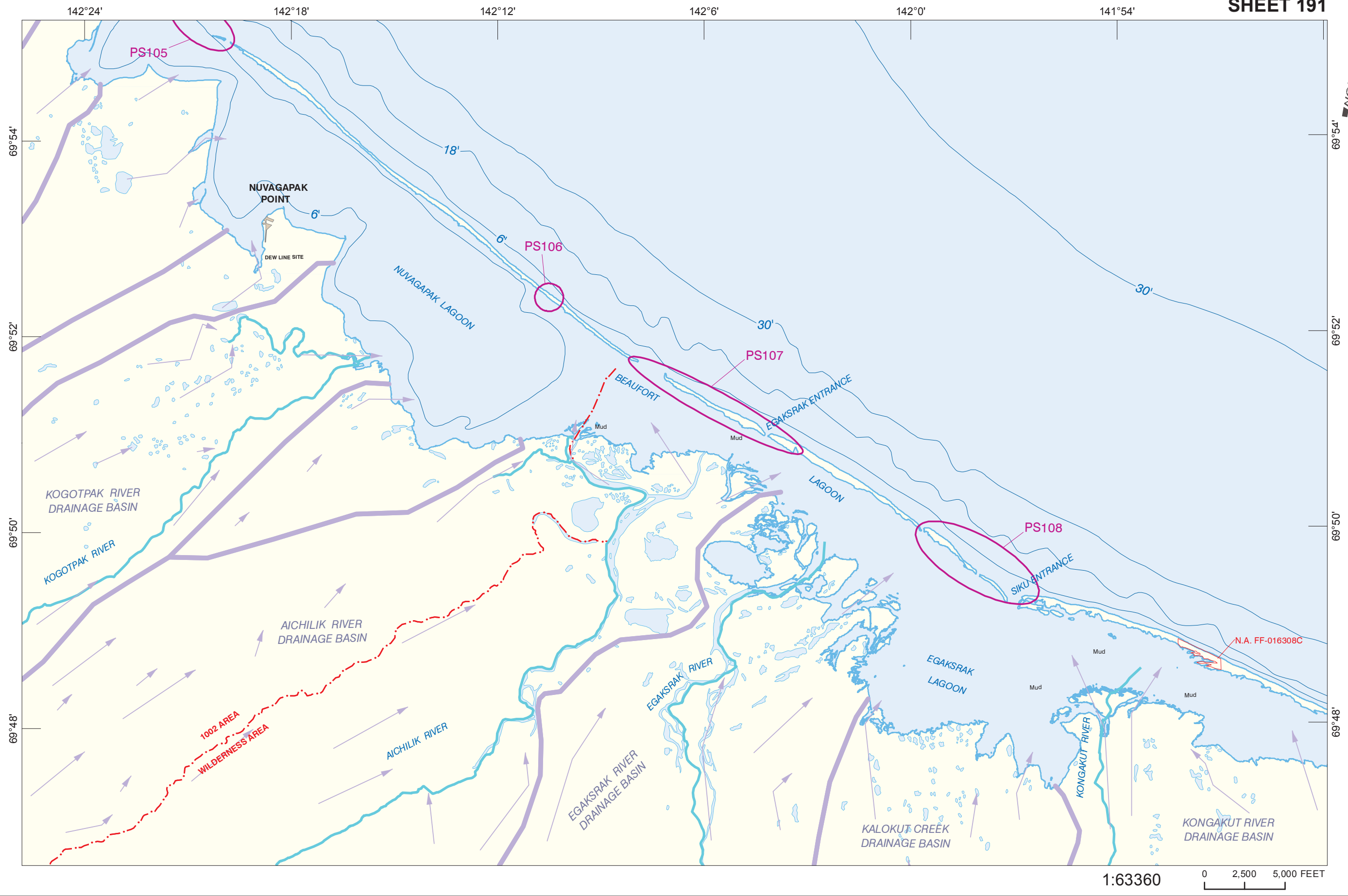
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PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS108	Openings to Egaksrak Lagoon.	Most sensitive during open water season. Prevent oil from entering the lagoon.	C-13 or C-14	500'
PS109	Opening in barrier island at mouth of Kongukut River.	Most sensitive during open water season. Prevent oil from reaching the river delta.	C-14	200'
PS110	Opening to Pingokruluk Lagoon.	Most sensitive during open water season. Prevent oil from entering the lagoon.	C-14	200'

GENERAL SENSITIVITIES

- All activities within the Arctic National Wildlife Refuge – Alaska (ANWR).
- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl, diving, shore and sea birds during the open water months (generally April - October). Expect to deploy bird hazing systems.
- Caribou present May through June.
- Polar bear dens may be present where topographical features provide adequate snow cover.
- Bearded seals present in the Beaufort Sea.
- Ringed seals present in coastal waters and/or ice. Ringed seals are associated with shorefast ice in the winter and early summer where they pup. Pups are very sensitive to oil for first 6 to 8 weeks of life (April, May).
- From August through November, Bowhead whales congregate in high concentrations and feed in Beaufort Sea offshore waters.
- Anadromous and resident fish present in freshwater rivers and many inland lakes.

CULTURAL SITES

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AIR ACCESS*

- Barter Island LRRS airstrip (Sheet 188) is located approximately 50 miles to the Northwest. Although still owned by the Air Force, it is leased to the North Slope Borough and is open to the public. The airfield is attended, but the 4,800 ft. gravel runway is not monitored and is reported to be soft with ruts the entire length. Visual inspection recommended prior to use.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- Siku Point is the northwest end of Icy Reef, a barrier island that extends 13 miles southeast to Demarcation Bay without a break. Icy Reef has elevations from 1-10 feet, and is more prominent than its neighboring barrier islands to the northwest. The island has considerable driftwood along its entire length, and water depths of 15 feet are within 100 yards of the beach.
- The northwest half of the mainland shore behind Icy Reef is low and relatively flat. Halfway to Demarcation Bay is a large ice field, approximately 3 miles long, that Natives say never melts. Observations from Icy Reef indicate the ice field is fairly uniform and stands a few feet above the surface of the lagoon.
- The southeast half of the mainland shore behind Icy Reef has bluffs with elevations of as much as 25 feet.
- Pingokraluk Point, a 49-foot-high tundra mound, is a prominent landmark.

COUNTERMEASURES CONSIDERATIONS

- Expect inlets, embayments and protruding shoreline features to collect oil during sustained incoming winds.
- Barrier islands are often very low and may not completely protect the mainland shoreline.
- Both gravel and sand-silt beaches are often narrow and/or lying on top of tundra vegetation, presenting potential risk to load-bearing machinery and equipment.
- The steepness of many beaches may largely preclude the use of mechanized equipment.
- River deltas typically present complex shorelines consisting of potentially unstable sand-silt and mud tidal flats.

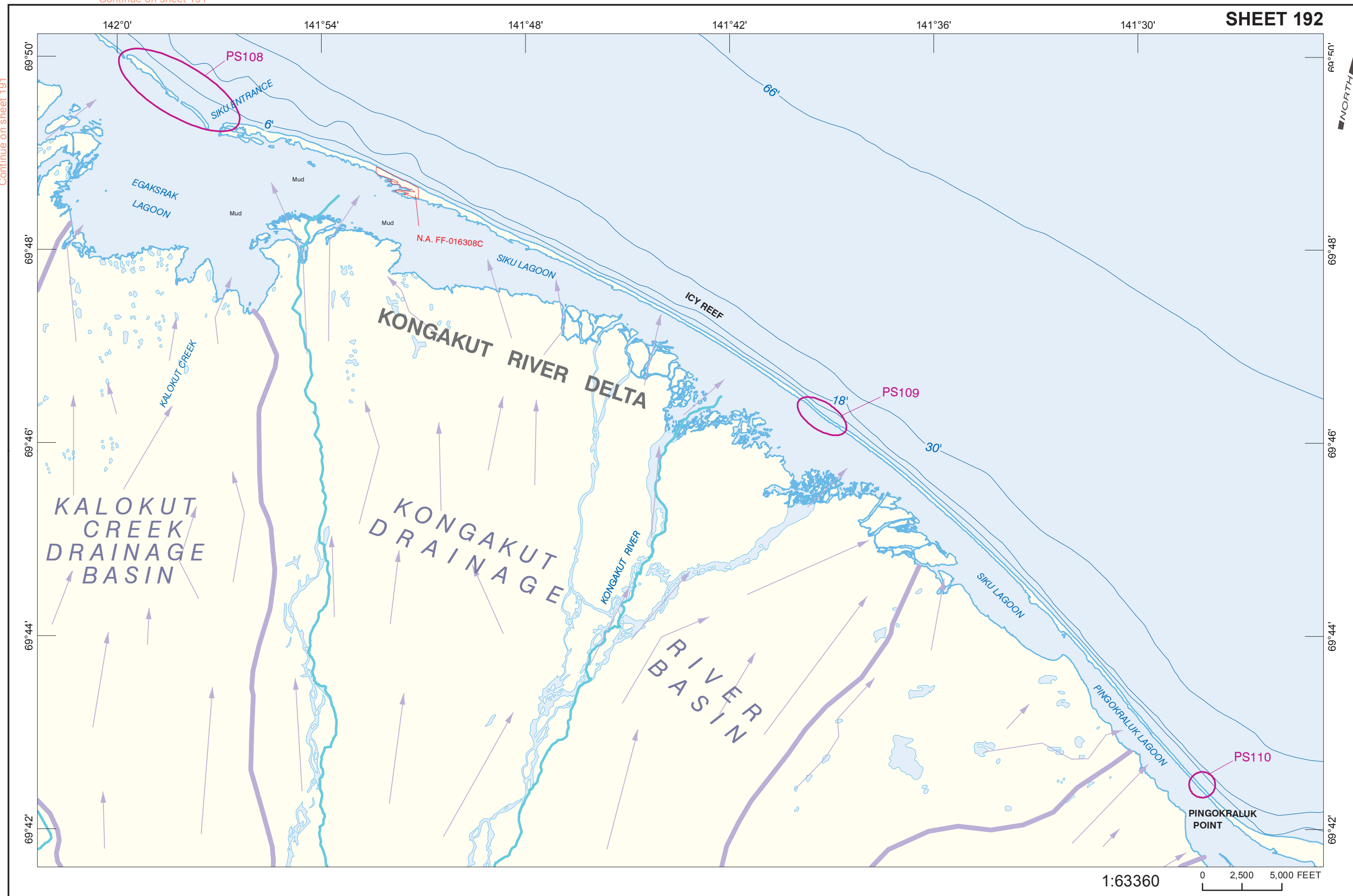
*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

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PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS110	Opening to Pingokruluk Lagoon.	Most sensitive during open water season. Prevent oil from entering the lagoon.	C-14	200'
PS111	Opening to Demarcation Bay.	Most sensitive during open water season. Prevent oil from entering the bay.	C-13	1200'

GENERAL SENSITIVITIES

- All activities within the Arctic National Wildlife Refuge – Alaska (ANWR).
- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl, diving, shore and sea birds during the open water months (generally April - October). Expect to deploy bird hazing systems.
- Caribou present May through June.
- Polar bear dens may be present where topographical features provide adequate snow cover.
- Bearded seals present in the Beaufort Sea.
- Ringed seals present in coastal waters and/or ice. Ringed seals are associated with shorefast ice in the winter and early summer where they pup. Pups are very sensitive to oil for first 6 to 8 weeks of life (April, May).
- From August through November, Bowhead whales congregate in high concentrations and feed in Beaufort Sea offshore waters.
- Anadromous and resident fish present in freshwater rivers and many inland lakes.

CULTURAL SITES

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AIR ACCESS*

- Barter Island LRRS airstrip (Sheet 188) is located approximately 64 miles to the Northwest. Although still owned by the Air Force, it is leased to the North Slope Borough and is open to the public. The airfield is attended, but the 4,800 ft. gravel runway is not monitored and is reported to be soft with ruts the entire length. Visual inspection recommended prior to use.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

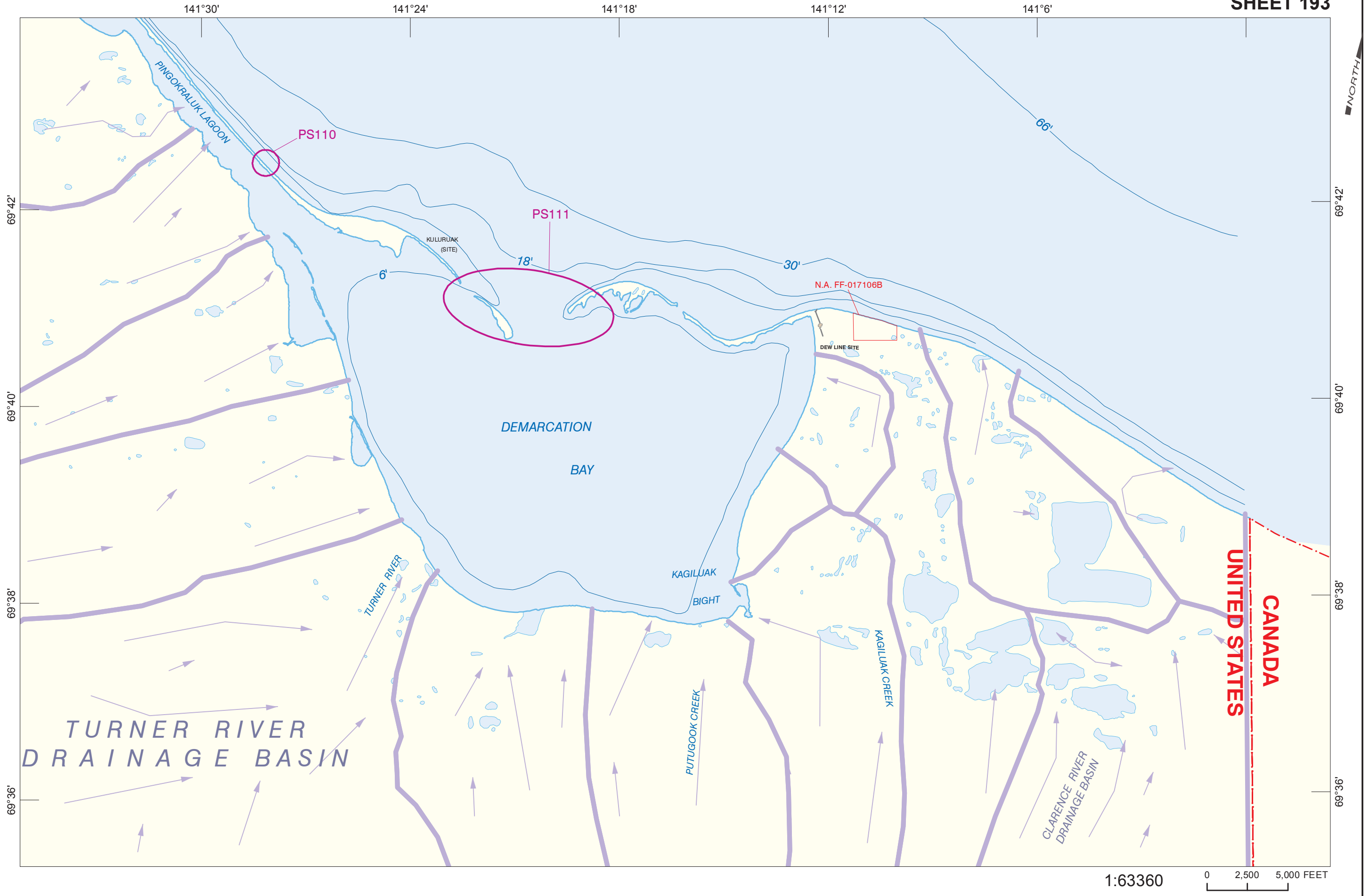
- Pingokraluk Point, a 49-foot-high tundra mound, is a prominent landmark.
- Demarcation Point, located on the east side of the entrance to Demarcation Bay, is low tundra that rises gradually to a 30-foot bluff.
- A depth of 13 feet can be carried into Demarcation Bay 0.5 miles west of Demarcation Point. The bay has depths of 13-16 feet, sticky bottom, and good protection from all weather. Along the shores of the bay are bluffs with elevations of up to 25 feet.
- From Demarcation Point to the Canadian border, a narrow, steep sand beach is backed by irregular bluffs. Small boats can navigate within a few yards of the beach, and there are depths of 30 feet within 0.3 miles.

COUNTERMEASURES CONSIDERATIONS

- Expect inlets, embayments and protruding shoreline features to collect oil during sustained incoming winds.
- Barrier islands are often very low and may not completely protect the mainland shoreline.
- Both gravel and sand-silt beaches are often narrow and/or lying on top of tundra vegetation, presenting potential risk to load-bearing machinery and equipment.
- The steepness of many beaches may largely preclude the use of mechanized equipment.
- River deltas typically present complex shorelines consisting of potentially unstable sand-silt and mud tidal flats.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

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PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS157A	Mouth of small creek.	Most sensitive during open water season. Prevent oil from entering the creek.	C-14	100'
PS158	Mouth of Mayoek River Drainage Basin.	Most sensitive during open water season. Prevent oil from entering the river.	C-13 or C-14	800'
PS159	Mouth of Ikpiik Slough.	Most sensitive during open water season. Prevent oil from entering the slough.	C-13 or C-14	1200'
PS160	Mouth of Central Marsh Drainage Basin.	Most sensitive during open water season. Prevent oil from entering the marsh.	C-13 or C-14	800'
PS161	Small inlet to North Salt Lagoon.	Most sensitive during open water season. Prevent oil from entering the lagoon.	C-14	200'

GENERAL SENSITIVITIES

- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl, diving, shore and sea birds during the open water months (generally April - October). Expect to deploy bird hazing systems.
- Known nesting area for threatened Spectacled and Steller’s Eiders.
- Elson Lagoon, bounded by a line stretching fromTekagakrok Point to Doctor Island, is heavily used in summer months for subsistence fishing.
- From August through November, Bowhead whales congregate and feed in Beaufort Sea offshore waters, Seaward of the barrier islands, between Pitt Point (Sheet 141) and Point Barrow (Sheet 194). They migrate westward each Fall through the nearshore environment, rounding Point Barrow close to shore before moving south offshore along the Chukchi Sea coast.
- Polar bears congregate near, and feed on, the whale bone piles remaining after subsistence hunts.
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.
- Ringed seals are associated with shorefast ice in the winter and early summer where they pup. Pups are very sensitive to oil for first 6 to 8 weeks of life (April, May).

CULTURAL SITES

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AIR ACCESS*

- Commercial and air freight services are available at Barrow airport (Sheet 195), located approximately 10 miles to the Southwest. Runway is 6,500 ft. asphalt.

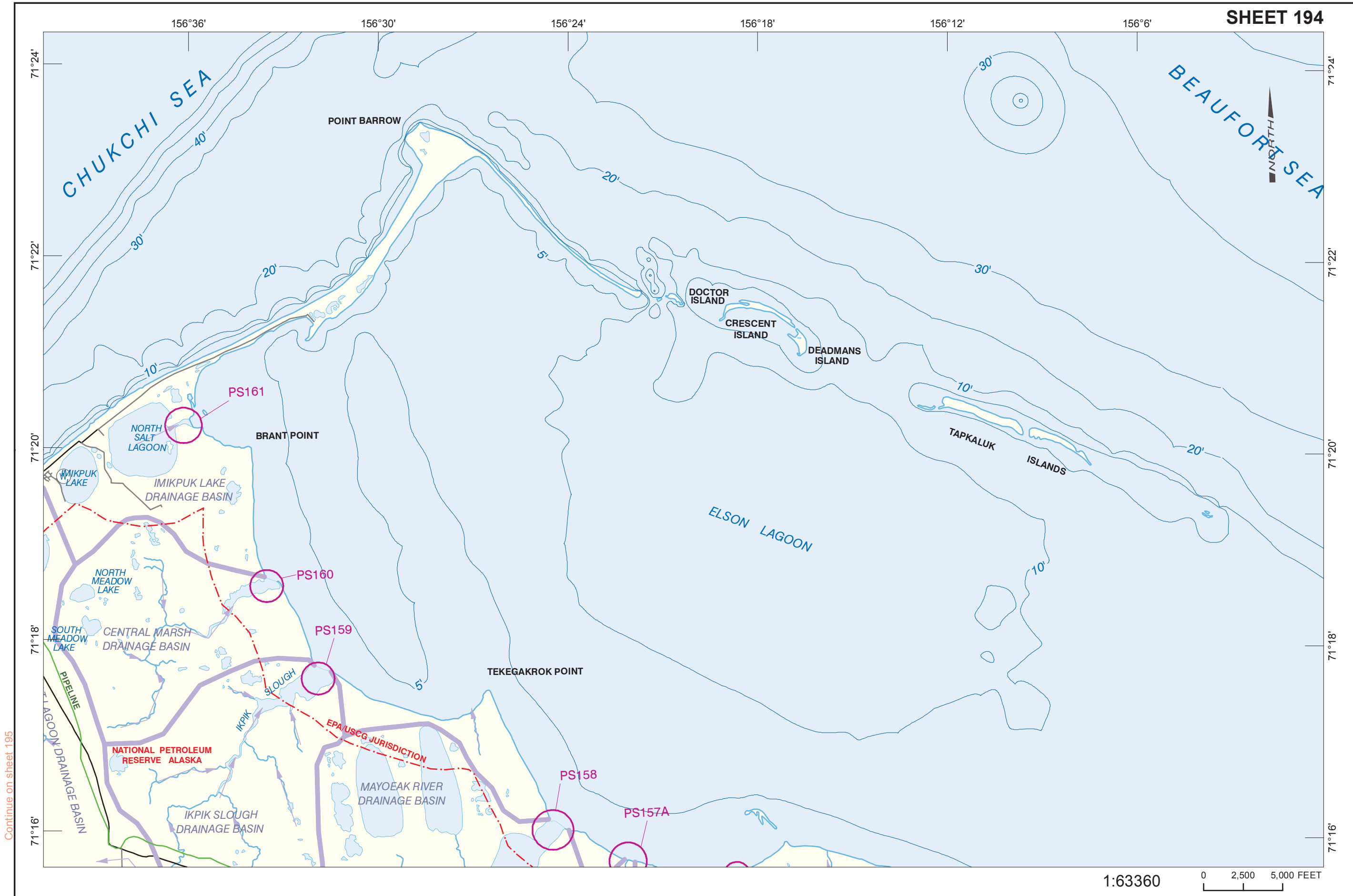
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- Point Barrow is the seaward end of a gravelly spit jutting 3 miles northeast from the mainland. It marks the northeast corner of the Chukchi Sea and the southwest corner of the Beaufort Sea.
- The dirunal range of tide at Point Barrow is approximately 0.4 ft.
- Northwest of the point, the current flows constantly in a northeast direction at 3-4 knots. Along the northeast side of the point, the current flows in a northwest direction at 1 knot.
- Average breakup at Barrow is in late July, with average freezeup is in early October. Navigation is difficult in the ice, and is usually suspended from early December to early July.
- Elson Lagoon, with depths of 8-12 ft., extends from Point Barrow 21 miles southeast to Christie Point. Between the lagoon and Beaufort Sea are a long series of low barrier islands known as the Plover Islands. Consult current navigation charts to determine the safest entryway into the lagoon.

COUNTERMEASURES CONSIDERATIONS

- The shores around Barrow and out on Barrow Spit are sand-gravel and gravel-cobble beaches. Sediment size is coarser on the spit and point than around the lagoon.
- Elson Lagoon is wide and shallow affording mainland beaches little protection from wind and waves.
- The Plover Islands have steep ocean-facing beaches and more gradually-sloping lagoon-facing shores.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.



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PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS159	Mouth of Ikpiik Slough.	Most sensitive during open water season. Prevent oil from entering the slough.	C-13 or C-14	1200'
PS160	Mouth of Central Marsh Drainage Basin.	Most sensitive during open water season. Prevent oil from entering the marsh.	C-13 or C-14	800'
PS161	Small inlet to North Salt Lagoon.	Most sensitive during open water season. Prevent oil from entering the lagoon.	C-14	200'
PS162	Mouth of Nunavak Bay.	Most sensitive during open water season. Prevent oil from entering the bay.	C-14	200'

GENERAL SENSITIVITIES

- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl, diving, shore and sea birds during the open water months (generally April - October). Expect to deploy bird hazing systems.
- Known nesting area for threatened Spectacled and Steller’s Eiders.
- Waterbirds will occupy leads in the ice during spring breakup.
- Offshore waters are home to a large population of beluga whales, walrus and bearded seals.
- Each Fall, bowhead whales migrate south, rounding Point Barrow close to shore before moving further offshore along the Chukchi Sea coast.
- Polar bears congregate near, and feed on, the whale bone piles remaining after subsistence hunts.
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.

CULTURAL SITES

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AIR ACCESS*

AIRFIELD	RUNWAY DESCRIPTION	FIXED WING MINIMUMS	FUEL / SERVICES	ATC
Wiley Post / Will Rogers Memorial Airport	6,500 ft. asphalt	VFR: 1000 ft. ceilings, 3 mi vis. Special VFR: 500 ft. ceilings, 1 mi vis IFR: 400 ft ceilings, 1 mi vis.	NC-100 and A1; S2	Barrow tower

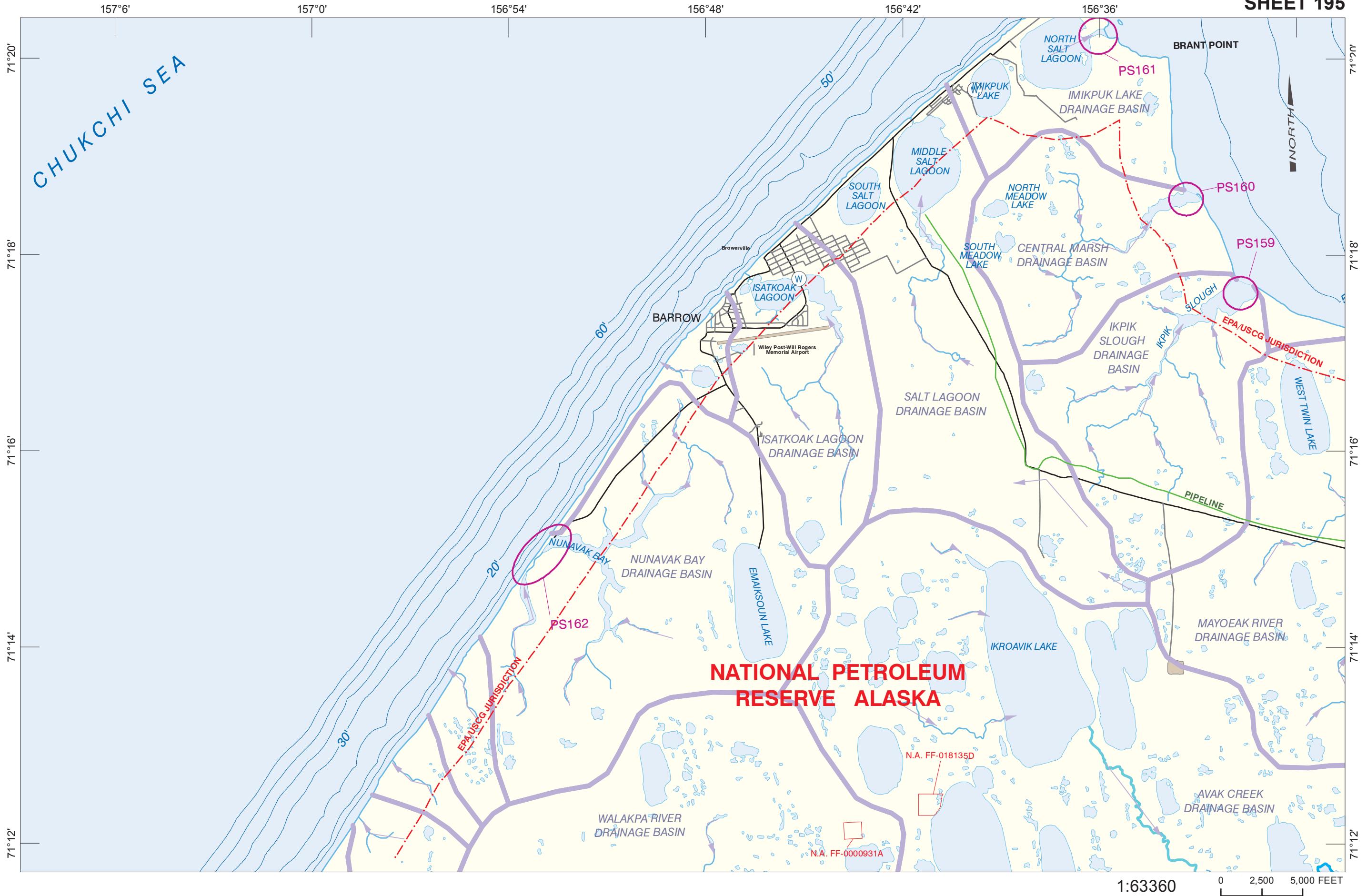
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- The coastline south of Barrow features no projecting points or shoals and the 5-fathom curve is 0.5-1 mile from shore, but depths may vary as much as a fathom from year to year due to ice gouging. There is no protection from heavy weather.

COUNTERMEASURES CONSIDERATIONS

- The shores around Barrow are sand-gravel and gravel-cobble beaches.
- Elson Lagoon is wide and shallow affording mainland beaches little protection from wind and waves.
- The coastline south of Barrow is rimmed with mud bluffs 25-90 ft. high, and furrowed by many small streams.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.



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Response Considerations



SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS153	Mouth of small creek.	Most sensitive during open water season. Prevent oil from entering the creek.	C-14	200'
PS153A	Mouth of small creek.	Most sensitive during open water season. Prevent oil from entering the creek.	C-14	100'
PS154	Mouth of Avak Creek.	Most sensitive during open water season. Prevent oil from entering the creek.	C-13 or C-14	500'
PS155	Mouth of slough.	Most sensitive during open water season. Prevent oil from entering the slough.	C-14	200'
PS155A	Mouth of small creek.	Most sensitive during open water season. Prevent oil from entering the creek.	C-14	200'
PS156	Mouth of slough.	Most sensitive during open water season. Prevent oil from entering the slough.	C-14	200'
PS157	Mouth of small creek.	Most sensitive during open water season. Prevent oil from entering the creek.	C-14	200'
PS157A	Mouth of small creek.	Most sensitive during open water season. Prevent oil from entering the creek.	C-14	100'
PS158	Mouth of Mayoeak River Drainage Basin.	Most sensitive during open water season. Prevent oil from entering the river.	C-13 or C-14	800'

GENERAL SENSITIVITIES

- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl, diving, shore and sea birds during the open water months (generally April - October). Expect to deploy bird hazing systems.
- Known nesting area for threatened Spectacled and Stellar's Eiders.
- From August through November, Bowhead whales congregate and feed in Beaufort Sea offshore waters between Pitt Point (Sheet 141) and Point Barrow (Sheet 194). They migrate westward each Fall through the nearshore environment (but in general offshore of the barrier islands).
- Significant populations of anadromous, estuarine and marine fish present inshore of barrier islands.
- Polar bears are present throughout the area primarily during the winter.
- Ringed seals are associated with shorefast ice in the winter and early summer where they pup. Pups are very sensitive to oil for first 6 to 8 weeks of life (April, May).

CULTURAL SITES

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AIR ACCESS*

- Commercial and air freight services are available at Barrow airport (Sheet 195), located approximately 10 miles to the Northwest. Runway is 6,500 ft. asphalt.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- Elson Lagoon, with depths of 8-12 ft., extends from Point Barrow 21 miles southeast to Christie Point. Between the lagoon and Beaufort Sea are a long series of low barrier islands known as the Plover Islands. Consult current navigation charts to determine the safest entryway into the lagoon.

COUNTERMEASURES CONSIDERATIONS

- Sand-gravel beaches in this area are narrow with a peat veneer, presenting potential risk to load-bearing machinery and equipment.
- The steepness of many beaches may largely preclude the use of mechanized equipment.
- Small stretches of vegetated and peat shorelines are present in more protected coastal areas.
- Expect inlets, embayments and protruding shoreline features to collect oil during sustained incoming winds.
- Barrier islands are often very low and may not completely protect the mainland shoreline.

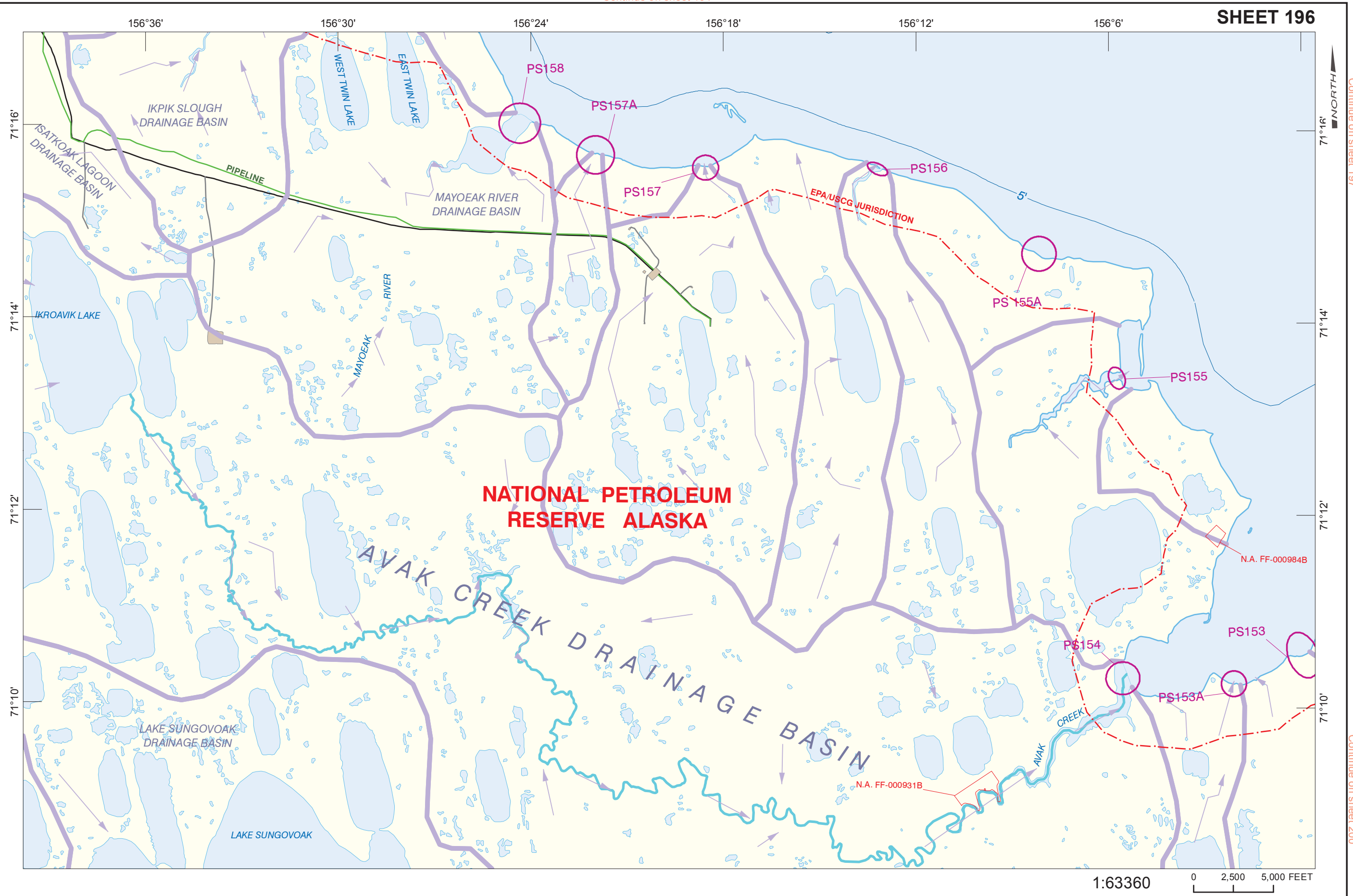
*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

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PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS150	Tidal breach area of coastal pond.	Most sensitive during open water season. Prevent oil from entering the pond.	C-14	200'
PS151	Mouth of slough.	Most sensitive during open water season. Prevent oil from entering the slough.	C-14	200'
PS152	Entrance to Ross Bay.	Most sensitive during open water season. Prevent oil from entering the bay.	C-13 or C-14	500'
PS152A	Mouth of small creek.	Most sensitive during open water season. Prevent oil from entering the creek.	C-14	300'
PS153	Mouth of small creek.	Most sensitive during open water season. Prevent oil from entering the creek.	C-14	200'

GENERAL SENSITIVITIES

- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl, diving, shore and sea birds during the open water months (generally April - October). Expect to deploy bird hazing systems. • Known nesting area for threatened Spectacled and Stellar's Eiders.
- From August through November, Bowhead whales congregate and feed in Beaufort Sea offshore waters between Pitt Point (Sheet 141) and Point Barrow (Sheet 194). They migrate westward each Fall through the nearshore environment (but in general offshore of the barrier islands).
- Significant populations of anadromous, estuarine and marine fish present inshore of barrier islands.
- Polar bears are present throughout the area primarily during the winter.

CULTURAL SITES

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AIR ACCESS*

- Commercial and air freight services are available at Barrow airport (Sheet 195), located approximately 24 miles to the West-Northwest. Runway is 6,500 ft. asphalt.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- Elson Lagoon, with depths of 8-12 ft., extends from Point Barrow 21 miles southeast to Christie Point. Between the lagoon and Beaufort Sea are a long series of low barrier islands known as the Plover Islands. Consult current navigation charts to determine the safest entryway into the lagoon.

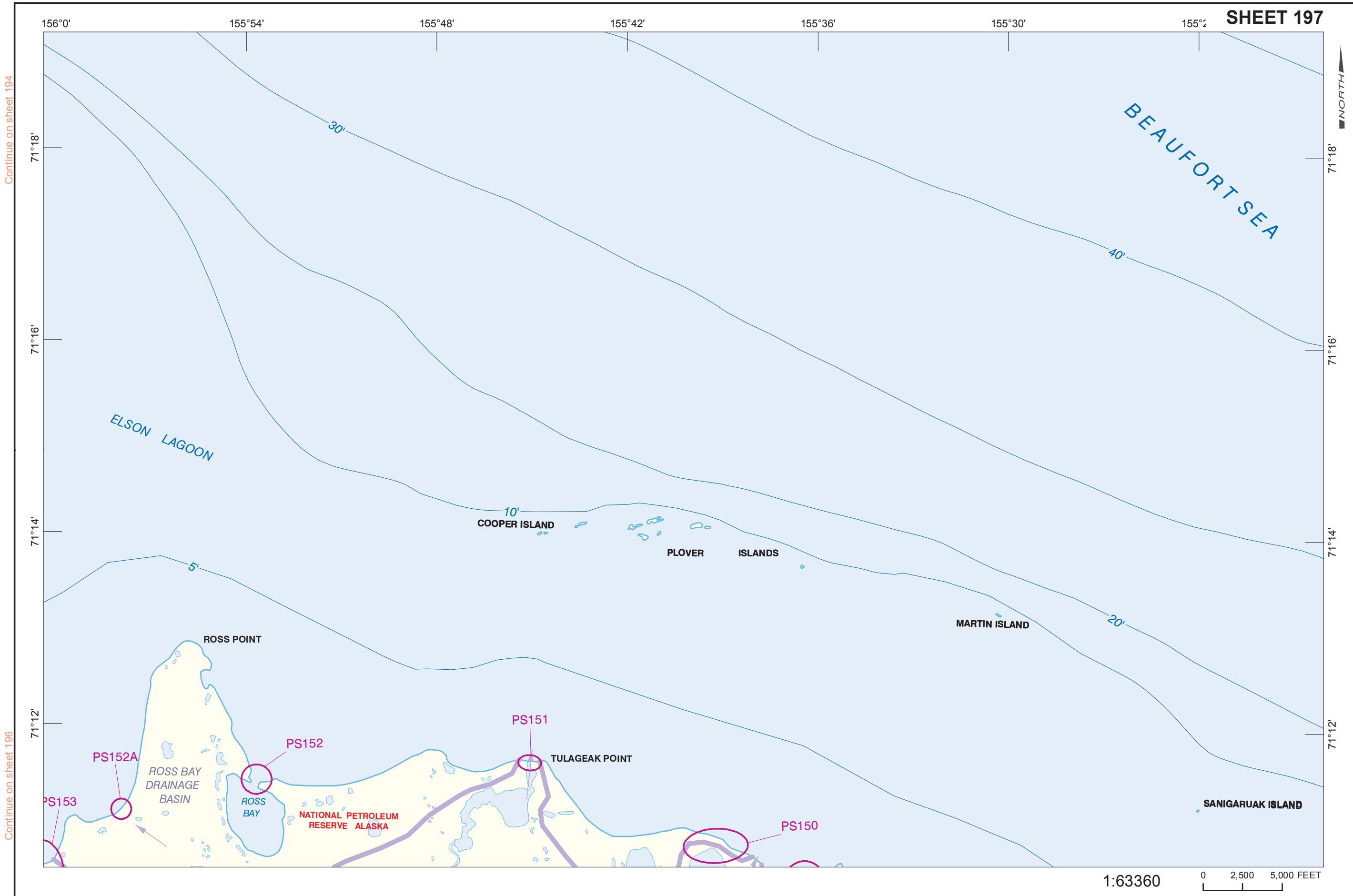
COUNTERMEASURES CONSIDERATIONS

- Sand-gravel beaches in this area are narrow with a peat veneer, presenting potential risk to load-bearing machinery and equipment.
- The steepness of many beaches may largely preclude the use of mechanized equipment.
- Small stretches of vegetated and peat shorelines are present in more protected coastal areas.
- Expect inlets, embayments and protruding shoreline features to collect oil during sustained incoming winds.
- Barrier islands are often very low and may not completely protect the mainland shoreline.


*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 194

Continue on sheet 196



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PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS163	Mouth of Walakpa Bay.	Most sensitive during open water season. Prevent oil from entering the bay.	C-13 or C-14	500'
PS164	Mouth of Singaruak Creek.	Most sensitive during open water season. Prevent oil from entering the creek.	C-14	200'


GENERAL SENSITIVITIES

- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl, diving, shore and sea birds during the open water months (generally April - October). Expect to deploy bird hazing systems.
- Known nesting area for threatened Spectacled and Steller’s Eiders.
- Waterbirds will occupy leads in the ice during spring breakup.
- Offshore waters are home to a large population of beluga whales, walrus and bearded seals.
- Each Fall, bowhead whales migrate south, rounding Point Barrow close to shore before moving further offshore along the Chukchi Sea coast.
- Polar bears congregate near, and feed on, the whale bone piles remaining after subsistence hunts.
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- Commercial and air freight services are available at Barrow airport (Sheet 195), located approximately 11 miles to the North-Northeast. Runway is 6,500 ft. asphalt.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

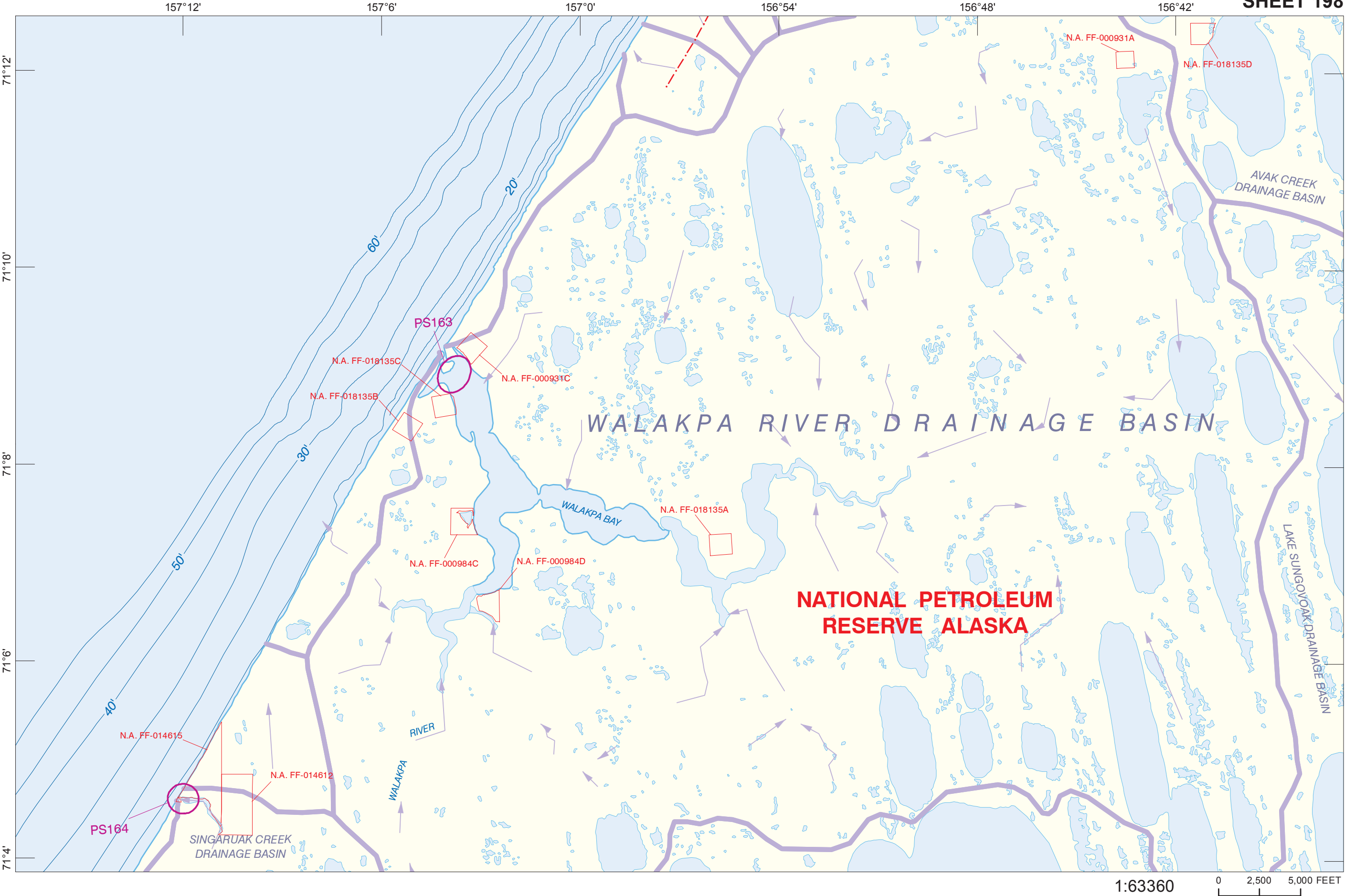
- The coastline features no projecting points or shoals and the 5-fathom curve is 0.75-1.25 miles from shore, but depths may vary as much as a fathom from year to year due to ice gouging. There is no protection from heavy weather.

COUNTERMEASURES CONSIDERATIONS

- The coastline is rimmed with mud bluffs 25-90 ft. high, and furrowed by many small streams.


*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

NOTE: All values given on these pages are for planning purposes only.




Continue on sheet 196

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PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.



GENERAL SENSITIVITIES


- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Coastal areas and inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during the open water months (generally April - October). Expect to deploy bird hazing systems.
- Known nesting area for threatened Spectacled and Steller’s Eiders.
- Black brant breeding, nesting, rearing area during the summer months.
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.



CULTURAL SITES


The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.




AIR ACCESS*

- Commercial and air freight services are available at Barrow airport (Sheet 195), located approximately 16 miles to the Northwest. Runway is 6,500 ft. asphalt.



VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.



*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

NOTE: All values given on these pages are for planning purposes only.

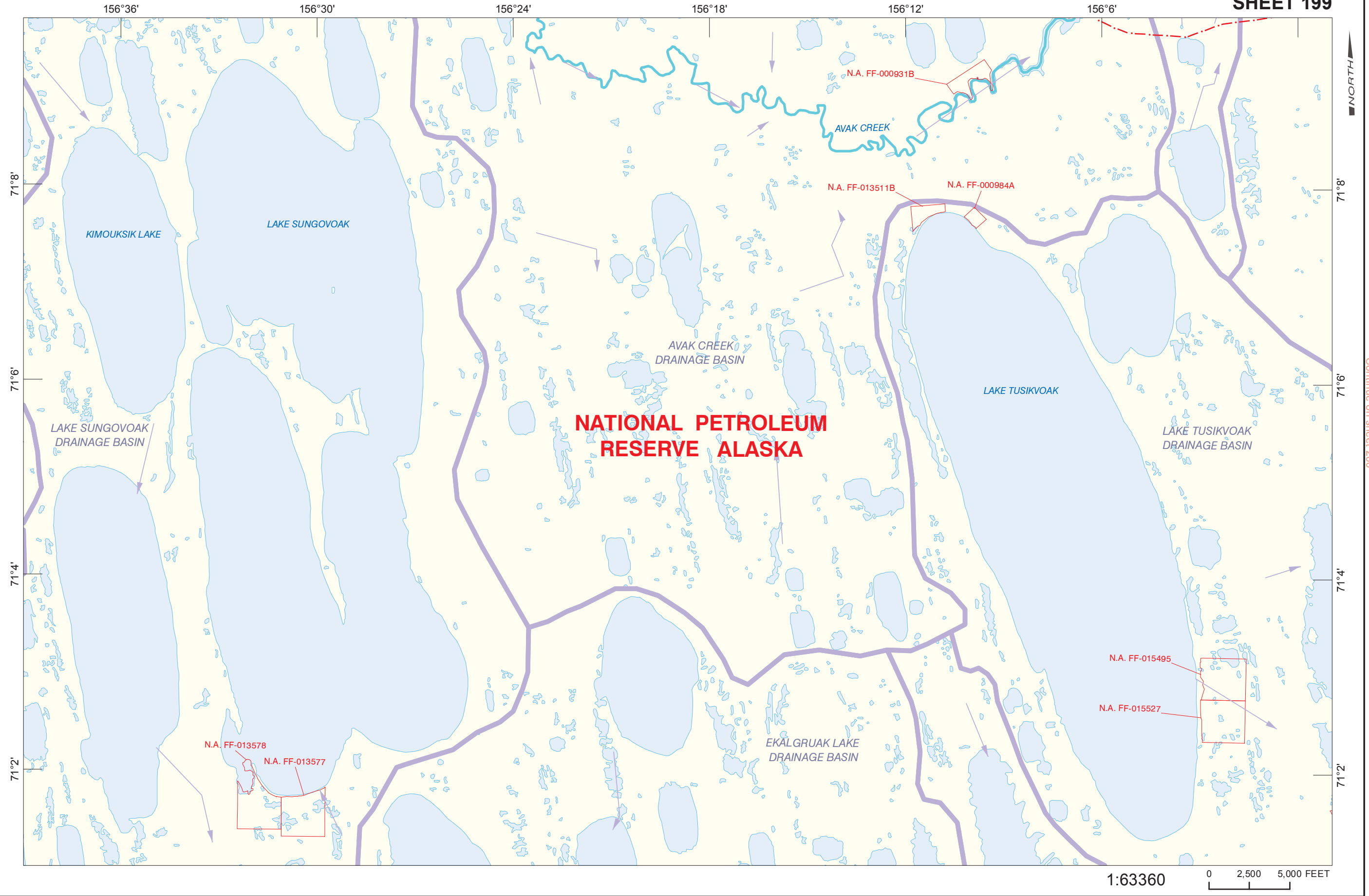
Continue on sheet 196

SHEET 199

Continue on sheet 198

Continue on sheet 203

Continue on sheet 200



Continue on sheet 203

Continue on sheet 204

• NORTH SLOPE SPILL RESPONSE •
NCSR
 alaska clean seas
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• NORTH SLOPE SPILL RESPONSE •
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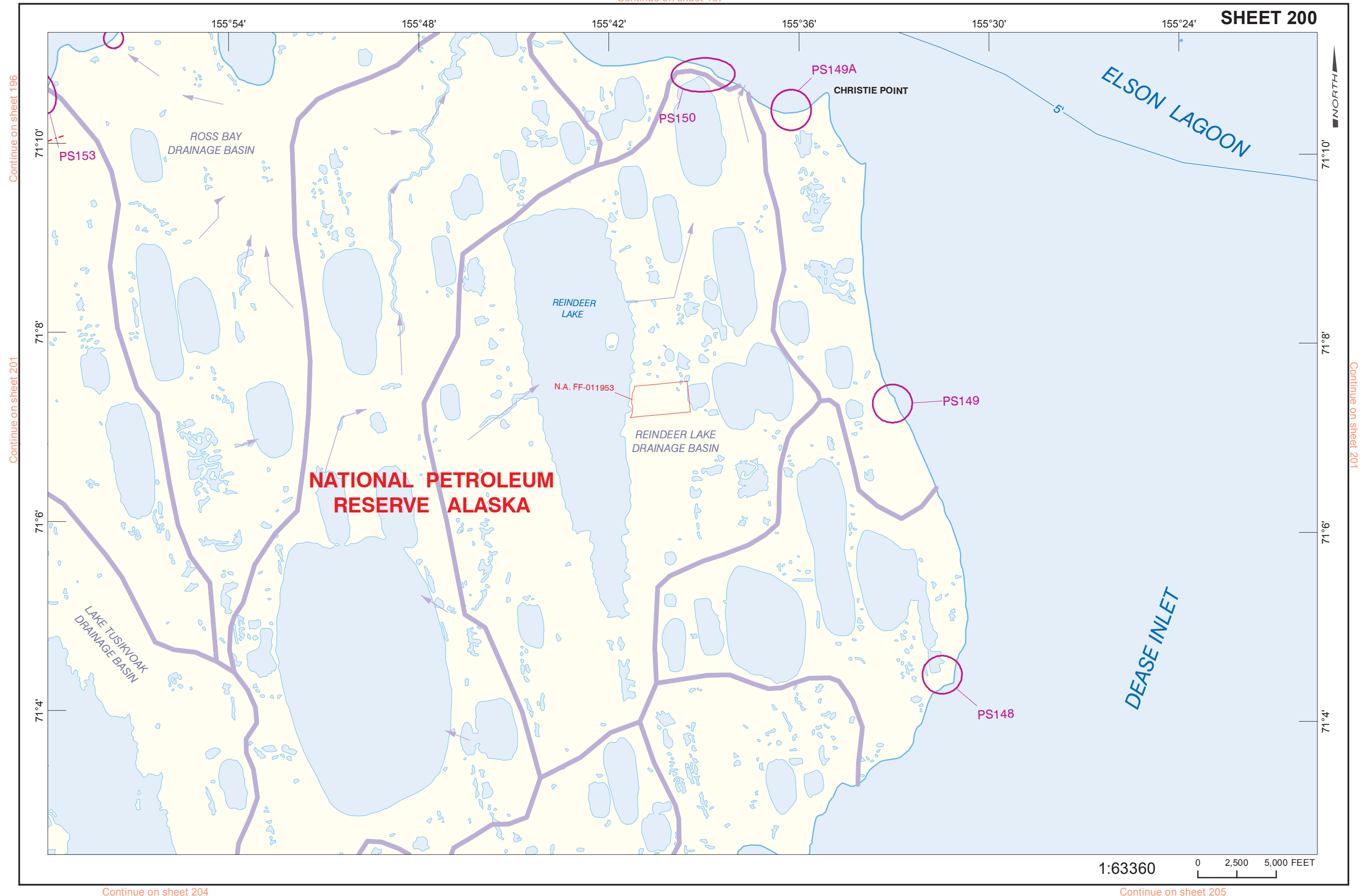
• NORTH SLOPE SPILL RESPONSE •
NCSR
 alaska clean seas
 • A WORLD CLASS ORGANIZATION •

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- NORTH SLOPE SPILL RESPONSE •
NCSR
 alaska clean seas
 • A WORLD CLASS ORGANIZATION •

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AIR ACCESS*

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS132	Numerous breaches in Tulamanik barrier island.	Most sensitive during open water season. Prevent oil from entering McKay Lagoon.	C-14	1000'
PS133	Northwest tip of Kulgurak Island to Tangent Point.	Most sensitive during open water season. Prevent oil from entering McKay Lagoon.	C-13 or C-14	4000'
PS134	Small inlet on west side of Tangent Point.	Most sensitive during open water season. Prevent oil from entering McKay Lagoon.	C-13 or C-14	4000'
PS135	Larger inlet on west side of Tangent Point.	Most sensitive during open water season. Prevent oil from entering the inlet.	C-13 or C-14	5000'

GENERAL SENSITIVITIES

- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl, diving, shore and sea birds during the open water months (generally April - October). Expect to deploy bird hazing systems.
- Known nesting area for threatened Spectacled and Steller's Eiders.
- Black brant and snow geese breeding, nesting, rearing area during the summer.
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.
- Caribou present in the vicinity during June and July insect relief period.
- Spotted seals utilize Dease Inlet and haulout in Admiralty Bay.
- Polar bears congregate near, and feed on, the whale bone piles remaining after subsistence hunts and are active on the nearshore ice during winter.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.

- Commercial and air freight services are available at Barrow airport (Sheet 195), located approximately 41 miles to the Northwest. Runway is 6,500 ft. asphalt.
- Lonely Air Station (Sheet 141) is located approximately 43 miles to the Southeast. This facility is closed to the public and should be considered for emergency landing only. The unattended, 5,000 ft. gravel runway is not maintained and its condition is unknown. Visual inspection recommended prior to use. May be used for spill response operations upon approval by Elmendorf Air Force Base, 11th Air Force Airfield Management, (907) 552-7384/3636/5265.
- An small, uncontrolled, unmaintained aircraft landing strip is reportedly located in the extreme southeast quadrant of this map. Exact location, runway orientation, length, composition, and condition are unknown. No further information is available. Exercise extreme caution and perform visual inspection if considering for emergency use.

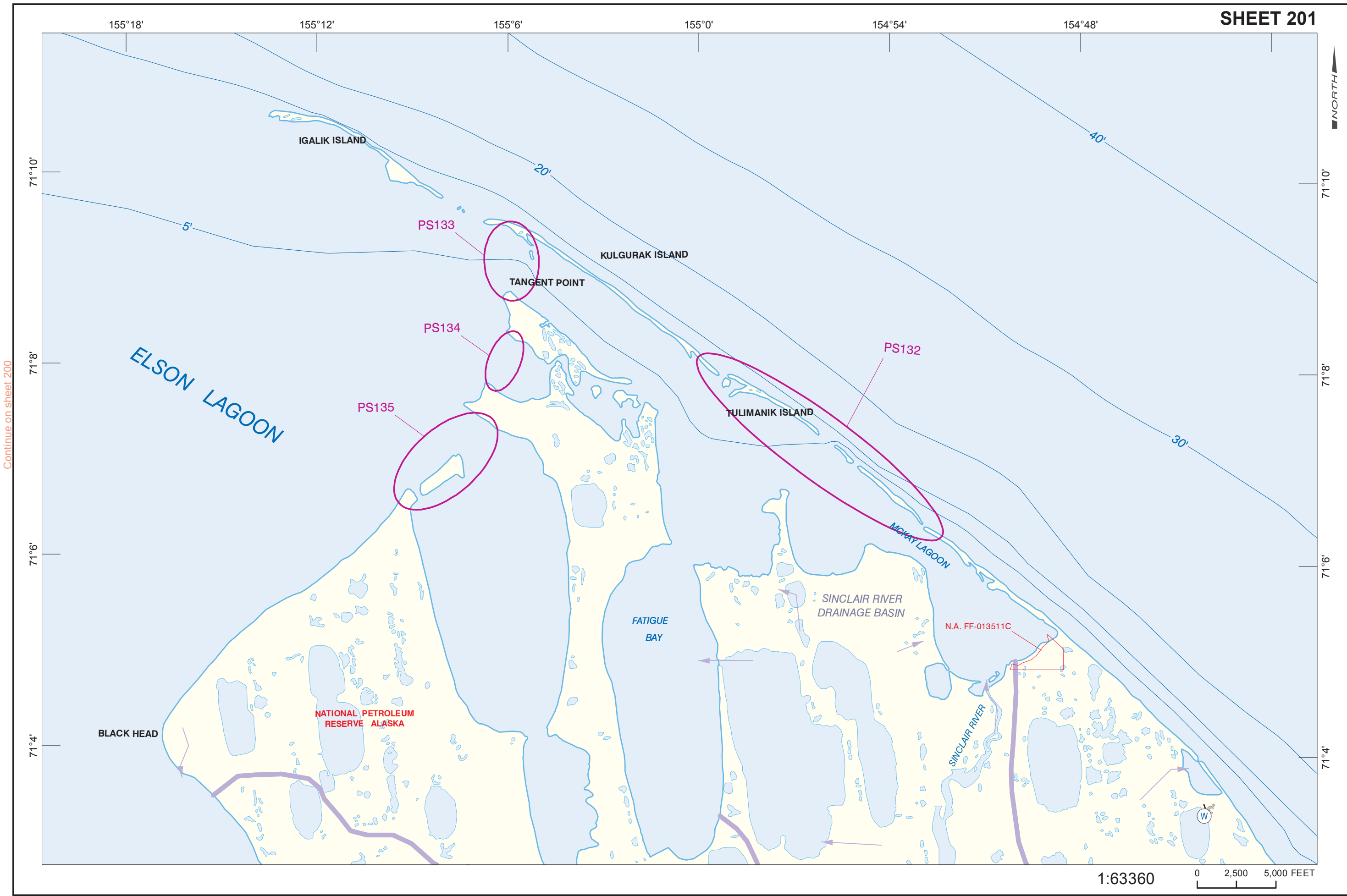
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- Dease Inlet has depths of 8-10 ft., except for the shallows near the beaches. There is a shallow entrance channel between Tangent Point and the islands to its northwest.
- The islands running southeast along the coast from Tangent Point are low sand barriers separated from the mainland by mud flats and shallow lagoons. These rapidly changing islands have steep beaches on their seaward side, with depth of 8 ft. or more only 100 yards offshore. Deep channels open and close through the islands during summer storms.
- The coastal bluffs running southeast from the southeast end of Mackay Lagoon vary in height from 4-15 ft. The land behind is marshy with numerous lakes. Launches may proceed safely along this stretch of coast at a distance of about 100 yards.

COUNTERMEASURES CONSIDERATIONS

- The Plover Islands' have sand-gravel ocean-facing beaches that are narrow and steep.
- Much of the lagoon areas behind the Plover Islands, along with much of Fatigue Bay, consists of mud tidal flats.
- Much of the mainland area -- particularly the interior of Fatigue Bay and similar water bodies -- consists of complex, subsiding tundra vegetated shorelines, often with a heavy peat overlay. These shorelines are very unstable and present a high risk to load-bearing machinery, equipment and personnel.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.



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PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS164	Mouth of Singaruak Creek.	Most sensitive during open water season. Prevent oil from entering the creek.	C-14	200'
PS165	Mouth of slough.	Most sensitive during open water season. Prevent oil from entering the slough.	C-14	200'
PS166	Mouth of slough.	Most sensitive during open water season. Prevent oil from entering the slough.	C-14	200'
PS167	Mouth of small creek.	Most sensitive during open water season. Prevent oil from entering the creek.	C-14	200'

GENERAL SENSITIVITIES

- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl, diving, shore and sea birds during the open water months (generally April - October). Expect to deploy bird hazing systems.
- Known nesting area for threatened Spectacled and Steller’s Eiders.
- Waterbirds will occupy leads in the ice during spring breakup.
- Offshore waters are home to a large population of beluga whales, walrus and bearded seals.
- Each Fall, bowhead whales migrate south, rounding Point Barrow close to shore before moving further offshore along the Chukchi Sea coast.
- Polar bears congregate near, and feed on, the whale bone piles remaining after subsistence hunts.
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- Commercial and air freight services are available at Barrow airport (Sheet 195), located approximately 22 miles to the Northeast. Runway is 6,500 ft. asphalt.

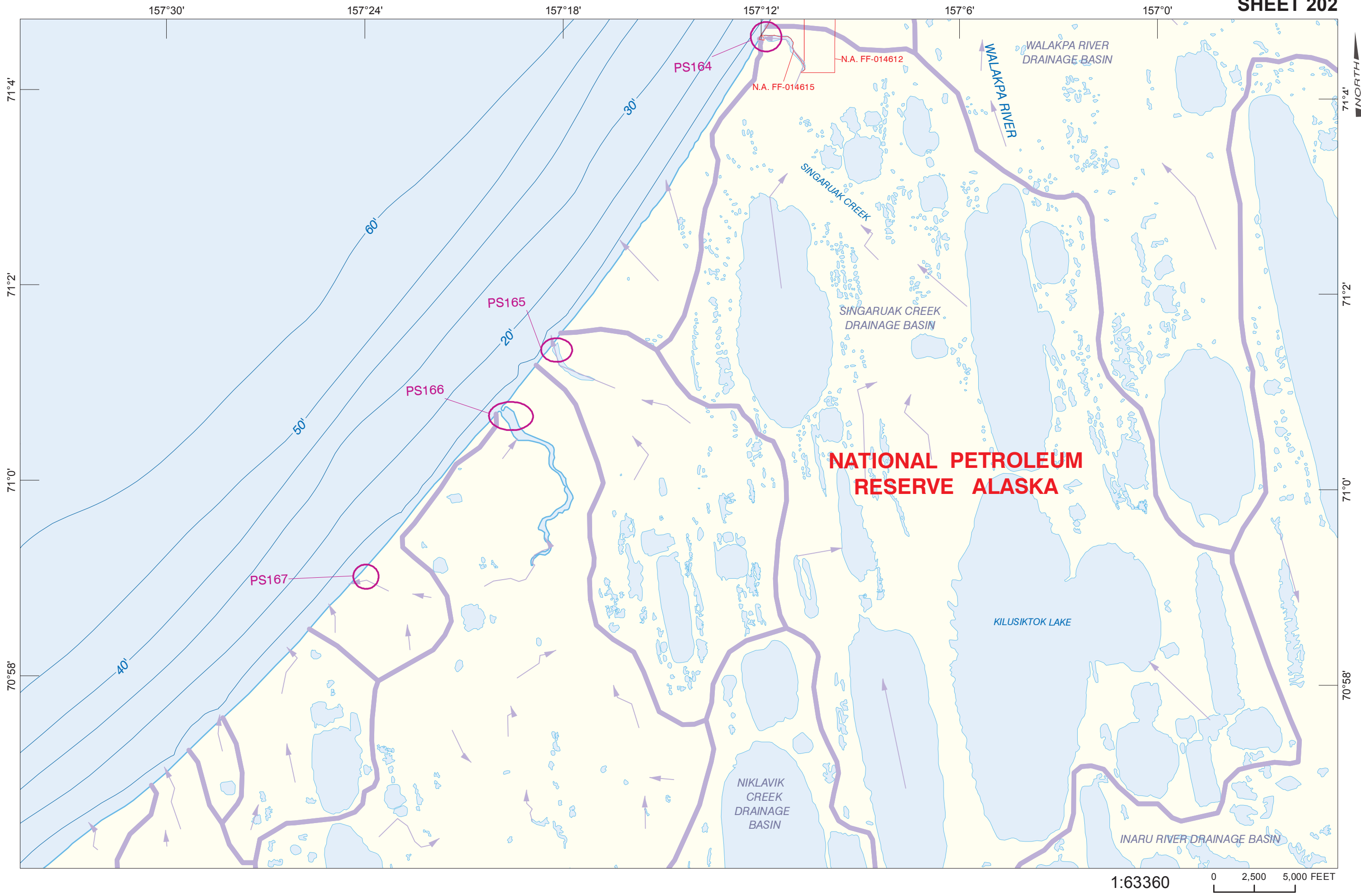
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- The coastline features no projecting points or shoals and the 5-fathom curve is 0.75-1.25 miles from shore, but depths may vary as much as a fathom from year to year due to ice gouging. There is no protection from heavy weather.


COUNTERMEASURES CONSIDERATIONS

- The coastline is rimmed with mud bluffs 25-90 ft. high, and furrowed by many small streams.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.




Continue on sheet 203




PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.



GENERAL SENSITIVITIES


- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Coastal areas and inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during the open water months (generally April - October). Expect to deploy bird hazing systems.
- Known nesting area for threatened Spectacled and Steller’s Eiders.
- Inland lakes contain resident and anadromous fish important to subsistence users.



CULTURAL SITES


The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- Commercial and air freight services are available at Barrow airport (Sheet 195), located approximately 19 miles to the North. Runway is 6,500 ft. asphalt.

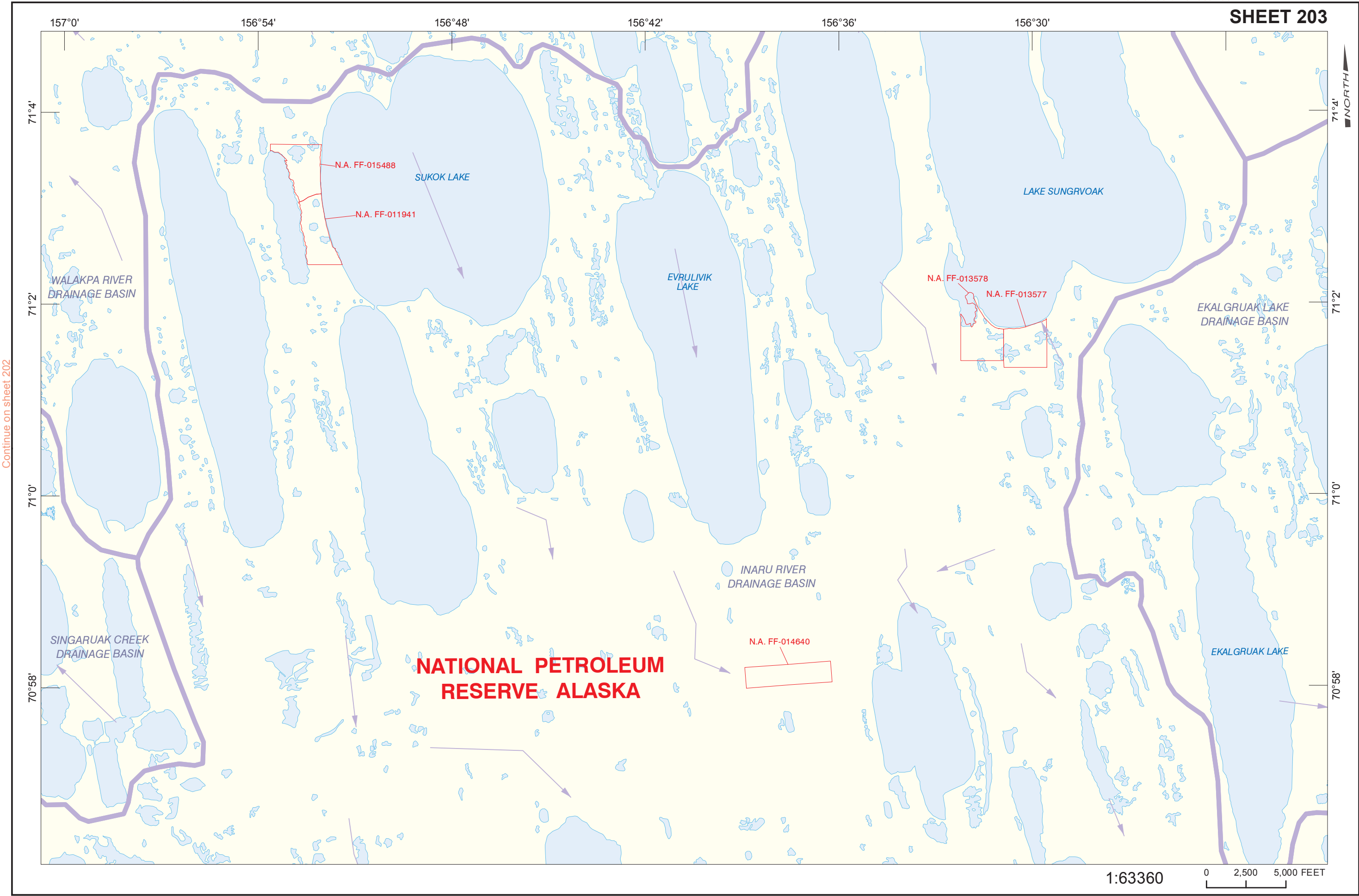


VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.


*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

NOTE: All values given on these pages are for planning purposes only.



Continue on sheet 202

Continue on sheet 204



PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS144	Mouth of Inaru River entering Kuyanak Bay.	Most sensitive during open water season. Prevent oil from entering the river.	C-13 or C-14	2000'
PS145	Mouth of small bay.	Most sensitive during open water season. Prevent oil from entering the bay.	C-13 or C-14	2000'
PS146	Mouth of small creek.	Most sensitive during open water season. Prevent oil from entering the creek.	C-14	200'


GENERAL SENSITIVITIES

- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Coastal areas and inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during the open water months (generally April - October). Expect to deploy bird hazing systems.
- The southernmost portion of Admiralty Bay, below a line stretching from Kuyanak Bay to the Alaktak River, is an important subsistence fishing area during summer months.
- Known nesting area for threatened Spectacled and Steller’s Eiders.
- Black brant breeding, nesting, rearing area during the summer.
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.
- Spotted seals haulout in Admiralty Bay.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- Commercial and air freight services are available at Barrow airport (Sheet 195), located approximately 26 miles to the Northwest. Runway is 6,500 ft. asphalt.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- Admiralty Bay has 8-10 ft. depths and bottom similar to the outer part of Dease Inlet.
- Shore may be accessed only with very shallow draft (< 3 ft.) vessels.

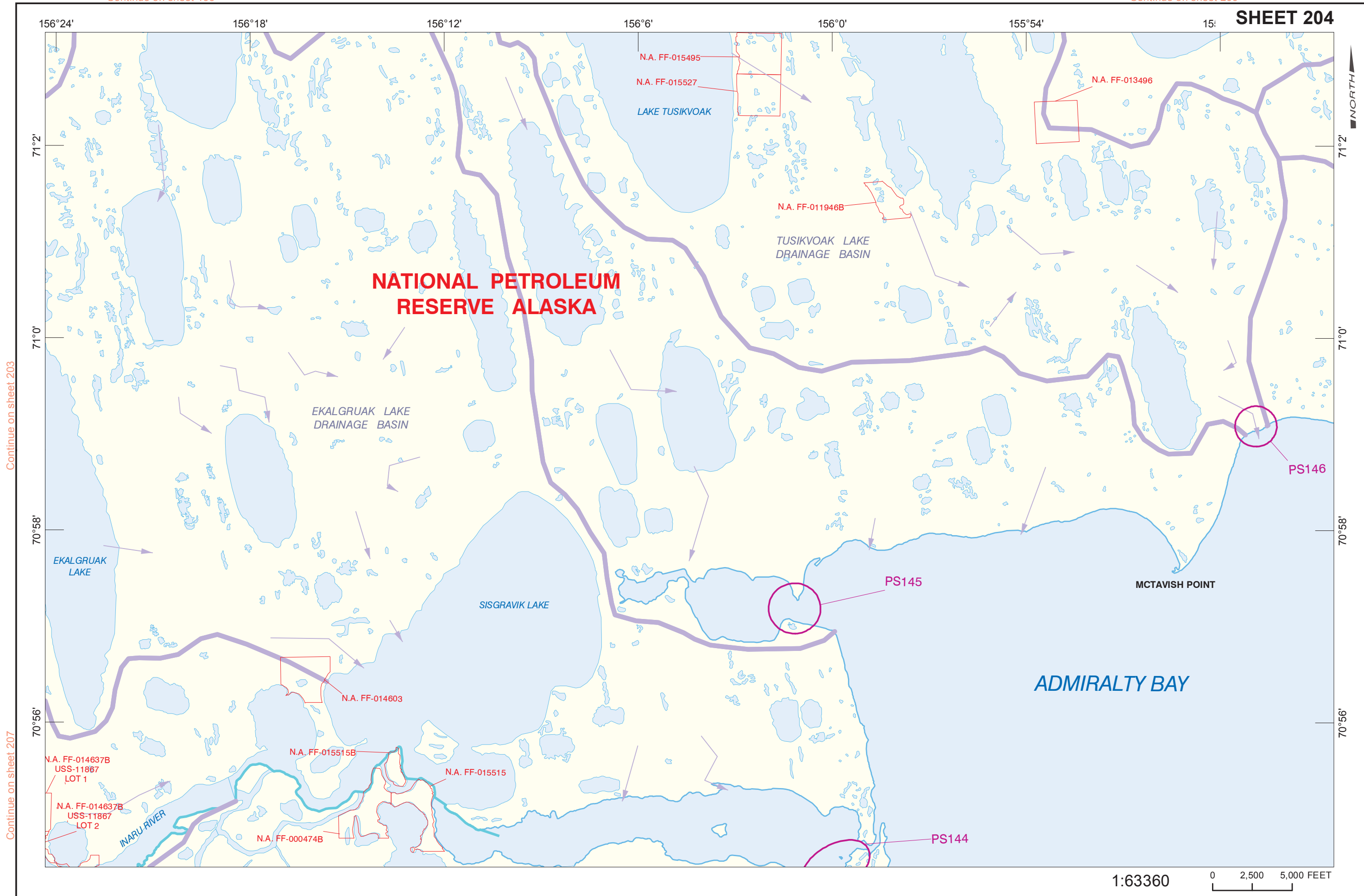
COUNTERMEASURES CONSIDERATIONS

- Slumping tundra and peat shores are unstable, presenting a high risk to load-bearing machinery, equipment and personnel.
- Much of this area is complex deltaic and subsiding tundra polygons.
- The shoreline is primarily mixed sand-silt or vegetated. Peat is often overwashed onto the tundra vegetation.
- Expect inlets, embayments and protruding shoreline features to collect oil during sustained incoming winds.

*See the latest Supplement, Alaska and United States Coast Pilot for current information on air and vessel access, respectively.

NOTE: All values given on these pages are for planning purposes only.

NOTE: All values given on these pages are for planning purposes only.



Continue on sheet 203

Continue on sheet 205

Continue on sheet 207



PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS136	Mouth of bay on southeast corner of Oarlock Island.	Most sensitive during open water season. Prevent oil from entering the bay.	C-13 or C-14	1500'
PS146	Mouth of small creek.	Most sensitive during open water season. Prevent oil from entering the creek.	C-14	200'
PS147	Mouth of small creek.	Most sensitive during open water season. Prevent oil from entering the creek.	C-14	200'

GENERAL SENSITIVITIES

- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Coastal areas and inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during the open water months (generally April - October). Expect to deploy bird hazing systems.
- Nesting likely in the area for threatened Spectacled and Steller’s Eiders.
- Black brant and snow geese breeding, nesting, rearing area during the summer.
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.
- Caribou present in the vicinity during June and July insect relief period.
- Oarlock Island in Admiralty Bay and the mouth of the Chipp River are traditional haulouts for spotted seals during the summer. Seals are sensitive to disturbance.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- Commercial and air freight services are available at Barrow airport (Sheet 195), located approximately 35 miles to the Northwest. Runway is 6,500 ft. asphalt.
- Lonely Air Station (Sheet 141) is located approximately 51 miles to the East-Southeast. This facility is closed to the public and should be considered for emergency landing only. The unattended, 5,000 ft. gravel runway is not maintained and its condition is unknown. Visual inspection recommended prior to use. May be used for spill response operations upon approval by Elmendorf Air Force Base, 11th Air Force Airfield Management, (907) 552-7384/3636/5265.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- Dease Inlet has depths of 8-10 ft., except for the shallows near the beaches.

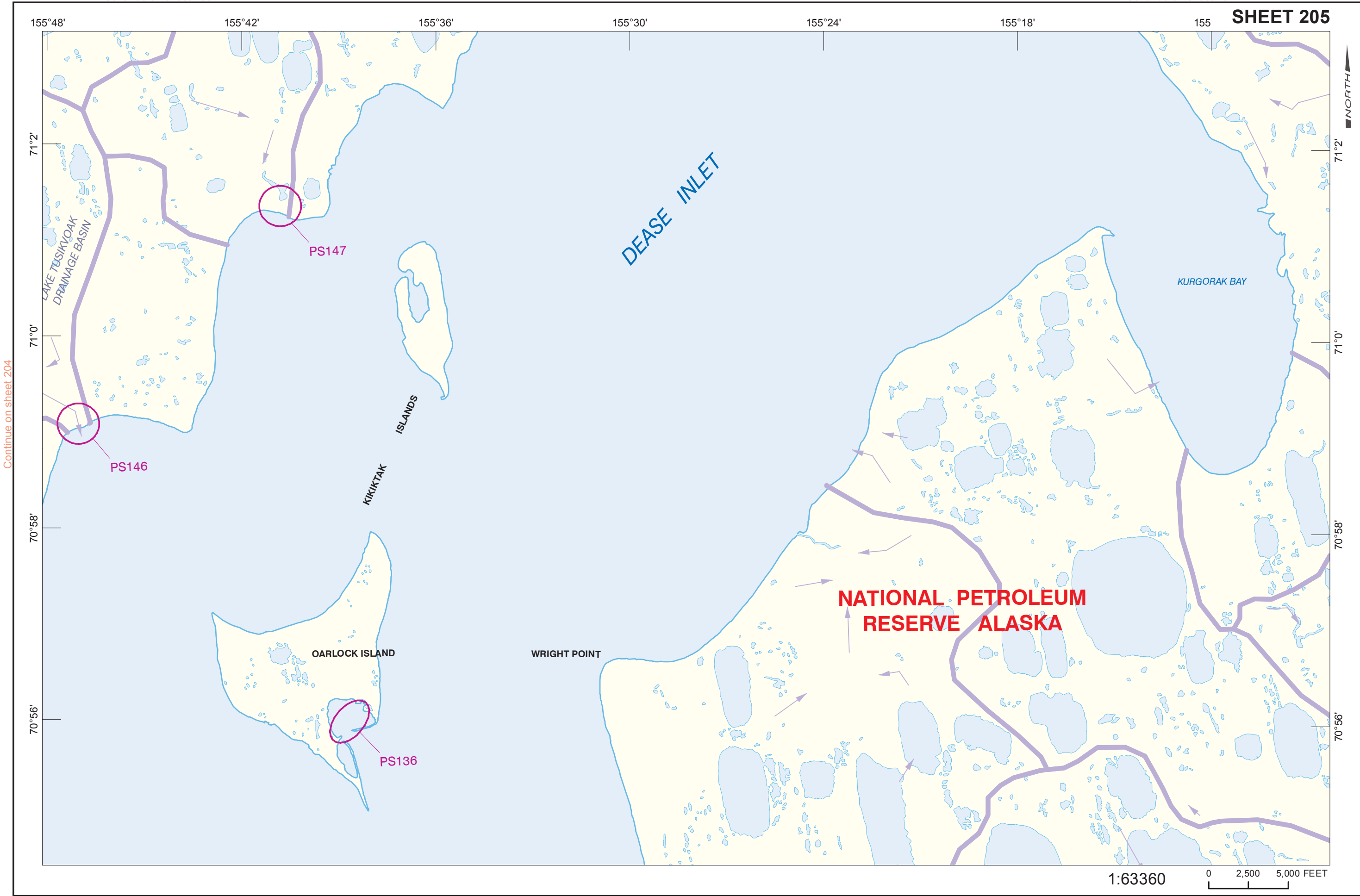
COUNTERMEASURES CONSIDERATIONS

- Slumping tundra and peat shores are unstable, presenting a high risk to load-bearing machinery, equipment and personnel.
- The western shoreline of Dease Inlet is mixed sand-silt or vegetated. Peat is often overwashed onto the tundra vegetation. Both shore types present potential risk to load-bearing machinery and equipment. Backshore areas are wet tundra.
- Both Tiny and Oarlock islands' shorelines are completely vegetated.
- The southeastern shoreline of Admiralty Bay is predominantly sandy and narrow, backed by sand scarps from 10-30 ft. in height. These scarps generally preclude shore access.
- The eastern shoreline of Admiralty Bay north of Wright Point is slumping tundra scarps, 2-8 ft. high. Peat slurry is present in some areas.
- Kurgorak Bay consists of peat shorelines with 2-6 ft. scarps behind.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 204

Continue on sheet 206



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The logo features a globe with the letters 'NCS' prominently displayed in the center. Above the globe, the text 'NORTH SLOPE SPILL RESPONSE' is written in a semi-circle. Below the globe, the text 'ALASKA CLEAN TECH' is written in a smaller font. At the bottom, the text 'A WORLD CLASS ORGANIZATION' is written in a semi-circle.

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- The logo features a globe with the letters 'NCS' prominently displayed in the center. Above the globe, the text 'NORTH SLOPE SPILL RESPONSE' is written in a semi-circle. Below the globe, the text 'ALASKA CLEAN TECH' is written in a smaller font. At the bottom, the text 'A WORLD CLASS ORGANIZATION' is written in a semi-circle.

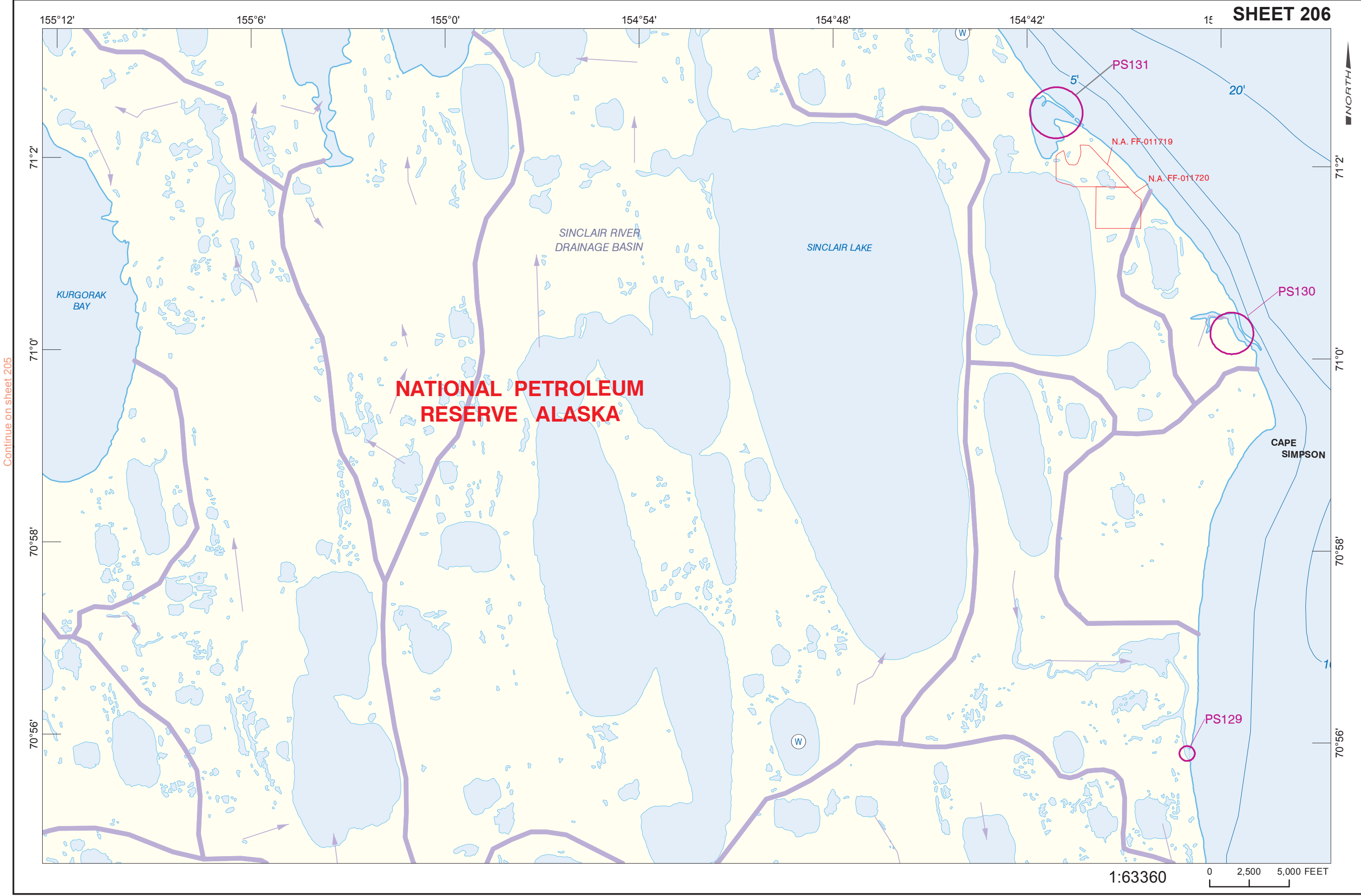
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Continue on sheet 205

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS144	Mouth of Inaru River entering Kuyanak Bay.	Most sensitive during open water season. Prevent oil from entering the river.	C-13 or C-14	2000'
PS145	Mouth of small bay.	Most sensitive during open water season. Prevent oil from entering the bay.	C-13 or C-14	2000'

- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Coastal areas and inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during the open water months (generally April - October). Expect to deploy bird hazing systems.
- Known nesting area for threatened Spectacled eiders and good nesting habitat for Steller's eiders.
- Black brant and snow geese breeding, nesting, and rearing area during the summer.
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.
- Spotted seals haulout in Admiralty Bay.

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

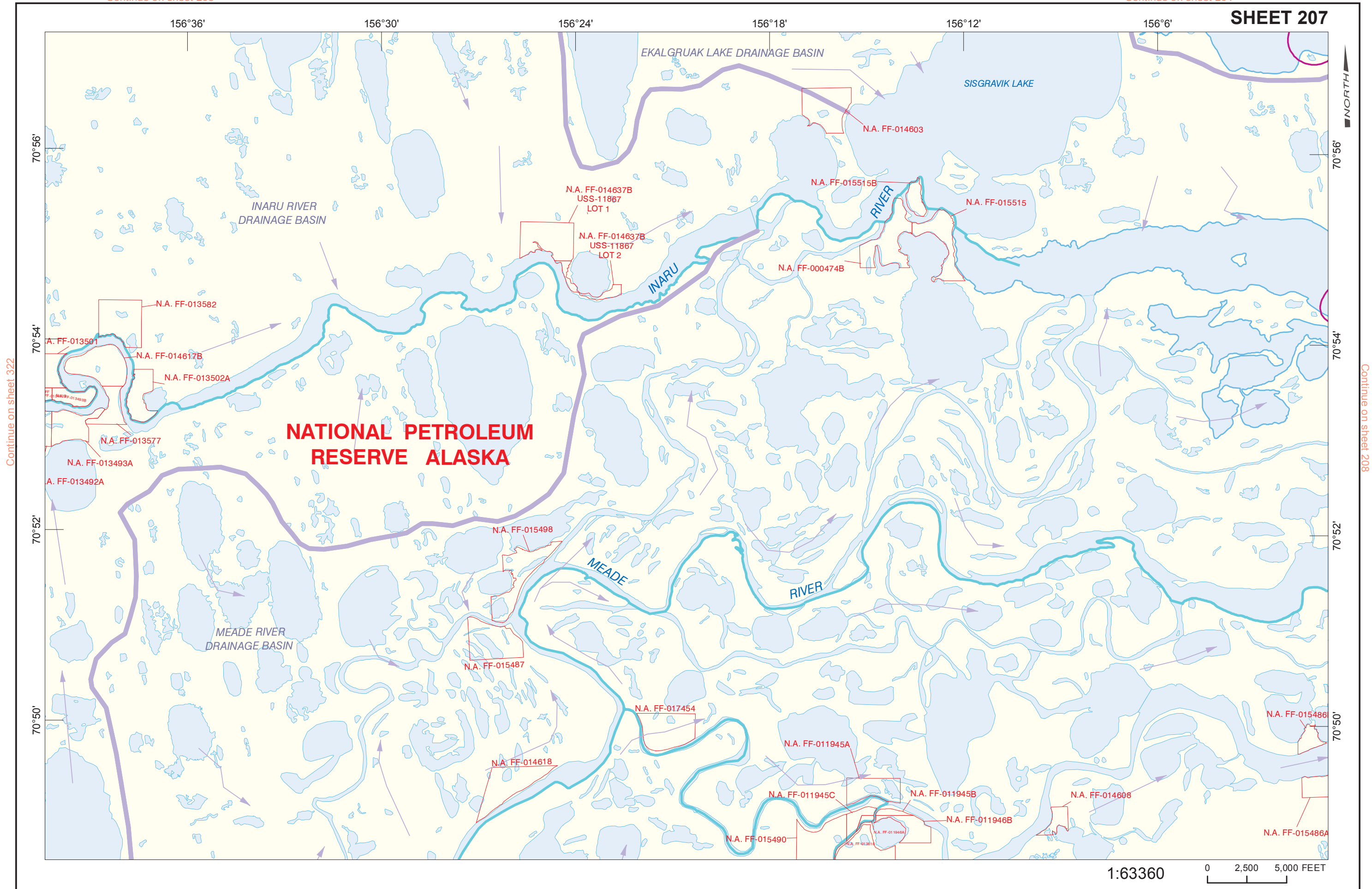
Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.

- Commercial and air freight services are available at Barrow airport (Sheet 195), located approximately 29 miles to the North-Northwest. Runway is 6,500 ft. asphalt.
- An unattended, 4,400 ft. gravel airstrip serving the community of Atkasuk (located out of sheet coverage area) is located approximately 38 miles to the Southwest. Visual inspection recommended prior to use.

- Several rivers flow into southern Admiralty Bay, resulting in a low, marshy delta dotted by many small lakes.
- Water depths are extremely shallow and in many cases uncharted, making shore access difficult.

- Much of this area is complex deltaic and subsiding tundra polygons.
- The shoreline is primarily vegetated, with some limited areas of silt-sand. Peat is often overwashed onto the tundra vegetation. Both shore types present potential risk to load-bearing machinery and equipment.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.





PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS137	Mouth of the Alaktak River.	Most sensitive during open water season. Prevent oil from entering the river.	C-13 or C-14	800'
PS138	Entire delta area at mouth of Chipp River.	Most sensitive during open water season. Prevent oil from entering the river.	C-13 or C-14	1000'
PS139	Area guarding primary entrance to Admiralty Bay Drainage Basin.	Most sensitive during open water season. Prevent oil from entering the basin.	C-13 or C-14	800'
PS140	Shore to shore at the extreme south-southwest end of Admiralty Bay.	Most sensitive during open water season. Prevent oil from entering the furthest portion of the bay.	C-13 or C-14	5000'
PS141	Mouth of southern entrance to the Meade River Drainage Basin.	Most sensitive during open water season. Prevent oil from entering the basin.	C-13 or C-14	2000'
PS142	Mouth of the Meade River.	Most sensitive during open water season. Prevent oil from entering the river.	C-13 or C-14	2000'
PS143	Mouth of northern entrance to the Meade River Drainage Basin.	Most sensitive during open water season. Prevent oil from entering the basin.	C-13 or C-14	500'
PS144	Mouth of Inaru River entering Kuyanak Bay.	Most sensitive during open water season. Prevent oil from entering the river.	C-13 or C-14	2000'

GENERAL SENSITIVITIES

- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Coastal areas and inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during the open water months (generally April - October). Expect to deploy bird hazing systems.
- The southernmost portion of Admiralty Bay, below a line stretching from Kuyanak Bay to the Alaktak River, is an important subsistence fishing area during summer months.
- Black brant and snow geese breeding, nesting, rearing area during the summer.
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.
- Caribou in the area southwest of Admiralty Bay during summer months.
- The mouth of the Chipp River is a traditional haulout for spotted seals during the summer. Seals are sensitive to disturbance.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- Commercial and air freight services are available at Barrow airport (Sheet 195), located approximately 38 miles to the North-Northwest. Runway is 6,500 ft. asphalt.
- An unattended, 4,400 ft. gravel airstrip serving the community of Atkasuk (located out of sheet coverage area) is located approximately 48 miles to the Southwest. Visual inspection recommended prior to use.

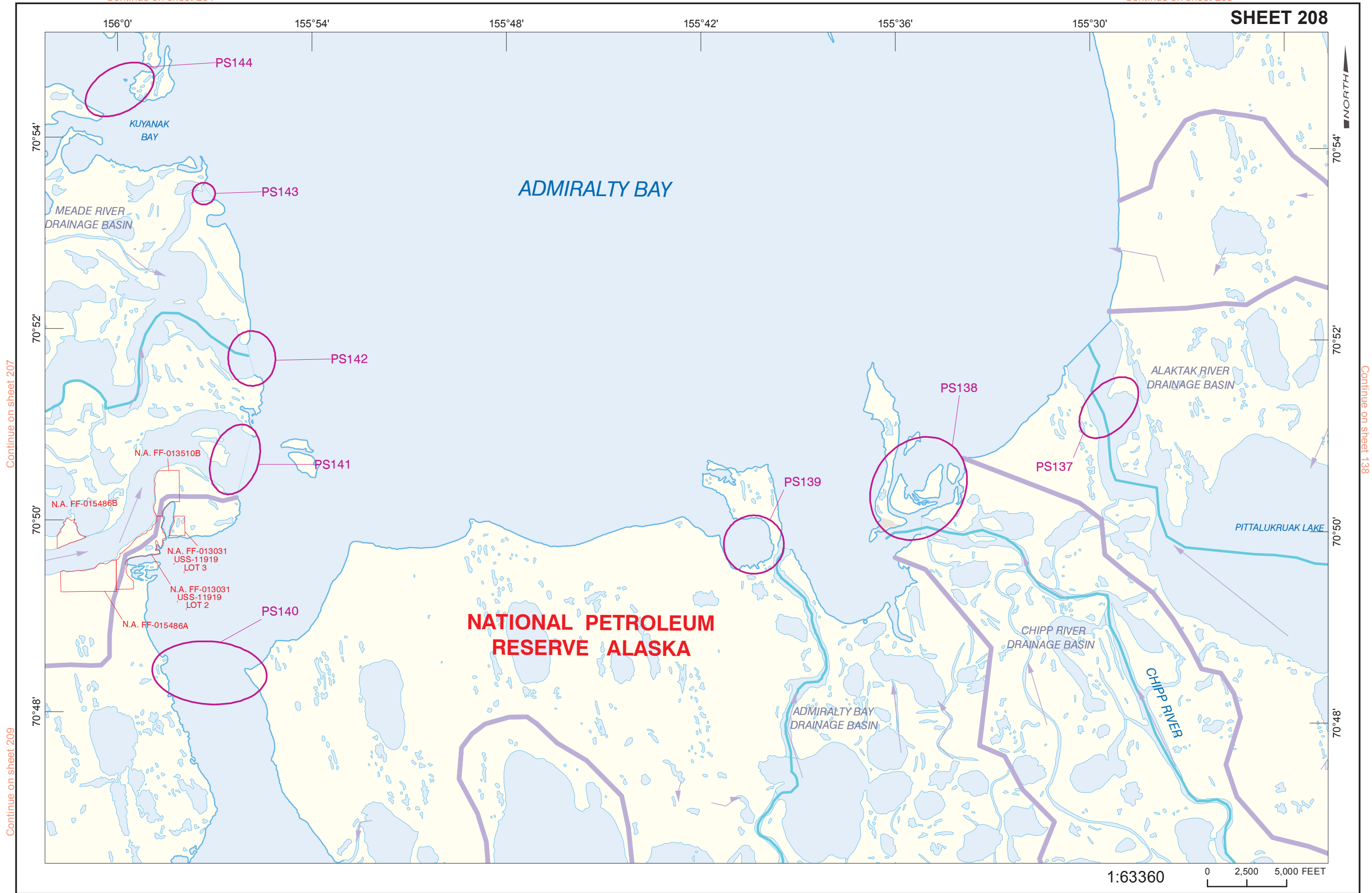
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS


- Admiralty Bay has 8-10 ft. depths and bottom similar to the outer part of Dease Inlet.
- Numerous rivers flow into southern Admiralty Bay, resulting in a low, marshy delta dotted by many small lakes.
- Water depths in the south are extremely shallow and in many cases uncharted, making shore access very difficult.

COUNTERMEASURES CONSIDERATIONS

- The Meade River Drainage Basin area consists of complex deltaic and subsiding tundra polygons.
- The bay's extreme southern shoreline is primarily wet vegetation, with some limited areas of silt-sand backed by 10-20 ft. tundra scarps. Both shore types present potential risk to load-bearing machinery and equipment.
- The shoreline entrance to Pittalukruak Lake is vegetated and consists of subsiding tundra not backed by scarps. Some peat may be overwashed onto it.
- The eastern shoreline of Admiralty Bay is predominantly sandy and narrow, backed by sand scarps from 10-30 ft. in height. These scarps generally preclude shore access.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.





PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS140	Shore to shore at the extreme south-southwest end of Admiralty Bay.	Most sensitive during open water season. Prevent oil from entering the furthest portion of the bay.	C-13 or C-14	5000'


GENERAL SENSITIVITIES

- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Coastal areas and inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during the open water months (generally April - October). Expect to deploy bird hazing systems.
- Known nesting area for threatened Spectacled eiders.
- Black brant breeding, nesting, rearing area during the summer.
- The southernmost reaches of Admiralty Bay are an important subsistence fishing area during summer months.
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.
- Many inland lakes contain freshwater fish important to subsistence users.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- An unattended, 4,400 ft. gravel airstrip serving the community of Atqasuk (located out of sheet coverage area) is located approximately 36 miles to the West-Southwest. Visual inspection recommended prior to use.
- Commercial and air freight services are available at Barrow airport (Sheet 195), located approximately 39 miles to the North-Northwest. Runway is 6,500 ft. asphalt.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

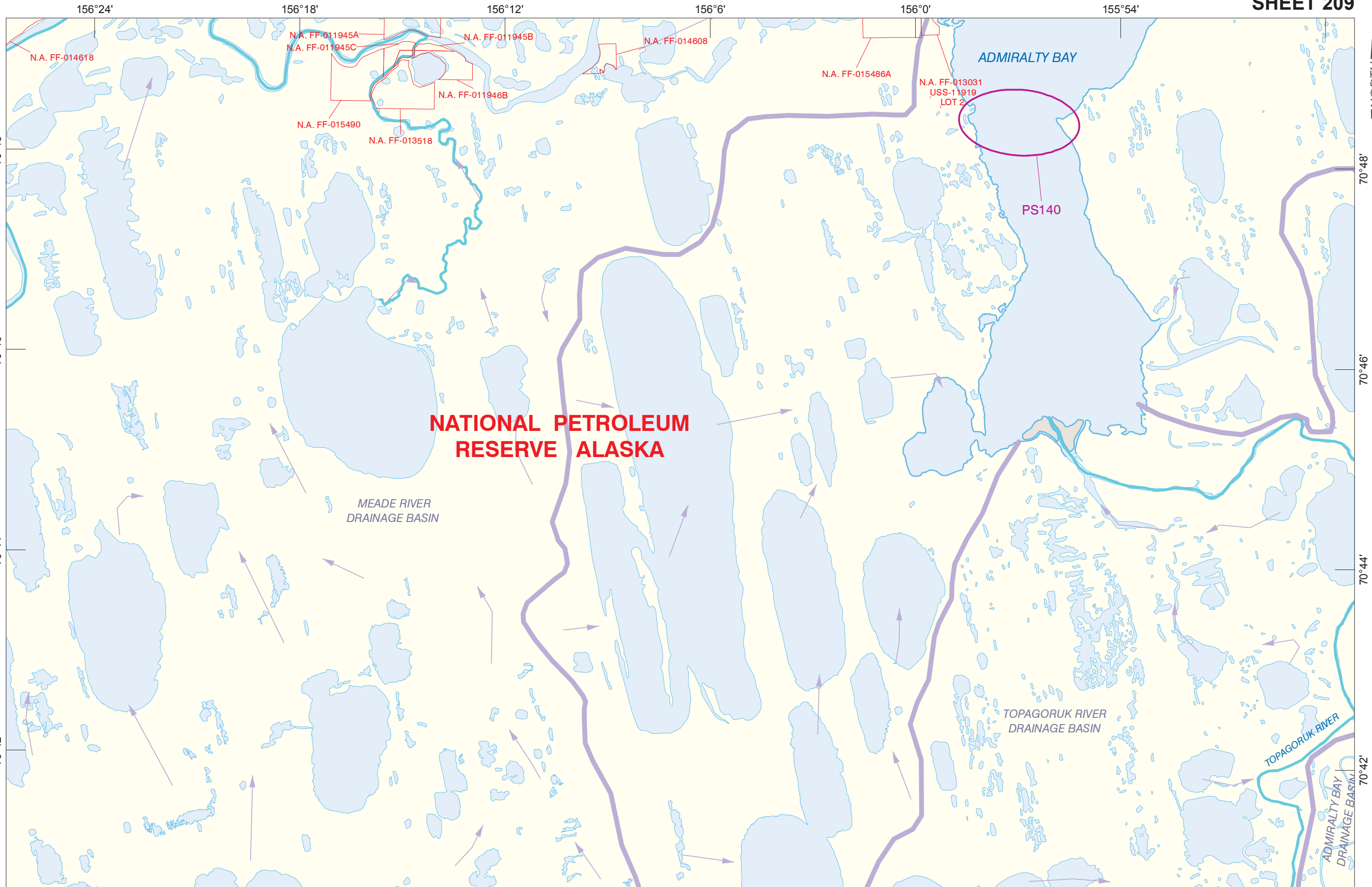
- Several rivers flow into southern Admiralty Bay, resulting in a low, marshy delta dotted by many small lakes.
- Water depths are extremely shallow and in many cases uncharted, making shore access very difficult.

COUNTERMEASURES CONSIDERATIONS

- The bay's extreme southern shoreline is primarily wet vegetation, with some limited areas of silt-sand backed by 10-20 ft. tundra scarps. Both shore types present potential risk to load-bearing machinery and equipment.
- This area is wet tundra and peat, dotted with numerous small lakes and creeks. Expect it to be very unstable.


*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

NOTE: All values given on these pages are for planning purposes only.



1:63360

0 2,500 5,000 FEET



PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.


GENERAL SENSITIVITIES

- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during the open water months (generally April - October). Expect to deploy bird hazing systems.
- Caribou present in the area during summer months.
- Chipp River contains resident and anadromous fish important to subsistence users.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- An unattended, 4,400 ft. gravel airstrip serving the community of Atqasuk (located out of sheet coverage area) is located approximately 45 miles to the West-Southwest. Visual inspection recommended prior to use.
- Commercial and air freight services are available at Barrow airport (Sheet 195), located approximately 48 miles to the North-Northwest. Runway is 6,500 ft. asphalt.

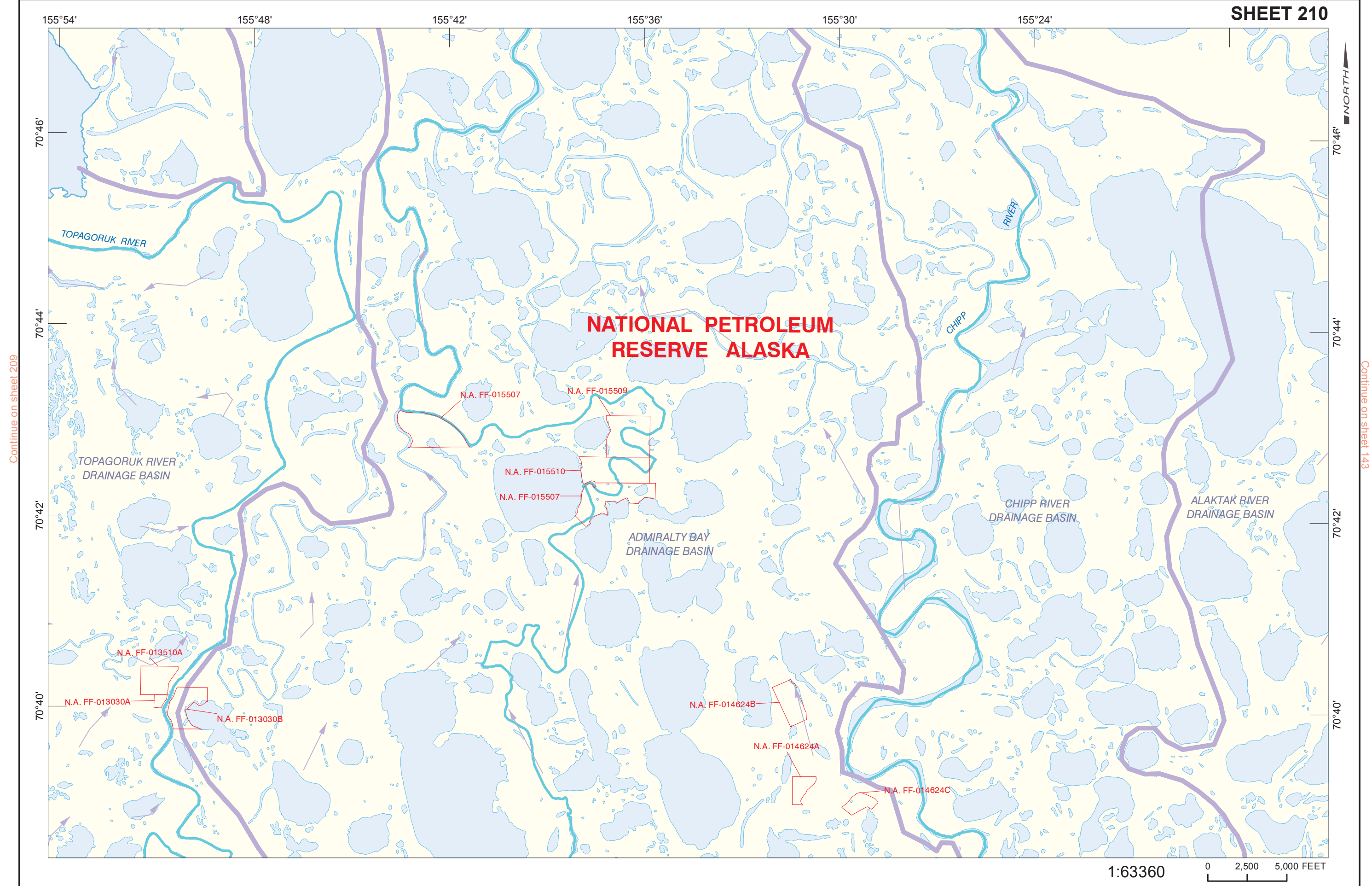
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS


- Several rivers flow into Admiralty Bay, resulting in a low, marshy delta dotted by numerous small lakes.

COUNTERMEASURES CONSIDERATIONS

- This area is wet tundra and peat, dotted with numerous small lakes and creeks. Expect it to be very unstable, presenting a high risk to load-bearing machinery, equipment and personnel.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.





PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.


GENERAL SENSITIVITIES

- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during the open water months (generally April - October). Expect to deploy bird hazing systems.
- Caribou present in the area during summer months.
- Chipp River contains resident and anadromous fish important to subsistence users.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- An unattended, 4,400 ft. gravel airstrip serving the community of Atqasuk (located out of sheet coverage area) is located approximately 47 miles to the West-Southwest. Visual inspection recommended prior to use.
- Lonely Air Station (Sheet 141) is located approximately 55 miles to the East-Northeast. This facility is closed to the public and should be considered for emergency landing only. The unattended, 5,000 ft. gravel runway is not maintained and its condition is unknown. Visual inspection recommended prior to use. May be used for spill response operations upon approval by Elmendorf Air Force Base, 11th Air Force Airfield Management, (907) 552-7384/3636/5265.
- Commercial and air freight services are available at Barrow airport (Sheet 195), located approximately 57 miles to the North-Northwest. Runway is 6,500 ft. asphalt.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.


COUNTERMEASURES CONSIDERATIONS

- This area is wet tundra and peat, dotted with numerous small lakes and creeks. Expect it to be very unstable, presenting a high risk to load-bearing machinery, equipment and personnel.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

NOTE: All values given on these pages are for planning purposes only.





PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.


GENERAL SENSITIVITIES

- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during the open water months (generally April - October). Expect to deploy bird hazing systems.
- Known spectacled eider nesting area.
- Polar bear dens may be present where typographical features provide adequate snow cover.
- Anadromous and resident fish present in Ugnuravik River.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- Ugnu-Kuparuk (Sheet 51) is a continuously attended, 6,551x150 ft. asphalt private airstrip serving the Kuparuk facilities. It is located approximately 10 miles to the Northeast.
- An irregularly attended, 5,000 ft. gravel private airstrip serving the Alpine field (Sheet 20) is located approximately 25 miles to the Northwest.
- Commercial and air freight services are available at Nuiqsut airport (Sheet 24), located approximately 25 miles to the West. The unattended runway is 4,300 ft. gravel. Its condition is not monitored, thus visual inspection prior to use is recommended.
- Commercial and air freight services are available at Deadhorse airport (Sheet 81), located approximately 34 miles to the East. Runway is 6,500 ft. asphalt.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 53

Continue on sheet 54

Continue on sheet 55

SHEET 212

Continue on sheet 23B

Continue on sheet 29

Continue on sheet 27

Continue on sheet 55

Continue on sheet 177




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0 2,500 5,000 FEET

Continue on sheet 28

Continue on sheet 213

Continue on sheet 178



NORTH SLOPE SPILL RESPONSE

ACS

A WORLD CLASS ORGANIZATION

PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.


GENERAL SENSITIVITIES

- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during the open water months (generally April - October). Expect to deploy bird hazing systems.
- Known spectacled eider nesting area.
- Polar bear dens may be present where typographical features provide adequate snow cover.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats.
- Anadromous and resident fish present in Ugnuravik and Miluveach Rivers.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



NORTH SLOPE SPILL RESPONSE

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AIR ACCESS*

- Ugnu-Kuparuk (Sheet 51) is a continuously attended, 6,551x150 ft. asphalt private airstrip serving the Kuparuk facilities. It is located approximately 18 miles to the Northeast.
- An irregularly attended, 5,000 ft. gravel private airstrip serving the Alpine field (Sheet 20) is located approximately 25 miles to the Northwest.
- Commercial and air freight services are available at Nuiqsut airport (Sheet 24), located approximately 22 miles to the West.-Northwest The unattended runway is 4,300 ft. gravel. Its condition is not monitored, thus visual inspection prior to use is recommended.
- Commercial and air freight services are available at Deadhorse airport (Sheet 81), located approximately 38 miles to the East-Northeast. Runway is 6,500 ft. asphalt.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 28

Continue on sheet 212

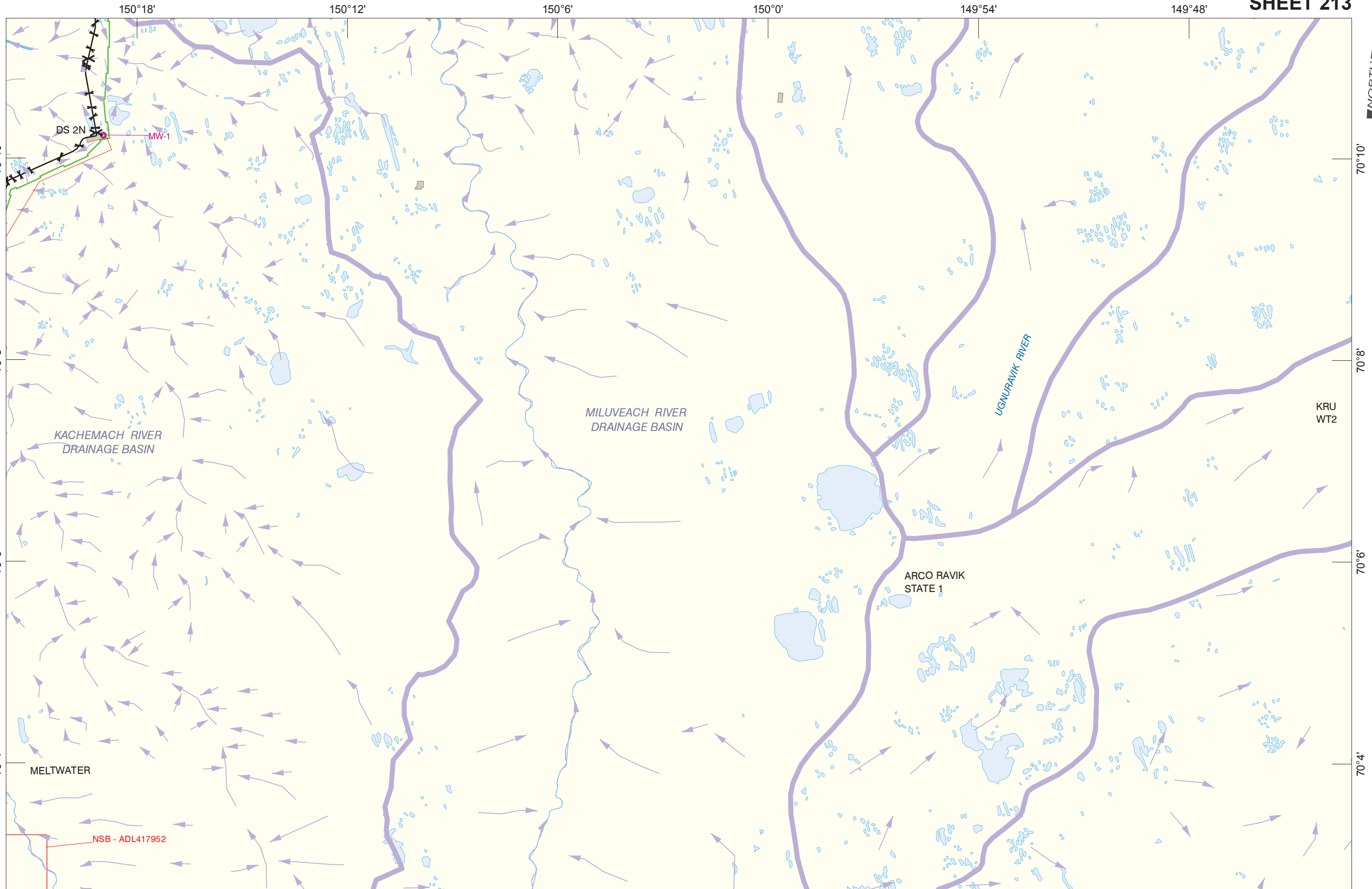
SHEET 213

Continue on sheet 28

Continue on sheet 28A

Continue on sheet 28B


Continue on sheet 178



1:63360 0 2,500 5,000 FEET

Continue on sheet 28C

Continue on sheet 214



ACS

A WORLD CLASS ORGANIZATION

PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

GENERAL SENSITIVITIES


- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during the open water months (generally April - October). Expect to deploy bird hazing systems.
- Known spectacled eider nesting area.
- Polar bears and potential dens present in the area.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats.
- Anadromous and resident fish present in Miluveach River.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.

Response Considerations



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AIR ACCESS*

- Ugnu-Kuparuk (Sheet 51) is a continuously attended, 6,551x150 ft. asphalt private airstrip serving the Kuparuk facilities. It is located approximately 24 miles to the North-Northeast.
- An irregularly attended, 5,000 ft. gravel private airstrip serving the Alpine field (Sheet 20) is located approximately 31 miles to the Northwest.
- Commercial and air freight services are available at Nuiqsut airport (Sheet 24), located approximately 26 miles to the Northwest The unattended runway is 4,300 ft. gravel. Its condition is not monitored, thus visual inspection prior to use is recommended.
- Commercial and air freight services are available at Deadhorse airport (Sheet 81), located approximately 40 miles to the Northeast. Runway is 6,500 ft. asphalt.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

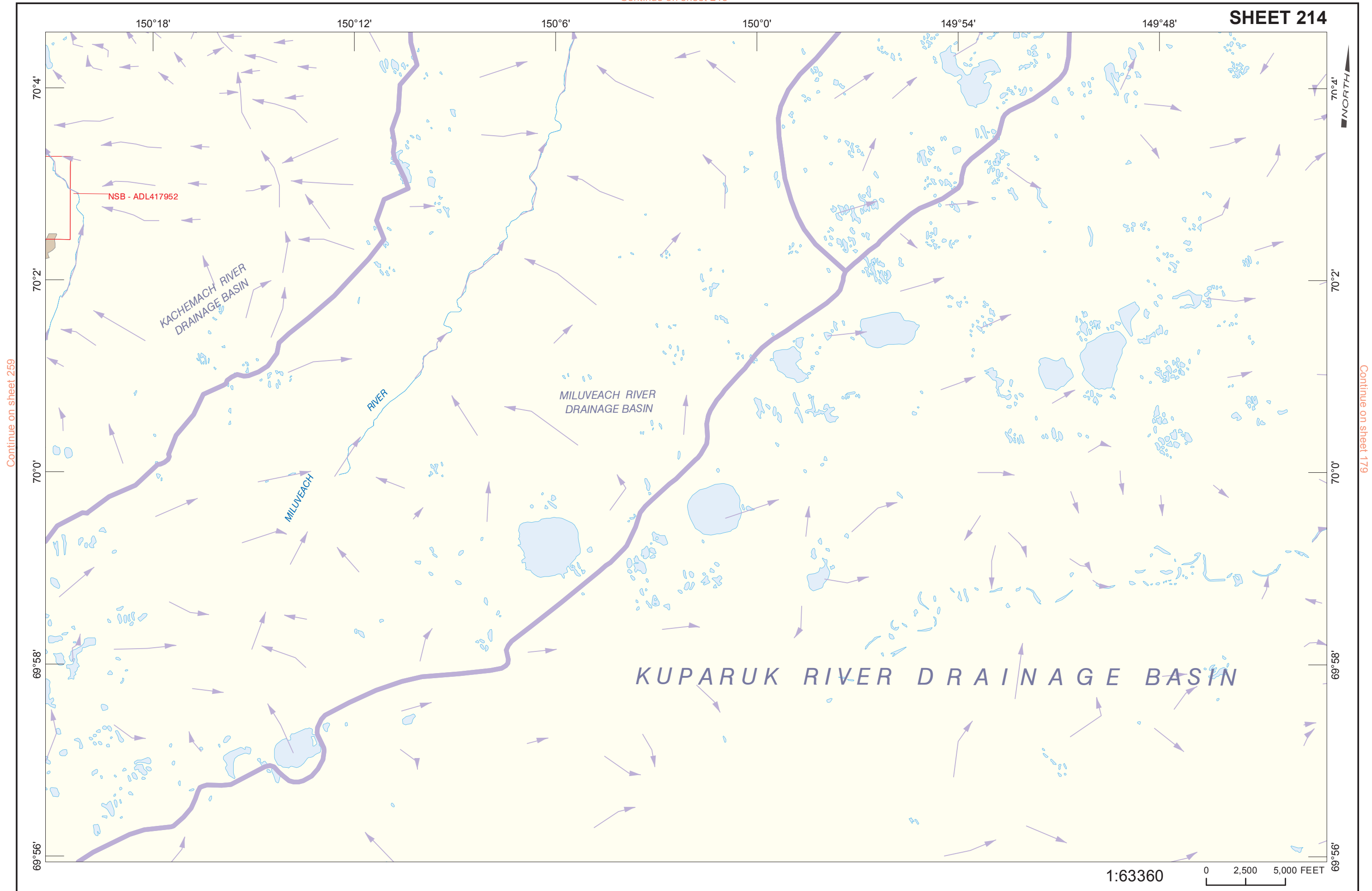
- There are no marine waters or shorelines on this map.

ACS Tech. Manual Vol. 2, 06/21

NOTE: All values given on these pages are for planning purposes only.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

NOTE: All values given on these pages are for planning purposes only.





PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

GENERAL SENSITIVITIES

- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during the open water months (generally April - October). Expect to deploy bird hazing systems.
- Polar bear dens may be present where typographical features provide adequate snow cover.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats.
- Caribou present in the winter.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- Ugnu-Kuparuk (Sheet 51) is a continuously attended, 6,551x150 ft. asphalt private airstrip serving the Kuparuk facilities. It is located approximately 32 miles to the North-Northeast.
- Commercial and air freight services are available at Nuiqsut airport (Sheet 24), located approximately 32 miles to the Northwest The unattended runway is 4,300 ft. gravel. Its condition is not monitored, thus visual inspection prior to use is recommended.
- Commercial and air freight services are available at Deadhorse airport (Sheet 81), located approximately 44 miles to the Northeast. Runway is 6,500 ft. asphalt.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS


- There are no marine waters or shorelines on this map.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 262

Continue on sheet 216





NORTH SLOPE SPILL RESPONSE

ACS

A WORLD CLASS ORGANIZATION

PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.


GENERAL SENSITIVITIES

- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during the open water months (generally April - October). Expect to deploy bird hazing systems.
- Caribou present in the winter.
- Polar bear dens may be present where typographical features provide adequate snow cover.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats.
- Anadromous and resident fish present in the Kuparuk and Toolik Rivers and most side tributaries.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



NORTH SLOPE SPILL RESPONSE

ACS

A WORLD CLASS ORGANIZATION

AIR ACCESS*

- Franklin Bluffs landing strip, details unknown, appears on Sheet 219 to the southeast.
- Several small landing strips, details unknown, appear on Sheet 222 to the southeast.
- Ugnu-Kuparuk (Sheet 51) is a continuously attended, 6,551x150 ft. asphalt private airstrip serving the Kuparuk facilities. It is located approximately 31 miles to the North.
- Commercial and air freight services are available at Deadhorse airport (Sheet 81), located approximately 31 miles to the Northeast. Runway is 6,500 ft. asphalt.
- Commercial and air freight services are available at Nuiqsut airport (Sheet 24), located approximately 43 miles to the Northwest The unattended runway is 4,300 ft. gravel. Its condition is not monitored, thus visual inspection prior to use is recommended.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

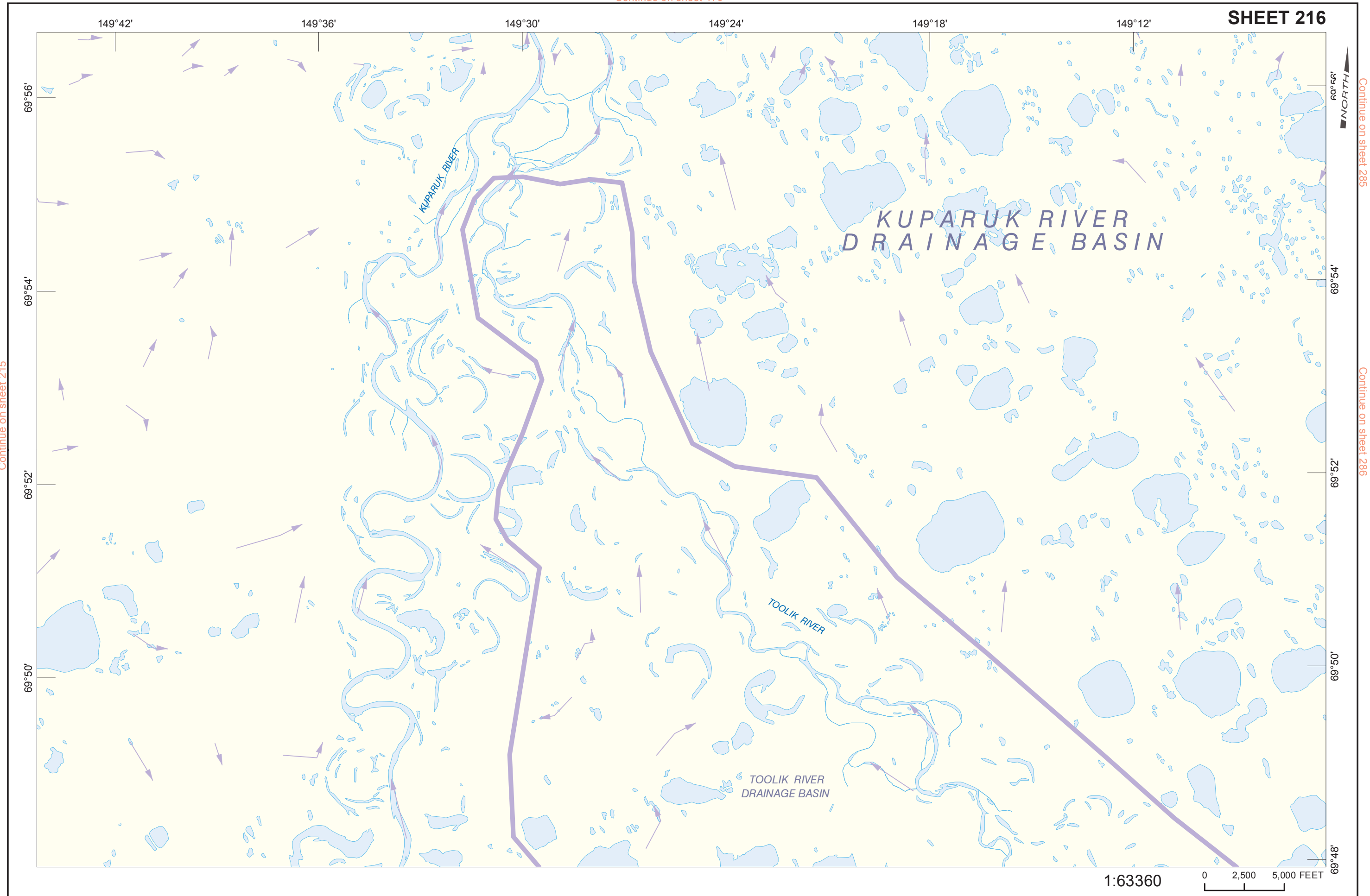
- There are no marine waters or shorelines on this map.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 215

Continue on sheet 285

Continue on sheet 286





PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

GENERAL SENSITIVITIES

- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during the open water months (generally April - October). Expect to deploy bird hazing systems.
- Caribou present in the winter.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats.
- Anadromous and resident fish present in the Kuparuk River and most side tributaries.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- Commercial and air freight services are available at Nuiqsut airport (Sheet 24), located approximately 39 miles to the Northwest The unattended runway is 4,300 ft. gravel. Its condition is not monitored, thus visual inspection prior to use is recommended.
- Ugnu-Kuparuk (Sheet 51) is a continuously attended, 6,551x150 ft. asphalt private airstrip serving the Kuparuk facilities. It is located approximately 41 miles to the North-Northeast.
- Commercial and air freight services are available at Deadhorse airport (Sheet 81), located approximately 50 miles to the Northeast. Runway is 6,500 ft. asphalt.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.


Continue on sheet 265

Continue on sheet 218



1:63360

0 2,500 5,000 FEET



PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.


GENERAL SENSITIVITIES

- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during the open water months (generally April - October). Expect to deploy bird hazing systems.
- Caribou wintering and calving grounds.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats.
- Anadromous and resident fish present in the Kuparuk and Toolik Rivers and most side tributaries.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- Franklin Bluffs landing strip, details unknown, appears on Sheet 219 directly to the east.
- Several small landing strips, details unknown, appear on Sheet 222 to the southeast.
- Commercial and air freight services are available at Deadhorse airport (Sheet 81), located approximately 38 miles to the Northeast. Runway is 6,500 ft. asphalt.
- Ugnu-Kuparuk (Sheet 51) is a continuously attended, 6,551x150 ft. asphalt private airstrip serving the Kuparuk facilities. It is located approximately 40 miles to the North.
- Commercial and air freight services are available at Nuiqsut airport (Sheet 24), located approximately 49 miles to the Northwest The unattended runway is 4,300 ft. gravel. Its condition is not monitored, thus visual inspection prior to use is recommended.

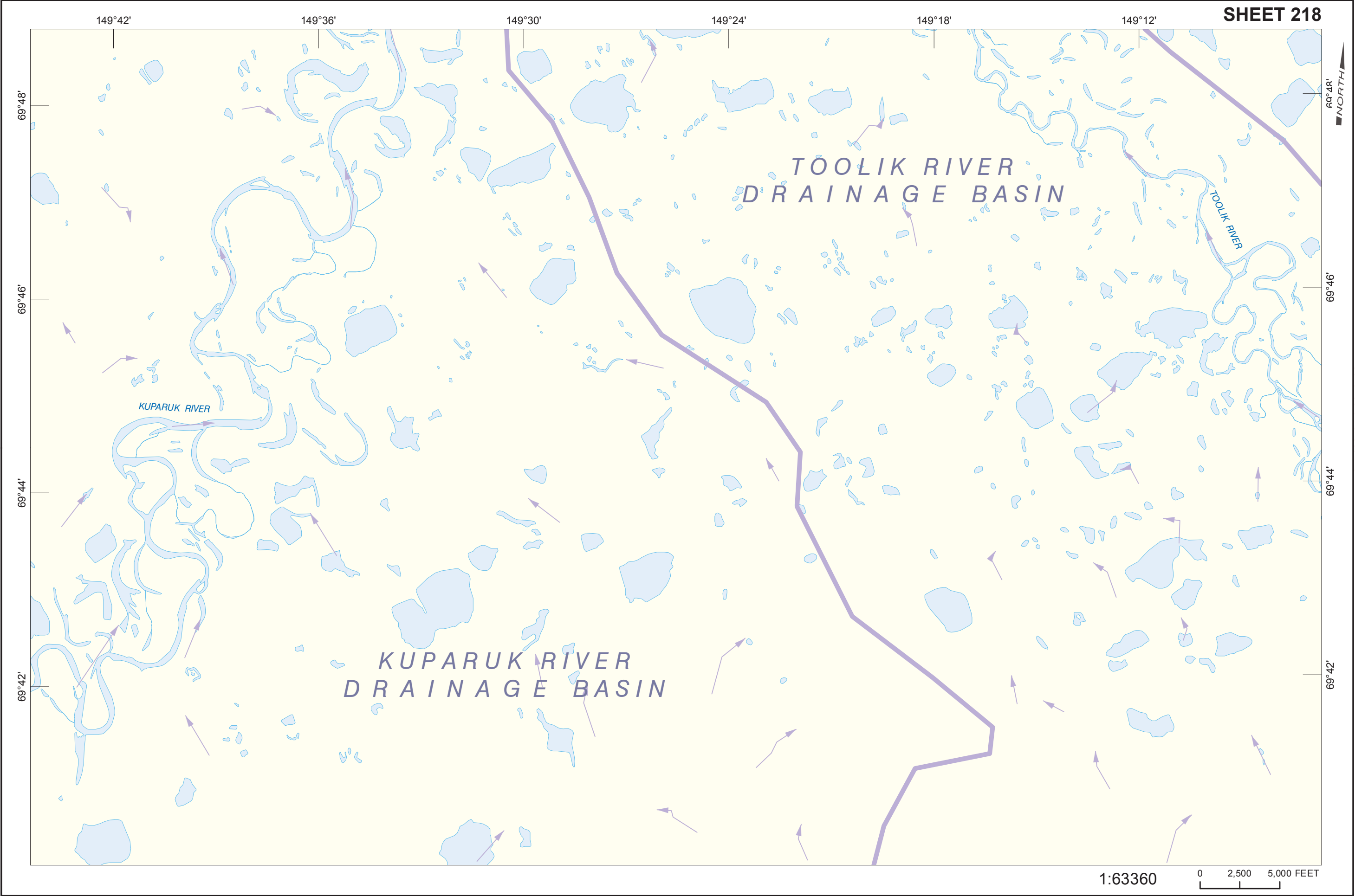
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS


- There are no marine waters or shorelines on this map.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 217

Continue on sheet 219





PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.


GENERAL SENSITIVITIES

- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during the open water months (generally April - October). Expect to deploy bird hazing systems.
- Caribou wintering and calving grounds.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats.
- Anadromous and resident fish present in the Toolik and Sagavanirktok Rivers and most side tributaries.
- Peregrine falcons may be present in area adjacent to the Sagavanirktok River.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

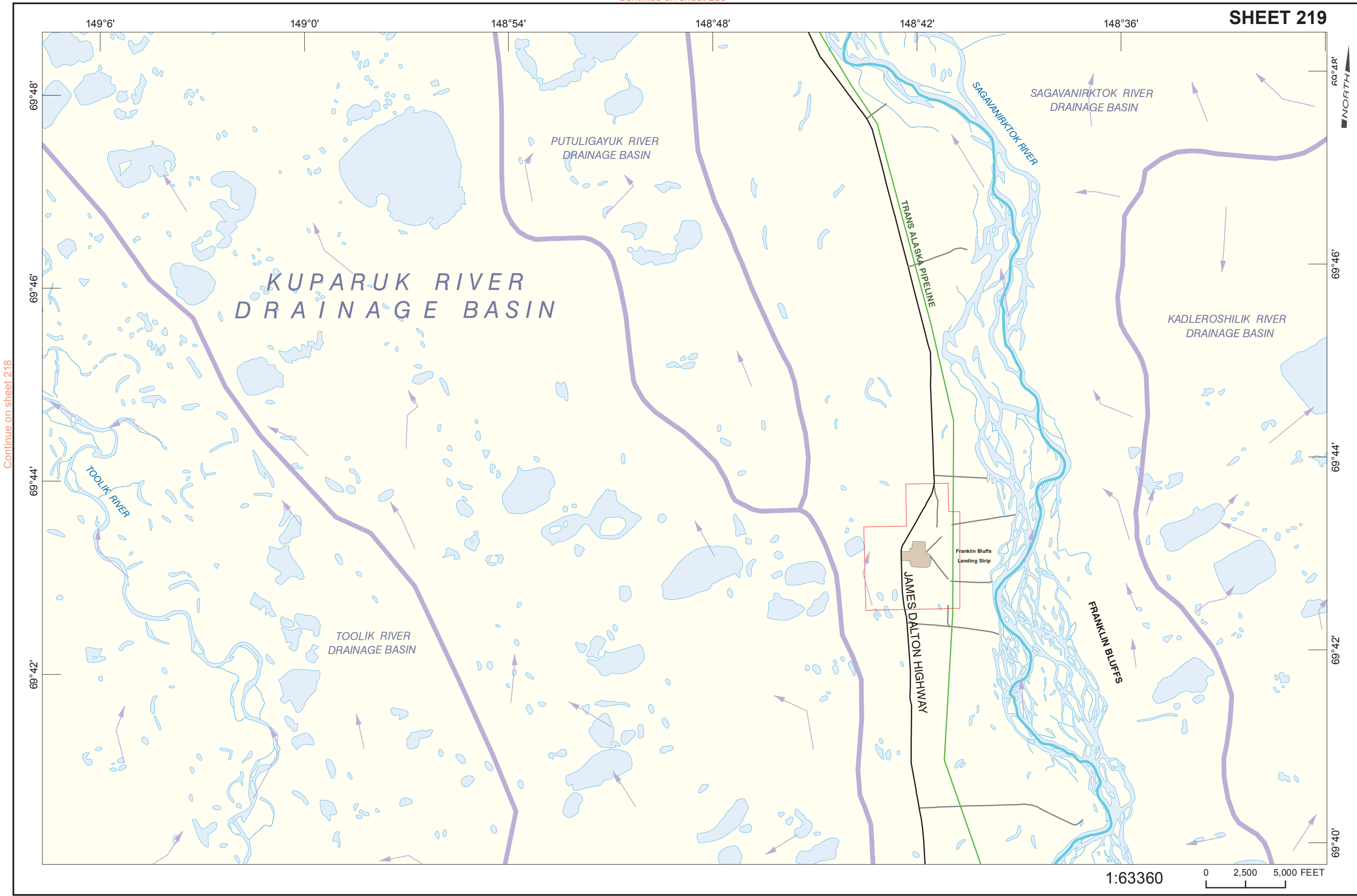
- Franklin Bluffs landing strip, details unknown, is depicted on this sheet.
- Several small landing strips, details unknown, appear on Sheet 222 directly to the south.
- Commercial and air freight services are available at Deadhorse airport (Sheet 81), located approximately 32 miles to the North. Runway is 6,500 ft. asphalt.
- Ugnu-Kuparuk (Sheet 51) is a continuously attended, 6,551x150 ft. asphalt private airstrip serving the Kuparuk facilities. It is located approximately 44 miles to the North-Northwest.
- An unattended, 5,100 ft. gravel private airstrip serving the Badami field (Sheet 91) is located approximately 50 miles to the Northeast.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS


- There are no marine waters or shorelines on this map.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

NOTE: All values given on these pages are for planning purposes only.



Continue on sheet 218



PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.


GENERAL SENSITIVITIES

- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during the open water months (generally April - October). Expect to deploy bird hazing systems.
- Caribou present in the winter.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats.
- Anadromous and resident fish present in the Kuparuk River and most side tributaries.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



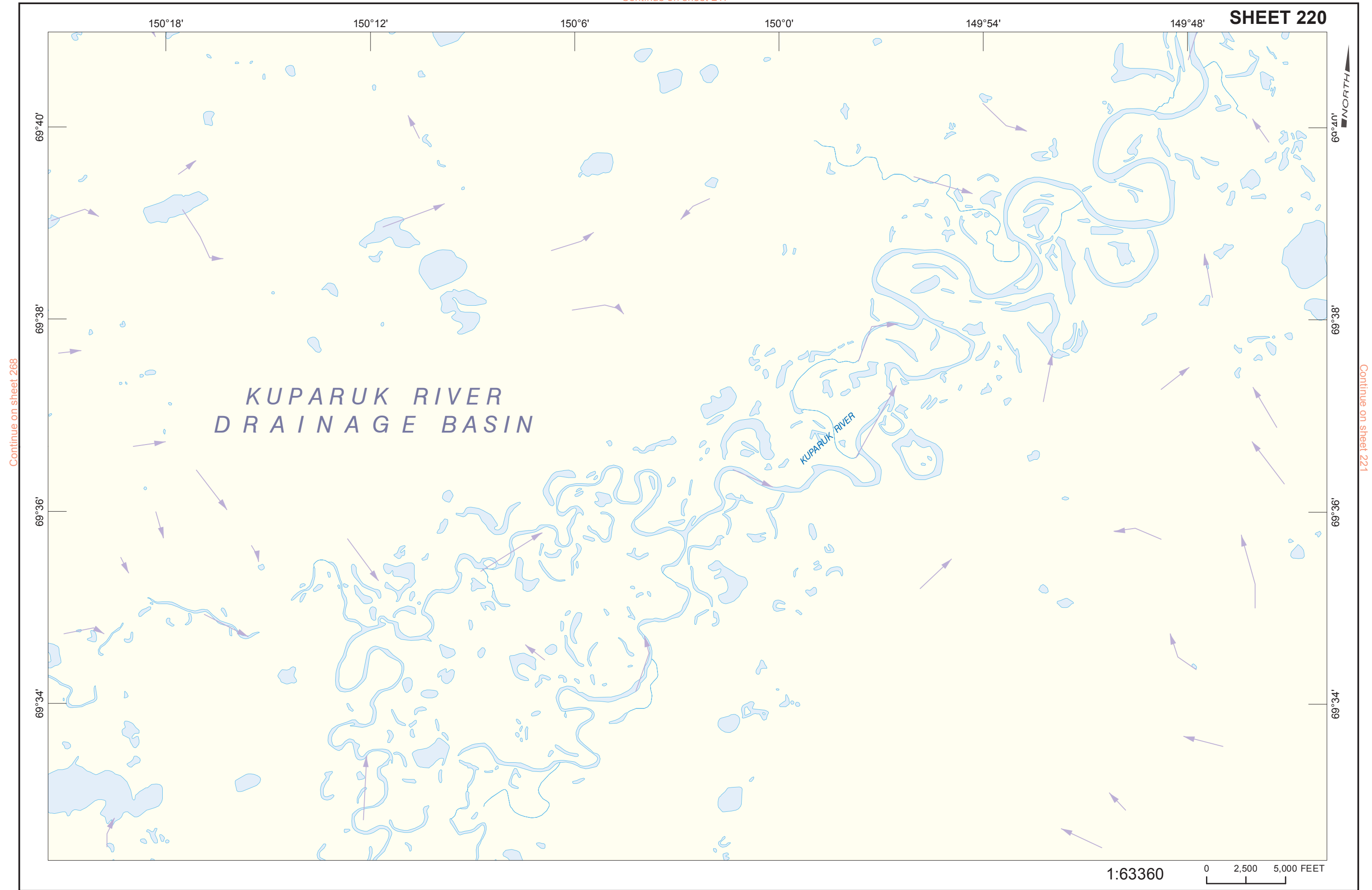
AIR ACCESS*

- Commercial and air freight services are available at Nuiqsut airport (Sheet 24), located approximately 47 miles to the Northwest The unattended runway is 4,300 ft. gravel. Its condition is not monitored, thus visual inspection prior to use is recommended.
- Ugnu-Kuparuk (Sheet 51) is a continuously attended, 6,551x150 ft. asphalt private airstrip serving the Kuparuk facilities. It is located approximately 51 miles to the North-Northeast.
- Commercial and air freight services are available at Deadhorse airport (Sheet 81), located approximately 56 miles to the Northeast. Runway is 6,500 ft. asphalt.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS


- There are no marine waters or shorelines on this map.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.



Continue on sheet 268

Continue on sheet 221



PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.


GENERAL SENSITIVITIES

- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during the open water months (generally April - October). Expect to deploy bird hazing systems.
- Caribou present in the winter.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



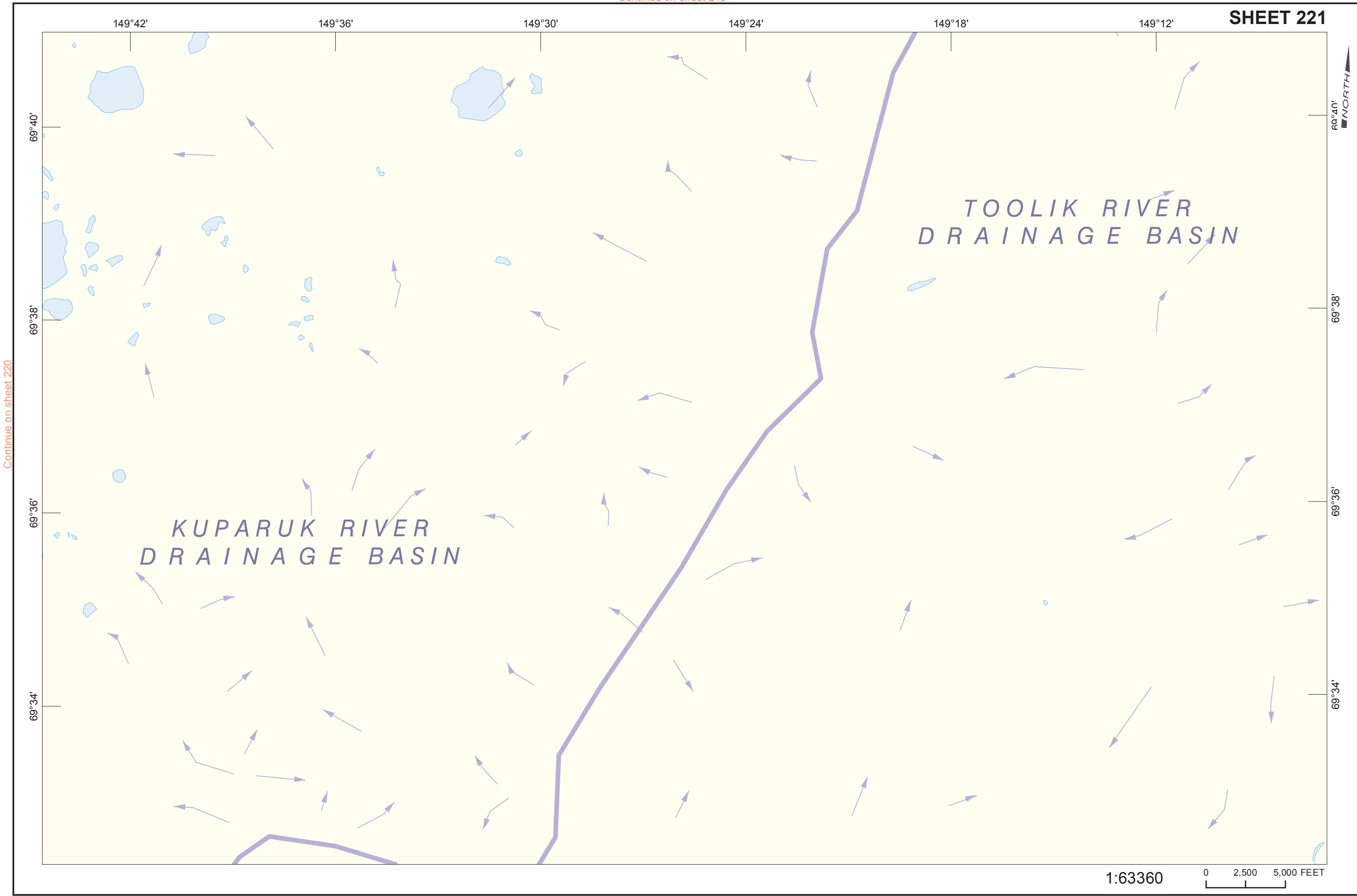
AIR ACCESS*

- Several small landing strips, details unknown, appear on Sheet 222 directly to the east.
- Franklin Bluffs landing strip, details unknown, appears on Sheet 219 to the northeast.
- Commercial and air freight services are available at Deadhorse airport (Sheet 81), located approximately 47 miles to the Northeast. Runway is 6,500 ft. asphalt.
- Ugnu-Kuparuk (Sheet 51) is a continuously attended, 6,551x150 ft. asphalt private airstrip serving the Kuparuk facilities. It is located approximately 50 miles to the North.
- Commercial and air freight services are available at Nuiqsut airport (Sheet 24), located approximately 56 miles to the Northwest The unattended runway is 4,300 ft. gravel. Its condition is not monitored, thus visual inspection prior to use is recommended.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.





PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

GENERAL SENSITIVITIES

- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during the open water months (generally April - October). Expect to deploy bird hazing systems.
- Caribou wintering and calving grounds.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats.
- Anadromous and resident fish present in the Toolik and Sagavanirktok Rivers and most side tributaries.
- Peregrine falcons may be present in area adjacent to the Sagavanirktok River.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



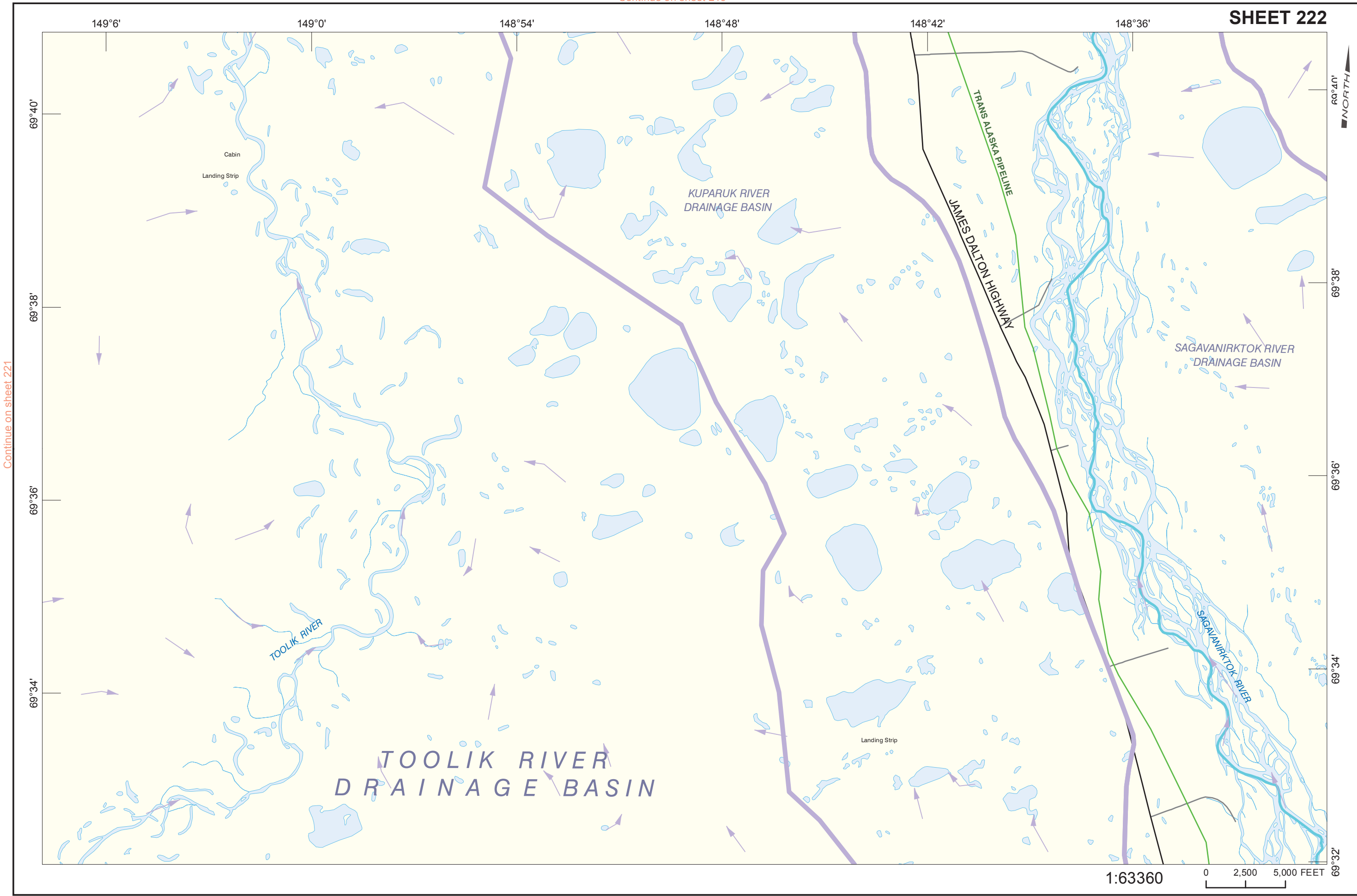
AIR ACCESS*

- Several small landing strips, details unknown, appear on this sheet.
- Franklin Bluffs landing strip, details unknown, is located approximately 8 miles northeast of the center of this sheet.
- Commercial and air freight services are available at Deadhorse airport (Sheet 81), located approximately 41 miles to the North. Runway is 6,500 ft. asphalt.
- Ugnu-Kuparuk (Sheet 51) is a continuously attended, 6,551x150 ft. asphalt private airstrip serving the Kuparuk facilities. It is located approximately 53 miles to the North-Northwest.
- An unattended, 5,100 ft. gravel private airstrip serving the Badami field (Sheet 91) is located approximately 56 miles to the Northeast.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.



Continue on sheet 221



PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS200	Opening to Marryat Inlet.	Most sensitive during open water season. Prevent oil from entering the lagoon. Heavy outflow likely precludes need for C-14 booming.	C-13	500'
PS201	Village ice cellars near the tip of Point Hope.	Most sensitive during open water season. Prevent contamination of food stores.	C-13	1000'

GENERAL SENSITIVITIES

- Important subsistence hunting and fishing area.
- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl, diving, shore and sea birds during the open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- Nearshore waters supply important food sources for bird populations during open water months.
- Heavy bird migration route approximately 5-10 miles offshore.
- Walrus may be present off shore on ice floes, Mar-Nov.
- Bearded Seals may be present Jan-Dec, as well as Ringed Seals from Jun-Feb.
- Ringed Seal breeding and pupping along shorefast ice.
- Bowhead Whales (endangered species) migrate to the Arctic Ocean and may be present, Mar-Jun.
- Beluga Whales may be present in the Chukchi Sea, just off the coast of Point Hope, Apr-Jul.
- Caribou summering/migration grounds (generally Jul-Aug).
- Freshwater rivers and many inland lakes contain resident and anadromous fish species. Kukpuk River is considered habitat for anadromous fish. Dolly Varden spawn Sep-Oct; Pink Salmon spawn Jul-Sep.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- An unattended, 4,000 ft. asphalt airstrip serves the village of Point Hope. Visual inspection recommended prior to use, due to lateral cracks the entire length of the runway.
- Cape Lisburn LRRS airstrip (Sheet 227) is a 4,800 ft. maintained gravel runway located approximately 40 miles north-northeast of Point Hope. This facility is closed to the public and should be considered for emergency landing only. May be used for spill response operations upon approval by Elmendorf Air Force Base, 11th Air Force Airfield Management, (907) 552-7384/3636/5265.

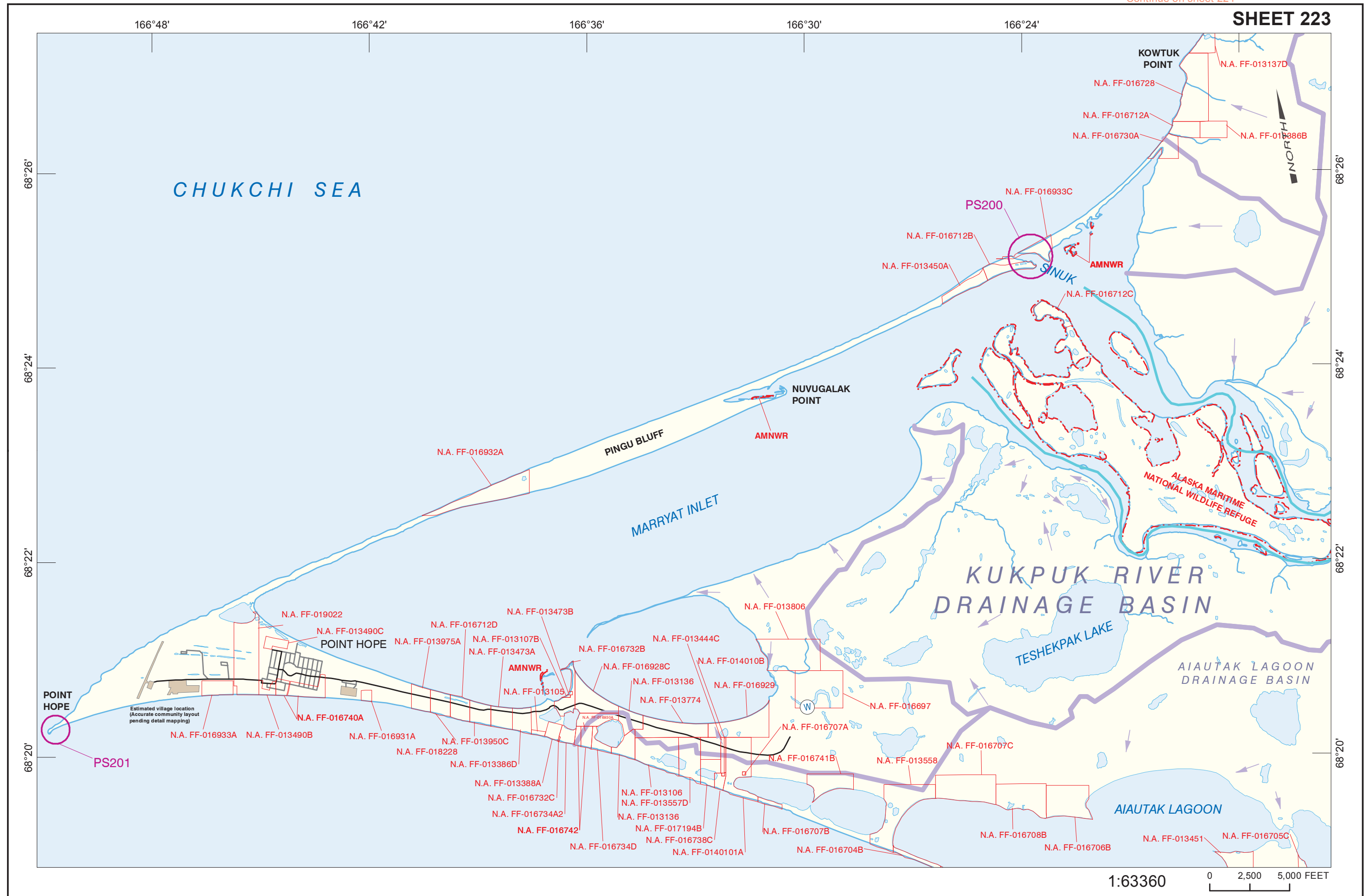
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- Chukchi Sea currents near shore flow north at not less than 1 knot when unopposed by wind or stopped by ice. If the ice is open from shore all the way to Point Barrow, the funneling effect it creates increases current velocity to 2-3 knots near Point Barrow.
- East of Point Hope, a 1.5-2 knot current flows westward along the southern shore.
- Pack ice in this area breaks off from the shore ice in May, moving off and closing back in again with changing winds, until gradually moving off to the north and west. Young ice forms in the vacated spaces, but gradually gets thinner until it disappears in late June. Average freeze up in this area occurs around the second week of November.

COUNTERMEASURES CONSIDERATIONS

- Point Hope consists of steep, shingle beaches backed by numerous lagoons.
- South-facing shoreline east of Point Hope consists of low-lying beaches that are often overrun by waves in winter.
- Waterbirds will occupy leads in the ice during spring breakup.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.





PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl, diving, shore and sea birds during the open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- Walrus may be present off shore on ice floes, Mar-Nov.
- Bearded Seals may be present in coastal waters and/or on ice, Jan-Dec.
- Ringed Seal breeding and pupping along shorefast ice, Jun-Feb.
- Bowhead Whales (endangered species) migrate to the Arctic Ocean and may be present, Mar-Jun.
- Beluga Whales may be present in the Chukchi Sea, Apr-Jul.
- Caribou summering/migration grounds (generally Jul-Aug).
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.

CULTURAL SITES

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Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- An unattended, 4,000 ft. asphalt airstrip serving the village of Point Hope (Sheet 223) is located approximately 19 miles southwest of the center of this map. Visual inspection recommended prior to use, due to lateral cracks the entire length of the runway.
- Cape Lisburne LRRS airstrip (Sheet 227) is a 4,800 ft. maintained gravel runway located approximately 25 miles north of the center of this map. This facility is closed to the public and should be considered for emergency landing only. May be used for spill response operations upon approval by Elmendorf Air Force Base, 11th Air Force Airfield Management, (907) 552-7384/3636/5265.

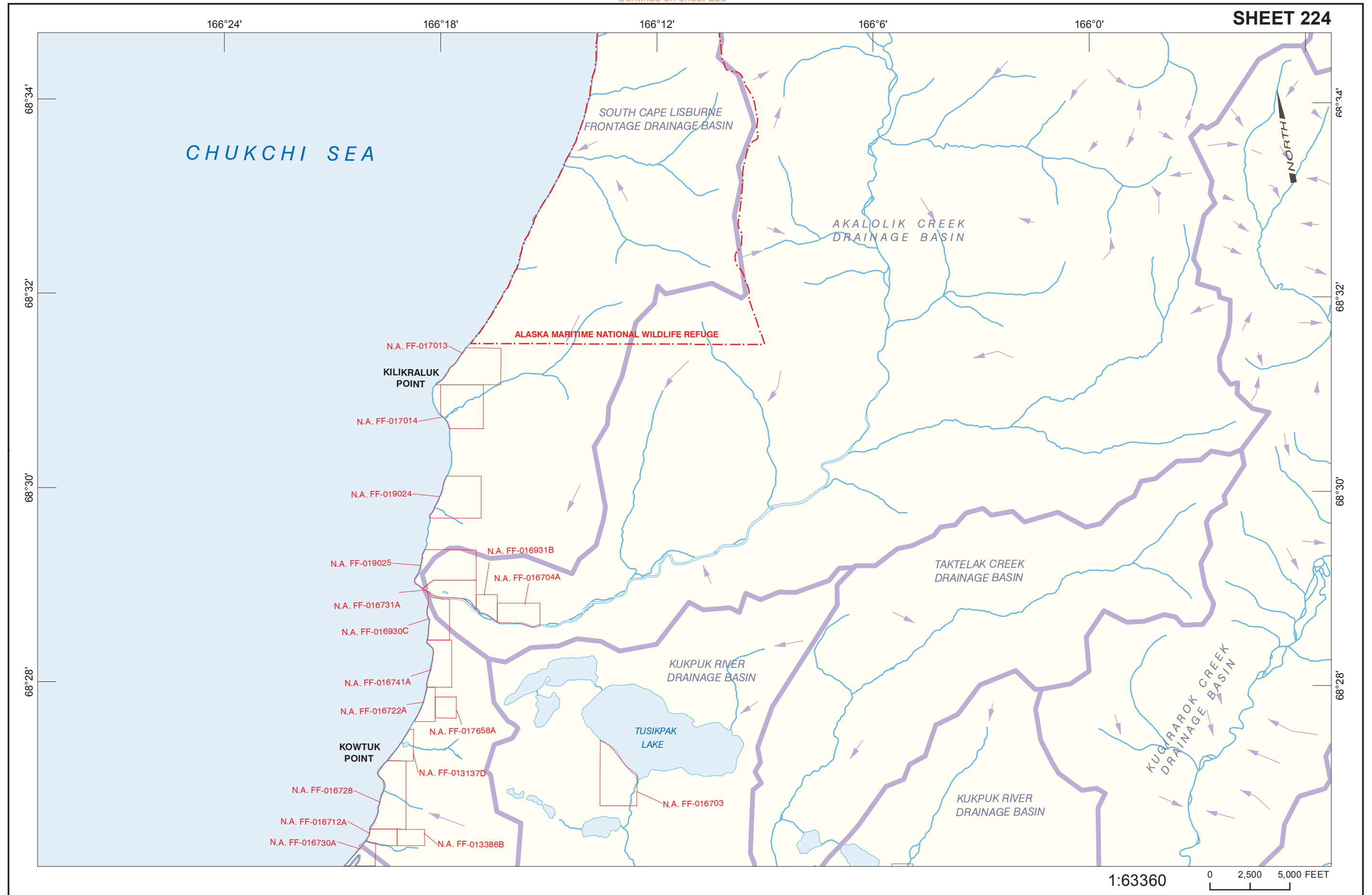
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- Chukchi Sea currents near shore flow north at not less than 1 knot when unopposed by wind or stopped by ice. If the ice is open from shore all the way to Point Barrow, the funneling effect it creates increases current velocity to 2-3 knots near Point Barrow.
- Pack ice in this area breaks off from the shore ice in May, moving off and closing back in again with changing winds, until gradually moving off to the north and west. Young ice forms in the vacated spaces, but gradually gets thinner until it disappears in late June. Average freeze up in this area occurs around the second week of November.

COUNTERMEASURES CONSIDERATIONS

- From Kilikraluk Point northward, the shore becomes increasing elevated, turning into steep cliffs.
- Waterbirds will occupy leads in the ice during spring breakup.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.





PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

GENERAL SENSITIVITIES

- Polar Bear denning area.
- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl, diving, shore and sea birds during the open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- Walrus may be present off shore on ice floes, Mar-Nov.
- Bearded Seals may be present in coastal waters and/or on ice, Jan-Dec.
- Ringed Seal breeding and pupping along shorefast ice, Jun-Feb.
- Bowhead Whales (endangered species) migrate to the Arctic Ocean and may be present, Mar-Jun.
- Beluga Whales may be present in the Chukchi Sea, Apr-Jul.
- Muskox wintering area.
- Caribou summering/migration grounds (generally Jul-Aug).
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- Cape Lisburne LRRS airstrip (Sheet 227) is a 4,800 ft. maintained gravel runway located approximately 17 miles north of the center of this map. This facility is closed to the public and should be considered for emergency landing only. May be used for spill response operations upon approval by Elmendorf Air Force Base, 11th Air Force Airfield Management, (907) 552-7384/3636/5265.
- An unattended, 4,000 ft. asphalt airstrip serving the village of Point Hope (Sheet 223) is located approximately 26 miles southwest of the center of this map. Visual inspection recommended prior to use, due to lateral cracks the entire length of the runway.

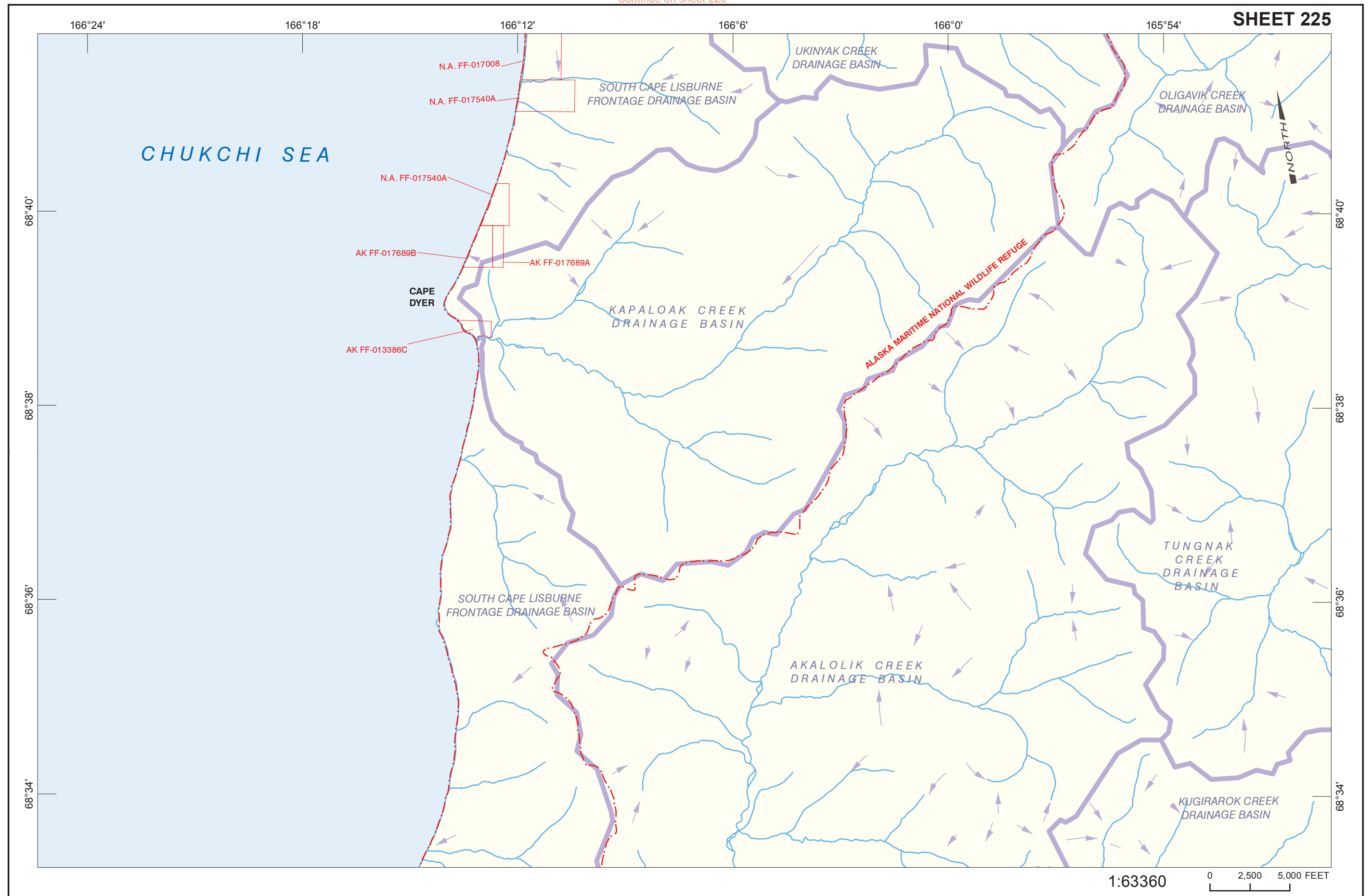
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS


- Chukchi Sea currents near shore flow north at not less than 1 knot when unopposed by wind or stopped by ice. If the ice is open from shore all the way to Point Barrow, the funneling effect it creates increases current velocity to 2-3 knots near Point Barrow.
- Pack ice in this area breaks off from the shore ice in May, moving off and closing back in again with changing winds, until gradually moving off to the north and west. Young ice forms in the vacated spaces, but gradually gets thinner until it disappears in late June. Average freeze up in this area occurs around the second week of November.

COUNTERMEASURES CONSIDERATIONS

- Shoreline characterized by steep cliffs, except for the area 2 miles immediately south of Cape Dyer.
- Waterbirds will occupy leads in the ice during spring breakup.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.





PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.


GENERAL SENSITIVITIES

- Polar Bear denning area.
- Ukinyak Creek hosts a significant grayling migration and is an important summer camping area and boat anchorage.
- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl, diving, shore and sea birds during the open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- Walrus may be present off shore on ice floes, Mar-Nov.
- Bearded Seals may be present in coastal waters and/or on ice, Jan-Dec.
- Ringed Seal breeding and pupping along shorefast ice, Jun-Feb.
- Bowhead Whales (endangered species) migrate to the Arctic Ocean and may be present, Mar-Jun.
- Beluga Whales may be present in the Chukchi Sea, Apr-Jul.
- Muskox wintering area.
- Cape Lewis, along the southern coast, hosts a population of approximately 50-100 Dall Sheep.
- Caribou summering/migration grounds (generally Jul-Aug).
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.

CULTURAL SITES

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Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- Cape Lisburne LRRS airstrip (Sheet 227) is a 4,800 ft. maintained gravel runway located approximately 9 miles north of the center of this map. This facility is closed to the public and should be considered for emergency landing only. May be used for spill response operations upon approval by Elmendorf Air Force Base, 11th Air Force Airfield Management, (907) 552-7384/3636/5265.
- An unattended, 4,000 ft. asphalt airstrip serving the village of Point Hope (Sheet 223) is located approximately 33 miles southwest of the center of this map. Visual inspection recommended prior to use, due to lateral cracks the entire length of the runway.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

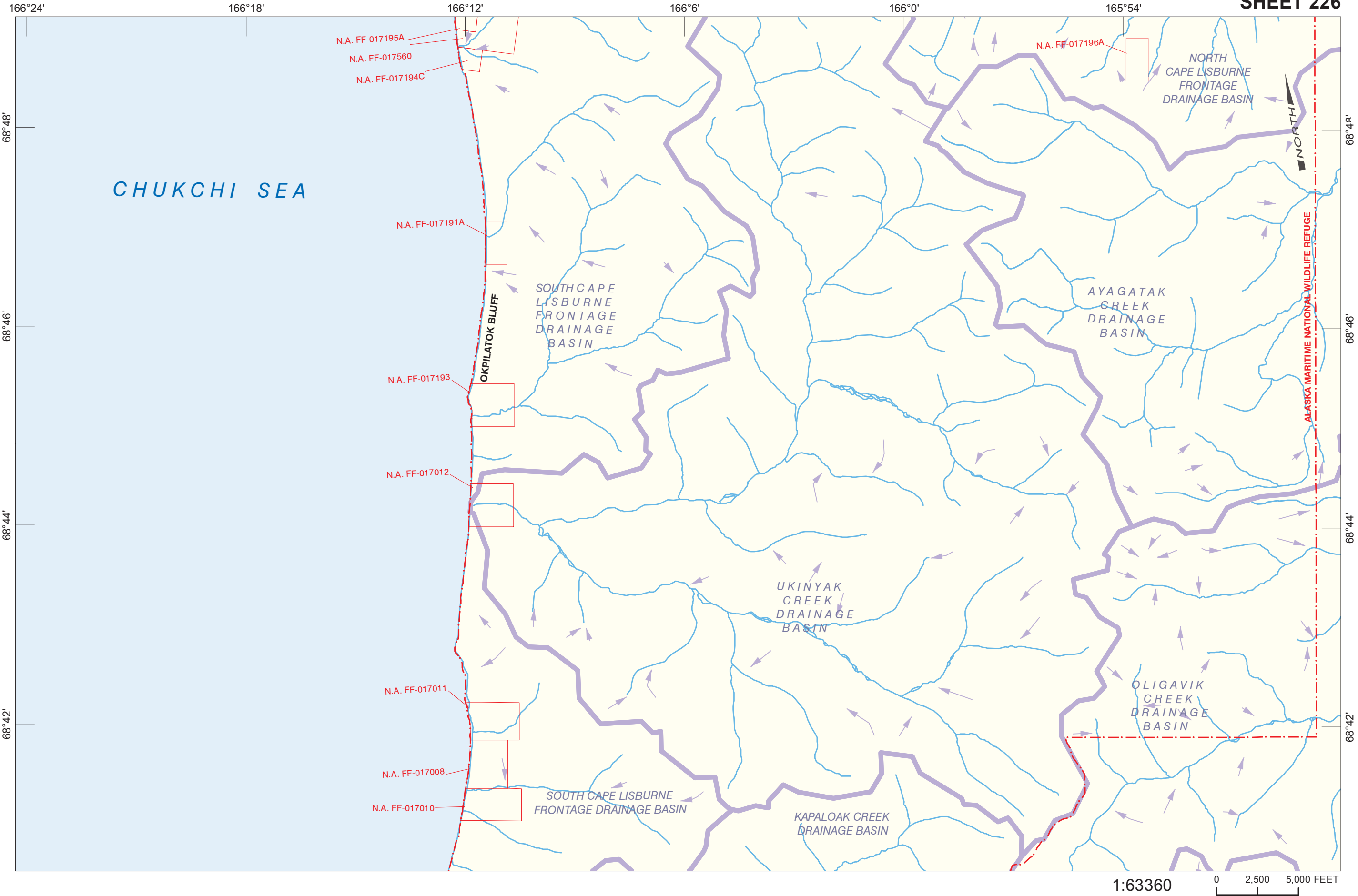
- Powerful, gusting winds may blow down from the cliffs in any offshore direction. Passing vessels should be wary and stay well offshore during such weather.
- Chukchi Sea currents near shore flow north at not less than 1 knot when unopposed by wind or stopped by ice. If the ice is open from shore all the way to Point Barrow, the funneling effect it creates increases current velocity to 2-3 knots near Point Barrow.
- Pack ice in this area breaks off from the shore ice in May, moving off and closing back in again with changing winds, until gradually moving off to the north and west. Young ice forms in the vacated spaces, but gradually gets thinner until it disappears in late June. Average freeze up in this area occurs around the second week of November.

COUNTERMEASURES CONSIDERATIONS

- Shoreline characterized by steep cliffs and terrain.
- Waterbirds will occupy leads in the ice during spring breakup.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

NOTE: All values given on these pages are for planning purposes only.



PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS199	Mouth of Ayugatak Creek.	Most sensitive during open water season. Winds increase the odds of a breach. Prevent oil from entering the creek.	C-14	100'

GENERAL SENSITIVITIES

- Polar Bear denning area.
- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl, diving, shore and sea birds during the open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- The low-lying area around the mouth of Ayagatak Creek hosts significant bird populations during summer months.
- Multitple seabird cliff colonies stretch around Cape Lisburne.
- Ledyard Bay, the area of the Chukchi Sea between Cape Lisburnee and Point Lay, is a designated Critical Habitat area for threatened Spectacled Eiders that use the bay as one of two staging and molting areas off the Alaska coast.
- Multple walrus haulouts exist under the cliffs of Cape Lisburne and the immediate surrounding area.
- Walrus may be present off shore on ice floes, Mar-Nov.
- Bearded Seals may be present in coastal waters and/or on ice, Jan-Dec.
- Ringed Seal breeding and pupping along shorefast ice, Jun-Feb.
- Bowhead Whales (endangered species) migrate to the Arctic Ocean and may be present, Mar-Jun.
- Beluga Whales migrate through the Cape Lisburne area in spring and summer.
- Caribou summering/migration grounds (generally Jul-Aug).
- High population of Brown Bear present Mar-Oct.
- Muskoxen and Dall Sheep migrate regularly between Cape Lisburne and Cape Lewis (Sheet 226).
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.
- Ayagatak Creek hosts a significant Pink and Chum Salmon run.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

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AIR ACCESS*

- Cape Lisburne LRRS airstrip is a 4,800 ft. maintained gravel runway. This facility is closed to the public and should be considered for emergency landing only. May be used for spill response operations upon approval by Elmendorf Air Force Base, 11th Air Force Airfield Management, (907) 552-7384/3636/5265.
- An unattended, 4,000 ft. ashpalt airstrip serving the village of Point Hope (Sheet 223) is located approximately 40 miles southwest of Cape Lisburnee LRRS. Visual inspection recommended prior to use, due to lateral cracks the entire length of the runway.

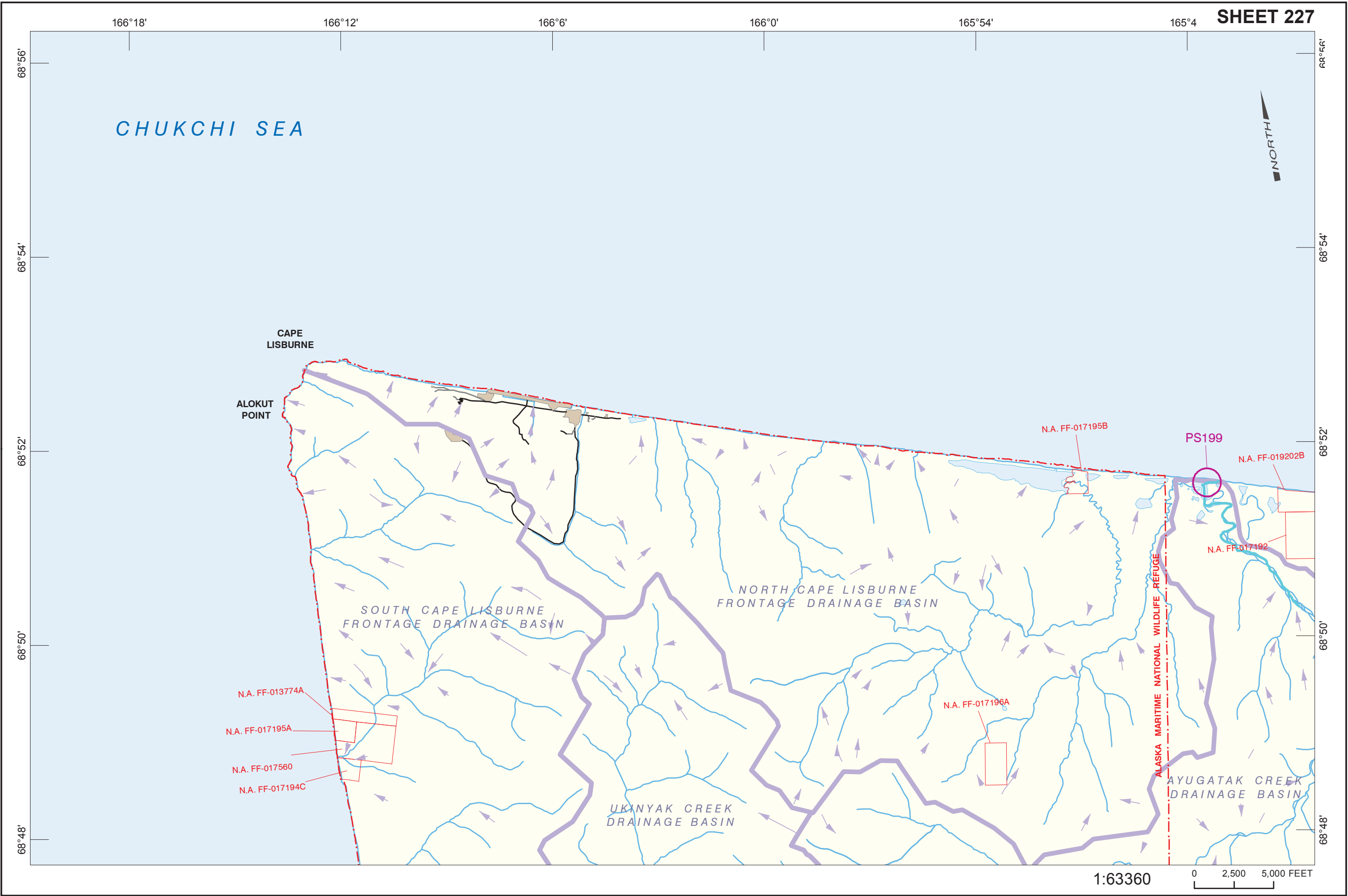
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- Powerful, gusting winds may blow down off the cape in any offshore direction. Passing vessels should be wary and stay well offshore during such weather.
- Chukchi Sea currents near shore flow north at not less than 1 knot when unopposed by wind or stopped by ice. If the ice is open from shore all the way to Point Barrow, the funneling effect it creates increases current velocity to 2-3 knots near Point Barrow.
- Pack ice in this area breaks off from the shore ice in May, moving off and closing back in again with changing winds, until gradually moving off to the north and west. Young ice forms in the vacated spaces, but gradually gets thinner until it disappears in late June. Average freeze up in this area occurs around the second week of November.


COUNTERMEASURES CONSIDERATIONS

- Cape Lisburne and the shoreline southward consists of very steep cliffs and high terrain. East of Cape Lisburne, the terrain gradually slopes in elevation.
- Waterbirds will occupy leads in the ice during spring breakup.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.



Continue on sheet 228



PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS199	Mouth of Ayugatak Creek.	Most sensitive during open water season. Winds increase the odds of a breach. Prevent oil from entering the creek.	C-14	100'


GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl, diving, shore and sea birds during the open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- The low-lying area around the mouth of Ayagatak Creek eastward to Ayagatak Lagoon hosts significant bird populations during summer months.
- Ledyard Bay, the area of the Chukchi Sea between Cape Lisburnee and Point Lay, is a designated Critical Habitat area for threatened Spectacled Eiders that use the bay as one of two staging and molting areas off the Alaska coast.
- Known Spectacled Eider nesting area.
- Known Walrus haulout area.
- Walrus may be present off shore on ice floes, Mar-Nov.
- Bearded Seals may be present in coastal waters and/or on ice, Jan-Dec.
- Ringed Seal breeding and pupping along shorefast ice, Jun-Feb.
- Bowhead Whales (endangered species) migrate to the Arctic Ocean and may be present, Mar-Jun.
- Beluga Whales may be present in the Chukchi Sea, Apr-Jul.
- Caribou summering/migration grounds (generally Jul-Aug).
- High population of Brown Bear present Mar-Oct.
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- Cape Lisburne LRRS airstrip (Sheet 227) is a 4,800 ft. maintained gravel runway located approximately 15 miles west of the center of this map. This facility is closed to the public and should be considered for emergency landing only. May be used for spill response operations upon approval by Elmendorf Air Force Base, 11th Air Force Airfield Management, (907) 552-7384/3636/5265.
- An unattended, 4,000 ft. asphalt airstrip serving the village of Point Hope (Sheet 223) is located approximately 48 miles southwest of the center of this map. Visual inspection recommended prior to use, due to lateral cracks the entire length of the runway.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

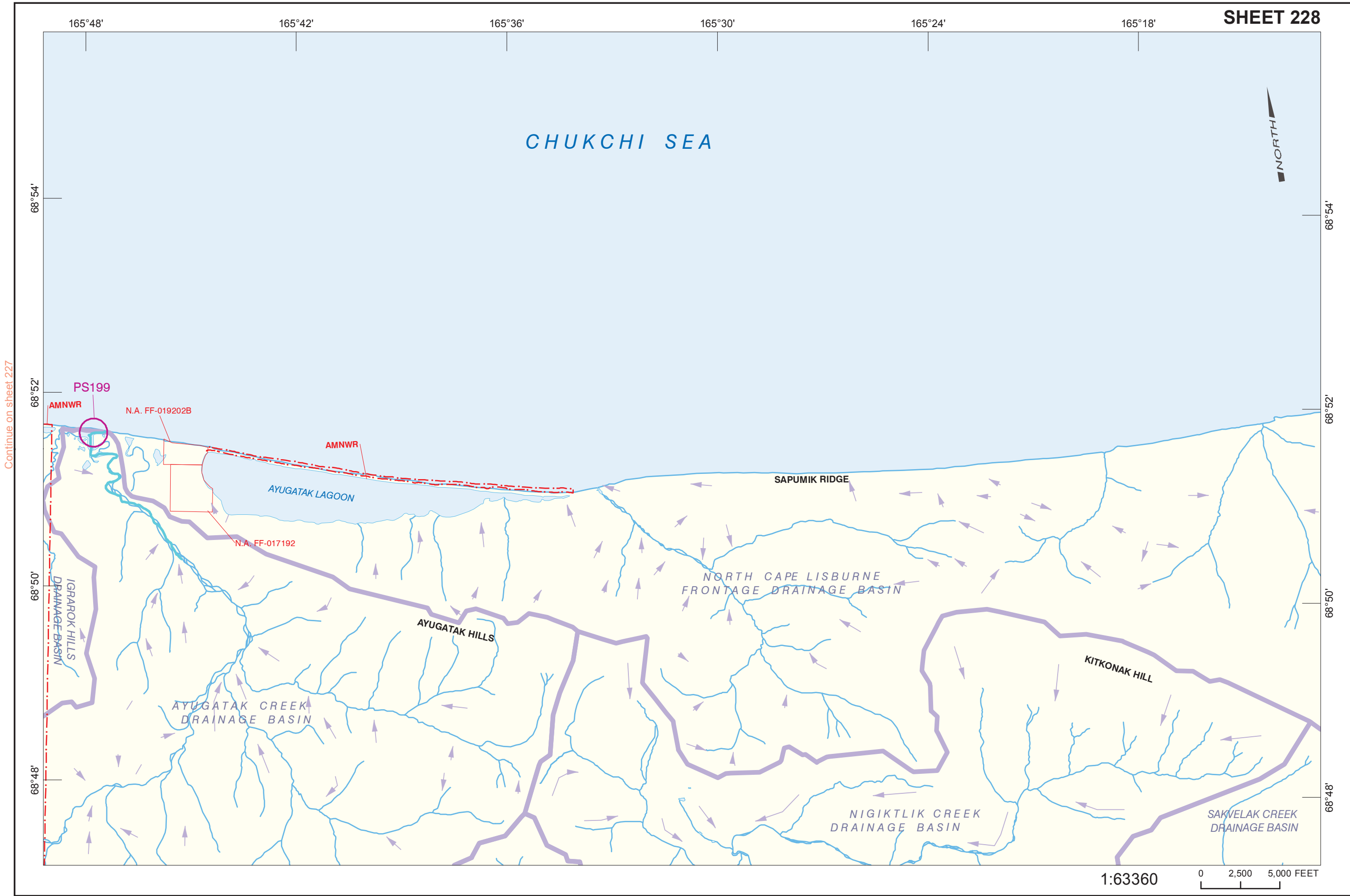
- Chukchi Sea currents near shore flow north at not less than 1 knot when unopposed by wind or stopped by ice. If the ice is open from shore all the way to Point Barrow, the funneling effect it creates increases current velocity to 2-3 knots near Point Barrow.
- Pack ice in this area breaks off from the shore ice in May, moving off and closing back in again with changing winds, until gradually moving off to the north and west. Young ice forms in the vacated spaces, but gradually gets thinner until it disappears in late June. Average freeze up in this area occurs around the second week of November.


COUNTERMEASURES CONSIDERATIONS

- Sapumik Ridge consists of steep cliff shoreline.
- East from Sapumik Ridge the terrain is rounded hills sloping toward the sea and terminating at the coast in bluffs.
- Waterbirds will occupy leads in the ice during spring breakup.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

NOTE: All values given on these pages are for planning purposes only.





PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS198	Mouth of Thetis Creek.	Most sensitive during open water season. Winds increase the odds of a breach. Prevent oil from entering the creek.	C-14	400'


GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl, diving, shore and sea birds during the open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- Ledyard Bay, the area of the Chukchi Sea between Cape Lisburnee and Point Lay, is a designated Critical Habitat area for threatened Spectacled Eiders that use the bay as one of two staging and molting areas off the Alaska coast.
- Known Spectacled Eider nesting area.
- Known Walrus haulout area.
- Walrus may be present off shore on ice floes, Mar-Nov.
- Bearded Seals may be present in coastal waters and/or on ice, Jan-Dec.
- Ringed Seal breeding and pupping along shorefast ice, Jun-Feb.
- Bowhead Whales (endangered species) migrate to the Arctic Ocean and may be present, Mar-Jun.
- Beluga Whales may be present in the Chukchi Sea, Apr-Jul.
- Gray Whales may be present Jun-Sep.
- Caribou summering/migration grounds (generally Jul-Aug).
- High population of Brown Bear present Mar-Oct.
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- Cape Lisburne LRRS airstrip (Sheet 227) is a 4,800 ft. maintained gravel runway located approximately 29 miles west of the center of this map. This facility is closed to the public and should be considered for emergency landing only. May be used for spill response operations upon approval by Elmendorf Air Force Base, 11th Air Force Airfield Management, (907) 552-7384/3636/5265.
- An unattended, 4,000 ft. asphalt airstrip serving the village of Point Hope (Sheet 223) is located approximately 59 miles southwest of the center of this map. Visual inspection recommended prior to use, due to lateral cracks the entire length of the runway.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

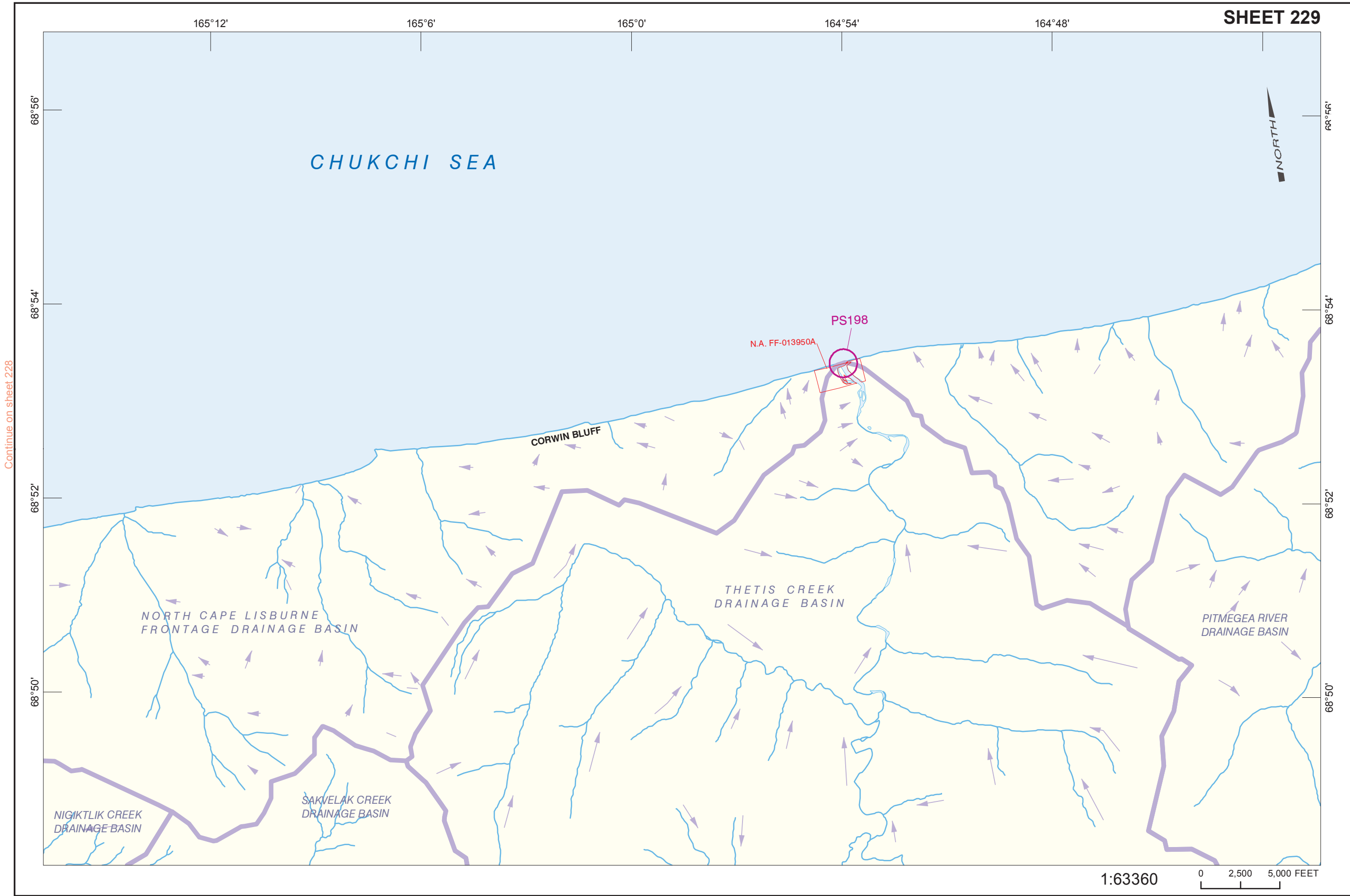
- Chukchi Sea currents near shore flow north at not less than 1 knot when unopposed by wind or stopped by ice. If the ice is open from shore all the way to Point Barrow, the funneling effect it creates increases current velocity to 2-3 knots near Point Barrow.
- Pack ice in this area breaks off from the shore ice in May, moving off and closing back in again with changing winds, until gradually moving off to the north and west. Young ice forms in the vacated spaces, but gradually gets thinner until it disappears in late June. Average freeze up in this area occurs around the second week of November.


COUNTERMEASURES CONSIDERATIONS

- Terrain is rounded hills sloping toward the sea and terminating at the coast in bluffs. Corwin Bluff is notably steeper.
- Waterbirds will occupy leads in the ice during spring breakup.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

NOTE: All values given on these pages are for planning purposes only.





PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS197	Mouth of Pitmegea River.	Most sensitive during open water season. Prevent oil from entering the river.	C-14	500'


GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl, diving, shore and sea birds during the open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- Ledyard Bay, the area of the Chukchi Sea between Cape Lisburnee and Point Lay, is a designated Critical Habitat area for threatened Spectacled Eiders that use the bay as one of two staging and molting areas off the Alaska coast.
- Known Spectacled Eider nesting area.
- Seabirds, including Kittewakes and gulls, frequent the Pitmegea River delta.
- Walrus may be present off shore on ice floes, Mar-Nov.
- Bearded Seals may be present in coastal waters and/or on ice, Jan-Dec.
- Ringed Seal breeding and pupping along shorefast ice, Jun-Feb.
- Bowhead Whales (endangered species) migrate to the Arctic Ocean and may be present, Mar-Jun.
- Beluga Whales may be present in the Chukchi Sea, Apr-Jul.
- Gray Whales may be present Jun-Sep.
- Caribou summering/migration grounds (generally Jul-Aug).
- High population of Brown Bear present Mar-Oct.
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.
- Pitmegea River is considered habitat for anadromous fish. Dolly Varden spawn, Sep-Oct; Pink and Chum Salmon spawn Jul-Sep. Arctic Grayling may be present, Jun-Sep.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- Cape Lisburne LRRS airstrip (Sheet 227) is a 4,800 ft. maintained gravel runway located approximately 43 miles west of the center of this map. This facility is closed to the public and should be considered for emergency landing only. May be used for spill response operations upon approval by Elmendorf Air Force Base, 11th Air Force Airfield Management, (907) 552-7384/3636/5265.
- An unattended, 4,000 ft. asphalt airstrip serving the village of Point Hope (Sheet 223) is located approximately 72 miles southwest of the center of this map. Visual inspection recommended prior to use, due to lateral cracks the entire length of the runway.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- Chukchi Sea currents near shore flow north at not less than 1 knot when unopposed by wind or stopped by ice. If the ice is open from shore all the way to Point Barrow, the funneling effect it creates increases current velocity to 2-3 knots near Point Barrow.
- Pack ice in this area breaks off from the shore ice in May, moving off and closing back in again with changing winds, until gradually moving off to the north and west. Young ice forms in the vacated spaces, but gradually gets thinner until it disappears in late June. Average freeze up in this area occurs around the second week of November.

COUNTERMEASURES CONSIDERATIONS

- Terrain is rounded hills sloping toward the sea and terminating at the coast in bluffs. The shoreline east of Agiak Lagoon is notably steeper.
- Waterbirds will occupy leads in the ice during spring breakup.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

NOTE: All values given on these pages are for planning purposes only.





PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl, diving, shore and sea birds during the open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- Ledyard Bay, the area of the Chukchi Sea between Cape Lisburnee and Point Lay, is a designated Critical Habitat area for threatened Spectacled Eiders that use the bay as one of two staging and molting areas off the Alaska coast.
- Known Spectacled Eider nesting area.
- Walrus may be present off shore on ice floes, Mar-Nov.
- Bearded Seals may be present in coastal waters and/or on ice, Jan-Dec.
- Ringed Seal breeding and pupping along shorefast ice, Jun-Feb.
- Bowhead Whales (endangered species) migrate to the Arctic Ocean and may be present, Mar-Jun.
- Beluga Whales may be present in the Chukchi Sea, Apr-Jul.
- Caribou summering/migration grounds (generally Jul-Aug).
- High population of Brown Bear present Mar-Oct.
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- Cape Lisburne LRRS airstrip (Sheet 227) is a 4,800 ft. maintained gravel runway located approximately 56 miles west of the center of this map. This facility is closed to the public and should be considered for emergency landing only. May be used for spill response operations upon approval by Elmendorf Air Force Base, 11th Air Force Airfield Management, (907) 552-7384/3636/5265.
- Point Lay LRRS airstrip (Sheets 237 & 238) is located approximately 57 miles northeast of the center of this map. Although formerly a closed Air Force site, it is now open to the public. The unattended 3,500 ft. gravel runway is reported to be soft with ruts and ridges the entire length. Visual inspection recommended prior to use.
- An unattended, 4,000 ft. asphalt airstrip serving the village of Point Hope (Sheet 223) is located approximately 86 miles west-southwest of the center of this map. Visual inspection recommended prior to use, due to lateral cracks the entire length of the runway.

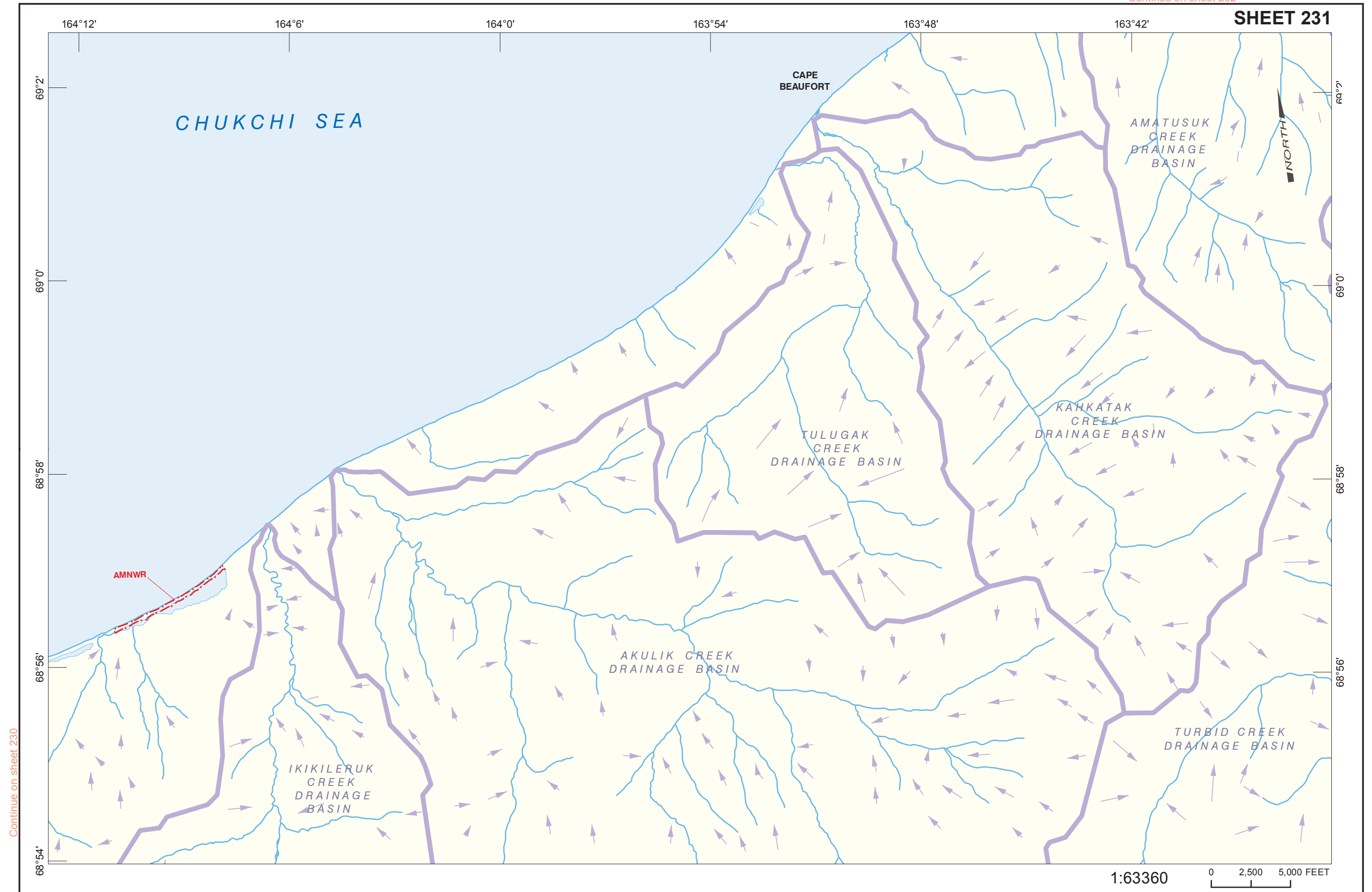
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS


- Chukchi Sea currents near shore flow north at not less than 1 knot when unopposed by wind or stopped by ice. If the ice is open from shore all the way to Point Barrow, the funneling effect it creates increases current velocity to 2-3 knots near Point Barrow.
- Pack ice in this area breaks off from the shore ice in May, moving off and closing back in again with changing winds, until gradually moving off to the north and west. Young ice forms in the vacated spaces, but gradually gets thinner until it disappears in late June. Average freeze up in this area occurs around the second week of November.

COUNTERMEASURES CONSIDERATIONS

- Shoreline consists of rounded hills sloping toward the sea and terminating at the coast in bluffs, becoming steeper near Cape Beaufort.
- Waterbirds will occupy leads in the ice during spring breakup.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.





PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS196	Mouth of Omalik Creek.	Most sensitive during open water season. Winds increase the odds of a breach. Prevent oil from entering the creek.	C-14	100'


GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl, diving, shore and sea birds during the open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- Ledyard Bay, the area of the Chukchi Sea between Cape Lisburnee and Point Lay, is a designated Critical Habitat area for threatened Spectacled Eiders that use the bay as one of two staging and molting areas off the Alaska coast.
- Arctic Tern nesting habitat.
- Omalik Lagoon is an important bird nesting area.
- Offshore is an important resting and feeding area for migrating Beluga Whales.
- Walrus may be present off shore on ice floes, Mar-Nov.
- Bearded Seals may be present in coastal waters and/or on ice, Jan-Dec.
- Ringed Seal breeding and pupping along shorefast ice, Jun-Feb.
- Spotted Seals may be present, Jul-Nov.
- Bowhead Whales (endangered species) migrate to the Arctic Ocean and may be present, Mar-Jun.
- Beluga Whales may be present in the Chukchi Sea, Apr-Jul.
- Caribou summering/migration grounds (generally Jul-Aug).
- High population of Brown Bear present Mar-Oct.
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- Point Lay LRRS airstrip (Sheets 237 & 238) is located approximately 46 miles north-northeast of the center of this map. Although formerly a closed Air Force site, it is now open to the public. The unattended 3,500 ft. gravel runway is reported to be soft with ruts and ridges the entire length. Visual inspection recommended prior to use.
- Cape Lisburne LRRS airstrip (Sheet 227) is a 4,800 ft. maintained gravel runway located approximately 66 miles west of the center of this map. This facility is closed to the public and should be considered for emergency landing only. May be used for spill response operations upon approval by Elmendorf Air Force Base, 11th Air Force Airfield Management, (907) 552-7384/3636/5265.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

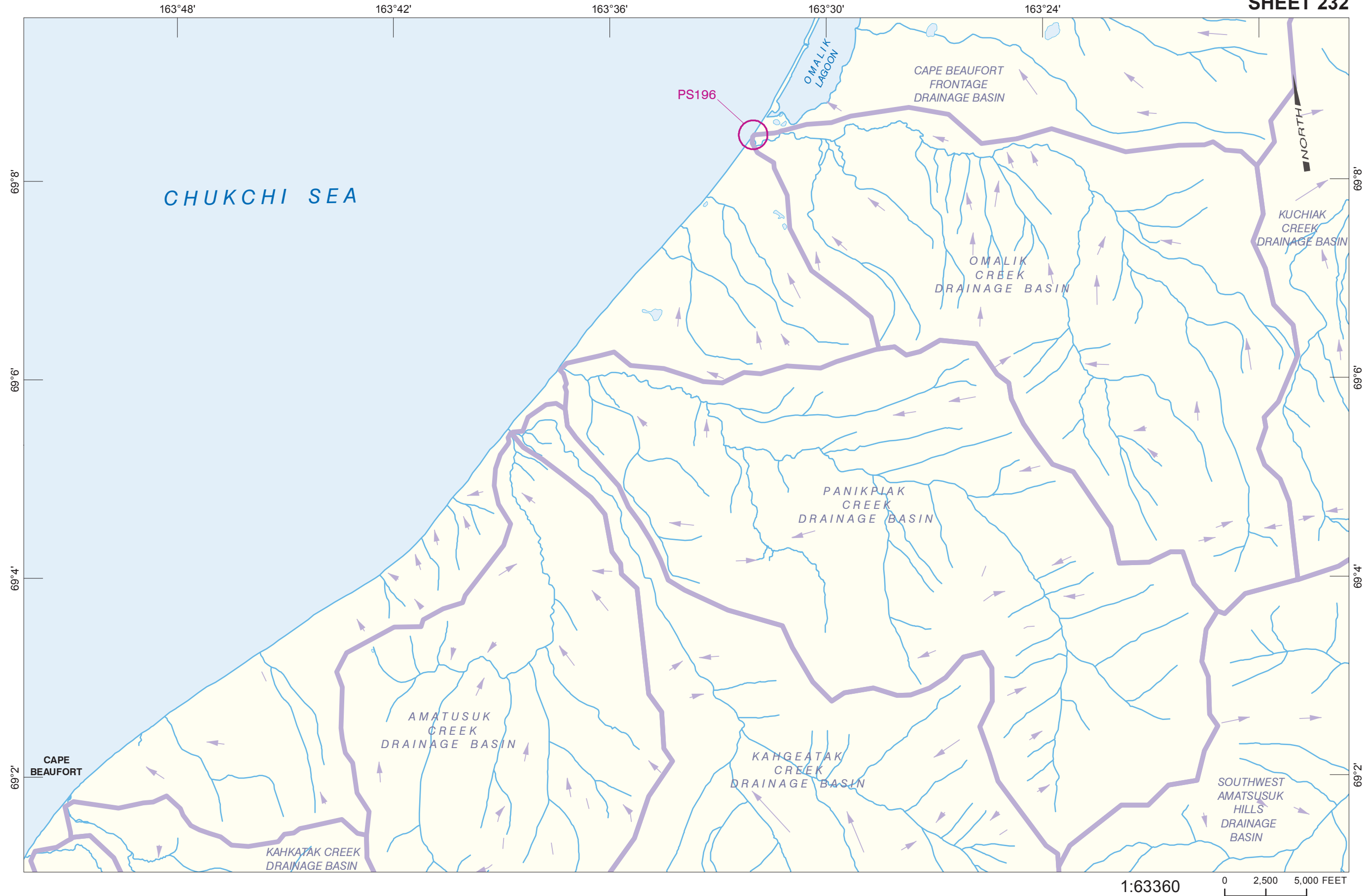
- Chukchi Sea currents near shore flow north at not less than 1 knot when unopposed by wind or stopped by ice. If the ice is open from shore all the way to Point Barrow, the funneling effect it creates increases current velocity to 2-3 knots near Point Barrow.
- Pack ice in this area breaks off from the shore ice in May, moving off and closing back in again with changing winds, until gradually moving off to the north and west. Young ice forms in the vacated spaces, but gradually gets thinner until it disappears in late June. Average freeze up in this area occurs around the second week of November.

COUNTERMEASURES CONSIDERATIONS

- A few miles north of Cape Beaufort, the terrain slopes to low plain with a slightly bluffed shoreline.
- Waterbirds will occupy leads in the ice during spring breakup.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

NOTE: All values given on these pages are for planning purposes only.

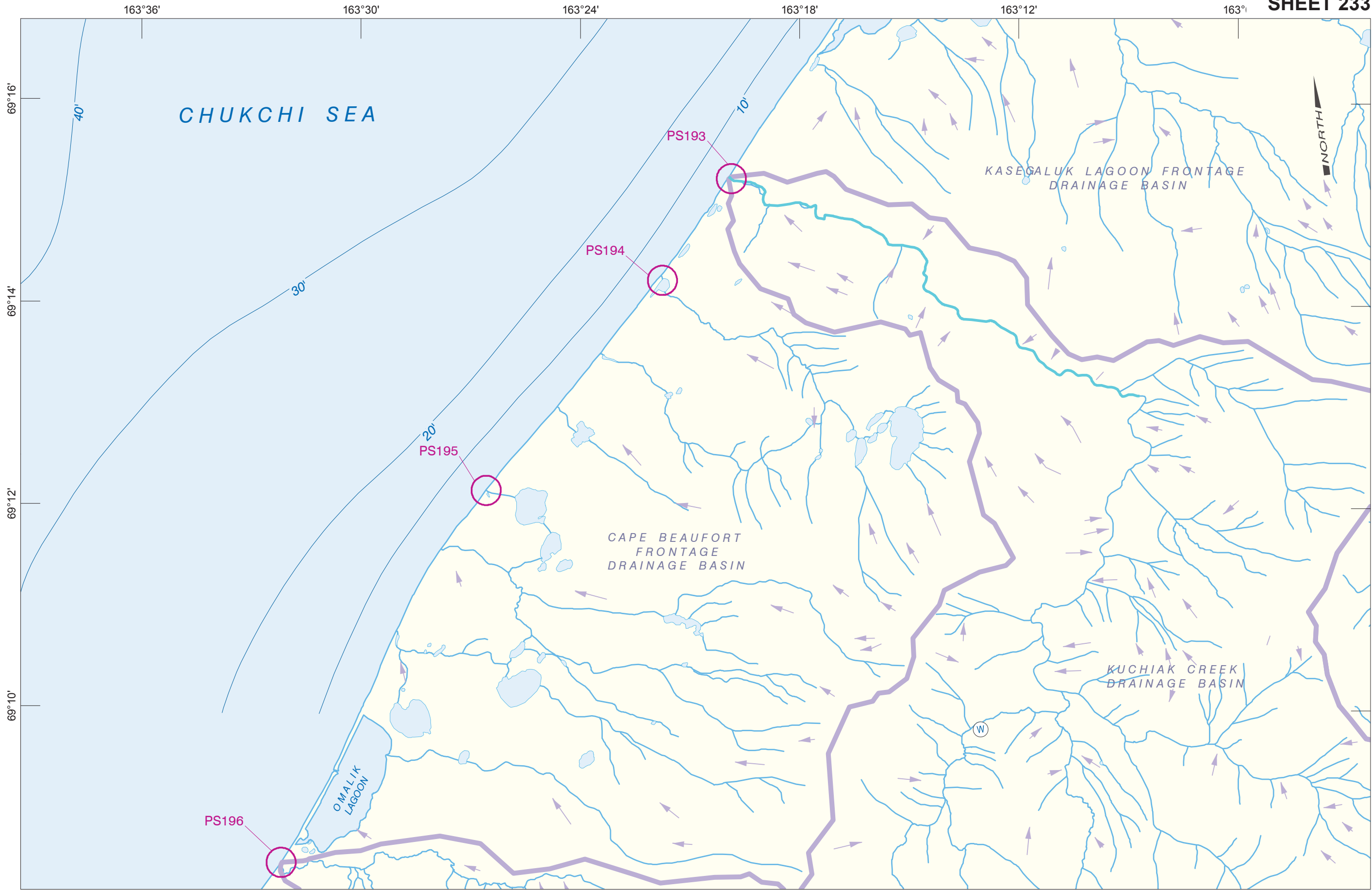


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1:63360

0 2,500 5,000 FEET



PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS193	Mouth of unnamed river.	Most sensitive during open water season. Winds increase the odds of a breach. Prevent oil from entering the river.	C-14	100'

GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl, diving, shore and sea birds during the open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- Ledyard Bay, the area of the Chukchi Sea between Cape Lisburnee and Point Lay, is a designated Critical Habitat area for threatened Spectacled Eiders that use the bay as one of two staging and molting areas off the Alaska coast.
- Known Spectacled Eider as well as Steller's Eider nesting area (both threatened species). As many as one million eider use Kasegaluk Lagoon, May-Oct.
- Both outer and inner Kasegaluk Lagoon shorelines are important bird nesting habitat.
- Offshore is an important resting and feeding area for migrating Beluga Whales.
- Walrus may be present off shore on ice floes, Mar-Nov.
- Bearded Seals may be present in coastal waters and/or on ice, Jan-Dec.
- Ringed Seal breeding and pupping along shorefast ice, Jun-Feb.
- Spotted Seals may be present, Jul-Nov.
- Bowhead Whales (endangered species) migrate to the Arctic Ocean and may be present, Mar-Jun.
- Beluga Whales gather together in waters close to shore and in Kasegaluk Lagoon, Jun-Jul.
- Caribou summering/migration grounds (generally Jul-Aug).
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- Point Lay LRRS airstrip (Sheets 237 & 238) is located approximately 28 miles north of the center of this map. Although formerly a closed Air Force site, it is now open to the public. The unattended 3,500 ft. gravel runway is reported to be soft with ruts and ridges the entire length. Visual inspection recommended prior to use.
- Cape Lisburne LRRS airstrip (Sheet 227) is a 4,800 ft. maintained gravel runway located approximately 81 miles west-southwest of the center of this map. This facility is closed to the public and should be considered for emergency landing only. May be used for spill response operations upon approval by Elmendorf Air Force Base, 11th Air Force Airfield Management, (907) 552-7384/3636/5265.

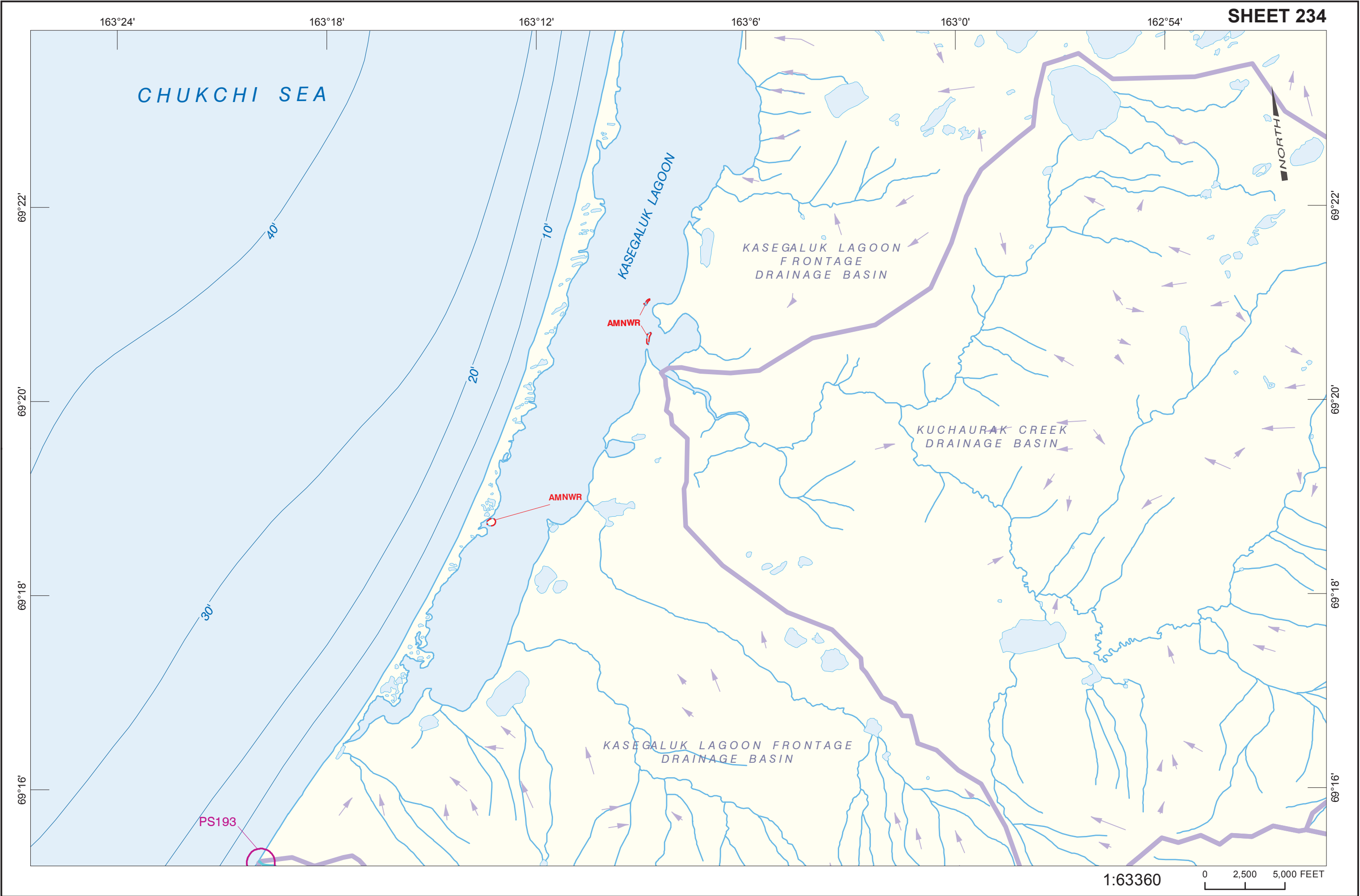
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- In general, Kasegaluk Lagoon is filled with flats and bars that restrict navigation to the smallest of craft.
- Chukchi Sea currents near shore flow north at not less than 1 knot when unopposed by wind or stopped by ice. If the ice is open from shore all the way to Point Barrow, the funneling effect it creates increases current velocity to 2-3 knots near Point Barrow.
- Pack ice in this area breaks off from the shore ice in May, moving off and closing back in again with changing winds, until gradually moving off to the north and west. Young ice forms in the vacated spaces, but gradually gets thinner until it disappears in late June. Average freeze up in this area occurs around the second week of November.


COUNTERMEASURES CONSIDERATIONS

- A narrow sand barrier, rising only a few ft. above sea level, protects Kasegaluk Lagoon.
- Waterbirds will occupy leads in the ice during spring breakup.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.



1:63360 0 2,500 5,000 FEET



PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS191	Break in barrier island leading into Kasegaluk Lagoon.	Most sensitive during open water season. Prevent oil from entering the lagoon.	C-13 or C-14	500'
PS192	Break in barrier island leading into Kasegaluk Lagoon.	Most sensitive during open water season. Prevent oil from entering the lagoon.	C-13 or C-14	500'


GENERAL SENSITIVITIES

- Recreational campers use the barrier island near the inlet to Kasegaluk Lagoon.
- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl, diving, shore and sea birds during the open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- Ledyard Bay, the area of the Chukchi Sea between Cape Lisburnee and Point Lay, is a designated Critical Habitat area for threatened Spectacled Eiders that use the bay as one of two staging and molting areas off the Alaska coast.
- Known Spectacled Eider as well as Steller’s Eider nesting area (both threatened species). As many as one million eider use Kasegaluk Lagoon, May-Oct.
- Both outer and inner Kasegaluk Lagoon shorelines are important bird nesting habitat.
- Offshore is an important resting and feeding area for migrating Beluga Whales.
- Concentrated Spotted Seal haulout area near Naokok Pass.
- Walrus may be present off shore on ice floes, Mar-Nov.
- Bearded Seals may be present in coastal waters and/or on ice, Jan-Dec.
- Ringed Seal breeding and pupping along shorefast ice, Jun-Feb.
- Bowhead Whales (endangered species) migrate to the Arctic Ocean and may be present, Mar-Jun.
- Beluga Whales gather together in waters close to shore and in Kasegaluk Lagoon, Jun-Jul.
- Caribou summering/migration grounds (generally Jul-Aug).
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- Point Lay LRRS airstrip (Sheets 237 & 238) is located approximately 20 miles north of the center of this map. Although formerly a closed Air Force site, it is now open to the public. The unattended 3,500 ft. gravel runway is reported to be soft with ruts and ridges the entire length. Visual inspection recommended prior to use.
- Cape Lisburne LRRS airstrip (Sheet 227) is a 4,800 ft. maintained gravel runway located approximately 87 miles southwest of the center of this map. This facility is closed to the public and should be considered for emergency land-ing only. May be used for spill response operations upon approval by Elmendorf Air Force Base, 11th Air Force Airfield Management, (907) 552-7384/3636/5265.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

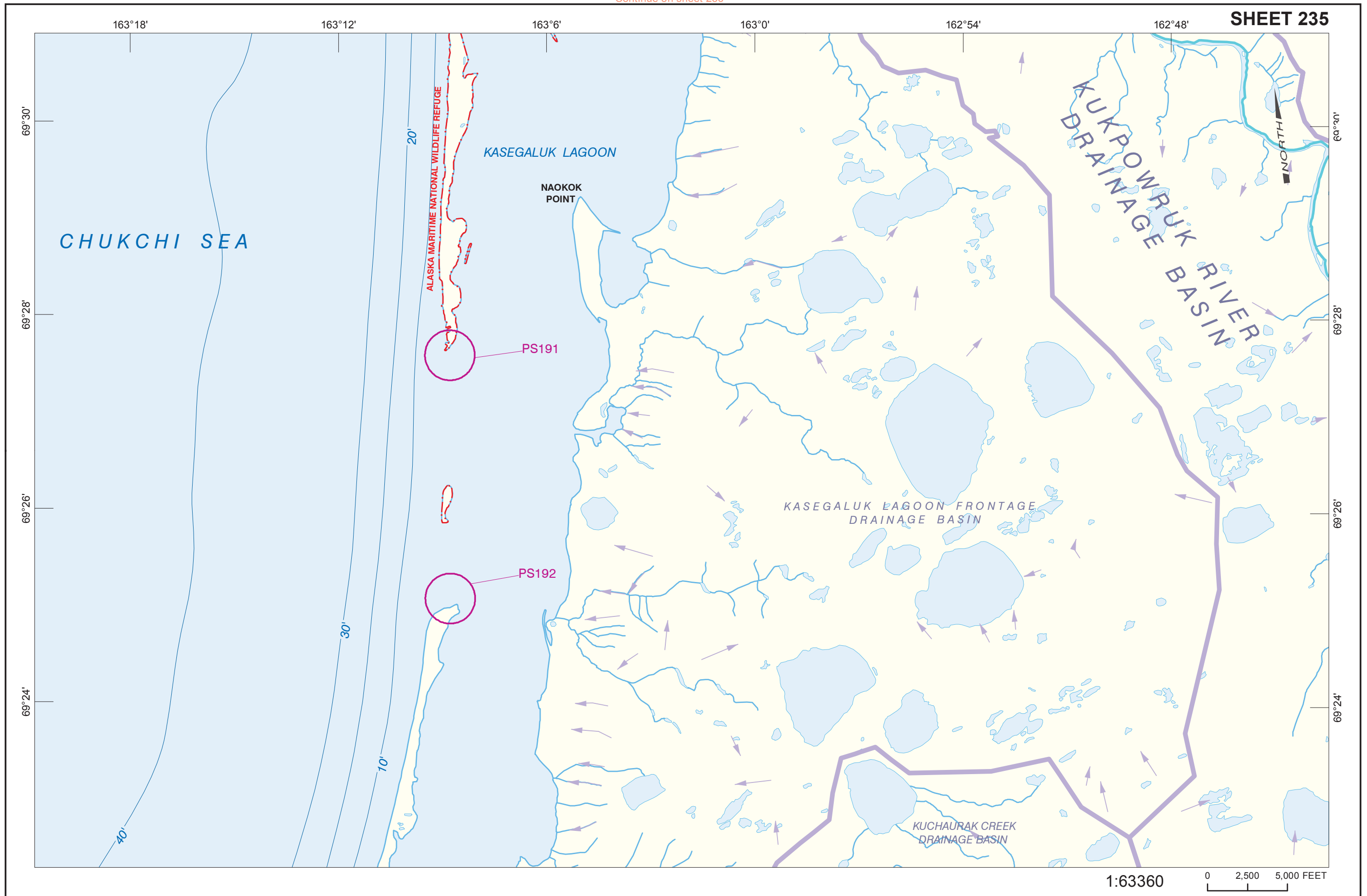
- In general, Kasegaluk Lagoon is filled with flats and bars that restrict navigation to the smallest of craft.
- Chukchi Sea currents near shore flow north at not less than 1 knot when unopposed by wind or stopped by ice. If the ice is open from shore all the way to Point Barrow, the funneling effect it creates increases current velocity to 2-3 knots near Point Barrow.
- Pack ice in this area breaks off from the shore ice in May, moving off and closing back in again with changing winds, until gradually moving off to the north and west. Young ice forms in the vacated spaces, but gradually gets thinner until it disappears in late June. Average freeze up in this area occurs in early November.

COUNTERMEASURES CONSIDERATIONS

- A narrow sand barrier, rising only a few ft. above sea level, protects Kasegaluk Lagoon.
- Waterbirds will occupy leads in the ice during spring breakup.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

NOTE: All values given on these pages are for planning purposes only.





PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl, diving, shore and sea birds during the open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- Ledyard Bay, the area of the Chukchi Sea between Cape Lisburnee and Point Lay, is a designated Critical Habitat area for threatened Spectacled Eiders that use the bay as one of two staging and molting areas off the Alaska coast.
- Known Spectacled Eider as well as Steller’s Eider nesting area (both threatened species). As many as one million eider use Kasegaluk Lagoon, May-Oct.
- Both outer and inner Kasegaluk Lagoon shorelines are important bird nesting habitat, particularly around the mouth of the Kukpowruk River and the opposite barrier island shore.
- Walrus may be present off shore on ice floes, Mar-Nov.
- Bearded Seals may be present in coastal waters and/or on ice, Jan-Dec.
- Ringed Seal breeding and pupping along shorefast ice, Jun-Feb.
- Spotted Seals may be present, Jul-Nov.
- Bowhead Whales (endangered species) migrate to the Arctic Ocean and may be present, Mar-Jun.
- Beluga Whales gather together in waters close to shore and in Kasegaluk Lagoon, Jun-Jul.
- Caribou summering/migration grounds (generally Jul-Aug).
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.
- Kukpowrik River is considered habitat for anadromous fish. Dolly Varden spawn Sep – Oct; Pink and Chum Salmon spawn Jul-Sep. Arctic Grayling may be present Jun-Sep.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

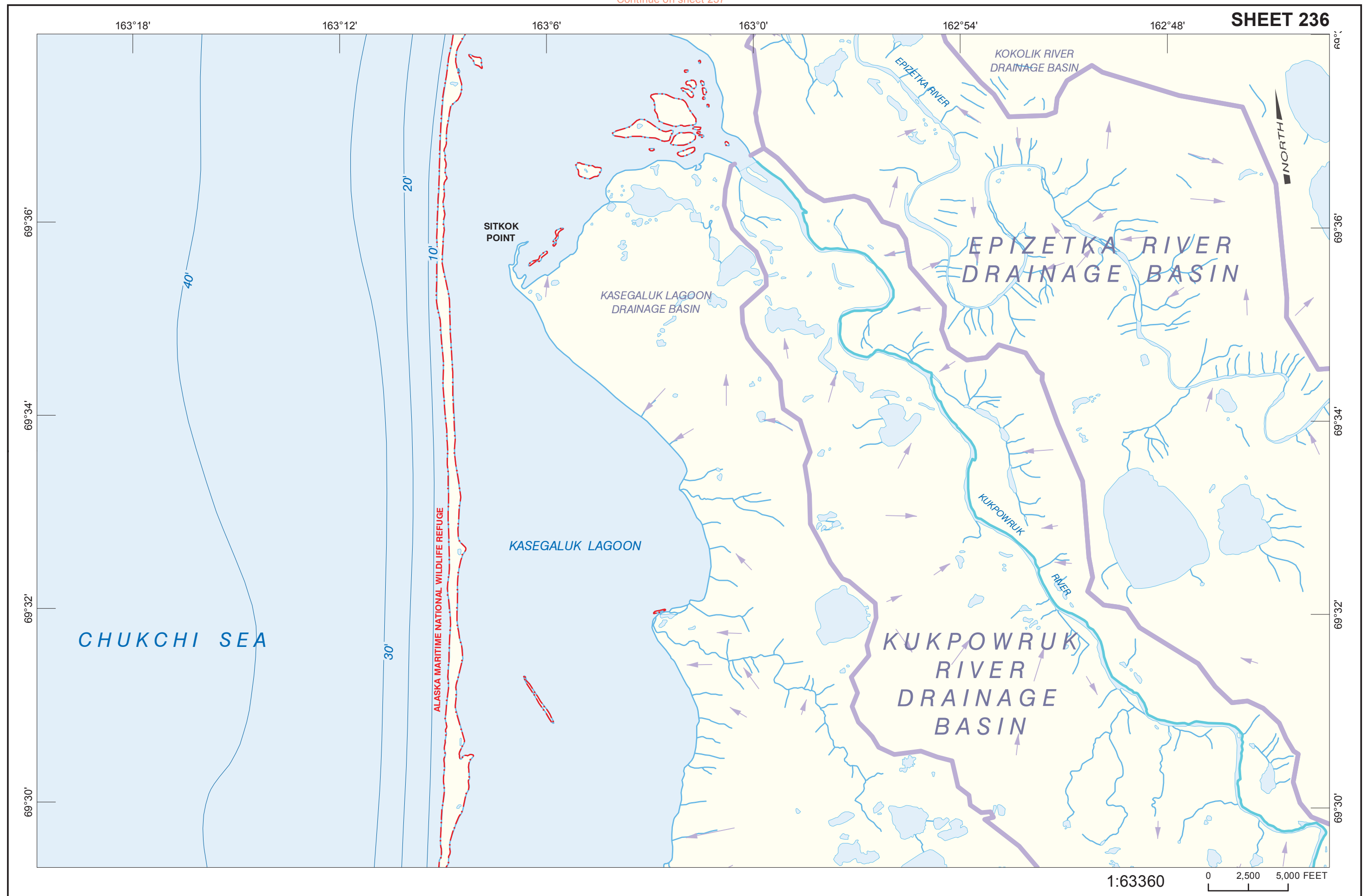
- Point Lay LRRS airstrip (Sheets 237 & 238) is located approximately 12 miles north of the center of this map. Although formerly a closed Air Force site, it is now open to the public. The unattended 3,500 ft. gravel runway is reported to be soft with ruts and ridges the entire length. Visual inspection recommended prior to use.
- Cape Lisburne LRRS airstrip (Sheet 227) is a 4,800 ft. maintained gravel runway located approximately 90 miles southwest of the center of this map. This facility is closed to the public and should be considered for emergency land-ing only. May be used for spill response operations upon approval by Elmendorf Air Force Base, 11th Air Force Airfield Management, (907) 552-7384/3636/5265.


VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- In general, Kasegaluk Lagoon is filled with flats and bars that restrict navigation to the smallest of craft.
- Chukchi Sea currents near shore flow north at not less than 1 knot when unopposed by wind or stopped by ice. If the ice is open from shore all the way to Point Barrow, the funneling effect it creates increases current velocity to 2-3 knots near Point Barrow.
- Pack ice in this area breaks off from the shore ice in May, moving off and closing back in again with changing winds, until gradually moving off to the north and west. Young ice forms in the vacated spaces, but gradually gets thinner until it disappears in late June. Average freeze up in this area occurs in early November.

COUNTERMEASURES CONSIDERATIONS


- A narrow sand barrier, rising only a few ft. above sea level, protects Kasegaluk Lagoon.
- Waterbirds will occupy leads in the ice during spring breakup.






PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS189	Break in barrier island leading into Kasegaluk Lagoon.	Most sensitive during open water season. Prevent oil from entering the lagoon and reaching Point Lay village.	C-13 or C-14	500'
PS190	Kukpowruk Pass, a break in the barrier island leading into Kasega-luk Lagoon.	Most sensitive during open water season. Prevent oil from entering the lagoon.	C-13 or C-14	1000'



GENERAL SENSITIVITIES


- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl, diving, shore and sea birds during the open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- Ledyard Bay, the area of the Chukchi Sea between Cape Lisburnee and Point Lay, is a designated Critical Habitat area for threatened Spectacled Eiders that use the bay as one of two staging and molting areas off the Alaska coast.
- Known Spectacled Eider as well as Steller’s Eider nesting area (both threatened species). As many as one million eider use Kasegaluk Lagoon, May-Oct.
- Both outer and inner Kasegaluk Lagoon shorelines and islands are important bird nesting habitat.
- Walrus may be present off shore on ice floes, Mar-Nov.
- Bearded Seals may be present in coastal waters and/or on ice, Jan-Dec.
- Ringed Seal breeding and pupping along shorefast ice, Jun-Feb.
- Spotted Seals may be present, Jul-Nov.
- Bowhead Whales (endangered species) migrate to the Arctic Ocean and may be present, Mar-Jun.
- High concentrations of Beluga Whales in Kasegaluk Lagoon, Jun-Jul, make area important for subsistence hunters.
- Caribou summering/migration grounds (generally Jul-Aug).
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.



CULTURAL SITES


The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.




AIR ACCESS*

- Point Lay LRRS airstrip is an unattended 3,500 ft. gravel runway. Although formerly a closed Air Force site, it is now open to the public. The runway is reported to be soft with ruts and ridges the entire length. Visual inspection recommended prior to use.
- An unattended, 4,500 ft. gravel airstrip serving the village of Wainwright (Sheet 250 & 251) is located approximately 95 miles northeast of Point Lay LRRS. Visual inspection recommended prior to use.
- Wainwright Air Station (Sheet 250) is located approximately 96 miles northeast of Point Lay LRRS. This facility is closed to the public and should be considered for emergency landing only. The unattended, 3,000 ft. gravel runway is not maintained and its condition is unknown. Visual inspection recommended prior to use. May be used for spill response operations upon approval by Elmendorf Air Force Base, 11th Air Force Airfield Management, (907) 552-7384/3636/5265.
- Cape Lisburne LRRS airstrip (Sheet 227) is a 4,800 ft. maintained gravel runway located approximately 97 miles southwest of Point Lay LRRS. This facility is closed to the public and should be considered for emergency landing only. May be used for spill response operations upon approval by Elmendorf Air Force Base, 11th Air Force Airfield Management, (907) 552-7384/3636/5265.



VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

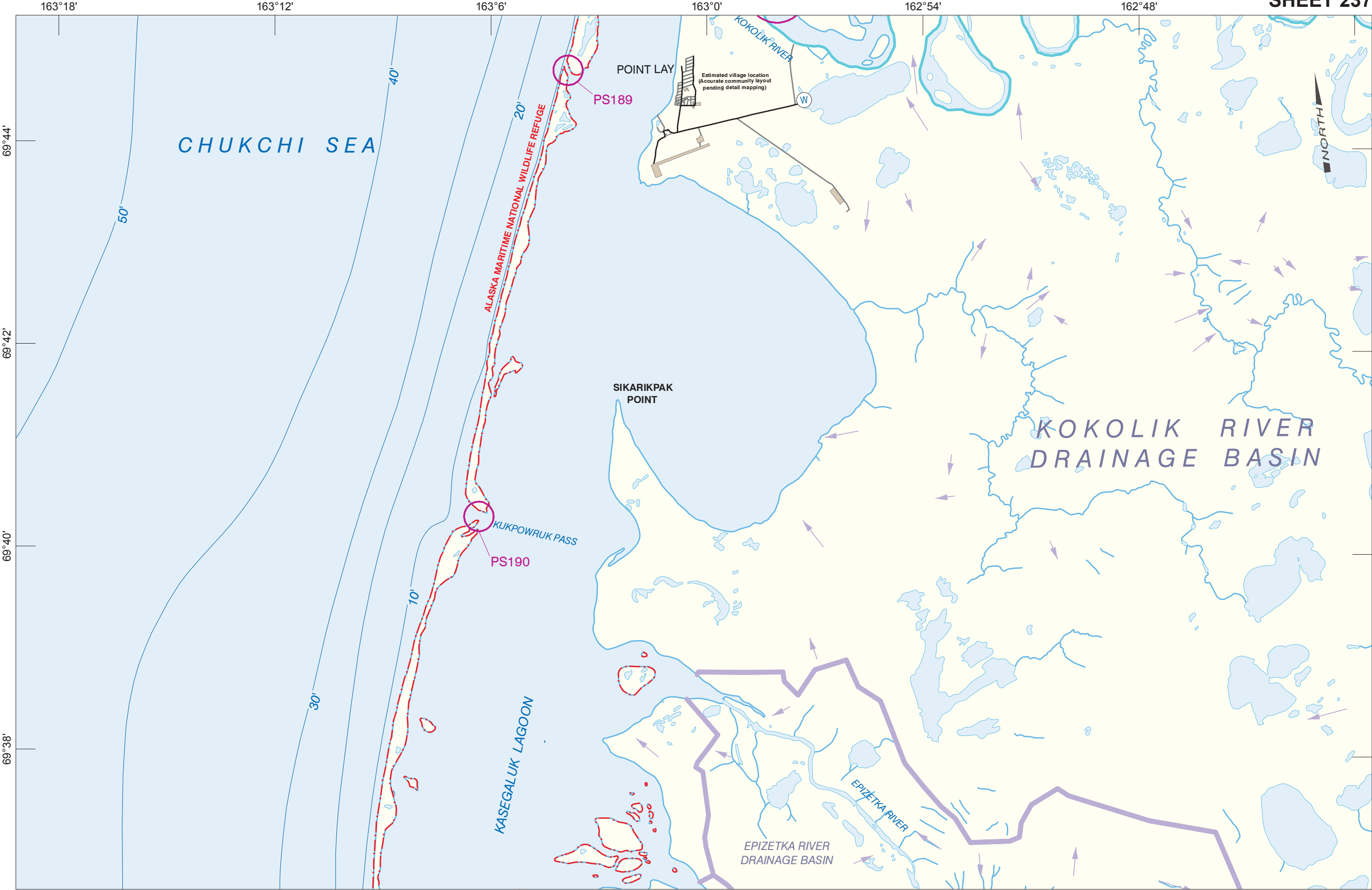
- The unnamed inlet to Point Lay village is sufficiently deep to allow barge traffic.
- Kukpowruk Pass has a controlling depth of approximately 6 ft. into Kasegaluk Lagoon and continuing south 2 miles through a narrow channel along the barrier's inner shore, leading to fair anchorage protected from all directions. Northeast winds lower the water level up to 3 ft.. The pass depth changes each year due to ice scouring. There is no channel north to the village of Point Lay.
- In general, Kasegaluk Lagoon is filled with flats and bars that restrict navigation to the smallest of craft.
- Chukchi Sea currents near shore flow north at not less than 1 knot when unopposed by wind or stopped by ice. If the ice is open from shore all the way to Point Barrow, the funneling effect it creates increases current velocity to 2-3 knots near Point Barrow.
- Pack ice in this area breaks off from the shore ice in May, moving off and closing back in again with changing winds, until gradually moving off to the north and west. Young ice forms in the vacated spaces, but gradually gets thinner until it disappears in late June. Average freeze up in this area occurs in early November.



COUNTERMEASURES CONSIDERATIONS

- A narrow sand barrier, rising only a few ft. above sea level, protects Kasegaluk Lagoon.
- Waterbirds will occupy leads in the ice during spring breakup.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.





PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS188	Mouth of Kokolik River.	Backup site in case of failure at PS189.	C-14	3000'
PS189	Break in barrier island leading into Kasegaluk Lagoon.	Most sensitive during open water season. Prevent oil from entering the lagoon and reaching Point Lay village.	C-13 or C-14	500'

GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl, diving, shore and sea birds during the open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- Ledyard Bay, the area of the Chukchi Sea between Cape Lisburnee and Point Lay, is a designated Critical Habitat area for threatened Spectacled Eiders that use the bay as one of two staging and molting areas off the Alaska coast.
- Known Spectacled Eider as well as Steller's Eider nesting area (both threatened species). As many as one million eider use Kasegaluk Lagoon, May-Oct.
- Both outer and inner Kasegaluk Lagoon shorelines and islands are important bird nesting habitat.
- Walrus may be present off shore on ice floes, Mar-Nov.
- Bearded Seals may be present in coastal waters and/or on ice, Jan-Dec.
- Ringed Seal breeding and pupping along shorefast ice, Jun-Feb.
- Spotted Seals may be present, Jul-Nov.
- Bowhead Whales (endangered species) migrate to the Arctic Ocean and may be present, Mar-Jun.
- High concentrations of Beluga Whales in Kasegaluk Lagoon, Jun-Jul, make area important for subsistence hunters.
- Caribou summering/migration grounds (generally Jul-Aug).
- Large lake immediately east of Point Lay provides the village's fresh water supply.
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.
- Kokolik River is considered habitat for anadromous fish. Dolly Varden spawn, Sep-Oct; Pink and Chum Salmon spawn Jul-Sep. Arctic Grayling may be present, Jun-Sep.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- Point Lay LRRS airstrip is an unattended 3,500 ft. gravel runway. Although formerly a closed Air Force site, it is now open to the public. The runway is reported to be soft with ruts and ridges the entire length. Visual inspection recommended prior to use.
- An unattended, 4,500 ft. gravel airstrip serving the village of Wainwright (Sheet 250 & 251) is located approximately 95 miles northeast of Point Lay LRRS. Visual inspection recommended prior to use.
- Wainwright Air Station (Sheet 250) is located approximately 96 miles northeast of Point Lay LRRS. This facility is closed to the public and should be considered for emergency landing only. The unattended, 3,000 ft. gravel runway is not maintained and its condition is unknown. Visual inspection recommended prior to use. May be used for spill response operations upon approval by Elmendorf Air Force Base, 11th Air Force Airfield Management, (907) 552-7384/3636/5265.
- Cape Lisburne LRRS airstrip (Sheet 227) is a 4,800 ft. maintained gravel runway located approximately 97 miles southwest of Point Lay LRRS. This facility is closed to the public and should be considered for emergency landing only. May be used for spill response operations upon approval by Elmendorf Air Force Base, 11th Air Force Airfield Management, (907) 552-7384/3636/5265.

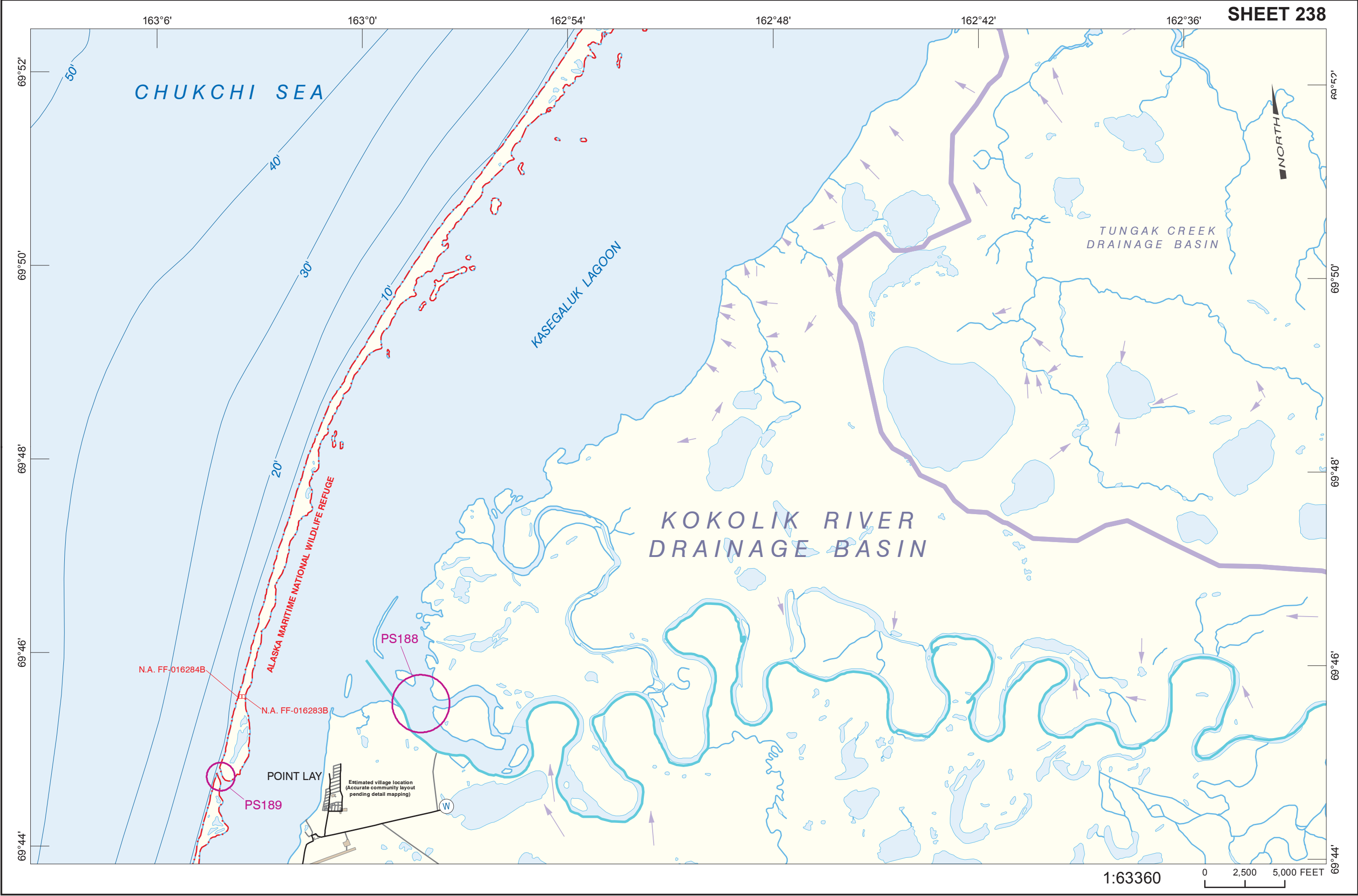
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- The unnamed inlet to Point Lay village is sufficiently deep to allow barge traffic.
- In general, Kasegaluk Lagoon is filled with flats and bars that restrict navigation to the smallest of craft.
- Chukchi Sea currents near shore flow north at not less than 1 knot when unopposed by wind or stopped by ice. If the ice is open from shore all the way to Point Barrow, the funneling effect it creates increases current velocity to 2-3 knots near Point Barrow.
- Pack ice in this area breaks off from the shore ice in May, moving off and closing back in again with changing winds, until gradually moving off to the north and west. Young ice forms in the vacated spaces, but gradually gets thinner until it disappears in late June. Average freeze up in this area occurs in early November.

COUNTERMEASURES CONSIDERATIONS

- A narrow sand barrier, rising only a few ft. above sea level, protects Kasegaluk Lagoon.
- Waterbirds will occupy leads in the ice during spring breakup.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.



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PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS187	Akunik Pass, a break in the barrier island leading into Kasegaluk Lagoon.	Most sensitive during open water season. Prevent oil from entering the lagoon.	C-13 or C-14	1500'

GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl, diving, shore and sea birds during the open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- Known Spectacled Eider as well as Steller's Eider nesting area (both threatened species). As many as one million eider use Kasegaluk Lagoon, May-Oct.
- Both outer and inner Kasegaluk Lagoon shorelines and islands are important bird nesting habitat.
- Walrus may be present off shore on ice floes, Mar-Nov.
- Bearded Seals may be present in coastal waters and/or on ice, Jan-Dec.
- Ringed Seal breeding and pupping along shorefast ice, Jun-Feb.
- Spotted Seals may be present, Jul-Nov.
- Bowhead Whales (endangered species) migrate to the Arctic Ocean and may be present, Mar-Jun.
- Beluga Whales gather together in waters close to shore and in Kasegaluk Lagoon, Jun-Jul.
- High population of Brown Bear present Mar-Oct.
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- Point Lay LRRS airstrip (Sheets 237 & 238) is located approximately 17 miles southwest of the center of this map. Although formerly a closed Air Force site, it is now open to the public. The unattended 3,500 ft. gravel runway is reported to be soft with ruts and ridges the entire length. Visual inspection recommended prior to use.
- An unattended, 4,500 ft. gravel airstrip serving the village of Wainwright (Sheet 250 & 251) is located approximately 78 miles northeast of the center of this map. Visual inspection recommended prior to use.
- Wainwright Air Station (Sheet 250) is located approximately 80 miles northeast of the center of this map. This facility is closed to the public and should be considered for emergency landing only. The unattended, 3,000 ft. gravel runway is not maintained and its condition is unknown. Visual inspection recommended prior to use. May be used for spill response operations upon approval by Elmendorf Air Force Base, 11th Air Force Airfield Management, (907) 552-7384/3636/5265.

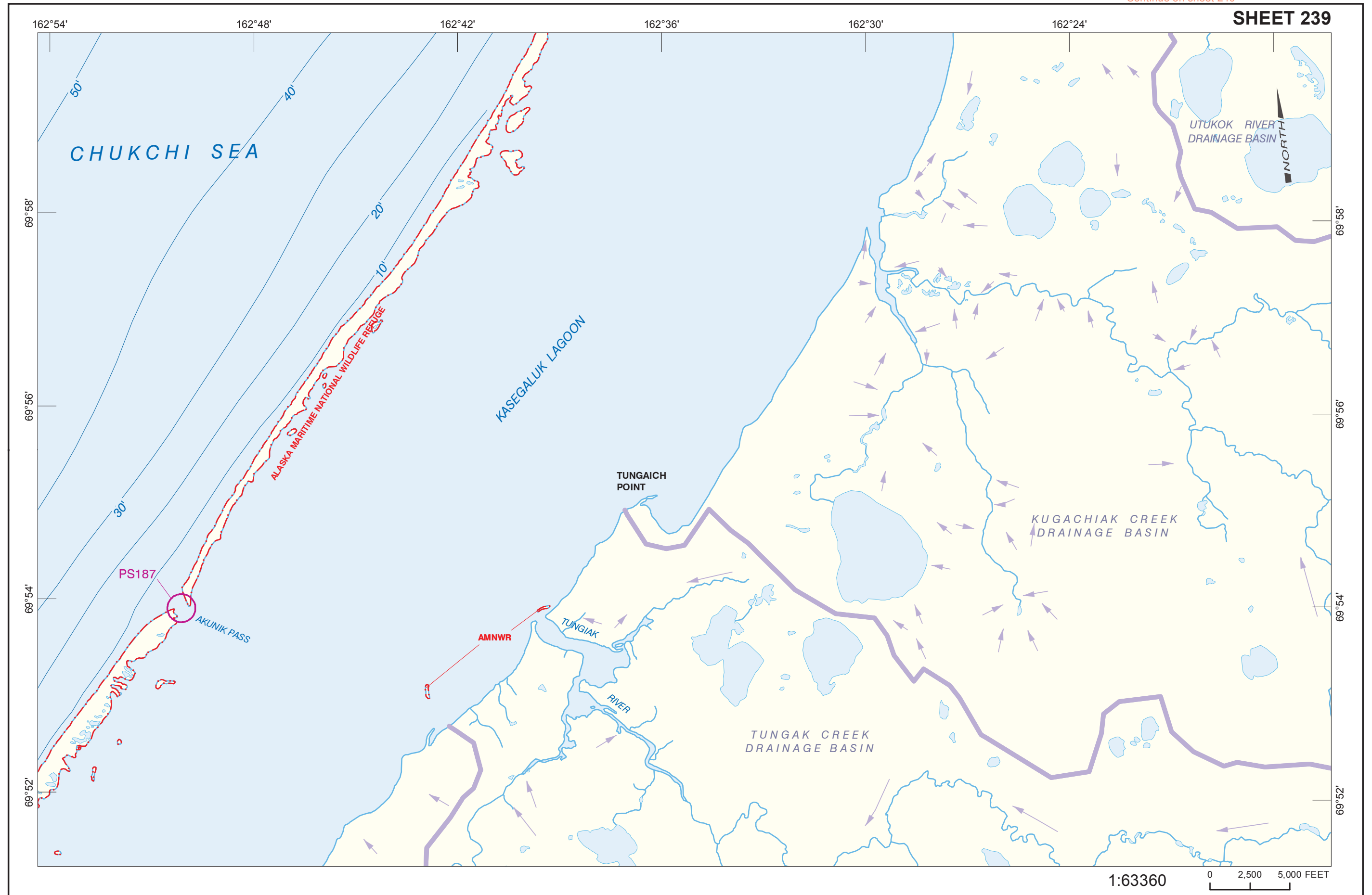
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS


- In general, Kasegaluk Lagoon is filled with flats and bars that restrict navigation to the smallest of craft.
- Chukchi Sea currents near shore flow north at not less than 1 knot when unopposed by wind or stopped by ice. If the ice is open from shore all the way to Point Barrow, the funneling effect it creates increases current velocity to 2-3 knots near Point Barrow.
- Pack ice in this area breaks off from the shore ice in May, moving off and closing back in again with changing winds, until gradually moving off to the north and west. Young ice forms in the vacated spaces, but gradually gets thinner until it disappears in late June.
- Average freeze up in this area occurs in early November.

COUNTERMEASURES CONSIDERATIONS

- A narrow sand barrier, rising only a few ft. above sea level, protects Kasegaluk Lagoon.
- Waterbirds will occupy leads in the ice during spring breakup.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.





PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS186	Utukok Pass, a break in the barrier island leading into Kasegaluk Lagoon.	Most sensitive during open water season. Prevent oil from entering the lagoon.	C-13 or C-14	4000'


GENERAL SENSITIVITIES

- Barrier Islands around Utukok Pass are used recreationally and for subsistence hunting.
- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl, diving, shore and sea birds during the open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- Known Spectacled Eider as well as Steller's Eider nesting area (both threatened species). As many as one million eider use Kasegaluk Lagoon, May-Oct.
- Both outer and inner Kasegaluk Lagoon shorelines and islands are important bird nesting habitat.
- Concentrated Spotted Seal haulout Area in Utukok Pass. Subsistence hunting occurs in the fall.
- Walrus have been spotted hauling out on the barrier islands. May also be present off shore on ice floes, Mar-Nov.
- Bearded Seals may be present in coastal waters and/or on ice, Jan-Dec.
- Ringed Seal breeding and pupping along shorefast ice, Jun-Feb.
- Beluga Whales gather together in waters close to shore and in Kasegaluk Lagoon, Jun-Jul.
- Bowhead Whales (endangered species) migrate to the Arctic Ocean and may be present, Mar-Jun.
- High population of Brown Bear present Mar-Oct.
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.
- Bering Cisco, Chum Salmon, Dolly Varden and Pink Salmon can all be found in Kasegaluk Lagoon, May-Sep/Oct.
- Utukok River is considered habitat for anadromous fish. Dolly Varden spawn, Sep-Oct; Pink and Chum Salmon spawn Jul-Sep. Arctic Grayling may be present, Jun-Sep.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- Point Lay LRRS airstrip (Sheets 237 & 238) is located approximately 26 miles south-southwest of the center of this map. Although formerly a closed Air Force site, it is now open to the public. The unattended 3,500 ft. gravel runway is reported to be soft with ruts and ridges the entire length. Visual inspection recommended prior to use.
- An unattended, 4,500 ft. gravel airstrip serving the village of Wainwright (Sheet 250 & 251) is located approximately 70 miles northeast of the center of this map. Visual inspection recommended prior to use.
- Wainwright Air Station (Sheet 250) is located approximately 72 miles northeast of the center of this map. This facility is closed to the public and should be considered for emergency landing only. The unattended, 3,000 ft. gravel runway is not maintained and its condition is unknown. Visual inspection recommended prior to use. May be used for spill response operations upon approval by Elmendorf Air Force Base, 11th Air Force Airfield Management, (907) 552-7384/3636/5265.

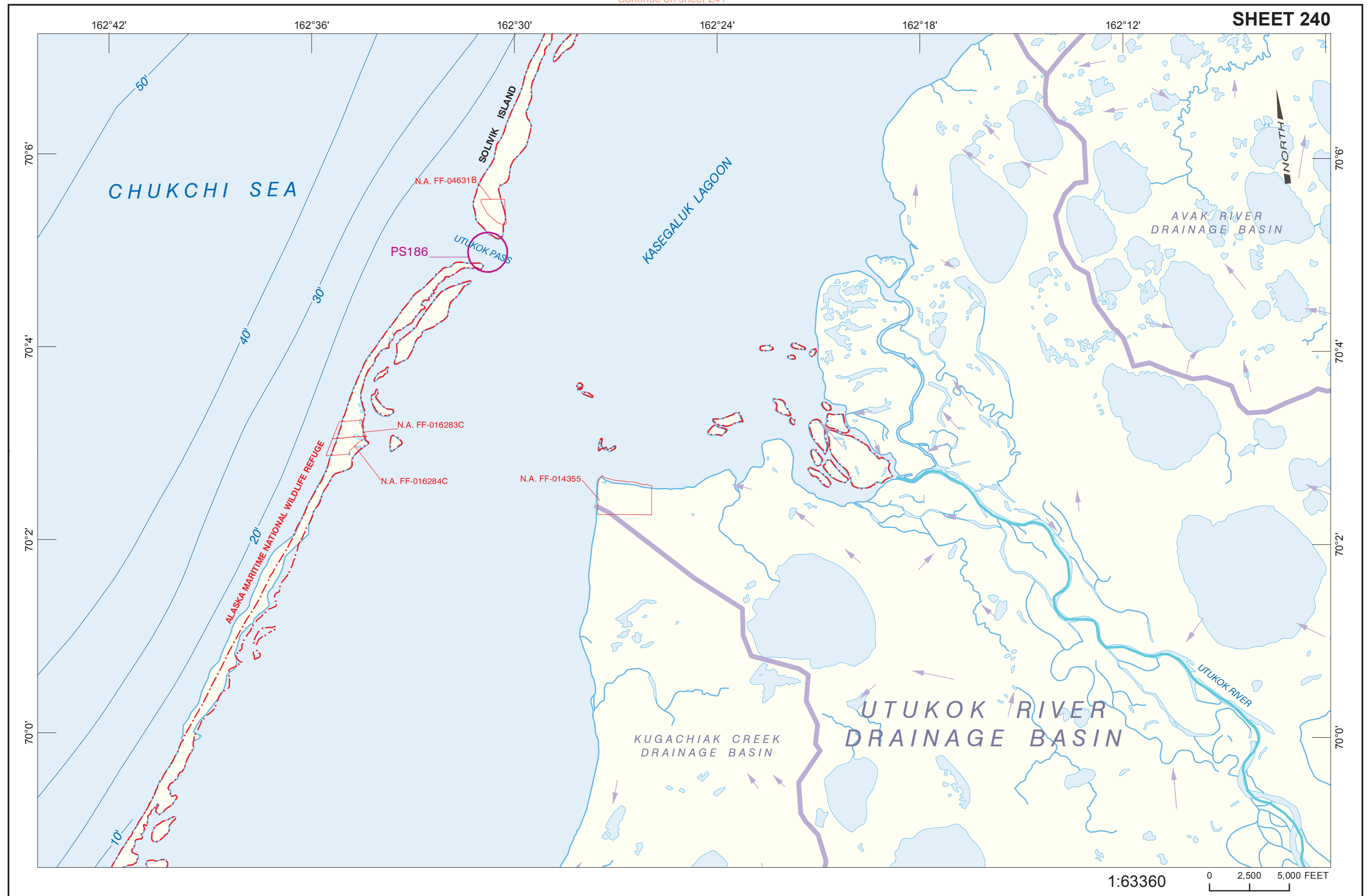
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- In general, Kasegaluk Lagoon is filled with flats and bars that restrict navigation to the smallest of craft.
- Chukchi Sea currents near shore flow north at not less than 1 knot when unopposed by wind or stopped by ice. If the ice is open from shore all the way to Point Barrow, the funneling effect it creates increases current velocity to 2-3 knots near Point Barrow.
- Pack ice in this area breaks off from the shore ice in May, moving off and closing back in again with changing winds, until gradually moving off to the north and west. Young ice forms in the vacated spaces, but gradually gets thinner until it disappears in late June. Average freeze up in this area occurs in early November.

COUNTERMEASURES CONSIDERATIONS

- A narrow sand barrier, rising only a few ft. above sea level, protects Kasegaluk Lagoon.
- Waterbirds will occupy leads in the ice during spring breakup.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.





PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl, diving, shore and sea birds during the open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.
- Known Spectacled Eider as well as Steller’s Eider nesting area (both threatened species). As many as one million eider use Kasegaluk Lagoon, May-Oct.
- Both outer and inner Kasegaluk Lagoon shorelines and islands are important bird nesting habitat, particularly Solivik Island.
- Walrus may be present off shore on ice floes, Mar-Nov.
- Bearded Seals may be present in coastal waters and/or on ice, Jan-Dec.
- Ringed Seal breeding and pupping along shorefast ice, Jun-Feb.
- Spotted Seal rookery on Solivik Island.
- Bowhead Whales (endangered species) migrate to the Arctic Ocean and may be present, Mar-Jun.
- Beluga Whales gather together in waters close to shore and in Kasegaluk Lagoon, Jun-Jul.
- Gray Whales may be present in Chukchi Sea, Jun-Sep.
- High population of Brown Bear present Mar-Oct.
- Bering Cisco, Chum Salmon, Dolly Varden and Pink Salmon can all be found in Kasegaluk Lagoon, May-Sep/Oct.
- Arctic Cod and Flounder, Capelin, Pacific Herring and Fourhorn Sculpin are found in coastal waters, Jun-Nov.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- Point Lay LRRS airstrip (Sheets 237 & 238) is located approximately 34 miles south-southwest of the center of this map. Although formerly a closed Air Force site, it is now open to the public. The unattended 3,500 ft. gravel runway is reported to be soft with ruts and ridges the entire length. Visual inspection recommended prior to use.
- An unattended, 4,500 ft. gravel airstrip serving the village of Wainwright (Sheet 250 & 251) is located approximately 65 miles east-northeast of the center of this map. Visual inspection recommended prior to use.
- Wainwright Air Station (Sheet 250) is located approximately 67 miles east-northeast of the center of this map. This facility is closed to the public and should be considered for emergency landing only. The unattended, 3,000 ft. gravel runway is not maintained and its condition is unknown. Visual inspection recommended prior to use. May be used for spill response operations upon approval by Elmendorf Air Force Base, 11th Air Force Airfield Management, (907) 552-7384/3636/5265.

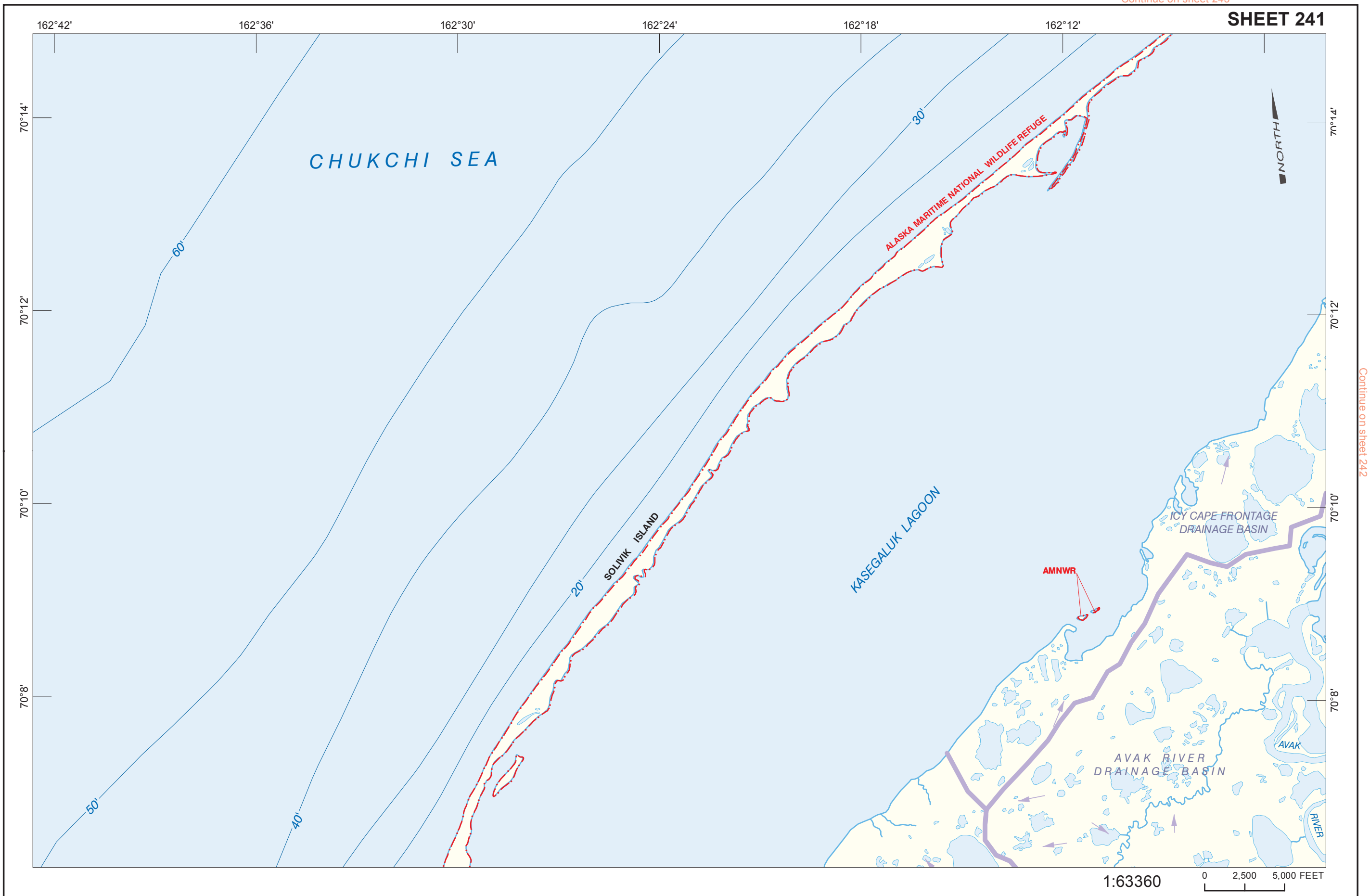
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- In general, Kasegaluk Lagoon is filled with flats and bars that restrict navigation to the smallest of craft.
- Chukchi Sea currents near shore flow north at not less than 1 knot when unopposed by wind or stopped by ice. If the ice is open from shore all the way to Point Barrow, the funneling effect it creates increases current velocity to 2-3 knots near Point Barrow.
- Pack ice in this area breaks off from the shore ice in May, moving off and closing back in again with changing winds, until gradually moving off to the north and west. Young ice forms in the vacated spaces, but gradually gets thinner until it disappears in late June. Average freeze up in this area occurs in late October.

COUNTERMEASURES CONSIDERATIONS

- A narrow sand barrier, rising only a few ft. above sea level, protects Kasegaluk Lagoon.
- Waterbirds will occupy leads in the ice during spring breakup.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.





PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

GENERAL SENSITIVITIES

- All activities within the Kasegaluk Lagoon Special Area (KLSA).
- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl, diving, shore and sea birds during the open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- Known Spectacled Eider as well as Steller’s Eider nesting area (both threatened species). As many as one million eider use Kasegaluk Lagoon, May-Oct.
- Kasegaluk Lagoon shoreline and islands are important bird nesting habitat.
- Walrus may be present off shore on ice floes, Mar-Nov.
- Bearded Seals may be present in coastal waters and/or on ice, Jan-Dec.
- Ringed Seal breeding and pupping along shorefast ice, Jun-Feb.
- Spotted Seals may be present, Jul-Nov.
- Bowhead Whales (endangered species) migrate to the Arctic Ocean and may be present, Mar-Jun.
- Beluga Whales gather together in waters close to shore and in Kasegaluk Lagoon, Jun-Jul.
- Gray Whales may be present in Chukchi Sea, Jun-Sep.
- High population of Brown Bear present Mar-Oct.
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.
- Bering Cisco, Chum Salmon, Dolly Varden and Pink Salmon can all be found in Kasegaluk Lagoon, May-Sep/Oct.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- Point Lay LRRS airstrip (Sheets 237 & 238) is located approximately 43 miles southwest of the center of this map. Although formerly a closed Air Force site, it is now open to the public. The unattended 3,500 ft. gravel runway is reported to be soft with ruts and ridges the entire length. Visual inspection recommended prior to use.
- An unattended, 4,500 ft. gravel airstrip serving the village of Wainwright (Sheet 250 & 251) is located approximately 53 miles northeast of the center of this map. Visual inspection recommended prior to use.
- Wainwright Air Station (Sheet 250) is located approximately 55 miles northeast of the center of this map. This facility is closed to the public and should be considered for emergency landing only. The unattended, 3,000 ft. gravel runway is not maintained and its condition is unknown. Visual inspection recommended prior to use. May be used for spill response operations upon approval by Elmendorf Air Force Base, 11th Air Force Airfield Management, (907) 552-7384/3636/5265.

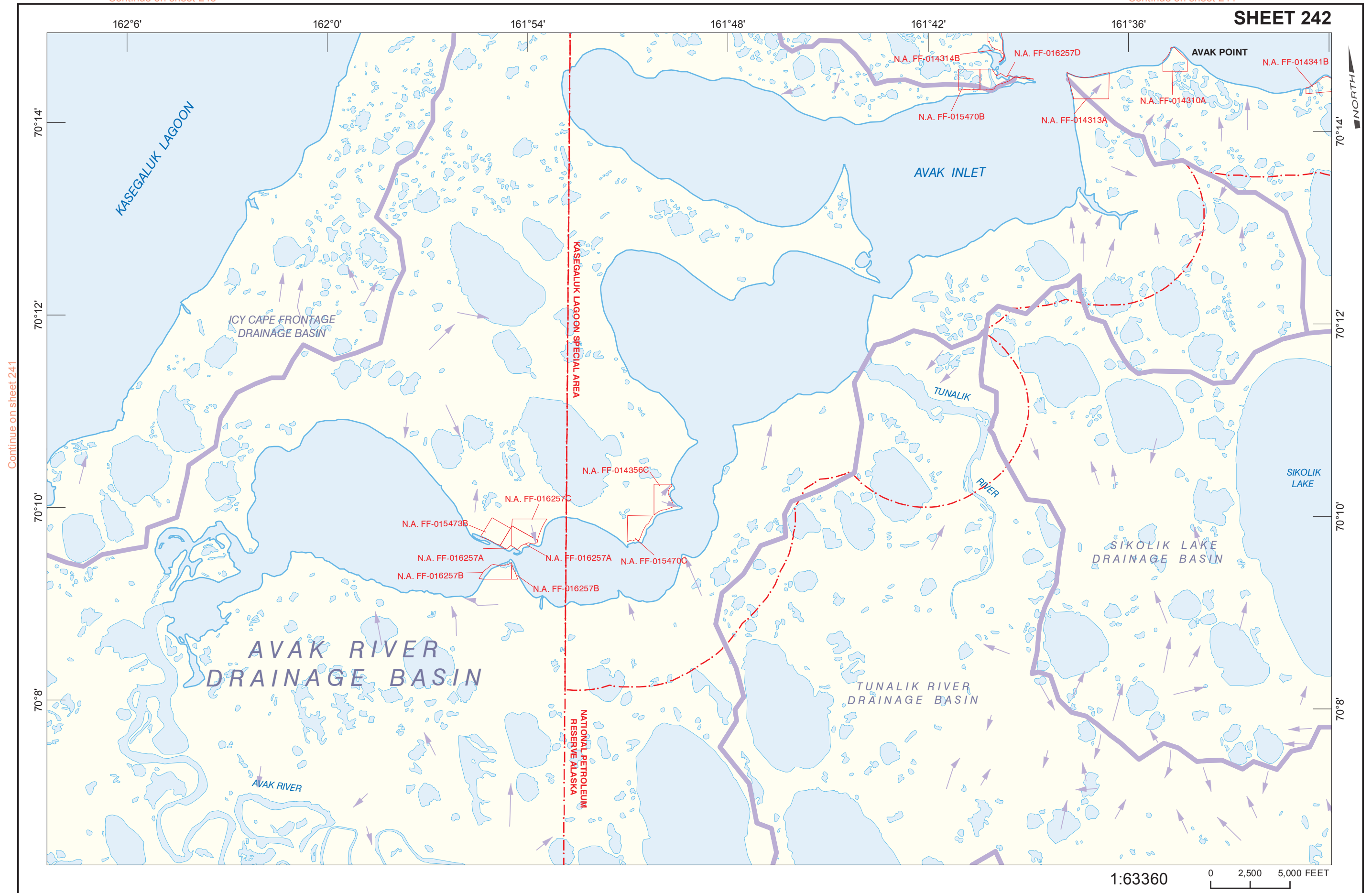
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS


- In general, Kasegaluk Lagoon is filled with flats and bars that restrict navigation to the smallest of craft.
- Avak Inlet is flat and shallow, but navigable in small craft.

COUNTERMEASURES CONSIDERATIONS

- Waterbirds will occupy leads in the ice during spring breakup.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.





PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS184	Icy Cape Pass, a break in the barrier island leading into Kasegaluk Lagoon.	Most sensitive during open water season. Prevent oil from entering the lagoon.	C-13 or C-14	1000'
PS185	Break in the barrier island leading into Kasegaluk Lagoon.	Most sensitive during open water season. Prevent oil from entering the lagoon.	C-13 or C-14	1000'


GENERAL SENSITIVITIES

- All activities within the Kasegaluk Lagoon Special Area (KLSA).
- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl, diving, shore and sea birds during the open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- Known Spectacled Eider as well as Steller's Eider nesting area (both threatened species). As many as one million eider use Kasegaluk Lagoon, May-Oct.
- Kasegaluk Lagoon shoreline and islands are important bird nesting habitat.
- Icy Cape is an important summertime walrus haulout.
- Walrus may be present off shore on ice floes, Mar-Nov.
- Bearded Seals may be present in coastal waters and/or on ice, Jan-Dec.
- Ringed Seal breeding and pupping along shorefast ice, Jun-Feb.
- Concentrated Spotted Seal Haulout Area in Avak Inlet and Icy Cape.
- Bowhead Whales (endangered species) migrate to the Arctic Ocean and may be present, Mar-Jun.
- Beluga Whales gather together in waters close to shore and in Kasegaluk Lagoon, Jun-Jul.
- Gray Whales may be present in Chukchi Sea, Jun-Sep.
- High population of Brown Bear present Mar-Oct.
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.
- Bering Cisco, Chum Salmon, Dolly Varden and Pink Salmon can all be found in Kasegaluk Lagoon, May-Sep/Oct.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- Point Lay LRRS airstrip (Sheets 237 & 238) is located approximately 45 miles south-southwest of the center of this map. Although formerly a closed Air Force site, it is now open to the public. The unattended 3,500 ft. gravel runway is reported to be soft with ruts and ridges the entire length. Visual inspection recommended prior to use.
- An unattended, 4,500 ft. gravel airstrip serving the village of Wainwright (Sheet 250 & 251) is located approximately 54 miles east-northeast of the center of this map. Visual inspection recommended prior to use.
- Wainwright Air Station (Sheet 250) is located approximately 57 miles east-northeast of the center of this map. This facility is closed to the public and should be considered for emergency landing only. The unattended, 3,000 ft. gravel runway is not maintained and its condition is unknown. Visual inspection recommended prior to use. May be used for spill response operations upon approval by Elmendorf Air Force Base, 11th Air Force Airfield Management, (907) 552-7384/3636/5265.
- An uncontrolled, unmaintained aircraft landing strip may still exist at the site of former Icy Cape Air Force Station, immediately south-southwest of Icy Cape on the mainland. Exact location, runway orientation, length, composition, and condition are unknown. No further information is available. Exercise extreme caution and perform visual inspection if considering for emergency use.


VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- Blossom Shoals is a series of ridges paralleling the coast and extending for 6-8 miles off Icy Cape. Depths are very irregular and subject to annual change due to ice scouring. Mariners are advised to give wide berth when transiting.
- Immediately behind Icy Cape, Kasegaluk Lagoon is extremely shallow and unnavigable.
- Icy Cape Pass has a controlling depth of approximately 5 ft., but entrance requires knowledge of bar and channel conditions. Fair anchorage is available in depths of 5-7 ft. immediately southwest of the pass. In general, Kasegaluk Lagoon south of Icy Cape is filled with flats and bars that restrict navigation to the smallest of craft.
- Chukchi Sea currents near shore flow north at not less than 1 knot when unopposed by wind or stopped by ice. If the ice is open from shore all the way to Point Barrow, the funneling effect it creates increases current velocity to 2-3 knots near Point Barrow.
- Pack ice in this area breaks off from the shore ice in May, moving off and closing back in again with changing winds, until gradually moving off to the north and west. Young ice forms in the vacated spaces, but gradually gets thinner until it disappears in late June. Average freeze up in this area occurs in late October.

COUNTERMEASURES CONSIDERATIONS

- A narrow sand barrier, rising only a few ft. above sea level, protects Kasegaluk Lagoon.
- Waterbirds will occupy leads in the ice during spring breakup.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.



PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS183	Akoliakatat Pass, a break in the barrier island leading into Kasegaluk Lagoon.	Most sensitive during open water season. Prevent oil from entering the lagoon.	C-13 or C-14	6000'

GENERAL SENSITIVITIES

- All activities within the Kasegaluk Lagoon Special Area (KLSA).
- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl, diving, shore and sea birds during the open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- Known Spectacled Eider as well as Steller's Eider nesting area (both threatened species). As many as one million eider use Kasegaluk Lagoon, May-Oct.
- Kasegaluk Lagoon shoreline and islands are important bird nesting habitat.
- This part of Kasegaluk Lagoon is an important Brant staging area.
- Akoliakatat Pass is a known seal haulout area.
- Walrus may be present off shore on ice floes, Mar-Nov.
- Bearded Seals may be present in coastal waters and/or on ice, Jan-Dec.
- Ringed Seal breeding and pupping along shorefast ice, Jun-Feb.
- Spotted Seals may be present, Jul-Nov.
- Bowhead Whales (endangered species) migrate to the Arctic Ocean and may be present, Mar-Jun.
- Beluga Whales gather together in waters close to shore and in Kasegaluk Lagoon, Jun-Jul.
- Gray Whales may be present in Chukchi Sea, Jun-Sep.
- High population of Brown Bear present Mar-Oct.
- The entrance to Avak Inlet is an important migrating fish transit point exploited by subsistence hunters.
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.
- Bering Cisco, Chum Salmon, Dolly Varden and Pink Salmon can all be found in Kasegaluk Lagoon, May-Sep/Oct.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.

Response Considerations

AIR ACCESS*


- An unattended, 4,500 ft. gravel airstrip serving the village of Wainwright (Sheet 250 & 251) is located approximately 43 miles northeast of the center of this map. Visual inspection recommended prior to use.
- Wainwright Air Station (Sheet 250) is located approximately 45 miles northeast of the center of this map. This facility is closed to the public and should be considered for emergency landing only. The unattended, 3,000 ft. gravel runway is not maintained and its condition is unknown. Visual inspection recommended prior to use. May be used for spill response operations upon approval by Elmendorf Air Force Base, 11th Air Force Airfield Management, (907) 552-7384/3636/5265.
- Point Lay LRRS airstrip (Sheets 237 & 238) is located approximately 53 miles southwest of the center of this map. Although formerly a closed Air Force site, it is now open to the public. The unattended 3,500 ft. gravel runway is reported to be soft with ruts and ridges the entire length. Visual inspection recommended prior to use.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- Behind the barrier beach east of Icy Cape, Kasegaluk Lagoon has mid-channel depths of approximately 9-11 ft., however numerous shoals project from both sides of the lagoon.
- Akoliakatat Pass has a narrow channel close to the western shore that may be passable under certain conditions.
- Current in Akoliakatat Pass may increase to 2 knots under strong northeast or southwest winds.
- Chukchi Sea currents near shore flow north at not less than 1 knot when unopposed by wind or stopped by ice. If the ice is open from shore all the way to Point Barrow, the funneling effect it creates increases current velocity to 2-3 knots near Point Barrow.
- Pack ice in this area breaks off from the shore ice in May, moving off and closing back in again with changing winds, until gradually moving off to the north and west. Young ice forms in the vacated spaces, but gradually gets thinner until it disappears in late June. Average freeze up in this area occurs in mid-late October.

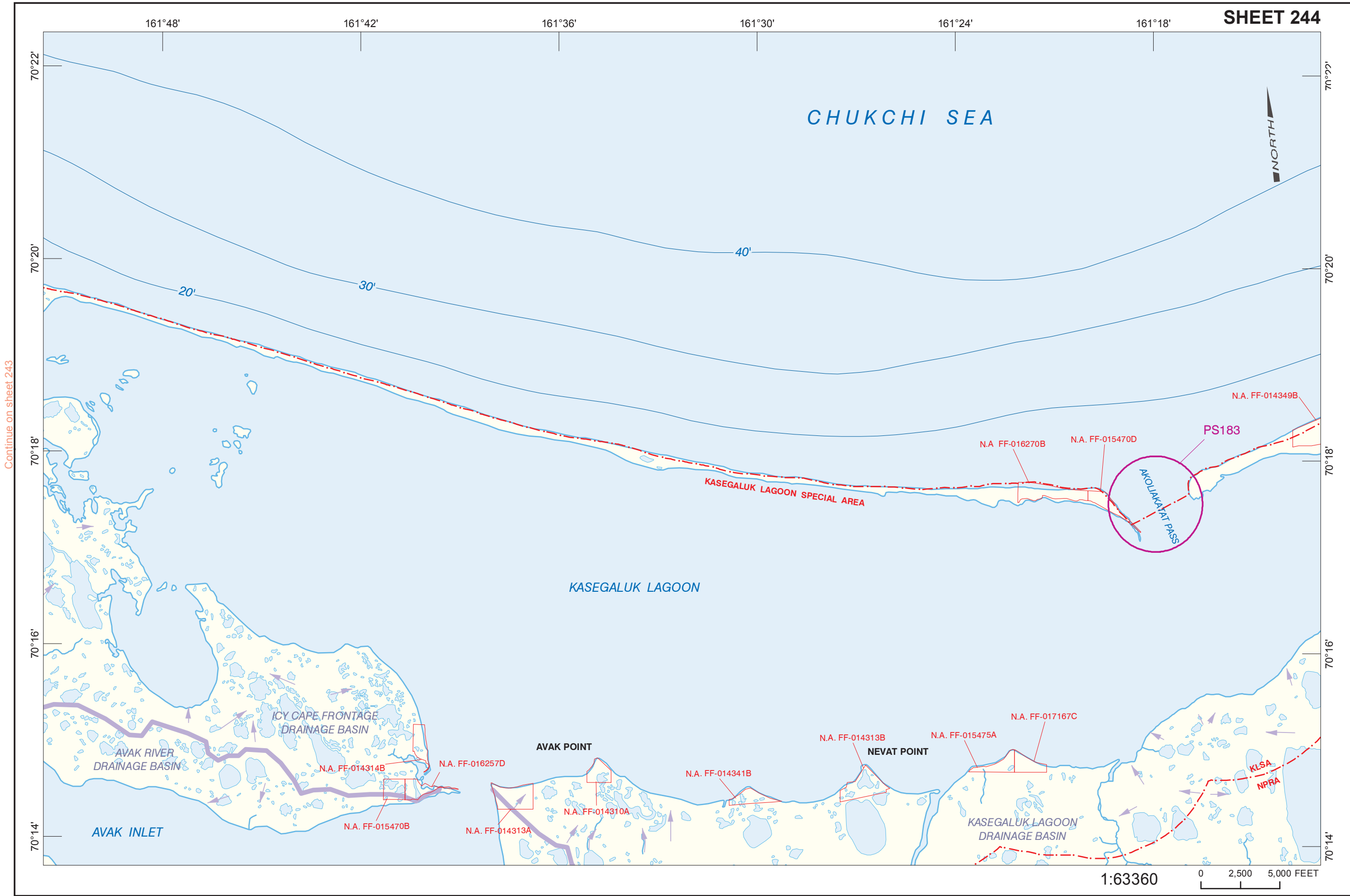
COUNTERMEASURES CONSIDERATIONS


- A narrow sand barrier, rising only a few ft. above sea level, protects Kasegaluk Lagoon.
- Waterbirds will occupy leads in the ice during spring breakup.



*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

NOTE: All values given on these pages are for planning purposes only.





PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS181	Pingorarak Pass, a break in the barrier island leading into Kasegaluk Lagoon.	Most sensitive during open water season. Prevent oil from entering the lagoon.	C-13 or C-14	3000'
PS182	Break in the barrier island leading into Kasegaluk Lagoon.	Most sensitive during open water season. Prevent oil from entering the lagoon.	C-13 or C-14	2500'
PS183	Akoliakatat Pass, a break in the barrier island leading into Kasegaluk Lagoon.	Most sensitive during open water season. Prevent oil from entering the lagoon.	C-13 or C-14	6000'


GENERAL SENSITIVITIES

- All activities within the Kasegaluk Lagoon Special Area (KLSA).
- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl, diving, shore and sea birds during the open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- Known Spectacled Eider as well as Steller’s Eider nesting area (both threatened species). As many as one million eider use Kasegaluk Lagoon, May-Oct.
- Kasegaluk Lagoon shoreline and islands are important bird nesting habitat.
- This part of Kasegaluk Lagoon is an important Brant staging area.
- Pingorarak Pass is a known seal haulout area.
- Walrus may be present off shore on ice floes, Mar-Nov.
- Bearded Seals may be present in coastal waters and/or on ice, Jan-Dec.
- Ringed Seal breeding and pupping along shorefast ice, Jun-Feb.
- Spotted Seals may be present, Jul-Nov.
- Bowhead Whales migrate to the Arctic Ocean and may be present, Mar-Jun; Gray Whales present in the Chukchi Sea, Jun-Sep; Beluga Whales present in Kasegaluk Bay (Jun-Jul) in exceptionally high concentrations.
- High population of Brown Bear present Mar-Oct.
- The river mouth at map center is an important migrating fish transit point exploited by subsistence hunters.
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.
- Bering Cisco, Chum Salmon, Dolly Varden and Pink Salmon can all be found in Kasegaluk Lagoon, May-Sep/Oct.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- An unattended, 4,500 ft. gravel airstrip serving the village of Wainwright (Sheet 250 & 251) is located approximately 31 miles northeast of the center of this map. Visual inspection recommended prior to use.
- Wainwright Air Station (Sheet 250) is located approximately 33 miles northeast of the center of this map. This facility is closed to the public and should be considered for emergency landing only. The unattended, 3,000 ft. gravel runway is not maintained and its condition is unknown. Visual inspection recommended prior to use. May be used for spill response operations upon approval by Elmendorf Air Force Base, 11th Air Force Airfield Management, (907) 552-7384/3636/5265.
- Point Lay LRRS airstrip (Sheets 237 & 238) is located approximately 64 miles southwest of the center of this map. Although formerly a closed Air Force site, it is now open to the public. The unattended 3,500 ft. gravel runway is reported to be soft with ruts and ridges the entire length. Visual inspection recommended prior to use.
- An unattended, 4,400 ft. gravel airstrip serving the village of Atkasuk (located out of map coverage area) is located approximately 84 miles east of the center of this map. Visual inspection recommended prior to use.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

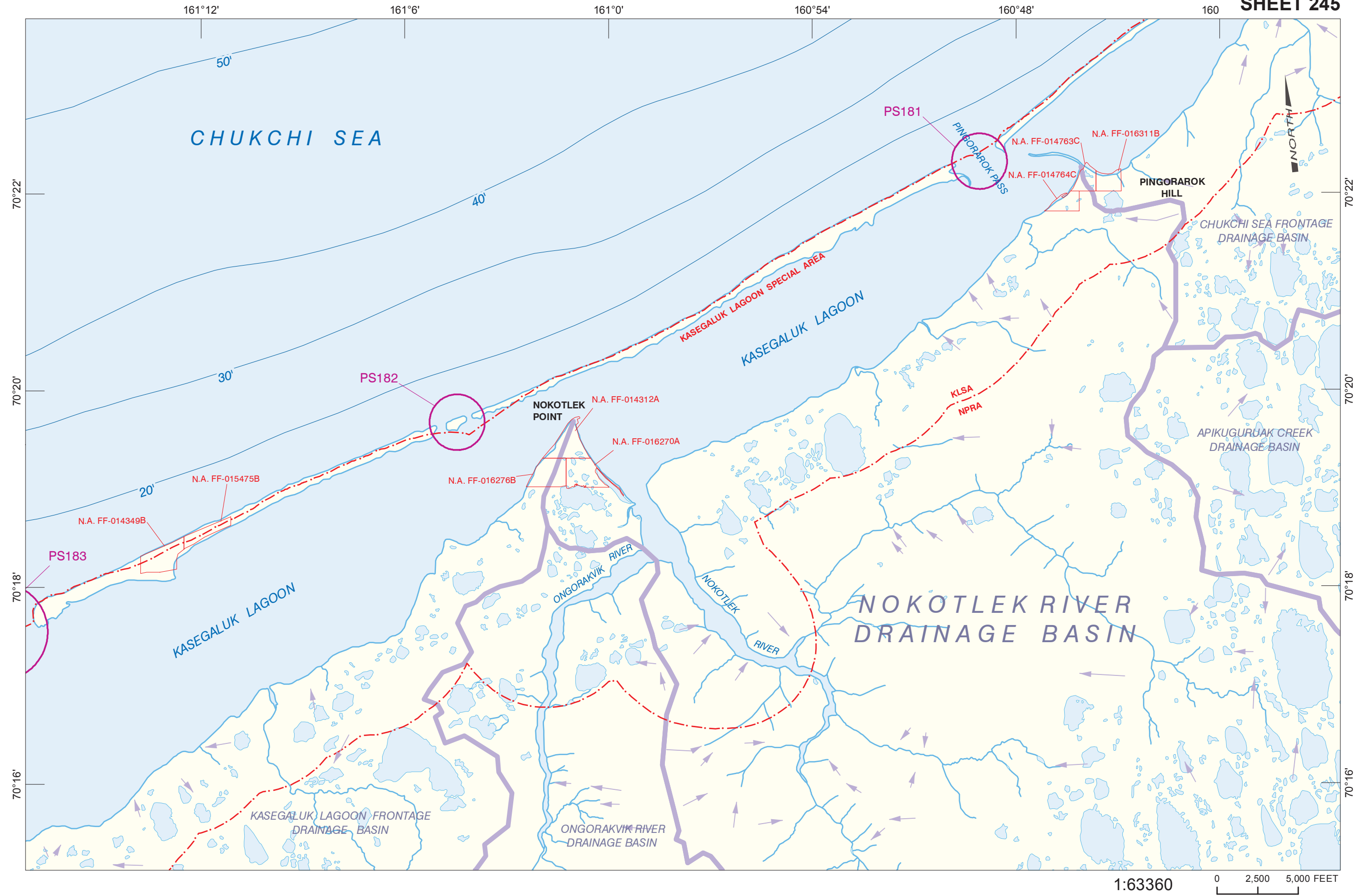
- Behind the barrier beach east of Icy Cape, Kasegaluk Lagoon has mid-channel depths of approximately 9-11 ft., however numerous shoals project from both sides of the lagoon.
- Launches drafting less than approximately 4.5 ft. may pass through a very narrow channel around Nokotlek Point.
- Pingorarak Pass has a narrow channel close to the eastern shore that may be passable under certain conditions. Breakers usually mark the shoals on both sides of the entrance.
- Chukchi Sea currents near shore flow north at not less than 1 knot when unopposed by wind or stopped by ice. If the ice is open from shore all the way to Point Barrow, the funneling effect it creates increases current velocity to 2-3 knots near Point Barrow.
- Pack ice in this area breaks off from the shore ice in May, moving off and closing back in again with changing winds, until gradually moving off to the north and west. Young ice forms in the vacated spaces, but gradually gets thinner until it disappears in late June. Average freeze up in this area occurs in mid October.

COUNTERMEASURES CONSIDERATIONS

- A narrow sand barrier, rising only a few ft. above sea level, protects Kasegaluk Lagoon.
- Waterbirds will occupy leads in the ice during spring breakup.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 244





PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

GENERAL SENSITIVITIES

- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl, diving, shore and sea birds during the open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- Spectacled and Steller’s Eiders may be present on land, May-Sep, (both threatened species).
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.
- Several species of salmon as well as smelt and Cisco may be found in the Kuk River, year round.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- Wainwright Air Station (Sheet 250) is located approximately 20 miles north of the center of this map. This facility is closed to the public and should be considered for emergency landing only. The unattended, 3,000 ft. gravel runway is not maintained and its condition is unknown. Visual inspection recommended prior to use. May be used for spill response operations upon approval by Elmendorf Air Force Base, 11th Air Force Airfield Management, (907) 552-7384/3636/5265.
- An unattended, 4,500 ft. gravel airstrip serving the village of Wainwright (Sheet 250 & 251) is located approximately 21 miles north of the center of this map. Visual inspection recommended prior to use.
- An unattended, 4,400 ft. gravel airstrip serving the village of Atqasuk (located out of map coverage area) is located approximately 60 miles east of the center of this map. Visual inspection recommended prior to use.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS


- There are no marine waters or shorelines on this map.
- The Kuk River has an even bottom and ranges in depth from approximately 10 ft. at the lagoon to a reported 4 ft. 30 miles upriver.

COUNTERMEASURES CONSIDERATIONS

- Waterbirds will occupy leads in the ice during spring breakup.


*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.






PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS179	Break in narrow strip of beach fronting a small enclosed lagoon.	Most sensitive during open water season. Winds increase the odds of a breach. Prevent oil from entering the lagoon.	C-14	100'
PS180	Break in the barrier island leading into Kasegaluk Lagoon.	Most sensitive during open water season. Winds increase the odds of a breach. Prevent oil from entering the lagoon.	C-14	100'



GENERAL SENSITIVITIES


- All activities within the Kasegaluk Lagoon Special Area (KLSA).
- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl, diving, shore and sea birds during the open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- Known Spectacled Eider as well as Steller’s Eider nesting area (both threatened species). As many as one million eider use Kasegaluk Lagoon, May-Oct.
- Kasegaluk Lagoon shoreline and islands are important bird nesting habitat.
- Walrus may be present off shore on ice floes, Mar-Nov.
- Bearded Seals may be present in coastal waters and/or on ice, Jan-Dec.
- Ringed Seal breeding and pupping along shorefast ice, Jun-Feb.
- Spotted Seals may be present, Jul-Nov.
- Bowhead Whales migrate to the Arctic Ocean and may be present, Mar-Jun; Gray Whales present in the Chukchi Sea, Jun-Sep; Beluga Whales present in Kasegaluk Bay (Jun-Jul) in exceptionally high concentrations.
- Bering Cisco, Chum Salmon, Dolly Varden and Pink Salmon can all be found in Kasegaluk Lagoon, May-Sep/Oct.
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.



CULTURAL SITES


The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.




AIR ACCESS*

- An unattended, 4,500 ft. gravel airstrip serving the village of Wainwright (Sheet 250 & 251) is located approximately 17 miles northeast of the center of this map. Visual inspection recommended prior to use.
- Wainwright Air Station (Sheet 250) is located approximately 19 miles northeast of the center of this map. This facility is closed to the public and should be considered for emergency landing only. The unattended, 3,000 ft. gravel runway is not maintained and its condition is unknown. Visual inspection recommended prior to use. May be used for spill response operations upon approval by Elmendorf Air Force Base, 11th Air Force Airfield Management, (907) 552-7384/3636/5265.
- An unattended, 4,400 ft. gravel airstrip serving the village of Atqasuk (located out of map coverage area) is located approximately 72 miles east of the center of this map. Visual inspection recommended prior to use.



VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- Chukchi Sea currents near shore flow north at not less than 1 knot when unopposed by wind or stopped by ice. If the ice is open from shore all the way to Point Barrow, the funneling effect it creates increases current velocity to 2-3 knots near Point Barrow.
- Pack ice in this area breaks off from the shore ice in May, moving off and closing back in again with changing winds, until gradually moving off to the north and west. Young ice forms in the vacated spaces, but gradually gets thinner until it disappears in late June. Average freeze up in this area occurs in early October.

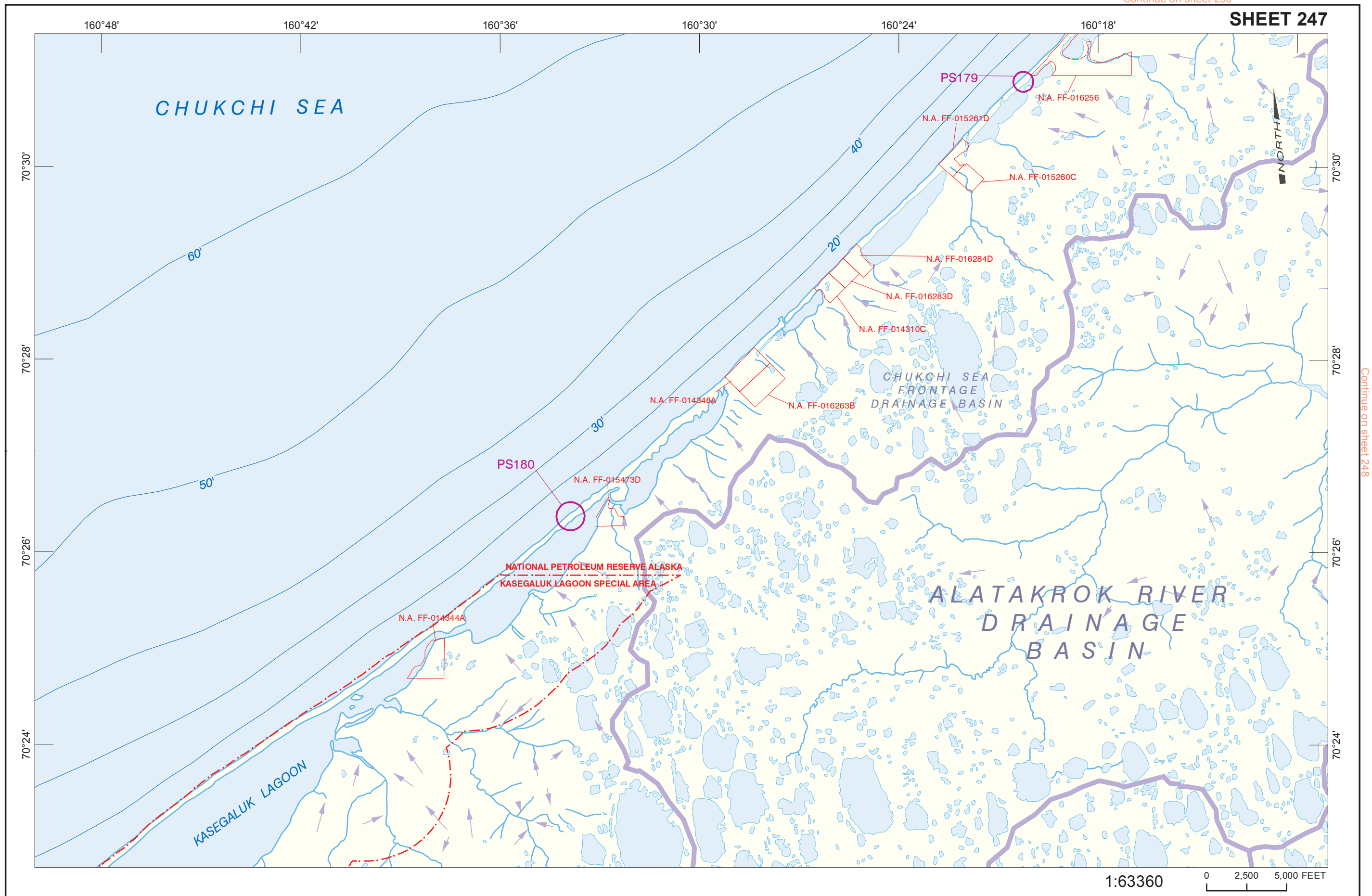


COUNTERMEASURES CONSIDERATIONS

- A narrow sand barrier, rising only a few ft. above sea level, protects Kasegaluk Lagoon.
- Waterbirds will occupy leads in the ice during spring breakup.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

NOTE: All values given on these pages are for planning purposes only.





PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

GENERAL SENSITIVITIES

- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl, diving, shore and sea birds during the open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.
- Several species of salmon as well as smelt and Cisco may be found in the Kuk River, year round.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- Wainwright Air Station (Sheet 250) is located approximately 12 miles north of the center of this map. This facility is closed to the public and should be considered for emergency landing only. The unattended, 3,000 ft. gravel runway is not maintained and its condition is unknown. Visual inspection recommended prior to use. May be used for spill response operations upon approval by Elmendorf Air Force Base, 11th Air Force Airfield Management, (907) 552-7384/3636/5265.
- An unattended, 4,500 ft. gravel airstrip serving the village of Wainwright (Sheet 250 & 251) is located approximately 13 miles north of the center of this map. Visual inspection recommended prior to use.
- An unattended, 4,400 ft. gravel airstrip serving the village of Atqasuk (located out of map coverage area) is located approximately 59 miles east of the center of this map. Visual inspection recommended prior to use.

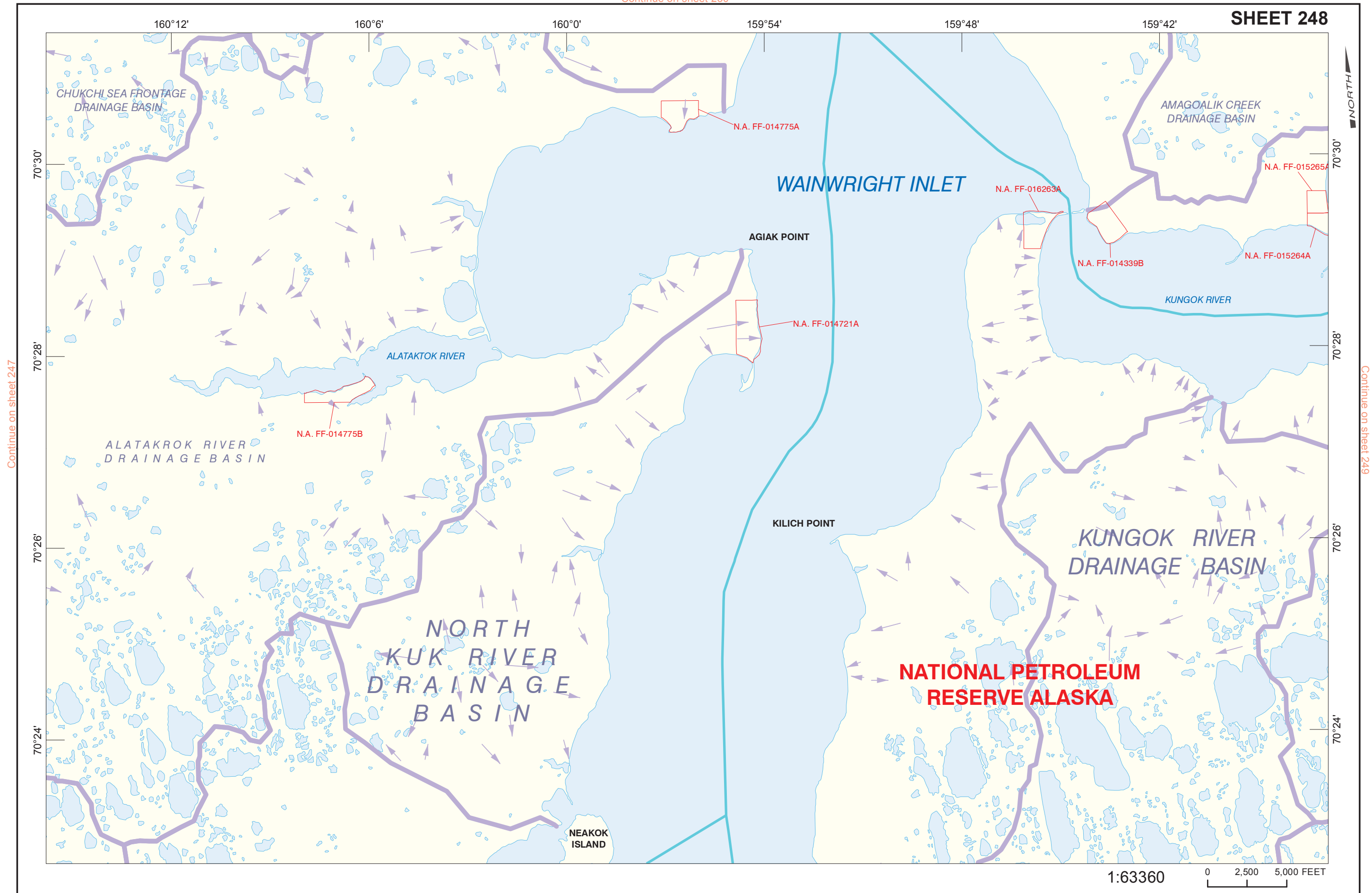
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.
- The Kuk River has an even bottom and ranges in depth from approximately 10 ft. at the lagoon to a reported 4 ft. 30 miles upriver.

COUNTERMEASURES CONSIDERATIONS

- Waterbirds will occupy leads in the ice during spring breakup.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.



Continue on sheet 247

Continue on sheet 249



PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

GENERAL SENSITIVITIES

- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl, diving, shore and sea birds during the open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.
- Several species of salmon as well as smelt and Cisco may be found in the Kuk River, year round.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- Wainwright Air Station (Sheet 250) is located approximately 13 miles northwest of the center of this map. This facility is closed to the public and should be considered for emergency landing only. The unattended, 3,000 ft. gravel runway is not maintained and its condition is unknown. Visual inspection recommended prior to use. May be used for spill response operations upon approval by Elmendorf Air Force Base, 11th Air Force Airfield Management, (907) 552-7384/3636/5265.
- An unattended, 4,500 ft. gravel airstrip serving the village of Wainwright (Sheet 250 & 251) is located approximately 16 miles northwest of the center of this map. Visual inspection recommended prior to use.
- An unattended, 4,400 ft. gravel airstrip serving the village of Atqasuk (located out of map coverage area) is located approximately 49 miles east of the center of this map. Visual inspection recommended prior to use.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

COUNTERMEASURES CONSIDERATIONS


- Waterbirds will occupy leads in the ice during spring breakup.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.




Continue on sheet 248

Continue on sheet 334




PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS175	Break in the barrier island leading into Wainwright Inlet.	Most sensitive during open water season. Prevent oil from entering the inlet.	C-13 or C-14	800'
PS176	Break in narrow strip of beach fronting a small enclosed lagoon.	Most sensitive during open water season. Winds increase the odds of a breach. Prevent oil from entering the lagoon.	C-14	200'
PS177	Break in narrow strip of beach fronting a small coastal lake fed by a creek.	Most sensitive during open water season. Winds increase the odds of a breach. Prevent oil from entering the lake.	C-14	100'
PS178	Break in narrow strip of beach fronting a small enclosed lagoon.	Most sensitive during open water season. Winds increase the odds of a breach. Prevent oil from entering the lagoon.	C-14	100'
PS179	Break in narrow strip of beach fronting a small enclosed lagoon.	Most sensitive during open water season. Winds increase the odds of a breach. Prevent oil from entering the lagoon.	C-14	100'



GENERAL SENSITIVITIES


- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl, diving, shore and sea birds during the open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- Wainwright Inlet has high populations of migrating waterfowl, Jul-Aug.
- Walrus may be present off shore on ice floes, Mar-Nov.
- Bearded Seals may be present in coastal waters and/or on ice, Jan-Dec.
- Ringed Seal breeding and pupping along shorefast ice, Jun-Feb.
- Spotted Seal concentrations can be found in the Kuk River and Wainwright Inlet, Jul-Nov.
- Bowhead Whales (endangered species) migrate to the Arctic Ocean and may be present, Mar-Jun.
- Beluga Whales present in Chukchi Sea and Wainwright Bay, Jun-Jul, providing subsistence hunting opportunities.
- Gray Whales may be present in Chukchi Sea, Jun-Sep.
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.
- Chinook Salmon may be present in Chukchi Sea/coastal waters, Jun-Sep.



CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



Response Considerations

AIR ACCESS*

- An unattended, 4,500 ft. gravel airstrip serves the village of Wainwright. Visual inspection recommended prior to use.
- Wainwright Air Station is closed to the public and should be considered for emergency landing only. The unattended, 3,000 ft. gravel runway is not maintained and its condition is unknown. Visual inspection recommended prior to use. May be used for spill response operations upon approval by Elmendorf Air Force Base, 11th Air Force Airfield Management, (907) 552-7384/3636/5265.
- An unattended, 4,400 ft. gravel airstrip serving the village of Atqasuk (located out of map coverage area) is located approximately 62 miles east-southeast of the village of Wainwright. Visual inspection recommended prior to use.

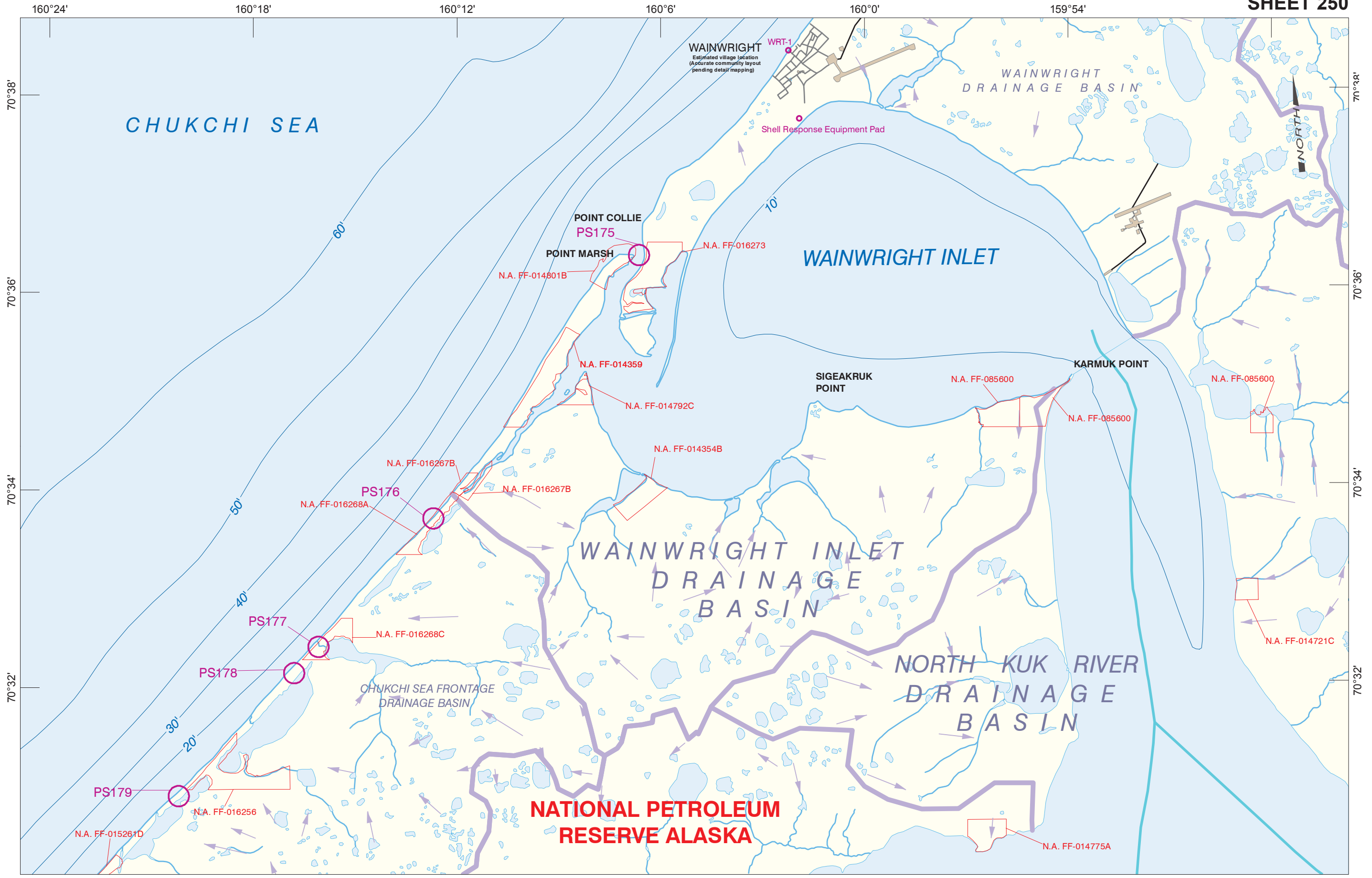
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- Entrance to Wainwright Inlet is a narrow, winding channel between Point Collie and Point Marsh. It's depth is approximately 6 ft. and is deep enough to accomodate barge traffic, but passage should not be attempted without the aid of local guides and/or pilots.
- Shoals extend approximately 0.7 miles off the inlet, and are well-defined by breakers during moderate weather. During west storms, the breakers stretch across the channel.
- Current through the inlet may reach a maximum velocity of 2 knots.
- Chukchi Sea currents near shore flow north at not less than 1 knot when unopposed by wind or stopped by ice. If the ice is open from shore all the way to Point Barrow, the funneling effect it creates increases current velocity to 2-3 knots near Point Barrow.
- Pack ice in this area breaks off from the shore ice in May, moving off and closing back in again with changing winds, until gradually moving off to the north and west. Young ice forms in the vacated spaces, but gradually gets thinner until it disappears in late June. Average freeze up in this area occurs around the first of October.

COUNTERMEASURES CONSIDERATIONS

- Terrain is low with sandy beaches.
- Waterbirds will occupy leads in the ice during spring breakup.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.



Continue on sheet 327

Continue on sheet 249

PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS174	Mouth of Sinaruruk River.	Most sensitive during open water season. Winds increase the odds of a breach. Prevent oil from entering the river.	C-14	500'

GENERAL SENSITIVITIES

- Polar Bear denning area.
- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl, diving, shore and sea birds during the open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- Known walrus haulout areas along northern shoreline on this map.
- Walrus may be present off shore on ice floes, Mar-Nov.
- Bearded Seals may be present in coastal waters and/or on ice, Jan-Dec.
- Ringed Seal breeding and pupping along shorefast ice, Jun-Feb.
- Spotted Seals may be present, Jul-Nov.
- Bowhead Whales (endangered species) migrate to the Arctic Ocean and may be present, Mar-Jun.
- Beluga Whales present in Chukchi Sea, Jun-Jul.
- Gray Whales may be present in Chukchi Sea, Jun-Sep.
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.
- Chinook Salmon are present in Chukchi Sea/coastal waters, Jun-Sep.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.

AIR ACCESS*

- An unattended, 4,500 ft. gravel airstrip serves the village of Wainwright. Visual inspection recommended prior to use.
- Wainwright Air Station (Sheet 250) is located approximately 4 miles east-southeast of the village of Wainwright. This facility is closed to the public and should be considered for emergency landing only. The unattended, 3,000 ft. gravel runway is not maintained and its condition is unknown. Visual inspection recommended prior to use. May be used for spill response operations upon approval by Elmendorf Air Force Base, 11th Air Force Airfield Management, (907) 552-7384/3636/5265.
- An unattended, 4,400 ft. gravel airstrip serving the village of Atkasuk (located out of map coverage area) is located approximately 62 miles east-southeast of the village of Wainwright. Visual inspection recommended prior to use.

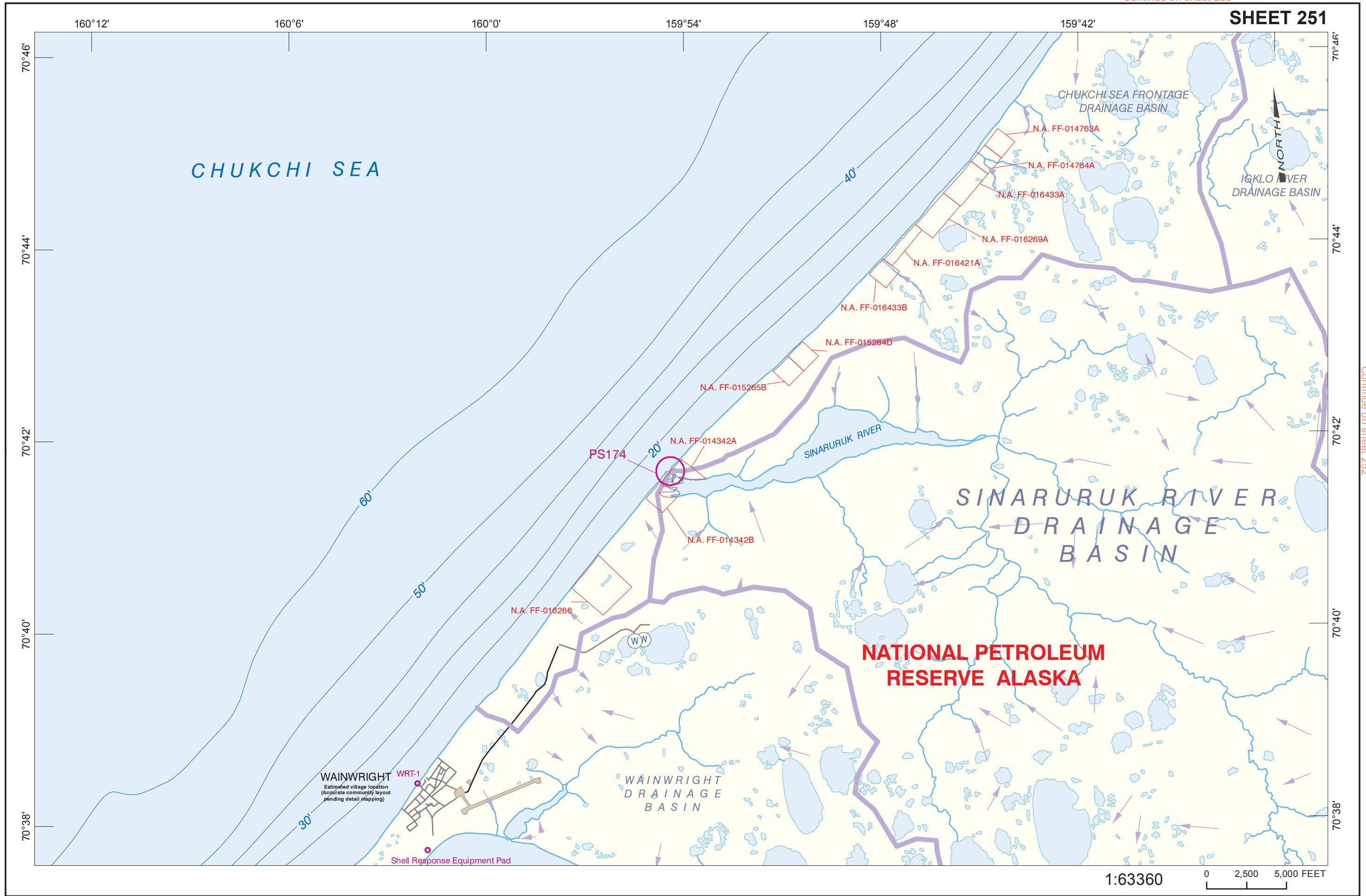
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- Chukchi Sea currents near shore flow north at not less than 1 knot when unopposed by wind or stopped by ice. If the ice is open from shore all the way to Point Barrow, the funneling effect it creates increases current velocity to 2-3 knots near Point Barrow.
- Pack ice in this area breaks off from the shore ice in May, moving off and closing back in again with changing winds, until gradually moving off to the north and west. Young ice forms in the vacated spaces, but gradually gets thinner until it disappears in late June. Average freeze up in this area occurs around the first of October.

COUNTERMEASURES CONSIDERATIONS

- Terrain is low with sandy beaches.
- Waterbirds will occupy leads in the ice during spring breakup.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.



Continue on sheet 252



PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

GENERAL SENSITIVITIES

- Polar Bear denning area.
- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl, diving, shore and sea birds during the open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.
- The Kugrua Bay tributary river is an anadromous stream where Chum and Pink Salmon can be found.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- Wainwright Air Station (Sheet 250) is located approximately 17 miles southwest of the center of this map. This facility is closed to the public and should be considered for emergency landing only. The unattended, 3,000 ft. gravel runway is not maintained and its condition is unknown. Visual inspection recommended prior to use. May be used for spill response operations upon approval by Elmendorf Air Force Base, 11th Air Force Airfield Management, (907) 552-7384/3636/5265.
- An unattended, 4,500 ft. gravel airstrip serving the village of Wainwright (Sheet 250 & 251) is located approximately 20 miles southwest of the center of this map. Visual inspection recommended prior to use.
- An unattended, 4,400 ft. gravel airstrip serving the village of Atqasuk (located out of map coverage area) is located approximately 45 miles southeast of the center of this map. Visual inspection recommended prior to use.

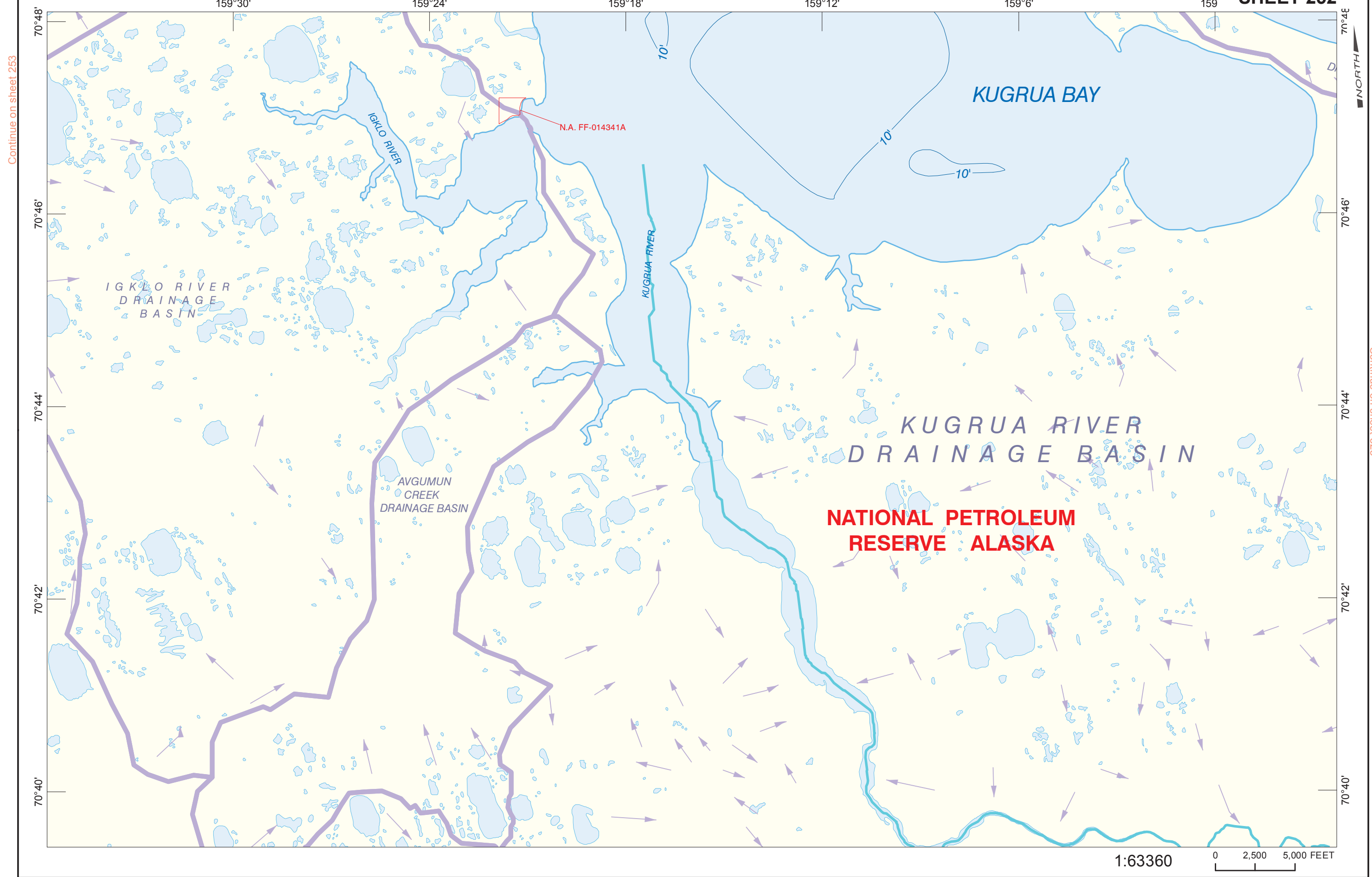
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS


- Vessels drafting less than approximately 4 ft. may enter Kugrua Bay. Mid-bay depths are approximately 10-12 ft.

COUNTERMEASURES CONSIDERATIONS

- Waterbirds will occupy leads in the ice during spring breakup.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.





PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS172	Break in narrow strip of beach fronting a small enclosed lagoon.	Most sensitive during open water season. Winds increase the odds of a breach. Prevent oil from entering the lagoon.	C-14	200'
PS173	Mouth of unnamed creek leading to enclosed lagoon at Point Belcher.	Most sensitive during open water season. Winds increase the odds of a breach. Prevent oil from entering the lagoon.	C-14	200'


GENERAL SENSITIVITIES

- Polar Bear denning area.
- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl, diving, shore and sea birds during the open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- Known walrus haulout areas all along ocean shoreline on this map.
- Walrus may be present off shore on ice floes, Mar-Nov.
- Bearded Seals may be present in coastal waters and/or on ice, Jan-Dec.
- Ringed Seal breeding and pupping along shorefast ice, Jun-Feb.
- Concentrated Spotted Seal haulout area in Peard Bay, Jul-Nov.
- Bowhead Whales (endangered species) migrate to the Arctic Ocean and may be present, Mar-Jun.
- Beluga Whales in Arctic Ocean Jul-Oct, and in high concentration in Peard Bay, Apr-Jun.
- Gray Whales may be present in Chukchi Sea, Jun-Sep.
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.
- Chinook Salmon are present in Chukchi Sea/coastal waters, Jun-Sep.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- Wainwright Air Station (Sheet 250) is located approximately 17 miles southwest of the center of this map. This facility is closed to the public and should be considered for emergency landing only. The unattended, 3,000 ft. gravel runway is not maintained and its condition is unknown. Visual inspection recommended prior to use. May be used for spill response operations upon approval by Elmendorf Air Force Base, 11th Air Force Airfield Management, (907) 552-7384/3636/5265.
- An unattended, 4,500 ft. gravel airstrip serving the village of Wainwright (Sheet 250 & 251) is located approximately 18 miles southwest of the center of this map. Visual inspection recommended prior to use.
- An unattended, 4,400 ft. gravel airstrip serving the village of Atqasuk (located out of map coverage area) is located approximately 52 miles southeast of the center of this map. Visual inspection recommended prior to use.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

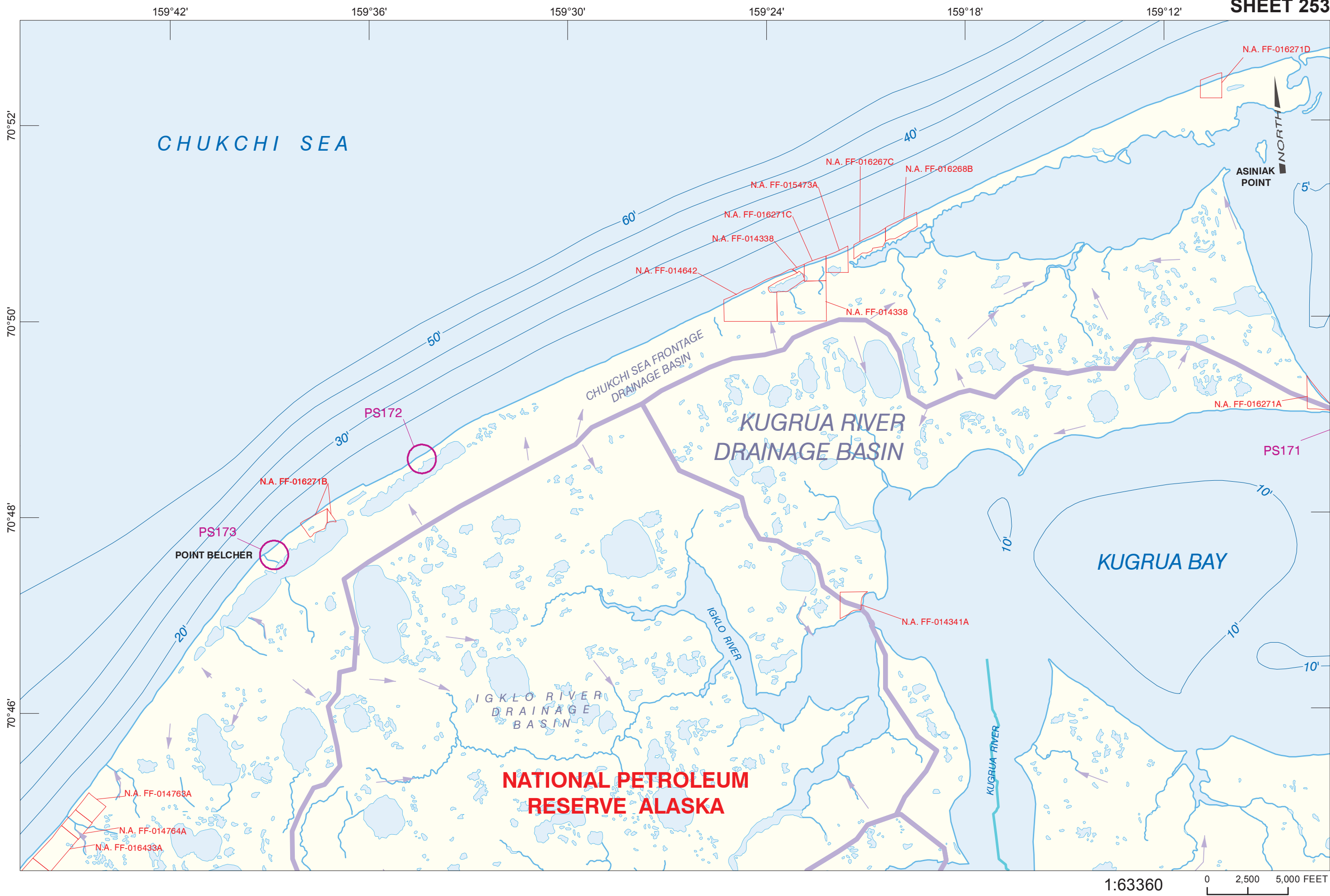
- Vessels drafting less than approximately 4 ft. may enter Kugrua Bay. Mid-bay depths are approximately 10-12 ft.
- Chukchi Sea currents near shore flow north at not less than 1 knot when unopposed by wind or stopped by ice. If the ice is open from shore all the way to Point Barrow, the funneling effect it creates increases current velocity to 2-3 knots near Point Barrow.
- Pack ice in this area breaks off from the shore ice in May, moving off and closing back in again with changing winds, until gradually moving off to the north and west. Young ice forms in the vacated spaces, but gradually gets thinner until it disappears in early July. Average freeze up in this area occurs around the first of October.

COUNTERMEASURES CONSIDERATIONS

- Terrain is low with sandy beaches.
- Waterbirds will occupy leads in the ice during spring breakup.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

NOTE: All values given on these pages are for planning purposes only.



Continue on sheet 254

Continue on sheet 251

Continue on sheet 252

Continue on sheet <Null>



PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS170	Mouth of unnamed river on south shore of Peard Bay.	Most sensitive during open water season. Prevent oil from entering the river.	C-14	100'
PS171	Entrance to Kugrua Bay.	Most sensitive during open water season. Prevent oil from entering the bay.	C-13 or C-14	5000'
* Priority Protection Area -- The entire Peard Bay area, including the Point Franklin spit/barrier island and Seahorse Islands, should be viewed as one large Priority Protection Area during open water season due to high concentrations of migratory birds. On-site conditions may require the use of open water tactics to prevent oil migration into sensitive habitat.				

GENERAL SENSITIVITIES

- Polar Bear denning area.
- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl, diving, shore and sea birds during the open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- Point Franklin Island and nearby islands are important bird nesting areas.
- Peard Bay is an important bird staging area.
- Walrus may be present off shore on ice floes, Mar-Nov.
- Bearded Seals may be present in coastal waters and/or on ice, Jan-Dec.
- Ringed Seal breeding and pupping along shorefast ice, Jun-Feb.
- Concentrated Spotted Seal haulout area in Peard Bay, Jul-Nov.
- Bowhead Whales (endangered species) migrate to the Arctic Ocean and may be present, Mar-Jun.
- Beluga Whales in Arctic Ocean Jul-Oct, and in high concentration in Peard Bay, Apr-Jun.
- Gray Whales may be present in Chukchi Sea, Jun-Sep.
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.
- Chinook Salmon are present in Chukchi Sea/coastal waters, Jun-Sep.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- Wainwright Air Station (Sheet 250) is located approximately 29 miles southwest of the center of this map. This facility is closed to the public and should be considered for emergency landing only. The unattended, 3,000 ft. gravel runway is not maintained and its condition is unknown. Visual inspection recommended prior to use. May be used for spill response operations upon approval by Elmendorf Air Force Base, 11th Air Force Airfield Management, (907) 552-7384/3636/5265.
- An unattended, 4,500 ft. gravel airstrip serving the village of Wainwright (Sheet 250 & 251) is located approximately 31 miles southwest of the center of this map. Visual inspection recommended prior to use.
- An unattended, 4,400 ft. gravel airstrip serving the village of Atqasuk (located out of map coverage area) is located approximately 42 miles southeast of the center of this map. Visual inspection recommended prior to use.
- Commercial and air freight services are available at Wiley Post / Will Rogers Memorial Airport in Barrow (Sheet 195), located approximately 56 miles northeast of the center of this map. Runway is 6,500 ft. asphalt.

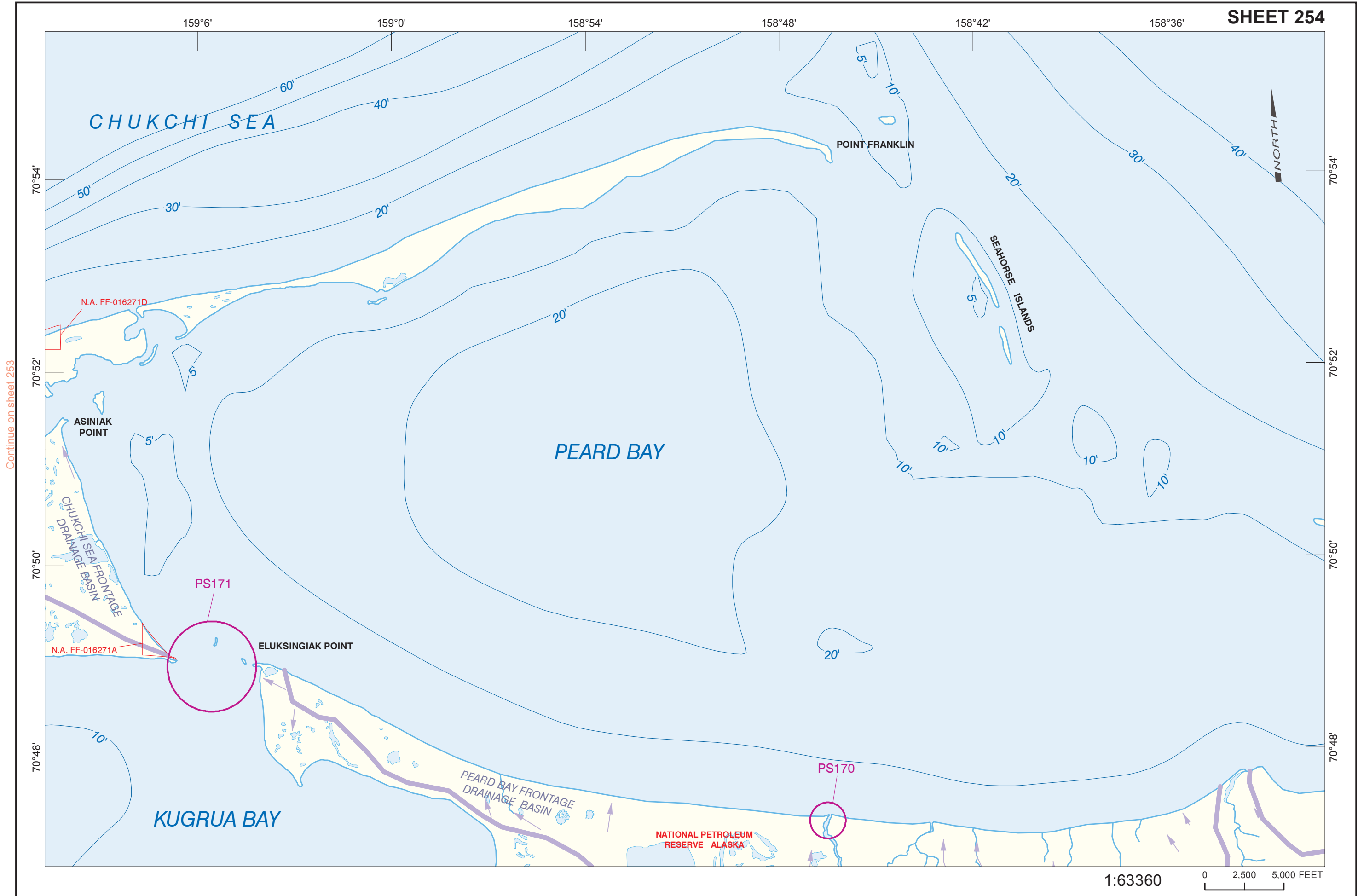
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- A shoal extends north from Point Franklin with 1 fathom depth at 1.2 miles and 5 fathoms at 2 miles.
- A northeasterly current flows at 1-2 knots along the shore, then forms a big eddy that circulates clockwise in the bight of Point Franklin. This eddy extends approximately 20 miles northeast of the point and 5-6 miles from shore.
- Between Point Franklin and the Seashore Islands is a narrow, windng channel approximately 4 ft. deep. This depth may vary annually due to ice gouging and hydraulic action.
- A narrow channel approximately 12 feet deep is located just off the south end of the Seahorse Islands. Another of 8 ft. lies approximately 1 mile to the southeast. Both provide entrance to Peard Bay.
- Peard Bay has uniform depths of approximately 20 ft. over the greater portion of its area. Its mud and clay bottom is excellent holding ground.
- Vessels drafting less than approximately 4 ft. may enter Kugrua Bay. Mid-bay depths are approximately 10-12 ft.
- Chukchi Sea currents near shore flow north at not less than 1 knot when unopposed by wind or stopped by ice. If the ice is open from shore all the way to Point Barrow, the funneling effect it creates increases current velocity to 2-3 knots near Point Barrow.
- Pack ice in this area breaks off from the shore ice in May, moving off and closing back in again with changing winds, until gradually moving off to the north and west. Young ice forms in the vacated spaces, but gradually gets thinner until it disappears in early July. Average freeze up in this area occurs around the first of October.

COUNTERMEASURES CONSIDERATIONS


- North to Point Franklin the terrain is low with sandy beaches.
- Northeast from Peard Bay the coast is rimmed with mud bluffs 25-90 ft. high and furrowed by numerous small streams.
- Waterbirds will occupy leads in the ice during spring breakup.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.



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Continue on sheet 255



PRIORITY PROTECTION SITES


SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS168	Mouth of unnamed river.	Most sensitive during open water season. Prevent oil from entering the river.	C-14	100'
PS169	Mouth of unnamed river.	Most sensitive during open water season. Prevent oil from entering the bay.	C-14	100'

* Priority Protection Area -- The entire Peard Bay area, including the Point Franklin spit/barrier island and Sea-horse Ilands, should be viewed as one large Priority Protection Area during open water season due to high concentrations of migratory birds. On-site conditions may require the use of open water tactics to prevent oil migration into sensitive habitat.



GENERAL SENSITIVITIES


- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl, diving, shore and sea birds during the open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- Peard Bay is an important bird staging area.
- Walrus may be present off shore on ice floes, Mar-Nov.
- Bearded Seals may be present in coastal waters and/or on ice, Jan-Dec.
- Ringed Seal breeding and pupping along shorefast ice, Jun-Feb.
- Spotted Seals may be present, Jul-Nov.
- Bowhead Whales (endangered species) migrate to the Arctic Ocean and may be present, Mar-Jun.
- Beluga Whales in Arctic Ocean Jul-Oct, and in high concentration in Peard Bay, Apr-Jun.
- Gray Whales may be present in Chukchi Sea, Jun-Sep.
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.
- Chinook Salmon are present in Chukchi Sea/coastal waters, Jun-Sep.



CULTURAL SITES


The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.




AIR ACCESS*

- Wainwright Air Station (Sheet 250) is located approximately 41 miles west-southwest of the center of this map. This facility is closed to the public and should be considered for emergency landing only. The unattended, 3,000 ft. gravel runway is not maintained and its condition is unknown. Visual inspection recommended prior to use. May be used for spill response operations upon approval by Elmendorf Air Force Base, 11th Air Force Airfield Management, (907) 552-7384/3636/5265.
- An unattended, 4,500 ft. gravel airstrip serving the village of Wainwright (Sheet 250 & 251) is located approximately 43 miles west-southwest of the center of this map. Visual inspection recommended prior to use.
- An unattended, 4,400 ft. gravel airstrip serving the village of Atqasuk (located out of map coverage area) is located approximately 31 miles south-southeast of the center of this map. Visual inspection recommended prior to use.
- Commercial and air freight services are available at Wiley Post / Will Rogers Memorial Airport in Barrow (Sheet 195), located approximately 46 miles northeast of the center of this map. Runway is 6,500 ft. asphalt.
- An small, uncontrolled, unmaintained aircraft landing strip is reportedly located near the center of this map. Exact location, runway orientation, length, composition, and condition are unknown. No further information is available. Exercise extreme caution and perform visual inspection if considering for emergency use.



VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- The eastern portion of Peard Bay has uniform depths of approximately 10 ft., with a mud and clay bottom that makes excellent holding ground.
- Chukchi Sea currents near shore flow north at not less than 1 knot when unopposed by wind or stopped by ice. If the ice is open from shore all the way to Point Barrow, the funneling effect it creates increases current velocity to 2-3 knots near Point Barrow.
- Pack ice in this area breaks off from the shore ice in May, moving off and closing back in again with changing winds, until gradually moving off to the north and west. Young ice forms in the vacated spaces, but gradually gets thinner until it disappears in early-mid July. Average freeze up in this area occurs around the first of October.



COUNTERMEASURES CONSIDERATIONS

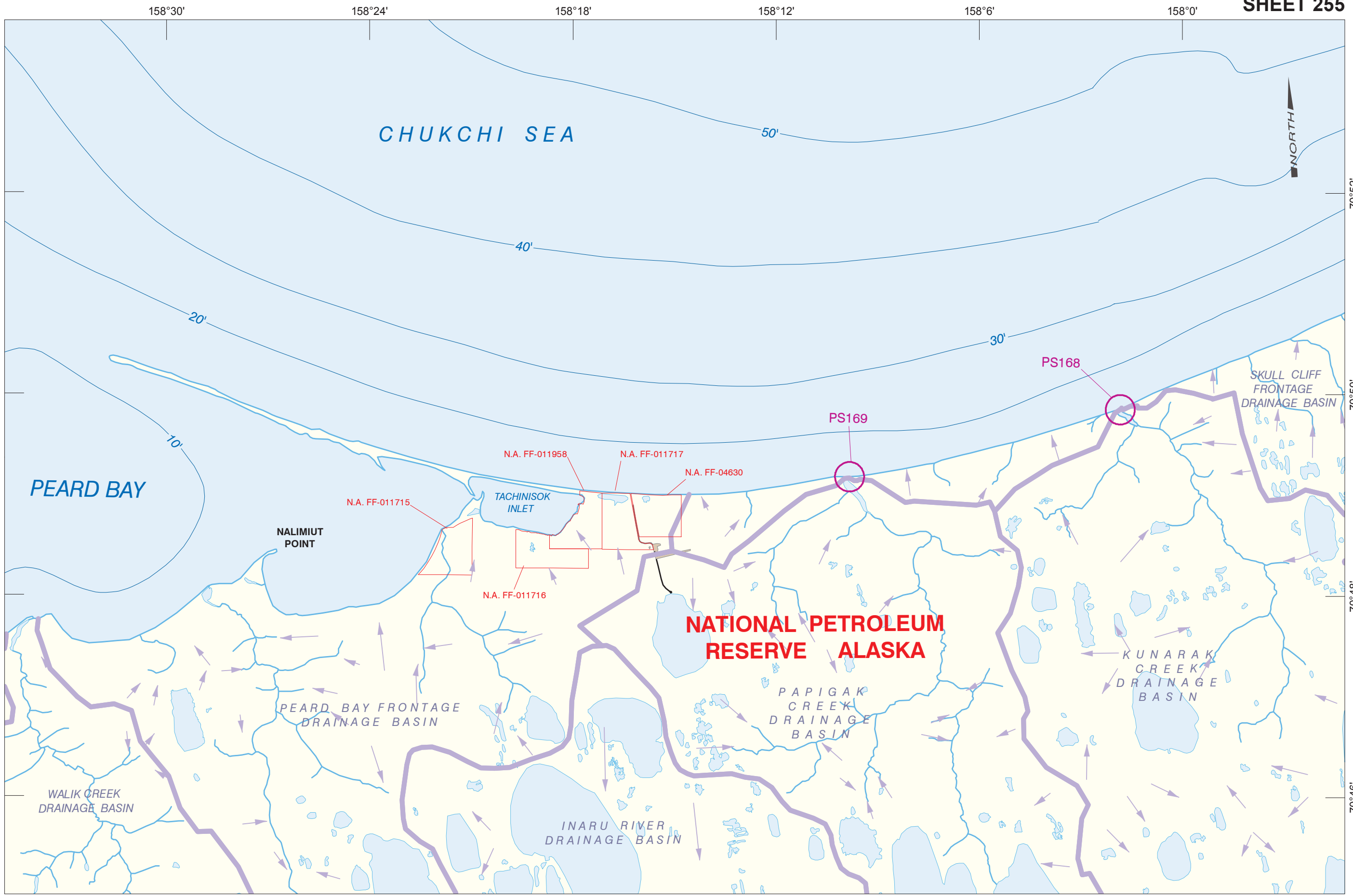
- Northeast from Peard Bay, the coast is rimmed with mud bluffs 25-90 ft. high and furrowed by small streams.
- Waterbirds will occupy leads in the ice during spring breakup.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

NOTE: All values given on these pages are for planning purposes only.

Continue on sheet 255

Continue on sheet 254



1:63360 0 2,500 5,000 FEET

Continue on sheet 323

Continue on sheet 324



PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

GENERAL SENSITIVITIES

- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl, diving, shore and sea birds during the open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- Walrus and Polar Bears may be present off shore on ice flows from Mar-Nov.
- Bearded Seals may be present in coastal waters and/or on ice, Jan-Dec.
- Ringed Seal breeding and pupping along shorefast ice, Jun-Feb.
- Spotted Seals may be present, Jul-Nov.
- Bowhead Whales (endangered species) migrate to the Arctic Ocean and may be present, Mar-Jun.
- Beluga Whales in Arctic Ocean Jul-Oct.
- Gray Whales may be present in Chukchi Sea, Jun-Sep.
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.
- Chinook Salmon are present in Chukchi Sea/coastal waters, Jun-Sep.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- An unattended, 4,400 ft. gravel airstrip serving the village of Atqasuk (located out of map coverage area) is located approximately 28 miles south of the center of this map. Visual inspection recommended prior to use.
- Commercial and air freight services are available at Wiley Post / Will Rogers Memorial Airport in Barrow (Sheet 195), located approximately 34 miles northeast of the center of this map. Runway is 6,500 ft. asphalt.

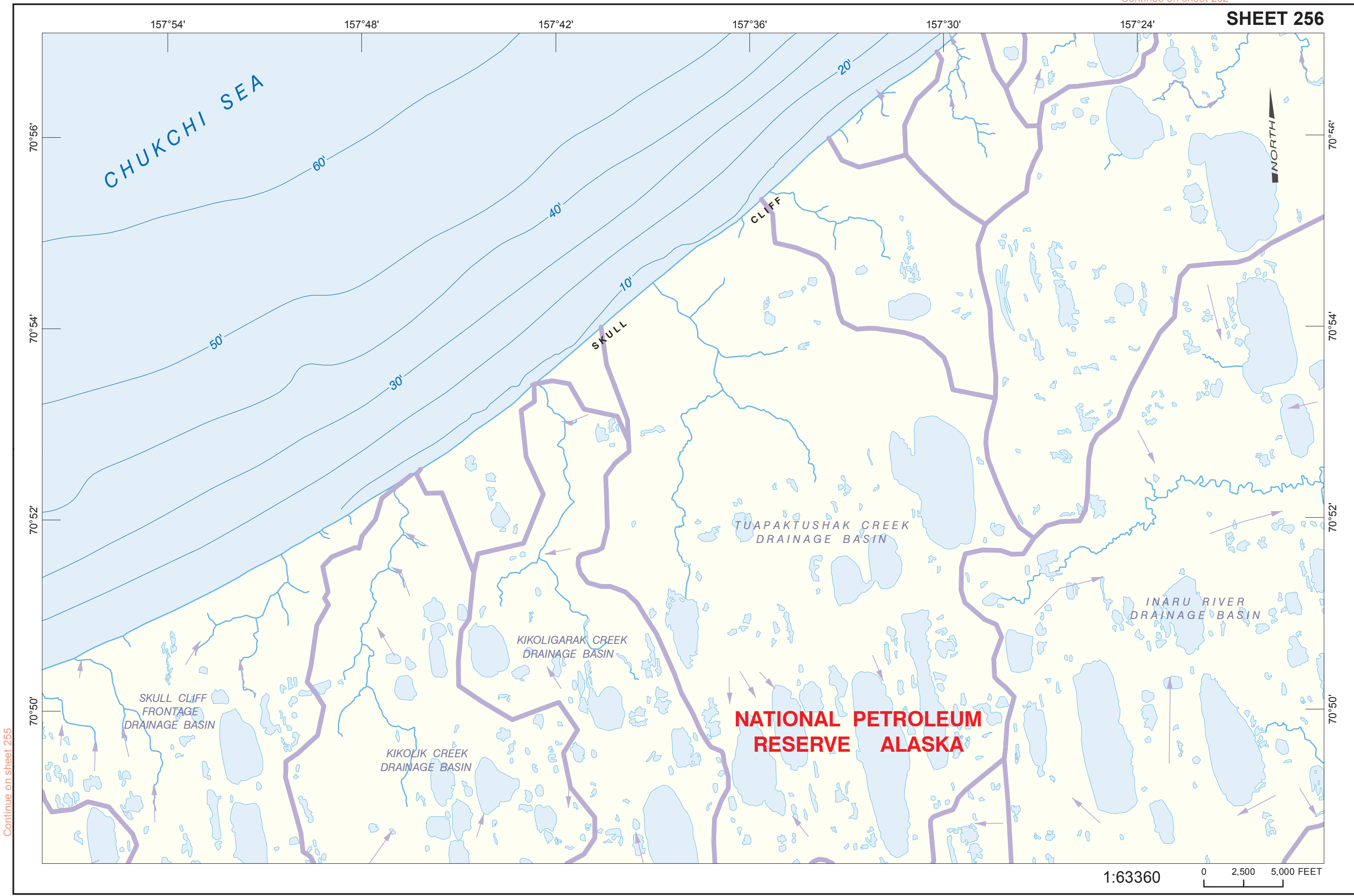
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- Chukchi Sea currents near shore flow north at not less than 1 knot when unopposed by wind or stopped by ice. If the ice is open from shore all the way to Point Barrow, the funneling effect it creates increases current velocity to 2-3 knots near Point Barrow.
- Pack ice in this area breaks off from the shore ice in May, moving off and closing back in again with changing winds, until gradually moving off to the north and west. Young ice forms in the vacated spaces, but gradually gets thinner until it disappears in mid July. Average freeze up in this area occurs around the first of October.

COUNTERMEASURES CONSIDERATIONS

- The coastline is rimmed with mud bluffs 25-90 ft. high and furrowed by numerous small streams. The highest of these bluffs is Skull Cliff.
- Waterbirds will occupy leads in the ice during spring breakup.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.





PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

GENERAL SENSITIVITIES

- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- The cliffs along the Colville River provide critical nesting site and food hunting areas for peregrine falcons, gyrfalcons, golden eagles and rough-legged hawks.
- Caribou present in winter.
- The Colville River is a migratory pathway for char, cisco, and whitefish.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- Commercial and air freight services are available at Nuiqsut airport (Sheet 24), located approximately 25 miles north-east from the center of this map. The unattended runway is 4,300 ft. gravel. Its condition is not monitored, thus visual inspection prior to use is recommended.
- An irregularly attended, 5,000 ft. gravel private airstrip is located at Inigok Test 1 (Sheet 171), approximately 30 miles west from the center of this map. Runway condition unknown.
- An irregularly attended, 5,000 ft. gravel private airstrip operated by ConocoPhillips at the Alpine field (Sheet 20) is located approximately 32 miles northeast from the center of this map.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.
- Main channel of the Colville River generally maintains a 3-ft water depth and is usually navigable 70 miles upriver to the rapids below the mouth of the Anaktuvuk River.

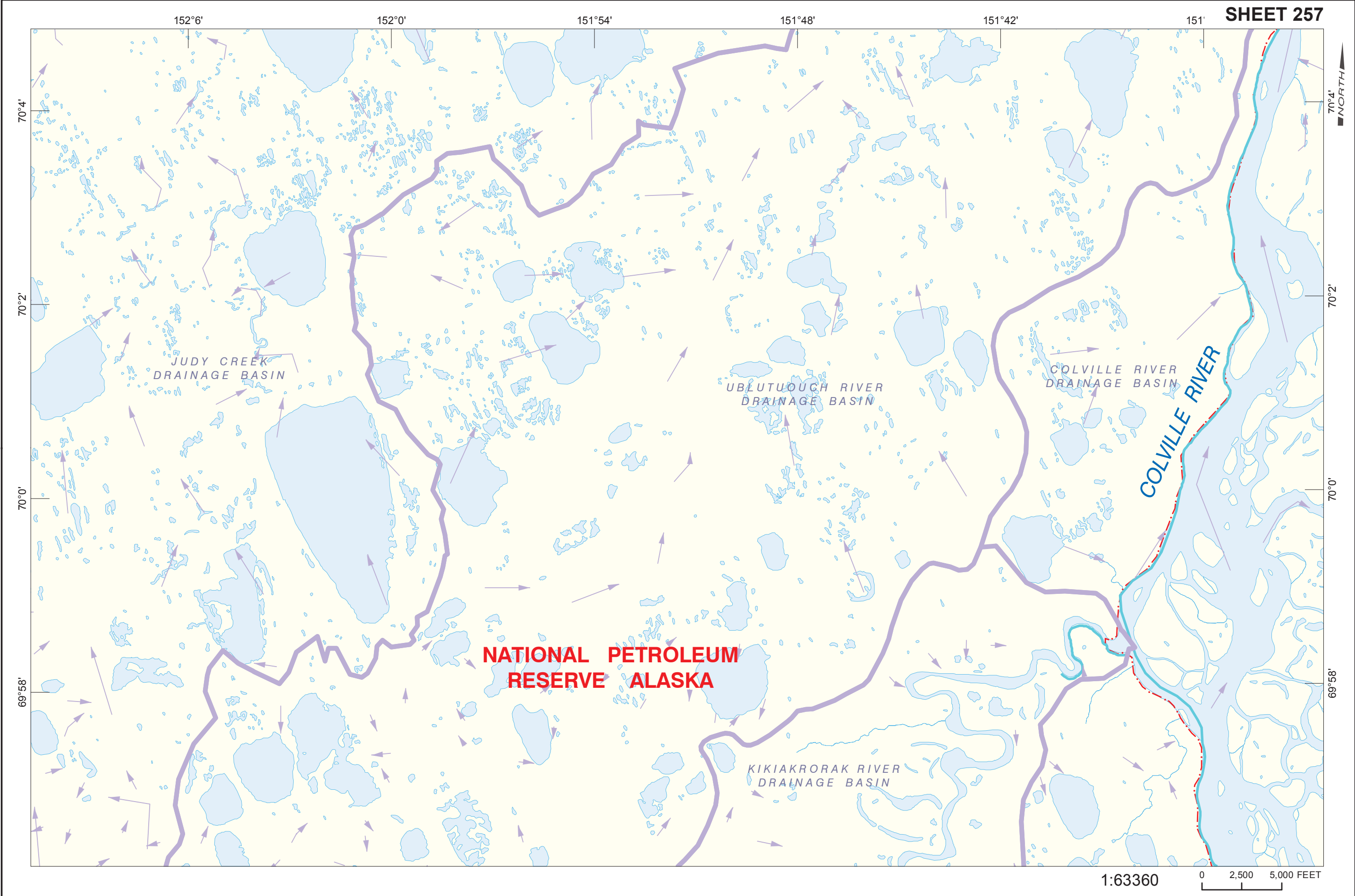
*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

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Continue on sheet 174

Continue on sheet 258

Continue on sheet 291





PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

GENERAL SENSITIVITIES

- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- The cliffs along the Colville River provide critical nesting site and food hunting areas for peregrine falcons, gyrfalcons, golden eagles and rough-legged hawks.
- Muskoxen may be found throughout the year along major river drainages west of the ANWR to the Colville River.
- Headwaters of the Colville River are considered a primary calving area for the Western Arctic Heard (WAH) caribou.
- The Colville River is a migratory pathway for char, cisco, and whitefish.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- Commercial and air freight services are available at Nuiqsut airport (Sheet 24), located approximately 15 miles north-northeast from the center of this map. The unattended runway is 4,300 ft. gravel. Its condition is not monitored, thus visual inspection prior to use is recommended.
- An irregularly attended, 5,000 ft. gravel private airstrip operated by ConocoPhillips at the Alpine field (Sheet 20) is located approximately 24 miles north-northeast from the center of this map.
- An irregularly attended, 5,000 ft. gravel private airstrip is located at Inigok Test 1 (Sheet 171), approximately 44 miles west from the center of this map. Runway condition unknown.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.
- Main channel of the Colville River generally maintains a 3-ft water depth and is usually navigable 70 miles upriver to the rapids below the mouth of the Anaktuvuk River.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 257

Continue on sheet 175

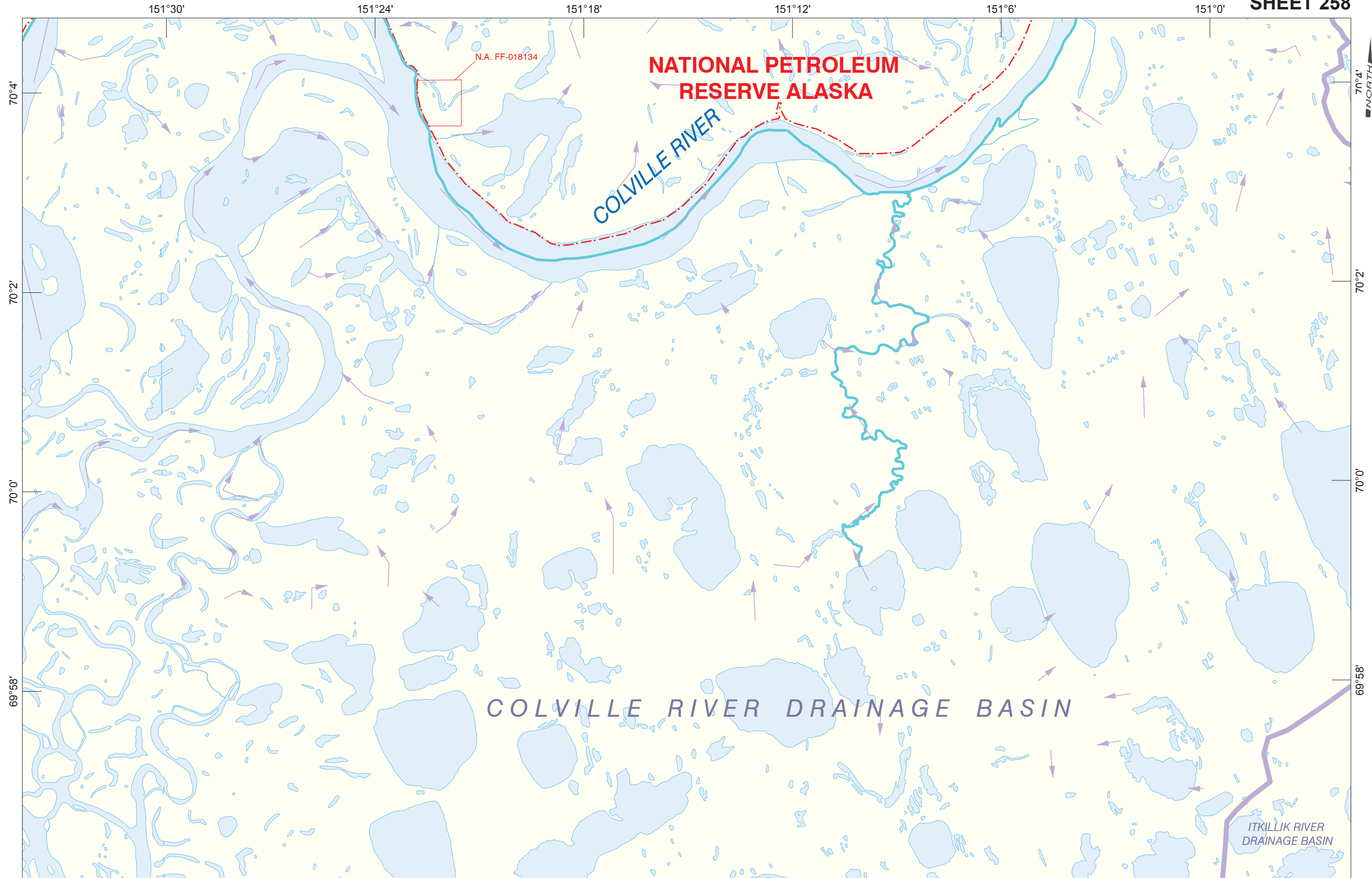
Continue on sheet 259

70°4' NORTH

70°2'

70°0'

69°58'



1:63360

0 2,500 5,000 FEET



PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

GENERAL SENSITIVITIES

- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- The cliffs along the Colville River provide critical nesting site and food hunting areas for peregrine falcons, gyrfalcons, golden eagles and rough-legged hawks.
- Muskoxen may be found throughout the year along major river drainages west of the ANWR to the Colville River.
- The Colville River is a migratory pathway for char, cisco, and whitefish.
- The Itkillik River provides habitat for fish.
- Jessica Creek provides habitat for anadromous fish.
- The Kachemach River provides habitat for anadromous whitefish and for resident fish.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- Commercial and air freight services are available at Nuiqsut airport (Sheet 24), located approximately 17 miles north-northwest from the center of this map. The unattended runway is 4,300 ft. gravel. Its condition is not monitored, thus visual inspection prior to use is recommended.
- An irregularly attended, 5,000 ft. gravel private airstrip operated by ConocoPhillips at the Alpine field (Sheet 20) is located approximately 24 miles north-northwest from the center of this map.
- Ugnu-Kuparuk (Sheet 51) is a continuously attended, 6,551x150 ft. asphalt private airstrip serving the Kuparuk facilities. It is located approximately 33 miles northeast from the center of this map.

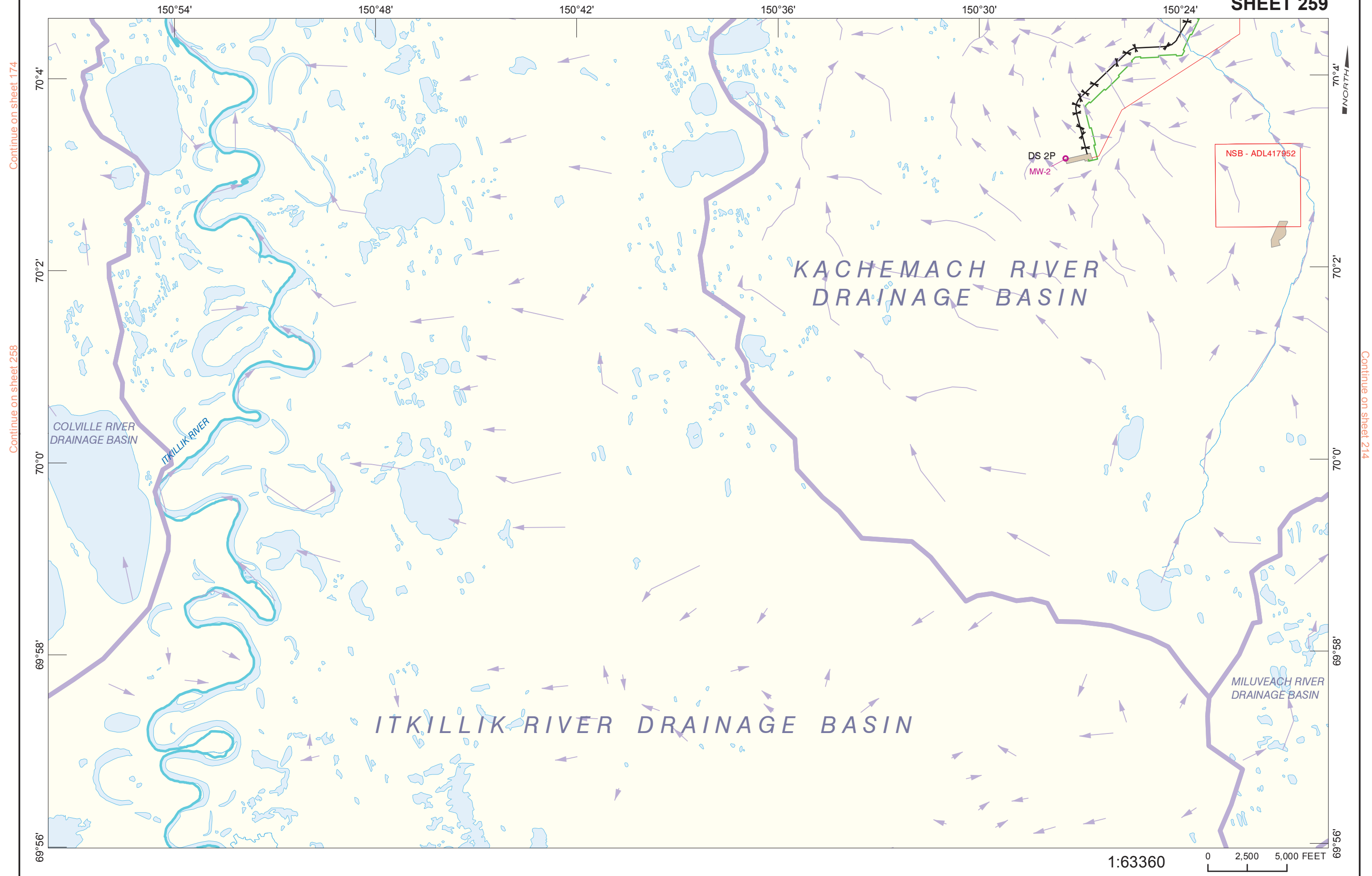
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

STAGING AREAS AND PRESTAGED EQUIPMENT

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
MW-2	DS 2P	Pipe Plastic sheeting Sandbags	40' 2 rolls Variable (sufficient to block tributary)	6" diameter Visqueen

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.





PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

GENERAL SENSITIVITIES

- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- The cliffs along the Colville River provide critical nesting site and food hunting areas for peregrine falcons, gyrfalcons, golden eagles and rough-legged hawks.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats.
- The Colville River is a migratory pathway for char, cisco, and whitefish.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



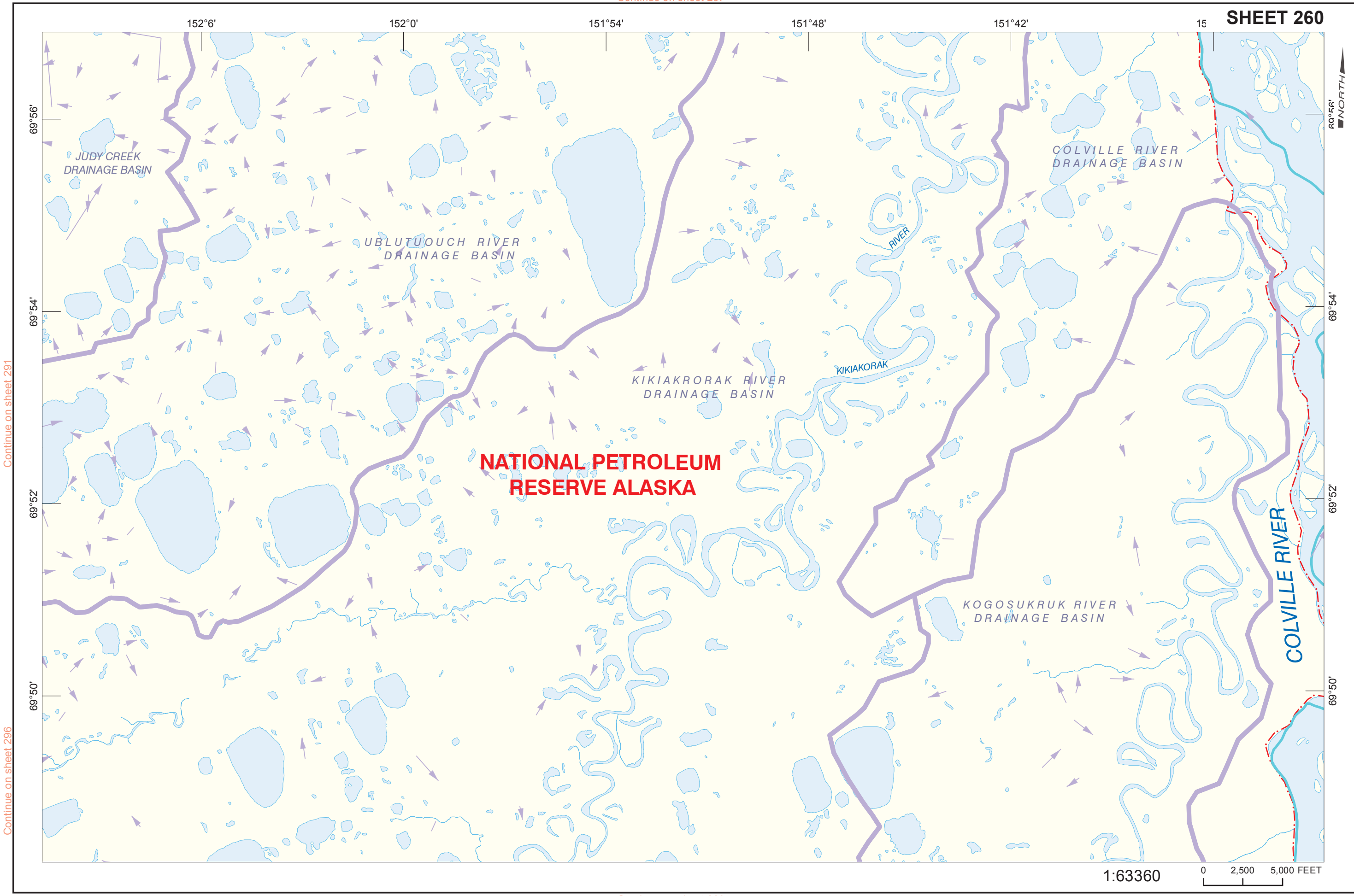
AIR ACCESS*

- Commercial and air freight services are available at Nuiqsut airport (Sheet 24), located approximately 31 miles north-east from the center of this map. The unattended runway is 4,300 ft. gravel. Its condition is not monitored, thus visual inspection prior to use is recommended.
- An irregularly attended, 5,000 ft. gravel private airstrip is located at Inigok Test 1 (Sheet 171), approximately 31 miles west-northwest from the center of this map. Runway condition unknown.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.
- Main channel of the Colville River generally maintains a 3-ft water depth and is usually navigable 70 miles upriver to the rapids below the mouth of the Anaktuvuk River.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.



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Continue on sheet 296

Continue on sheet 261



PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

GENERAL SENSITIVITIES

- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- The cliffs along the Colville River provide critical nesting site and food hunting areas for peregrine falcons, gyrfalcons, golden eagles and rough-legged hawks.
- Muskoxen may be found throughout the year along major river drainages west of the ANWR to the Colville River.
- Polar bear dens may be present where topographical features provide adequate snow cover.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats.
- The Colville River is a migratory pathway for char, cisco, and whitefish.
- The Itkillik River provides habitat for fish.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



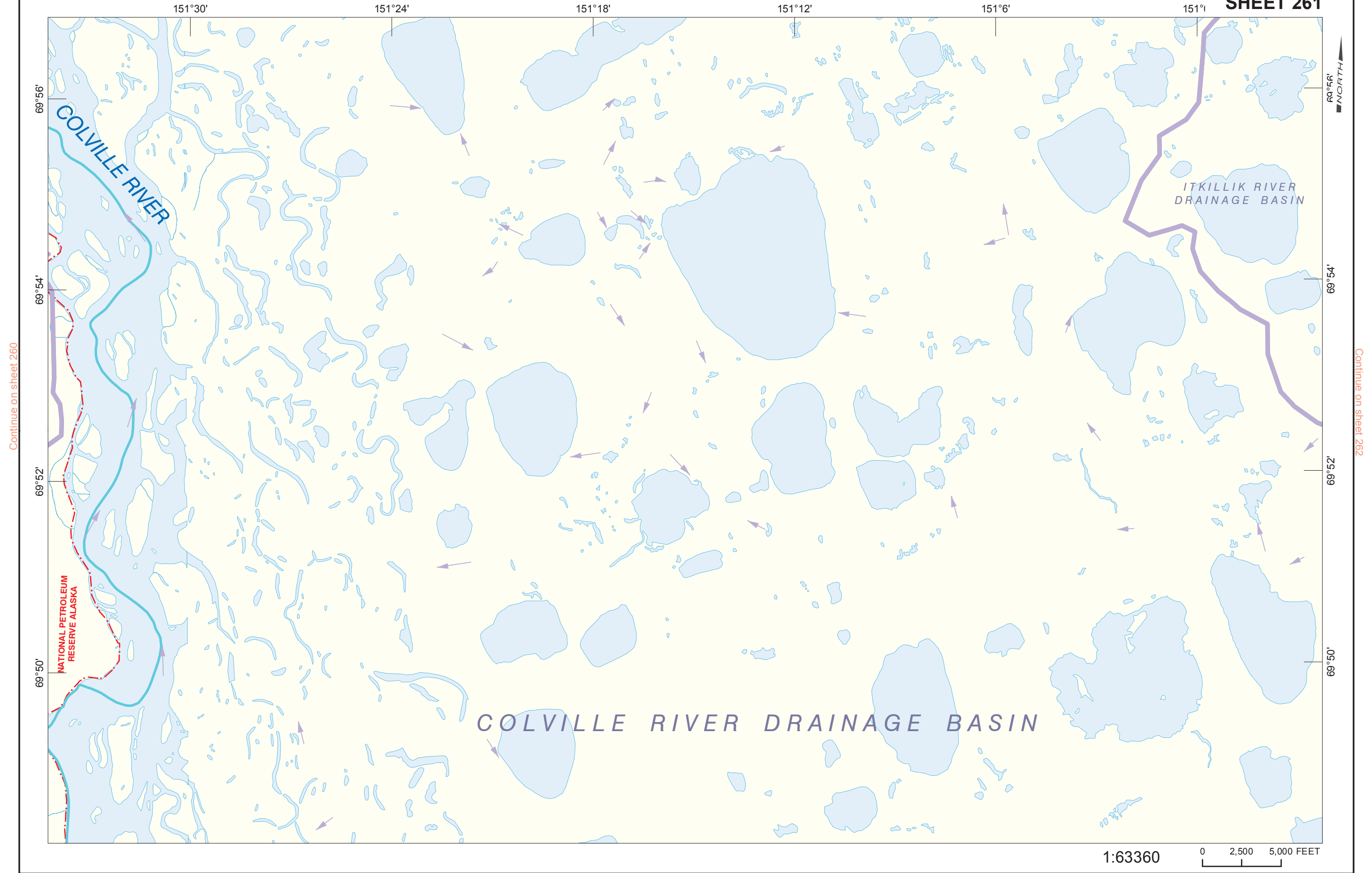
AIR ACCESS*

- Commercial and air freight services are available at Nuiqsut airport (Sheet 24), located approximately 24 miles north-northeast from the center of this map. The unattended runway is 4,300 ft. gravel. Its condition is not monitored, thus visual inspection prior to use is recommended.
- An irregularly attended, 5,000 ft. gravel private airstrip is located at Inigok Test 1 (Sheet 171), approximately 45 miles west-northwest from the center of this map. Runway condition unknown.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.
- Main channel of the Colville River generally maintains a 3-ft water depth and is usually navigable 70 miles upriver to the rapids below the mouth of the Anaktuvuk River.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.





PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

GENERAL SENSITIVITIES

- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- Muskoxen may be found throughout the year along major river drainages west of the ANWR to the Colville River.
- Polar bear dens may be present where topographical features provide adequate snow cover.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats.
- The Itkillik River provides habitat for fish.
- Anadromous and resident fish present in the Kuparuk River and most side tributaries.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- Commercial and air freight services are available at Nuiqsut airport (Sheet 24), located approximately 25 miles north-northwest from the center of this map. The unattended runway is 4,300 ft. gravel. Its condition is not monitored, thus visual inspection prior to use is recommended.
- Ugnu-Kuparuk (Sheet 51) is a continuously attended, 6,551x150 ft. asphalt private airstrip serving the Kuparuk facilities. It is located approximately 40 miles northeast from the center of this map.

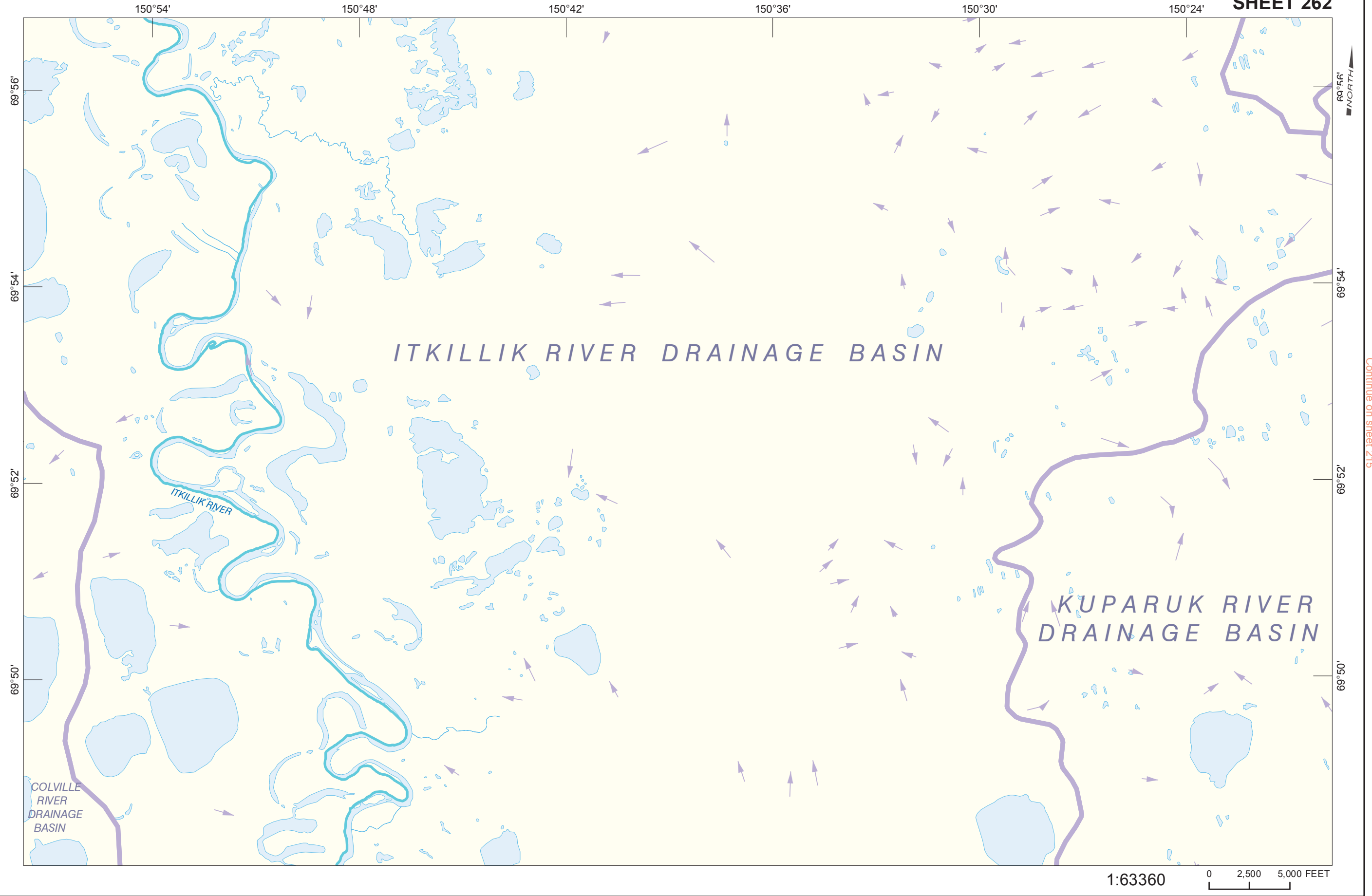
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 261

Continue on sheet 215





PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

GENERAL SENSITIVITIES

- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- The cliffs along the Colville River provide critical nesting site and food hunting areas for peregrine falcons, gyrfalcons, golden eagles and rough-legged hawks.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats.
- The Colville River is a migratory pathway for char, cisco, and whitefish.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- An unattended, 5,400 ft. gravel airstrip serving the village of Umiat (Sheet 275) is located approximately 26 miles south-southwest from the center of this map. Visual inspection recommended prior to use. No winter maintenance or snow removal.
- Commercial and air freight services are available at Nuiqsut airport (Sheet 24), located approximately 38 miles north-east from the center of this map. The unattended runway is 4,300 ft. gravel. Its condition is not monitored, thus visual inspection prior to use is recommended.
- An irregularly attended, 5,000 ft. gravel private airstrip is located at Inigok Test 1 (Sheet 171), approximately 34 miles northwest from the center of this map. Runway condition unknown.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

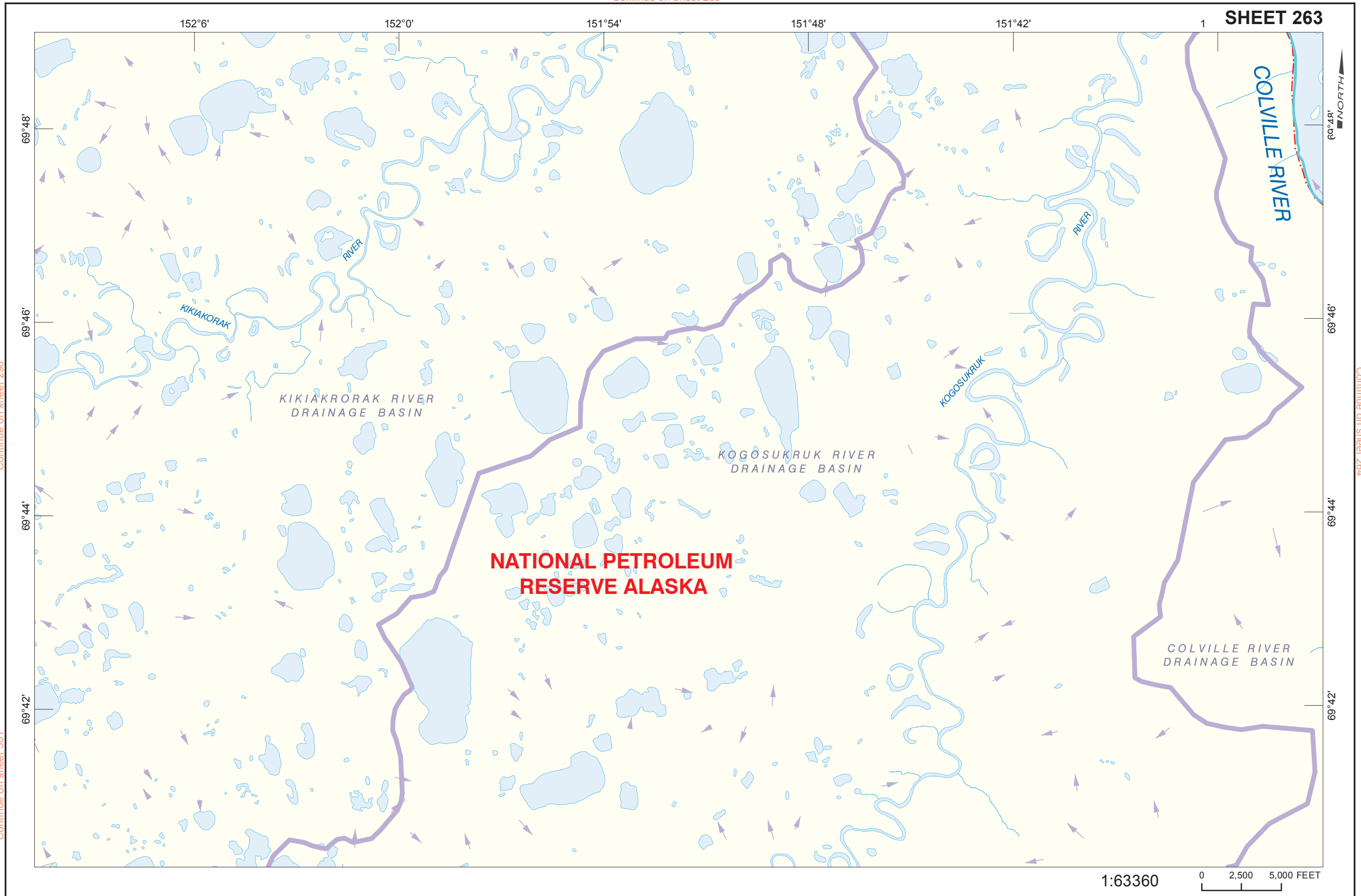
- There are no marine waters or shorelines on this map.
- Main channel of the Colville River generally maintains a 3-ft water depth and is usually navigable 70 miles upriver to the rapids below the mouth of the Anaktuvuk River.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 296

Continue on sheet 264

Continue on sheet 301





PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

GENERAL SENSITIVITIES

- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- The cliffs along the Colville River provide critical nesting site and food hunting areas for peregrine falcons, gyrfalcons, golden eagles and rough-legged hawks.
- Muskoxen may be found throughout the year along major river drainages west of the ANWR to the Colville River.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats.
- The Colville River is a migratory pathway for char, cisco, and whitefish.
- The Itkillik River provides habitat for fish.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- Commercial and air freight services are available at Nuiqsut airport (Sheet 24), located approximately 32 miles north-northeast from the center of this map. The unattended runway is 4,300 ft. gravel. Its condition is not monitored, thus visual inspection prior to use is recommended.
- An unattended, 5,400 ft. gravel airstrip serving the village of Umiat (Sheet 275) is located approximately 33 miles southwest from the center of this map. Visual inspection recommended prior to use. No winter maintenance or snow removal.
- An irregularly attended, 5,000 ft. gravel private airstrip is located at Inigok Test 1 (Sheet 171), approximately 48 miles northwest from the center of this map. Runway condition unknown.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.
- Main channel of the Colville River generally maintains a 3-ft water depth and is usually navigable 70 miles upriver to the rapids below the mouth of the Anaktuvuk River.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 263

Continue on sheet 265



1:63360

0 2,500 5,000 FEET



PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

GENERAL SENSITIVITIES

- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- Muskoxen may be found throughout the year along major river drainages west of the ANWR to the Colville River.
- Caribou present in winter.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats.
- The Itkillik River provides habitat for fish.
- Anadromous and resident fish present in the Kuparuk River and most side tributaries.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- Commercial and air freight services are available at Nuiqsut airport (Sheet 24), located approximately 33 miles north-northwest from the center of this map. The unattended runway is 4,300 ft. gravel. Its condition is not monitored, thus visual inspection prior to use is recommended.
- An unattended, 5,400 ft. gravel airstrip serving the village of Umiat (Sheet 275) is located approximately 44 miles southwest from the center of this map. Visual inspection recommended prior to use. No winter maintenance or snow removal.
- Ugnu-Kuparuk (Sheet 51) is a continuously attended, 6,551x150 ft. asphalt private airstrip serving the Kuparuk facilities. It is located approximately 47 miles northeast from the center of this map.

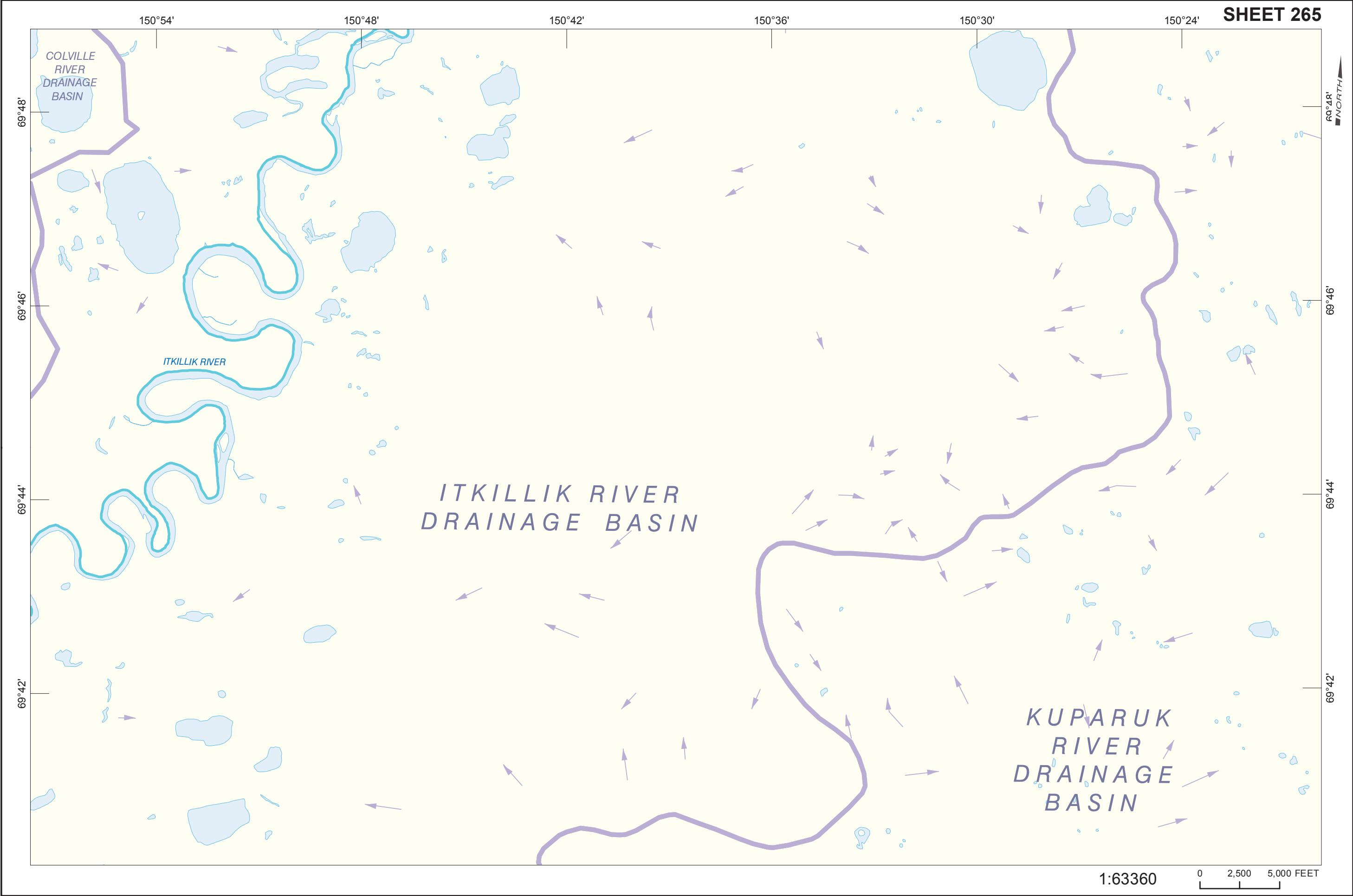
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 264

Continue on sheet 217





PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

GENERAL SENSITIVITIES

- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- The cliffs along the Colville River provide critical nesting site and food hunting areas for peregrine falcons, gyrfalcons, golden eagles and rough-legged hawks.
- Caribou present in winter.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats.
- The Colville River is a migratory pathway for char, cisco, and whitefish.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



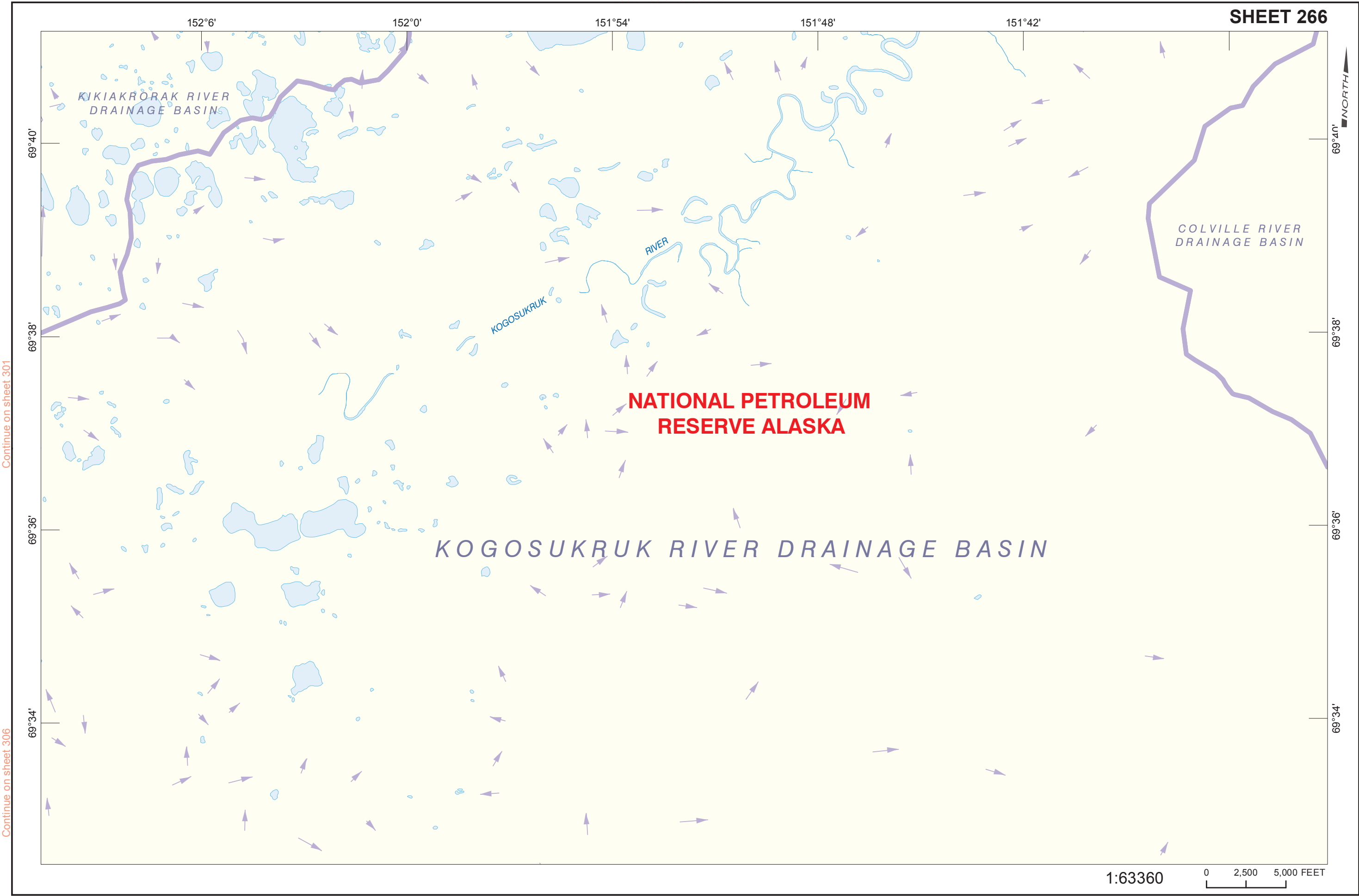
AIR ACCESS*

- An unattended, 5,400 ft. gravel airstrip serving the village of Umiat (Sheet 275) is located approximately 18 miles south-southwest from the center of this map. Visual inspection recommended prior to use. No winter maintenance or snow removal.
- An irregularly attended, 5,000 ft. gravel private airstrip is located at Inigok Test 1 (Sheet 171), approximately 40 miles northwest from the center of this map. Runway condition unknown.
- Commercial and air freight services are available at Nuiqsut airport (Sheet 24), located approximately 46 miles north-northeast from the center of this map. The unattended runway is 4,300 ft. gravel. Its condition is not monitored, thus visual inspection prior to use is recommended.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.





PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

GENERAL SENSITIVITIES

- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- The cliffs along the Colville River provide critical nesting site and food hunting areas for peregrine falcons, gyrfalcons, golden eagles and rough-legged hawks.
- Muskoxen may be found throughout the year along major river drainages west of the ANWR to the Colville River.
- Caribou present in winter.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats.
- The Itkillik River provides habitat for fish.
- The Colville River is a migratory pathway for char, cisco, and whitefish.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



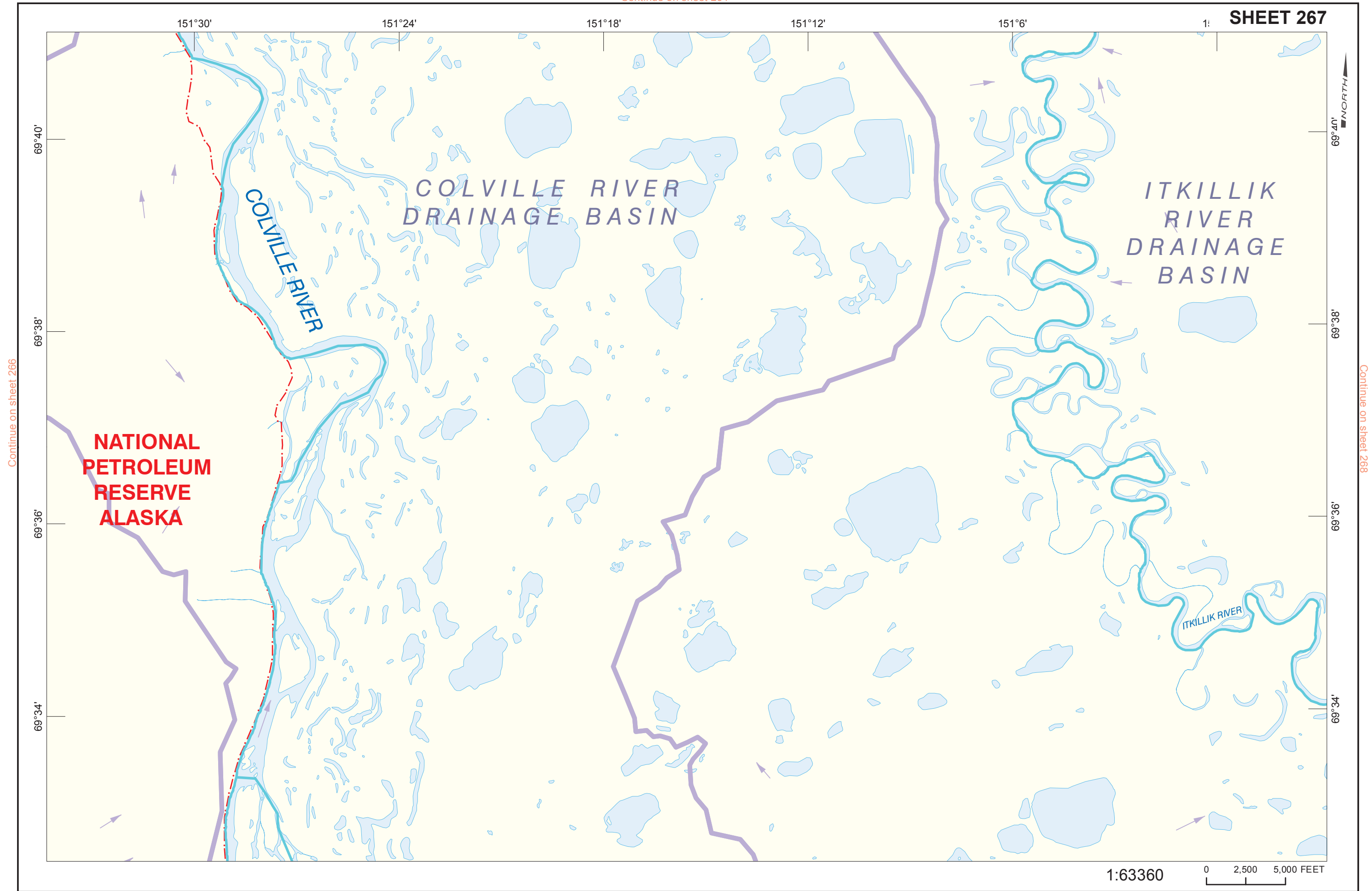
AIR ACCESS*

- An unattended, 5,400 ft. gravel airstrip serving the village of Umiat (Sheet 275) is located approximately 27 miles southwest from the center of this map. Visual inspection recommended prior to use. No winter maintenance or snow removal.
- Commercial and air freight services are available at Nuiqsut airport (Sheet 24), located approximately 41 miles north from the center of this map. The unattended runway is 4,300 ft. gravel. Its condition is not monitored, thus visual inspection prior to use is recommended.
- An irregularly attended, 5,000 ft. gravel private airstrip is located at Inigok Test 1 (Sheet 171), approximately 52 miles northwest from the center of this map. Runway condition unknown.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.
- Main channel of the Colville River generally maintains a 3-ft water depth and is usually navigable 70 miles upriver to the rapids below the mouth of the Anaktuvuk River.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.





PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

GENERAL SENSITIVITIES

- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- Muskoxen may be found throughout the year along major river drainages west of the ANWR to the Colville River.
- Caribou present in winter.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats.
- The Itkillik River provides habitat for fish.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- An unattended, 5,400 ft. gravel airstrip serving the village of Umiat (Sheet 275) is located approximately 40 miles southwest from the center of this map. Visual inspection recommended prior to use. No winter maintenance or snow removal.
- Commercial and air freight services are available at Nuiqsut airport (Sheet 24), located approximately 42 miles north-northwest from the center of this map. The unattended runway is 4,300 ft. gravel. Its condition is not monitored, thus visual inspection prior to use is recommended.
- Ugnu-Kuparuk (Sheet 51) is a continuously attended, 6,551x150 ft. asphalt private airstrip serving the Kuparuk facilities. It is located approximately 55 miles north-northeast from the center of this map.

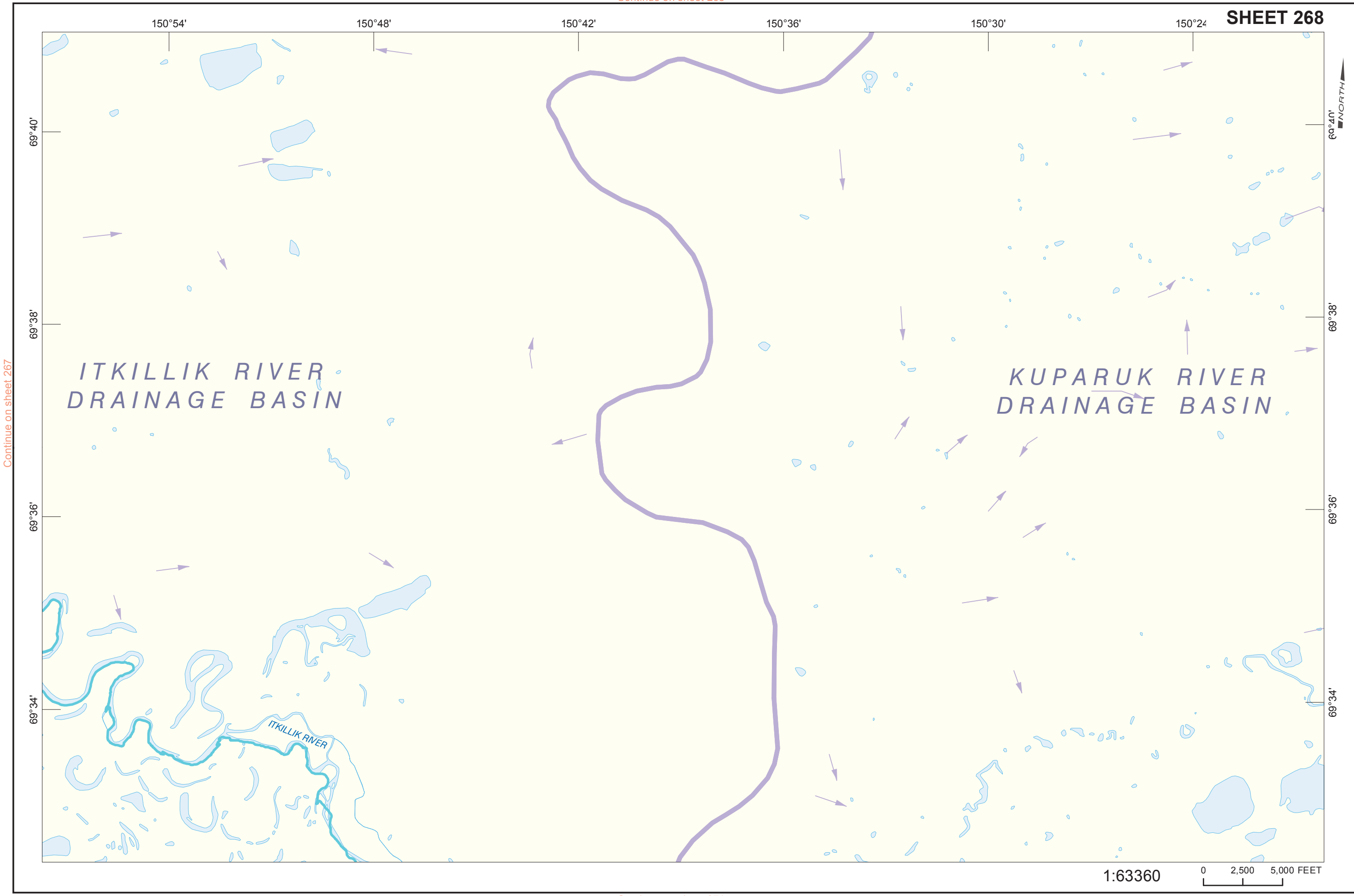
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 267

Continue on sheet 220





PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

GENERAL SENSITIVITIES

- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- The cliffs along the Colville River provide critical nesting site and food hunting areas for peregrine falcons, gyrfalcons, golden eagles and rough-legged hawks.
- Caribou present in winter.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats.
- The Colville River is a migratory pathway for char, cisco, and whitefish.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- An unattended, 5,400 ft. gravel airstrip serving the village of Umiat (Sheet 275) is located approximately 10 miles southwest from the center of this map. Visual inspection recommended prior to use. No winter maintenance or snow removal.
- An irregularly attended, 5,000 ft. gravel private airstrip is located at Inigok Test 1 (Sheet 171), approximately 46 miles northwest from the center of this map. Runway condition unknown.
- Commercial and air freight services are available at Nuiqsut airport (Sheet 24), located approximately 53 miles north-northeast from the center of this map. The unattended runway is 4,300 ft. gravel. Its condition is not monitored, thus visual inspection prior to use is recommended.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 266

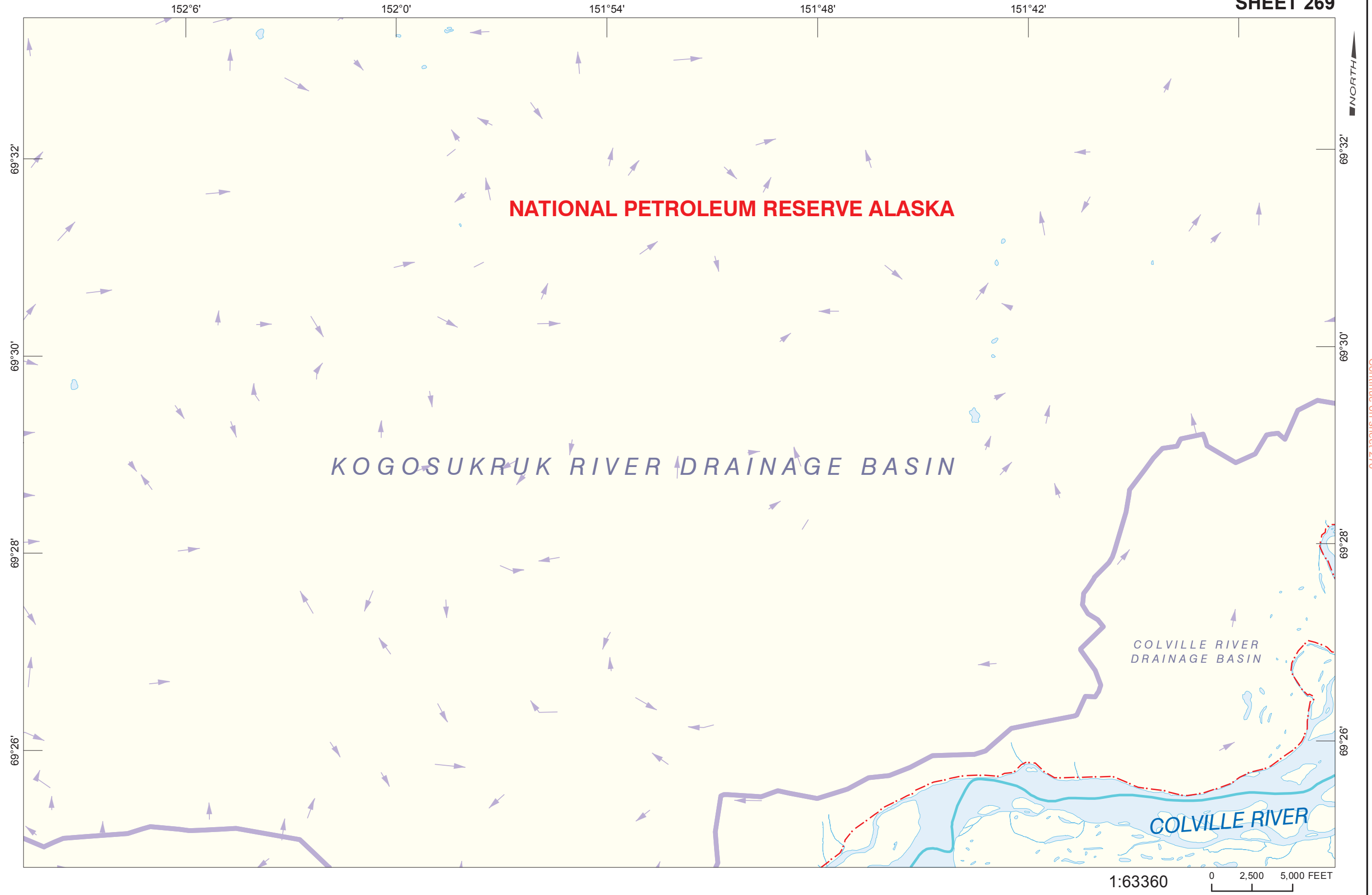
SHEET 269

Continue on sheet 306

Continue on sheet 311

Continue on sheet 270

Continue on sheet 275





PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

GENERAL SENSITIVITIES

- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- The cliffs along the Colville River provide critical nesting site and food hunting areas for peregrine falcons, gyrfalcons, golden eagles and rough-legged hawks.
- Muskoxen may be found throughout the year along major river drainages west of the ANWR to the Colville River.
- Caribou present in winter.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats.
- The Colville River is a migratory pathway for char, cisco, and whitefish.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- An unattended, 5,400 ft. gravel airstrip serving the village of Umiat (Sheet 275) is located approximately 23 miles southwest from the center of this map. Visual inspection recommended prior to use. No winter maintenance or snow removal.
- Commercial and air freight services are available at Nuiqsut airport (Sheet 24), located approximately 50 miles north from the center of this map. The unattended runway is 4,300 ft. gravel. Its condition is not monitored, thus visual inspection prior to use is recommended.
- An irregularly attended, 5,000 ft. gravel private airstrip is located at Inigok Test 1 (Sheet 171), approximately 57 miles northwest from the center of this map. Runway condition unknown.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.
- Main channel of the Colville River generally maintains a 3-ft water depth and is usually navigable 70 miles upriver to the rapids below the mouth of the Anaktuvuk River.

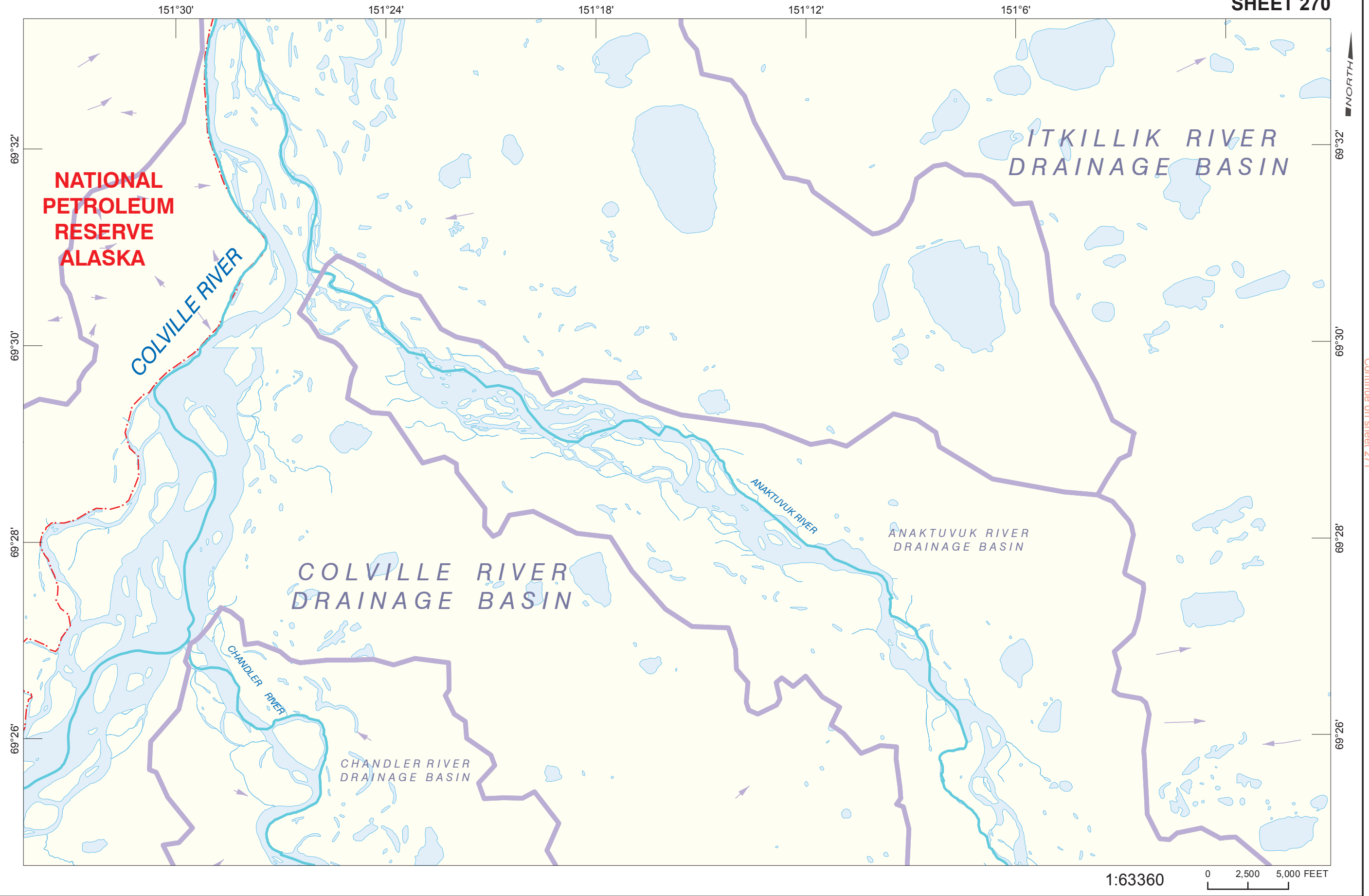
*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

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SHEET 270

Continue on sheet 269

Continue on sheet 271




Continue on sheet 276




PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.



GENERAL SENSITIVITIES


- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- Muskoxen may be found throughout the year along major river drainages west of the ANWR to the Colville River.
- Caribou present in winter.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats.
- The Itkillik River provides habitat for fish.



CULTURAL SITES


The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.




AIR ACCESS*

- An unattended, 5,400 ft. gravel airstrip serving the village of Umiat (Sheet 275) is located approximately 37 miles west-southwest from the center of this map. Visual inspection recommended prior to use. No winter maintenance or snow removal.
- Commercial and air freight services are available at Nuiqsut airport (Sheet 24), located approximately 50 miles north-northwest from the center of this map. The unattended runway is 4,300 ft. gravel. Its condition is not monitored, thus visual inspection prior to use is recommended.
- Ugnu-Kuparuk (Sheet 51) is a continuously attended, 6,551x150 ft. asphalt private airstrip serving the Kuparuk facilities. It is located approximately 63 miles north-northeast from the center of this map.



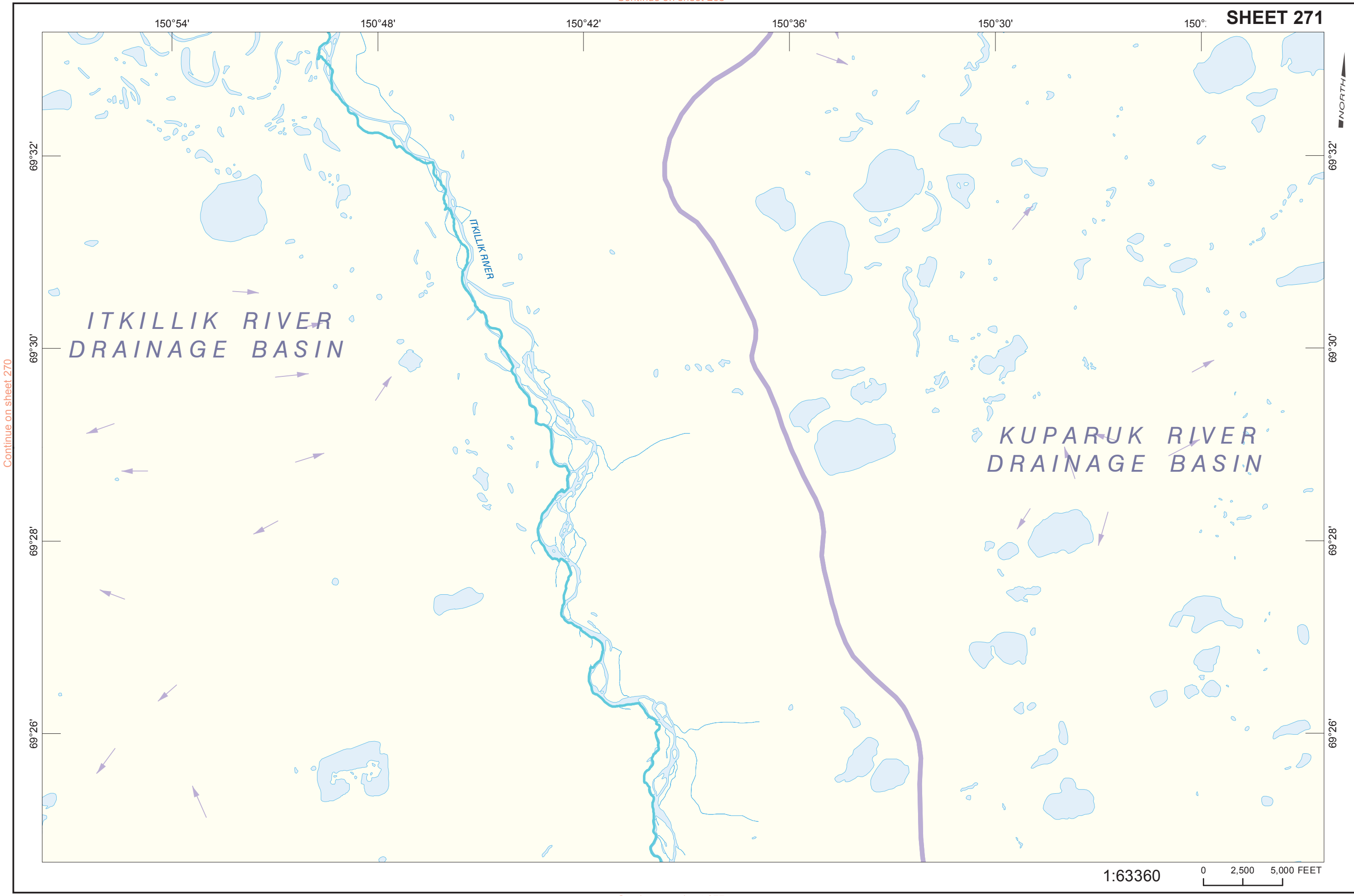
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.




*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

NOTE: All values given on these pages are for planning purposes only.




Continue on sheet 270

Continue on sheet 272




PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.



GENERAL SENSITIVITIES


- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- Muskoxen may be found throughout the year along major river drainages west of the ANWR to the Colville River.
- Caribou present in the winter.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats.
- Anadromous and resident fish present in the Kuparuk River and most side tributaries.



CULTURAL SITES


The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- An unattended, 5,400 ft. gravel airstrip serving the village of Umiat (Sheet 275) is located approximately 52 miles west-southwest from the center of this map. Visual inspection recommended prior to use. No winter maintenance or snow removal.
- Commercial and air freight services are available at Nuiqsut airport (Sheet 24), located approximately 55 miles north-northwest from the center of this map. The unattended runway is 4,300 ft. gravel. Its condition is not monitored, thus visual inspection prior to use is recommended.
- Commercial and air freight services are available at Deadhorse airport (Sheet 81), located approximately 61 miles north-northeast from the center of this map. Runway is 6,500 ft. asphalt.

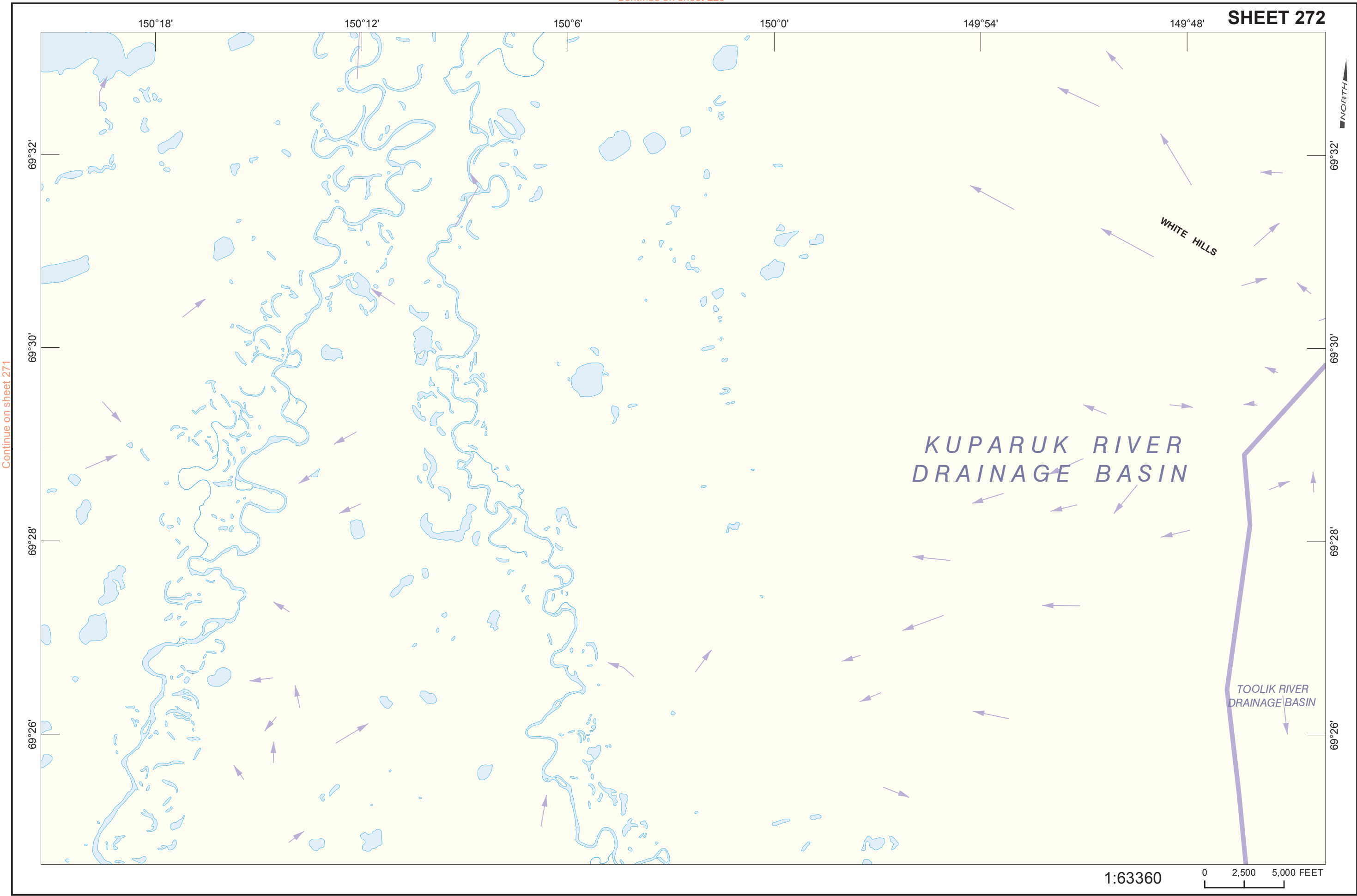



VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

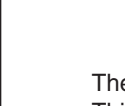
NOTE: All values given on these pages are for planning purposes only.






PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.



GENERAL SENSITIVITIES


- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- Caribou present in the winter.
- Grizzly bear dens may be present in pingos and other bluff and relieve habitats.
- Anadromous and resident fish present in the Toolik and Kuparuk Rivers and most side tributaries.



CULTURAL SITES


The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

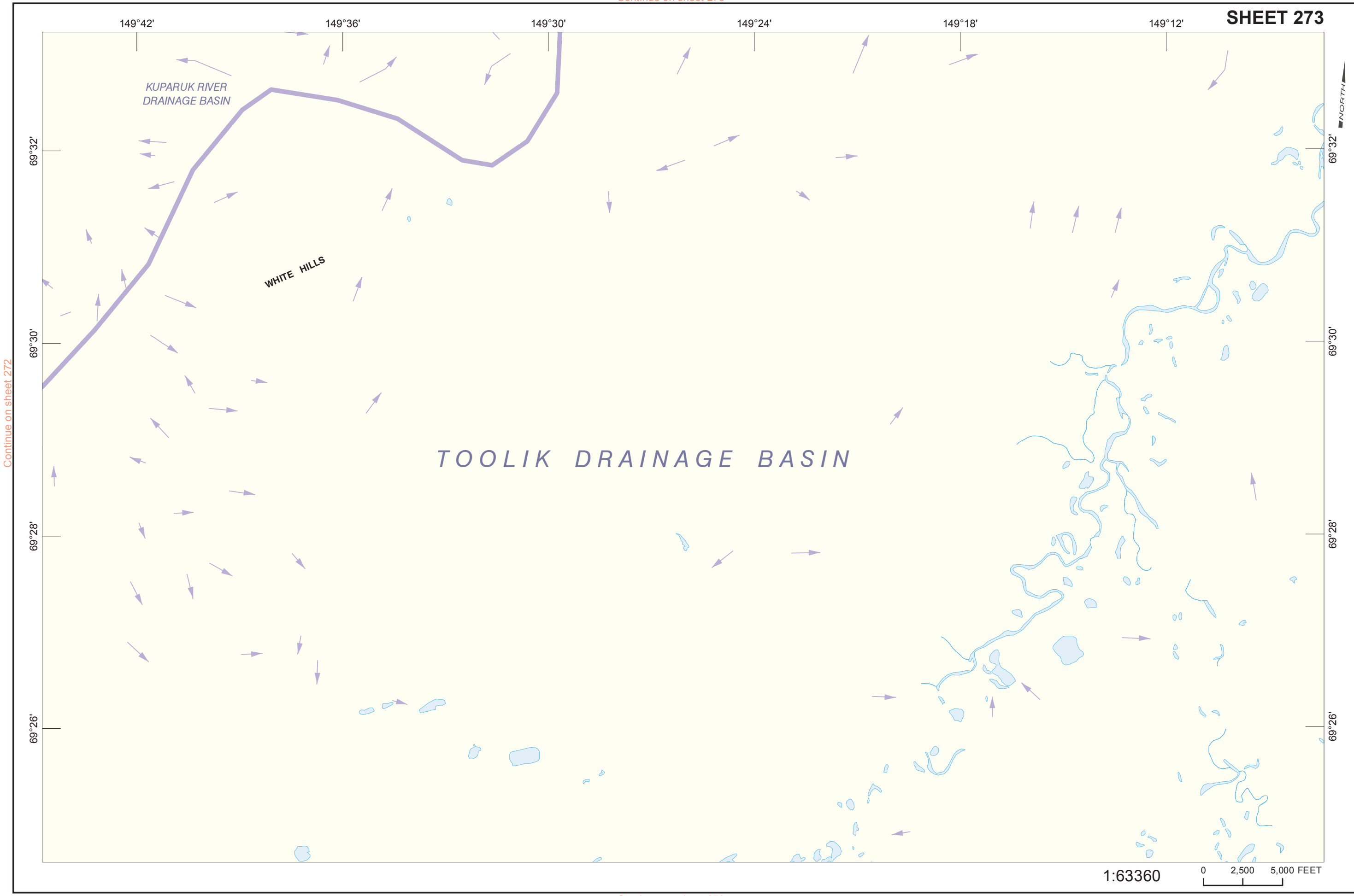
- Commercial and air freight services are available at Deadhorse airport (Sheet 81), located approximately 54 miles north-northeast from the center of this map. Runway is 6,500 ft. asphalt.
- Commercial and air freight services are available at Nuiqsut airport (Sheet 24), located approximately 63 miles north-west from the center of this map. The unattended runway is 4,300 ft. gravel. Its condition is not monitored, thus visual inspection prior to use is recommended.



VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS


- There are no marine waters or shorelines on this map.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.




Continue on sheet 272

Continue on sheet 274




PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.



GENERAL SENSITIVITIES


- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- Muskoxen may be found throughout the year along major river drainages west of the ANWR to the Colville River.
- Caribou present in the winter.
- Grizzly bear dens may be present in pingos and other bluff and relieve habitats.
- Anadromous and resident fish present in the Toolik and Sagavanirktok Rivers and most side tributaries.
- Peregrine Falcons may be present in area adjacent to the Sagavanirktok River.



CULTURAL SITES


The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.




AIR ACCESS*

- Commercial and air freight services are available at Deadhorse airport (Sheet 81), located approximately 50 miles north from the center of this map. Runway is 6,500 ft. asphalt.



VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

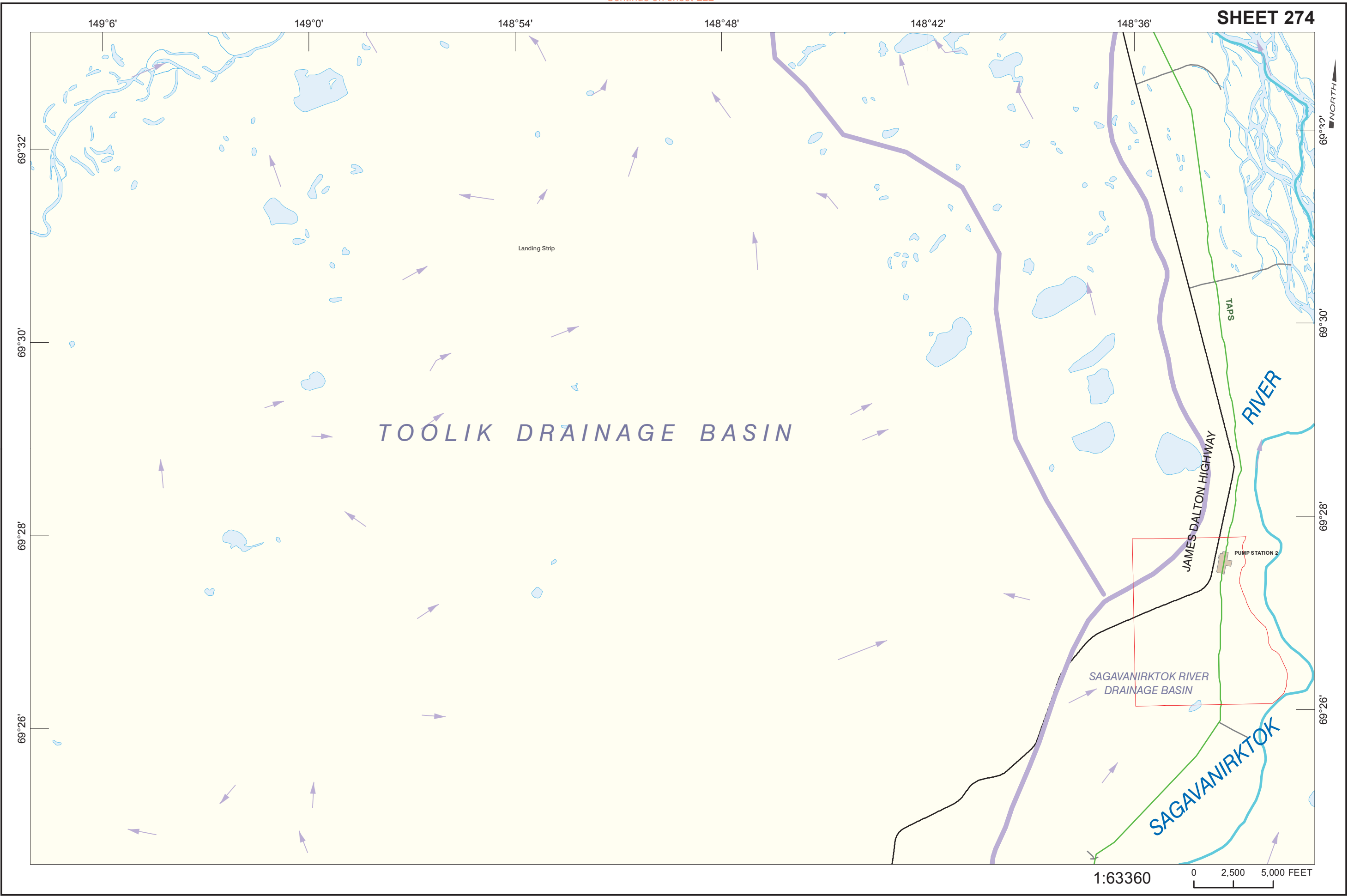
- There are no marine waters or shorelines on this map.



*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

NOTE: All values given on these pages are for planning purposes only.

Continue on sheet 273



1:63360

0 2,500 5,000 FEET



PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

GENERAL SENSITIVITIES

- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- The cliffs along the Colville River provide critical nesting site and food hunting areas for peregrine falcons, gyrfalcons, golden eagles and rough-legged hawks.
- Muskoxen may be found throughout the year along major river drainages west of the ANWR to the Colville River.
- Caribou present in winter.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



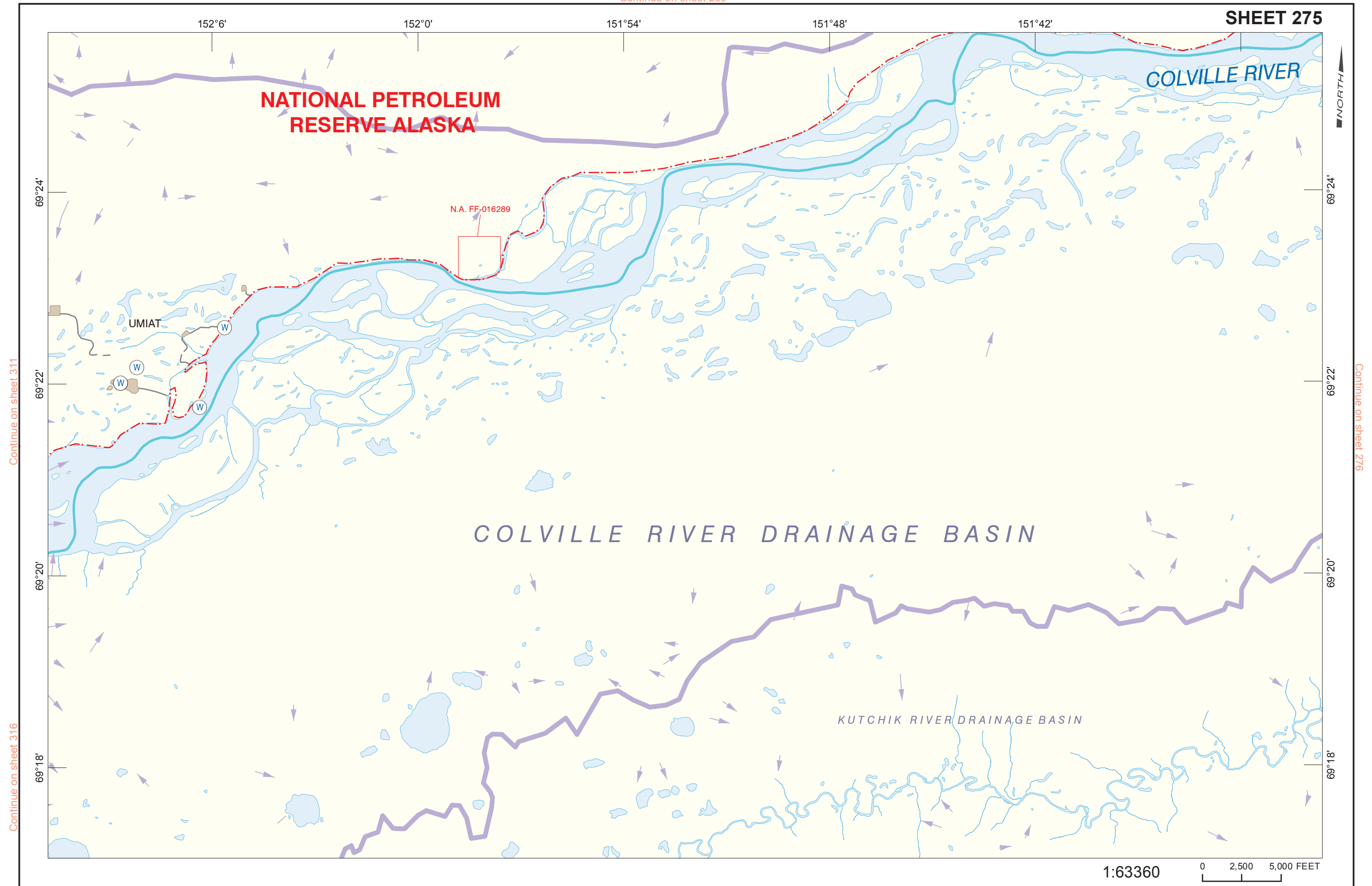
AIR ACCESS*


- An unattended, 5,400 ft. gravel airstrip serves the village of Umiat (Sheet 275). Visual inspection recommended prior to use. No winter maintenance or snow removal.
- Commercial and air freight services are available at Nuiqsut airport (Sheet 24), located approximately 62 miles north-northeast from the center of this map. The unattended runway is 4,300 ft. gravel. Its condition is not monitored, thus visual inspection prior to use is recommended.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.


*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.






PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.



GENERAL SENSITIVITIES

- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- The cliffs along the Colville River provide critical nesting site and food hunting areas for peregrine falcons, gyrfalcons, golden eagles and rough-legged hawks.
- Muskoxen may be found throughout the year along major river drainages west of the ANWR to the Colville River.
- Caribou present in winter.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats.
- The Colville River is a migratory pathway for char, cisco, and whitefish.



CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- An unattended, 5,400 ft. gravel airstrip serving the village of Umiat (Sheet 275) is located approximately 22 miles west from the center of this map. Visual inspection recommended prior to use. No winter maintenance or snow removal.
- Commercial and air freight services are available at Nuiqsut airport (Sheet 24), located approximately 59 miles north from the center of this map. The unattended runway is 4,300 ft. gravel. Its condition is not monitored, thus visual inspection prior to use is recommended.



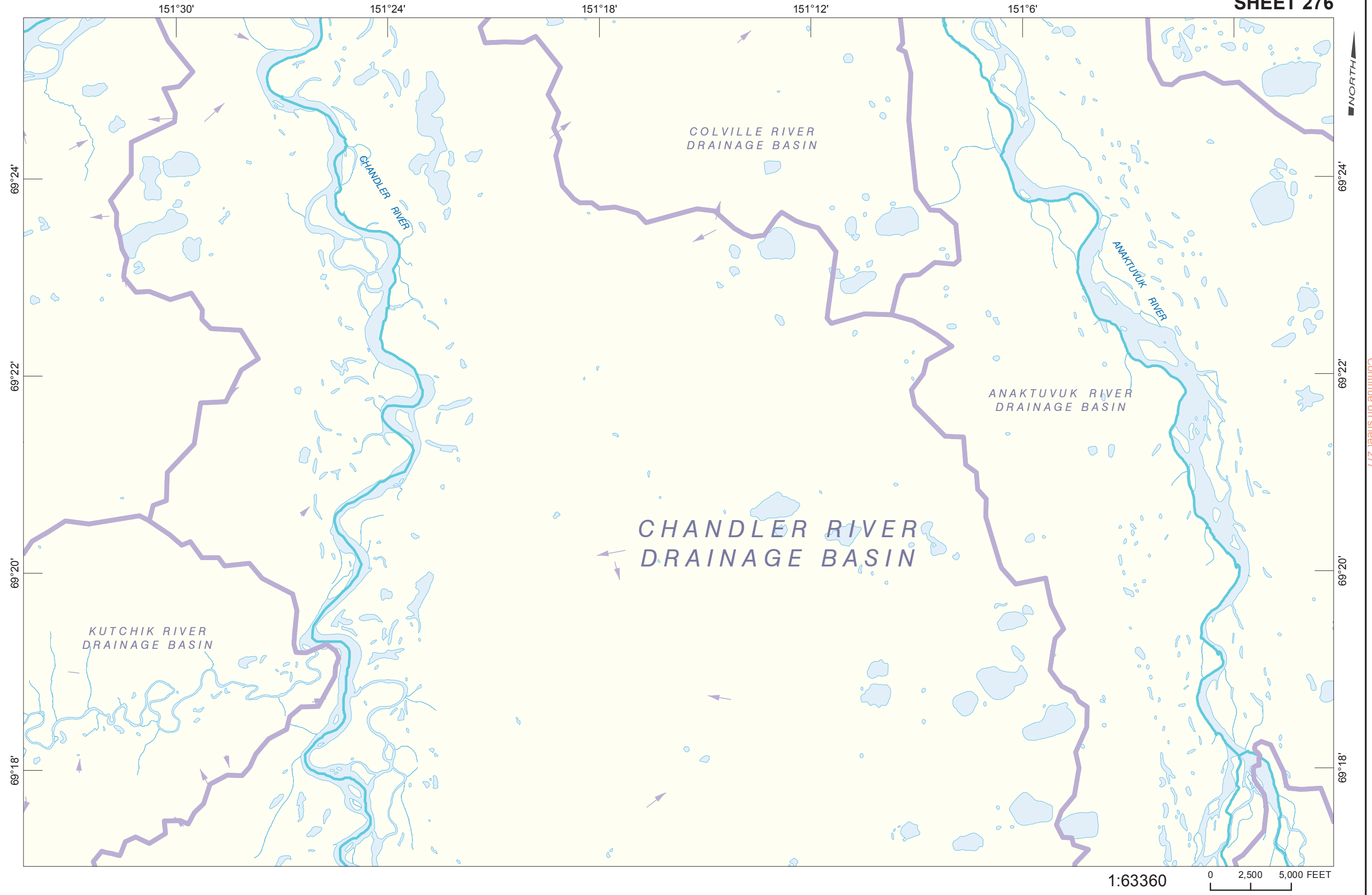
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS


- There are no marine waters or shorelines on this map.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 275


Continue on sheet 277






PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.



GENERAL SENSITIVITIES


- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- Muskoxen may be found throughout the year along major river drainages west of the ANWR to the Colville River.
- Caribou present in winter.
- Grizzly bear dens may be present in pingos and other bluff and relieve habitats.
- The Itkillik River provides habitat for fish.



CULTURAL SITES


The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.




AIR ACCESS*

- An unattended, 5,400 ft. gravel airstrip serving the village of Umiat (Sheet 275) is located approximately 37 miles west from the center of this map. Visual inspection recommended prior to use. No winter maintenance or snow removal.
- Commercial and air freight services are available at Nuiqsut airport (Sheet 24), located approximately 64 miles north from the center of this map. The unattended runway is 4,300 ft. gravel. Its condition is not monitored, thus visual inspection prior to use is recommended.



VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

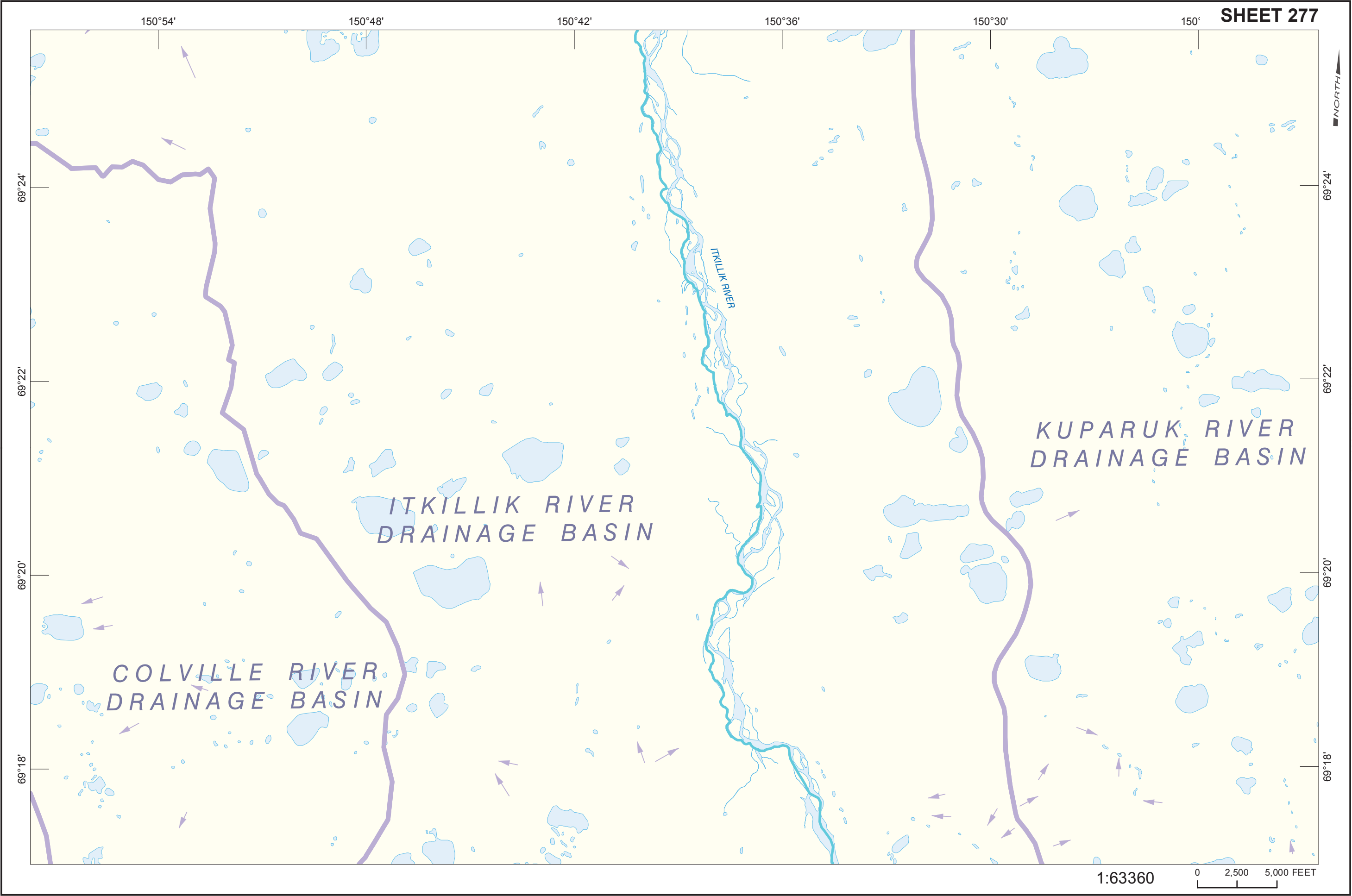


*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

NOTE: All values given on these pages are for planning purposes only.

Continue on sheet 276

Continue on sheet 278





PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

GENERAL SENSITIVITIES

- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- Muskoxen may be found throughout the year along major river drainages west of the ANWR to the Colville River.
- Caribou present in the winter.
- Grizzly bear dens may be present in pingos and other bluff and relieve habitats.
- Anadromous and resident fish present in the Toolik and Kuparuk Rivers and most side tributaries.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- An unattended, 5,400 ft. gravel airstrip serving the village of Umiat (Sheet 275) is located approximately 52 miles west from the center of this map. Visual inspection recommended prior to use. No winter maintenance or snow removal.
- Commercial and air freight services are available at Nuiqsut airport (Sheet 24), located approximately 64 miles north-northwest from the center of this map. The unattended runway is 4,300 ft. gravel. Its condition is not monitored, thus visual inspection prior to use is recommended.
- Commercial and air freight services are available at Deadhorse airport (Sheet 81), located approximately 69 miles northeast from the center of this map. Runway is 6,500 ft. asphalt.

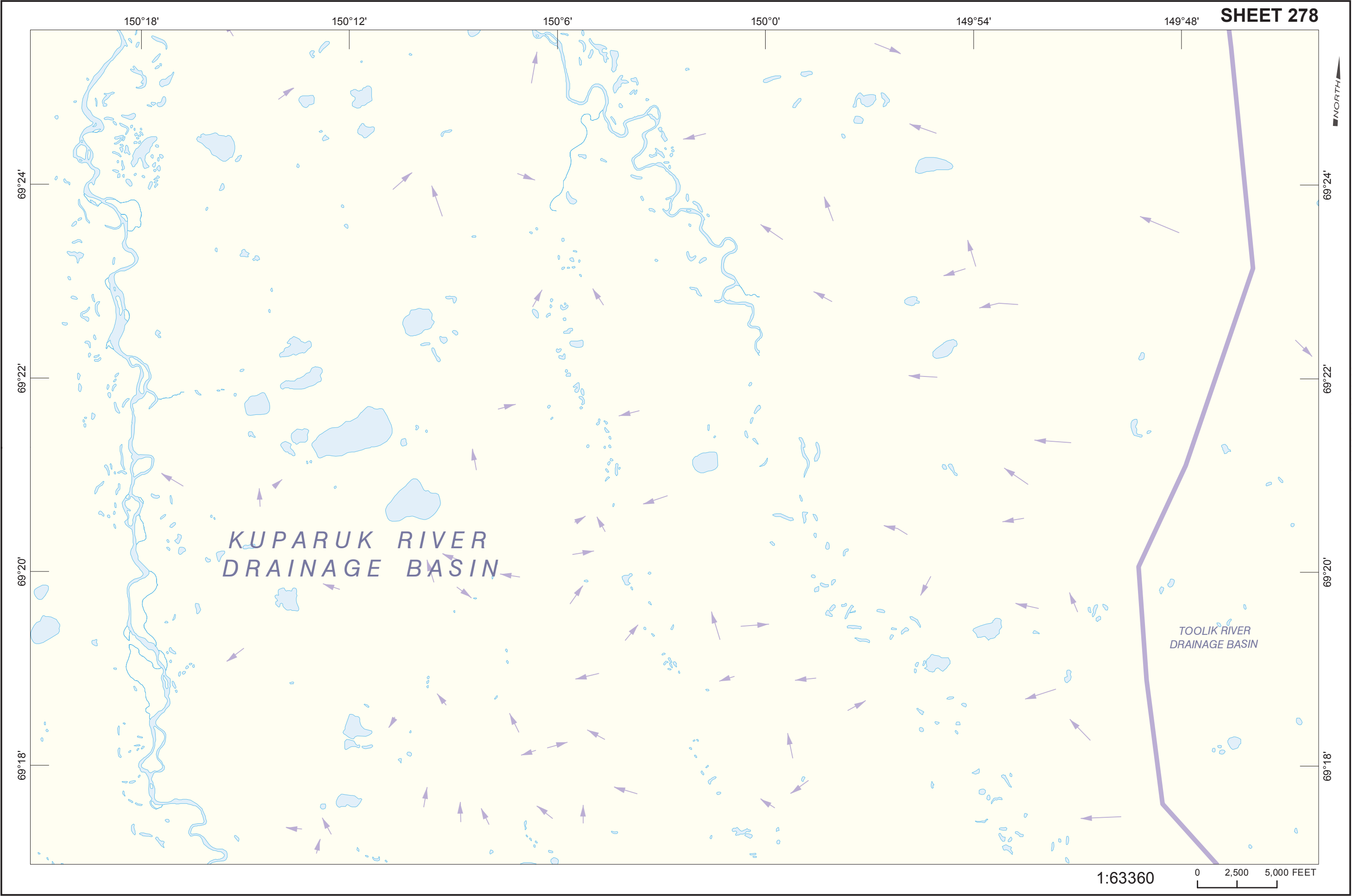
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 277

Continue on sheet 279





PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

GENERAL SENSITIVITIES

- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- Muskoxen may be found throughout the year along major river drainages west of the ANWR to the Colville River.
- Caribou present in the winter.
- Grizzly bear dens may be present in pingos and other bluff and relieve habitats.
- Anadromous and resident fish present in the Toolik Rivers and most side tributaries.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- Commercial and air freight services are available at Deadhorse airport (Sheet 81), located approximately 62 miles north-northeast from the center of this map. Runway is 6,500 ft. asphalt.

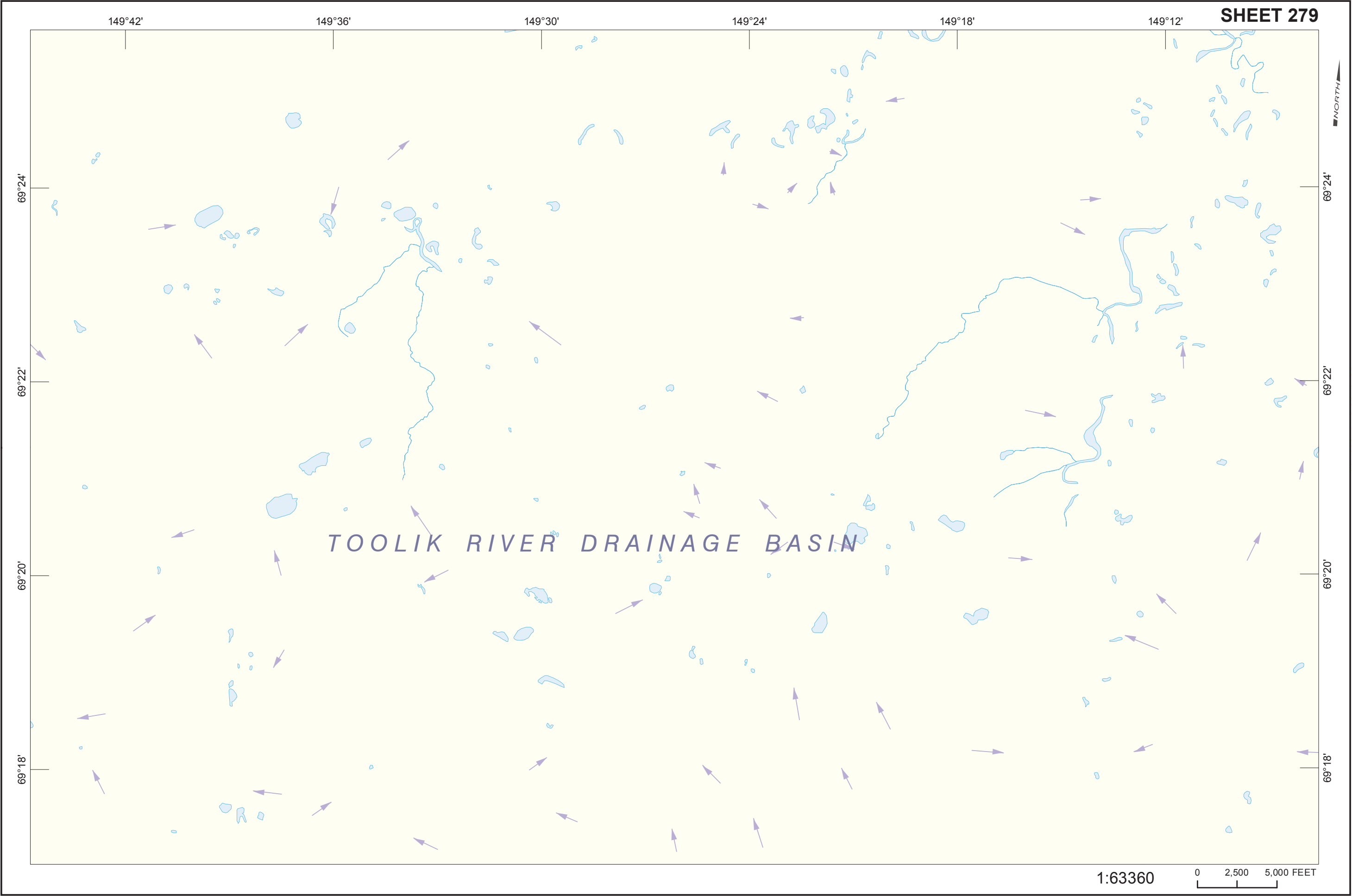
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS


- There are no marine waters or shorelines on this map.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 278


Continue on sheet 280






PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.



GENERAL SENSITIVITIES


- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- Muskoxen may be found throughout the year along major river drainages west of the ANWR to the Colville River.
- Caribou present in the winter.
- Grizzly bear dens may be present in pingos and other bluff and relieve habitats.
- Anadromous and resident fish present in the Toolik and Sagavanirktok Rivers and most side tributaries.



CULTURAL SITES


The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.




AIR ACCESS*

- Commercial and air freight services are available at Deadhorse airport (Sheet 81), located approximately 58 miles north from the center of this map. Runway is 6,500 ft. asphalt.
- An small, uncontrolled, unmaintained aircraft landing strip is reportedly located right of center of this map. Exact location, runway orientation, length, composition, and condition are unknown. No further information is available. Exercise extreme caution and perform visual inspection if considering for emergency use.



VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

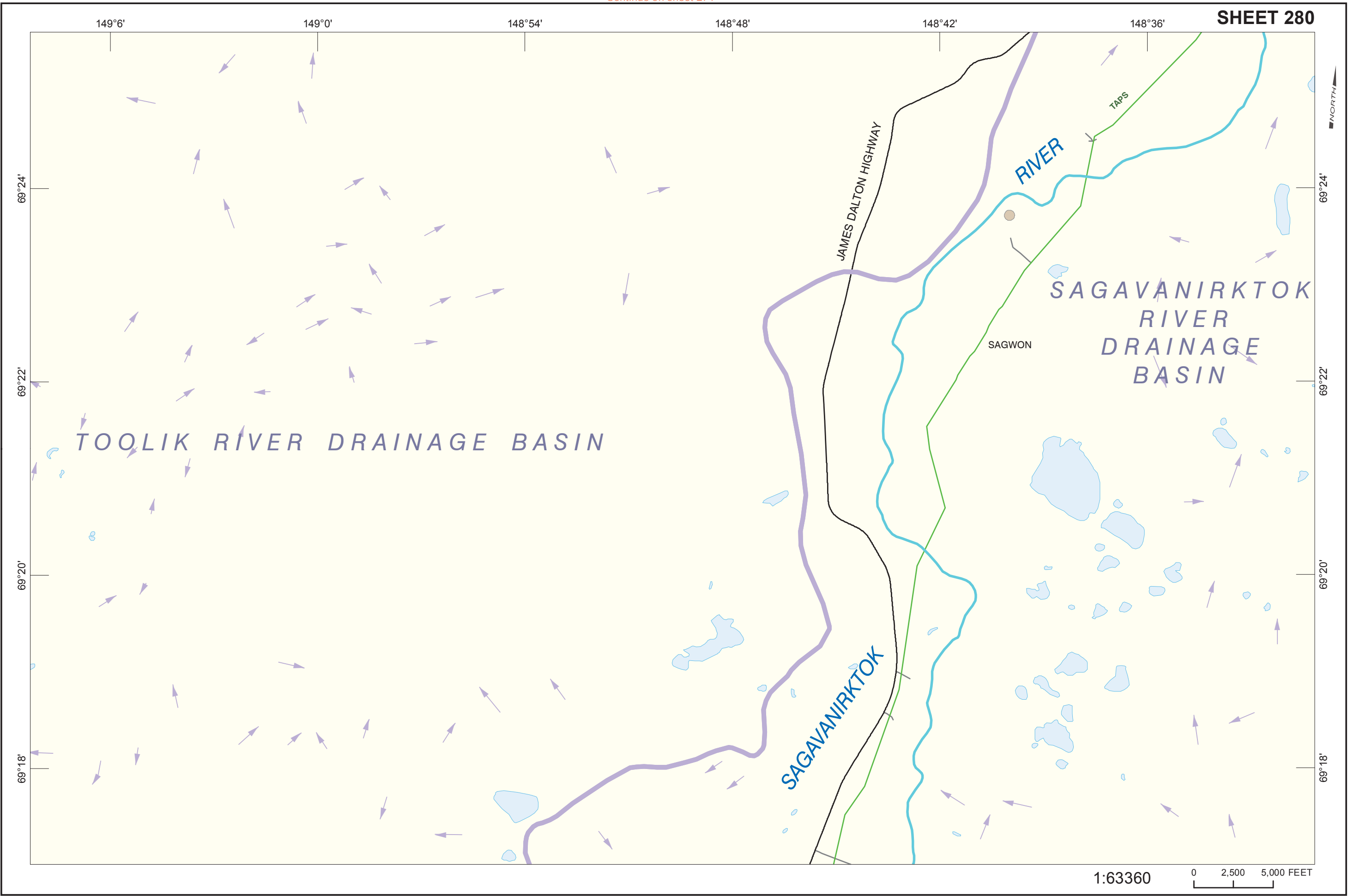
- There are no marine waters or shorelines on this map.



*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

NOTE: All values given on these pages are for planning purposes only.

Continue on sheet 279





PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS16B	Salt marsh 2 miles NW of Kuparuk River delta.	Most sensitive during open water season. Prevent oil from entering salt marsh. Inundated low-lying tundra shoreline.	C-13 or C-14	3500'

GENERAL SENSITIVITIES

- Coastal areas support concentrations of breeding, nesting, brood-rearing, and molting waterfowl, diving, shore and sea birds during the open water months (generally Apr and Oct). Expect to deploy bird hazing systems.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- This is a Brant nesting, brood-rearing, and molting area. Birds are present from May through August.
- Pairs of Spectacled Eiders have been found in this area.
- The Sakonowyak River provides habitat for anadromous whitefish.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



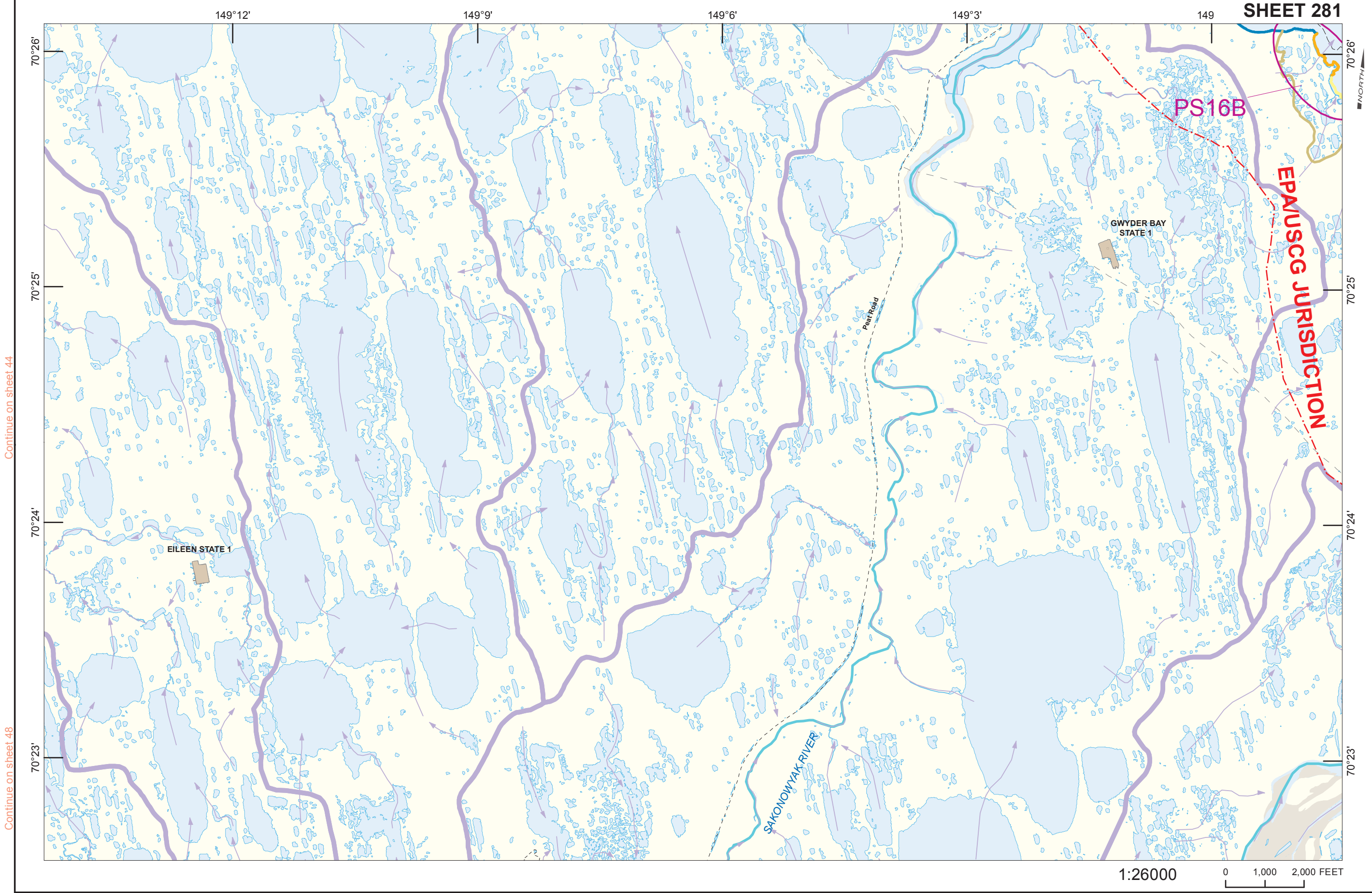
AIR ACCESS*

- An unattended and unmaintained 1,500 ft. gravel private airstrip is located at Point McIntyre (Sheet 62), approximately 10 miles east from the center of this map. Runway has soft spots, with erosion, grass and rocks up to 3". Recommend emergency use only.
- Commercial and air freight services are available at Deadhorse airport (Sheet 81), located approximately 21 miles southeast from the center of this map. Runway is 6,500 ft. asphalt.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.



Continue on sheet 44

Continue on sheet 48

Continue on sheet 61



PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

GENERAL SENSITIVITIES

- Coastal areas support concentrations of breeding, nesting, brood-rearing, and molting waterfowl, diving, shore and sea birds during the open water months (generally Apr and Oct). Expect to deploy bird hazing systems.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- This is a Brant nesting, brood-rearing, and molting area. Birds are present from May through August.
- Pairs of Spectacled Eiders have been found in this area.
- The Sakonowyak River provides habitat for anadromous whitefish.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- An unattended and unmaintained 1,500 ft. gravel private airstrip is located at Point McIntyre (Sheet 62), approximately 10 miles east-northeast from the center of this map. Runway has soft spots, with erosion, grass and rocks up to 3". Recommend emergency use only.
- Commercial and air freight services are available at Deadhorse airport (Sheet 81), located approximately 19 miles southeast from the center of this map. Runway is 6,500 ft. asphalt.

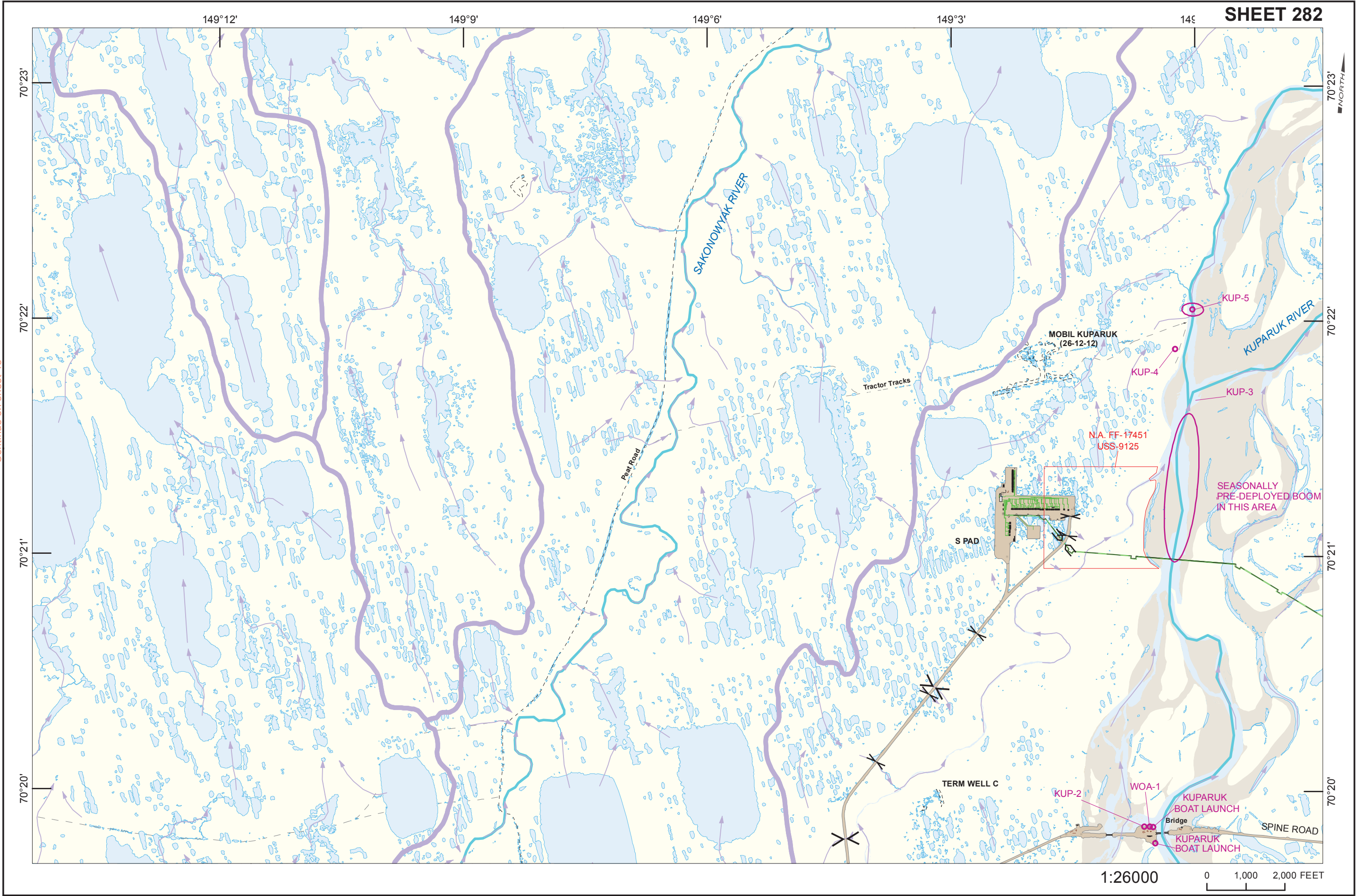
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.


Continue on sheet 48

Continue on sheet 63



Continue on sheet 68

Continue on sheet 69



NORTH SLOPE SPILL RESPONSE

ACS

A WORLD CLASS ORGANIZATION

PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.


GENERAL SENSITIVITIES

- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- Concentrations of swans, ducks, geese and shorebirds are present here in June before open water is present elsewhere.
- This is Brant nesting area. Birds are present May through June.
- Pairs of Spectacled Eiders have been found in this area.
- Caribou wintering grounds.
- Polar bear dens may be present where typographical features provide adequate snow cover.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats;
- The Putuligayuk River provides habitat for anadromous whitefish and char.
- Anadromous and resident fish present in Kuparuk River.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



NORTH SLOPE SPILL RESPONSE

ACS

A WORLD CLASS ORGANIZATION

AIR ACCESS*

- Commercial and air freight services are available at Deadhorse airport (Sheet 81), located approximately 8 miles east from the center of this map. Runway is 6,500 ft. asphalt.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

NOTE: All values given on these pages are for planning purposes only.

Continue on sheet 75

Continue on sheet 76

Continue on sheet 77

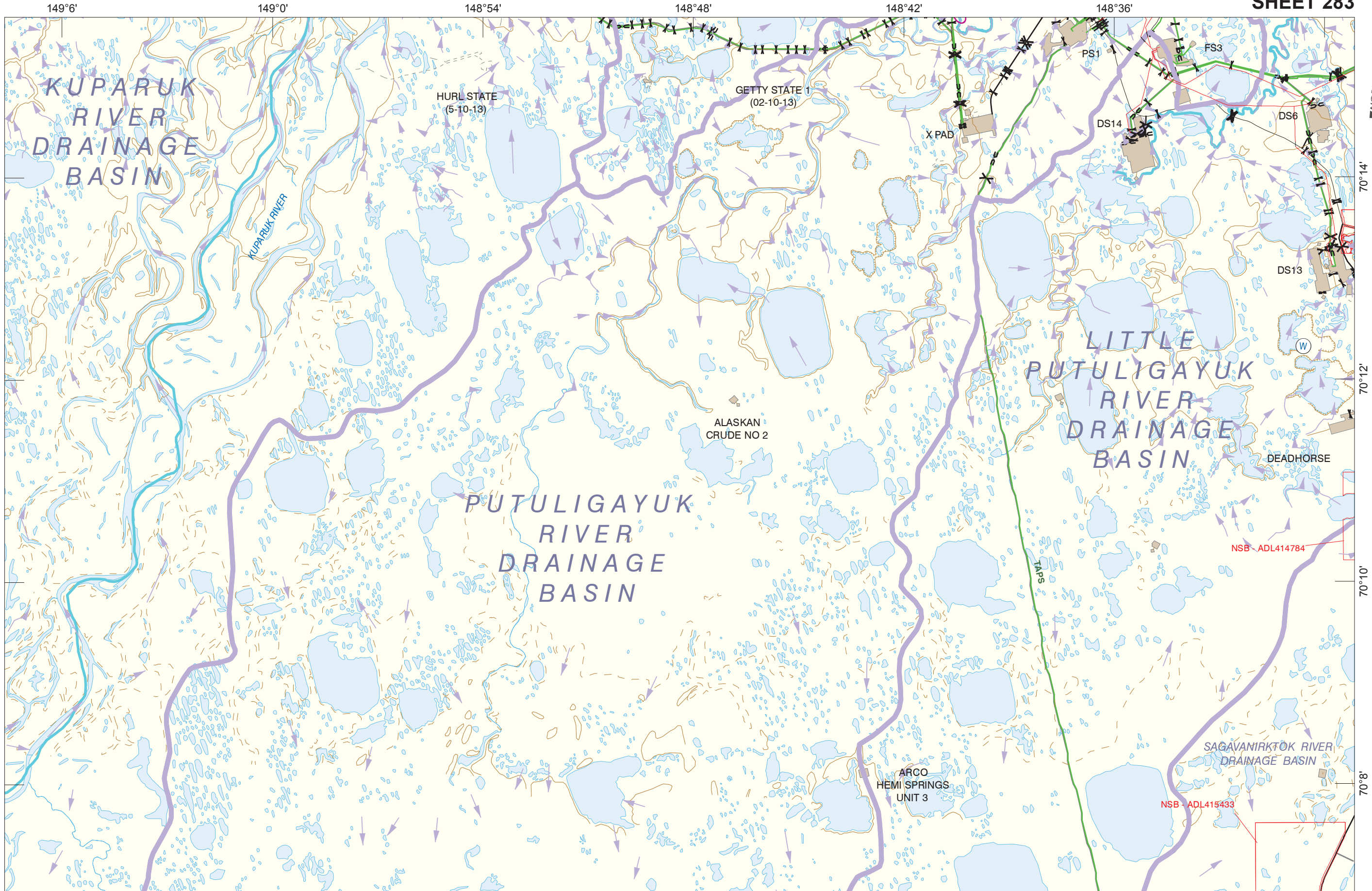
SHEET 283

Continue on sheet 177

Continue on sheet 178

Continue on sheet 81

Continue on sheet 180



1:63360
0 2,500 5,000 FEET

Continue on sheet 284



PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

GENERAL SENSITIVITIES

- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- Pairs of Spectacled Eiders have been found in this area.
- Muskoxen may be found throughout the year along major river drainages west of the ANWR to the Colville River.
- Caribou wintering grounds.
- Polar bear dens may be present where typographical features provide adequate snow cover.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats;
- Anadromous and resident fish present in Sagavanirktok River.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- Commercial and air freight services are available at Deadhorse airport (Sheet 81), located approximately 11 miles northeast from the center of this map. Runway is 6,500 ft. asphalt.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

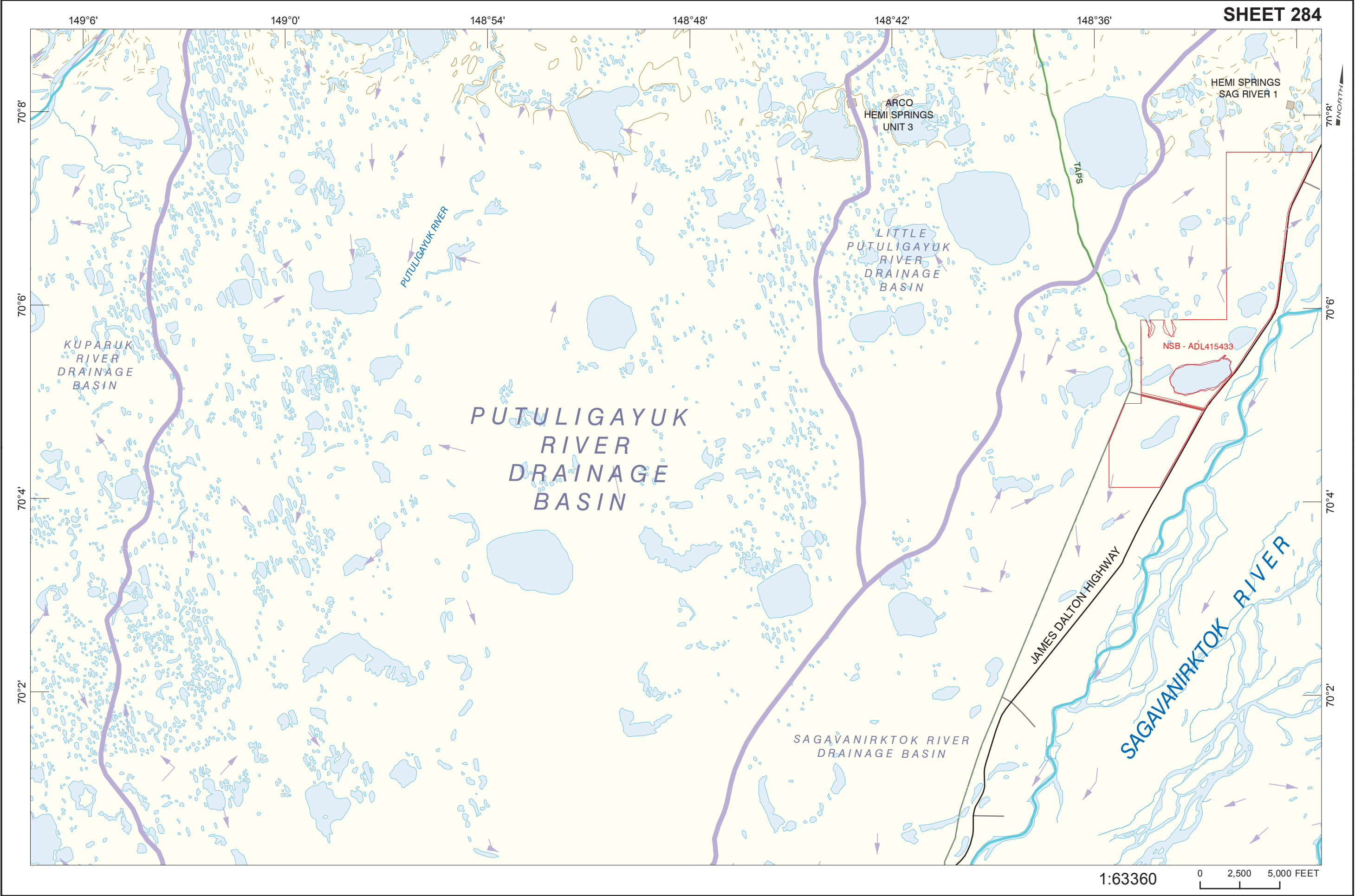
*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 178

Continue on sheet 179

Continue on sheet 180

Continue on sheet 181





PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

GENERAL SENSITIVITIES

- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- Muskoxen may be found throughout the year along major river drainages west of the ANWR to the Colville River.
- Caribou wintering grounds.
- Polar bear dens may be present where typographical features provide adequate snow cover.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats;
- Anadromous and resident fish present in Sagavanirktok River.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



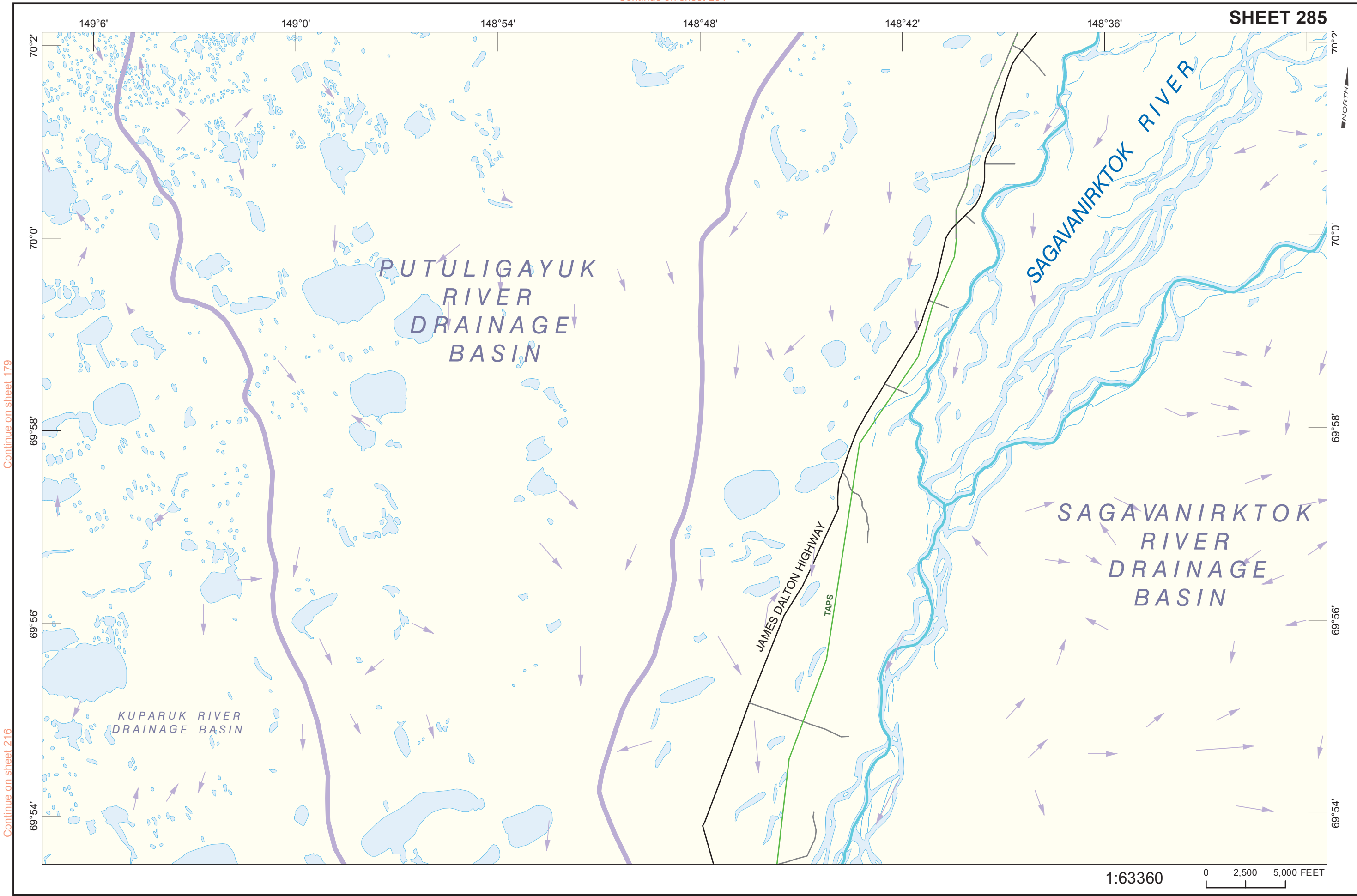
AIR ACCESS*

- Commercial and air freight services are available at Deadhorse airport (Sheet 81), located approximately 18 miles northeast from the center of this map. Runway is 6,500 ft. asphalt.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.





PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

GENERAL SENSITIVITIES

- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- Muskoxen may be found throughout the year along major river drainages west of the ANWR to the Colville River.
- Caribou wintering and calving grounds.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats;
- Anadromous and resident fish present in Sagavanirktok River.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



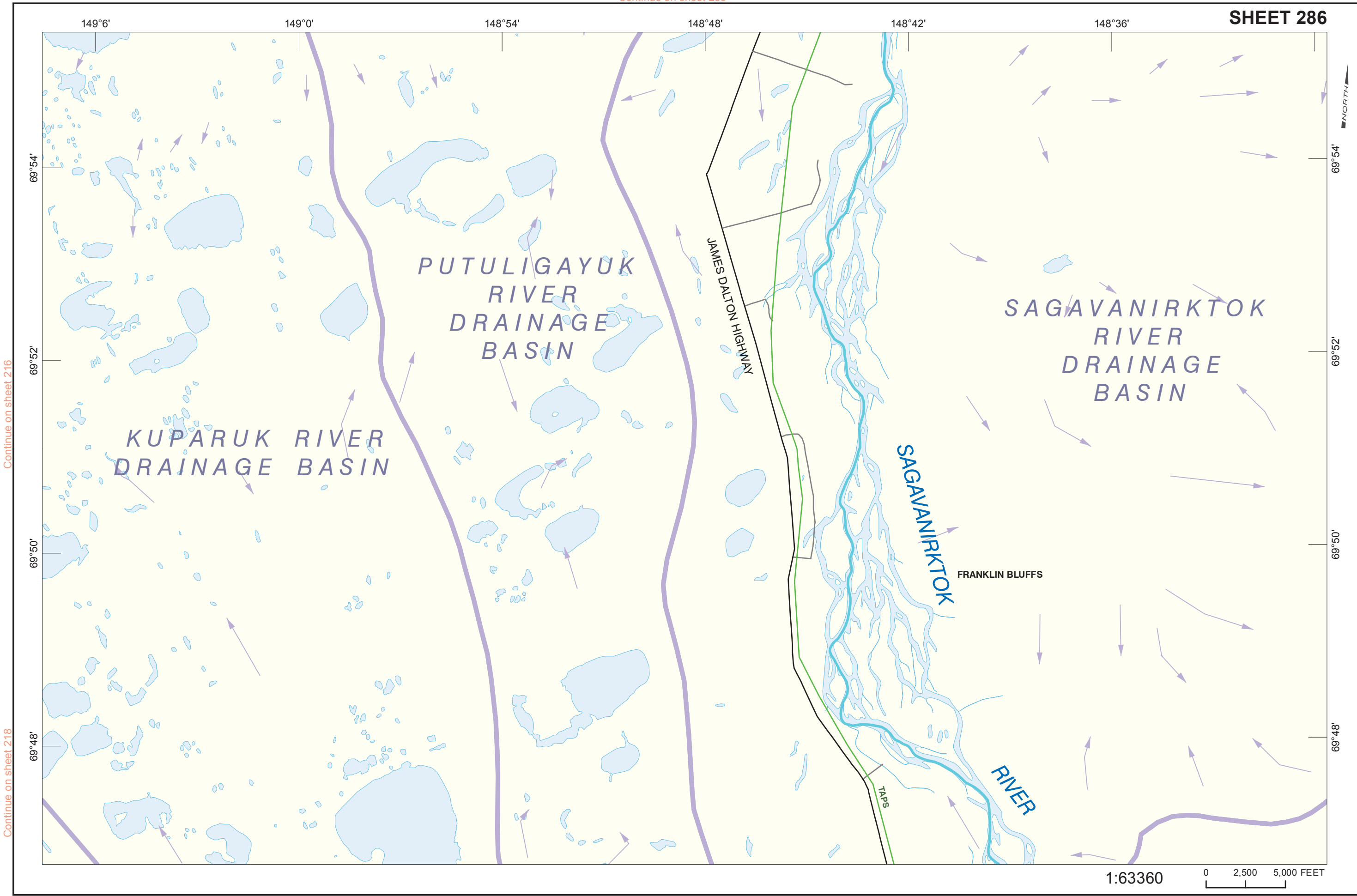
AIR ACCESS*


- Commercial and air freight services are available at Deadhorse airport (Sheet 81), located approximately 25 miles north-northeast from the center of this map. Runway is 6,500 ft. asphalt.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.


*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.






PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.



GENERAL SENSITIVITIES


- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.
- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- Caribou present in winter.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats.



CULTURAL SITES


The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

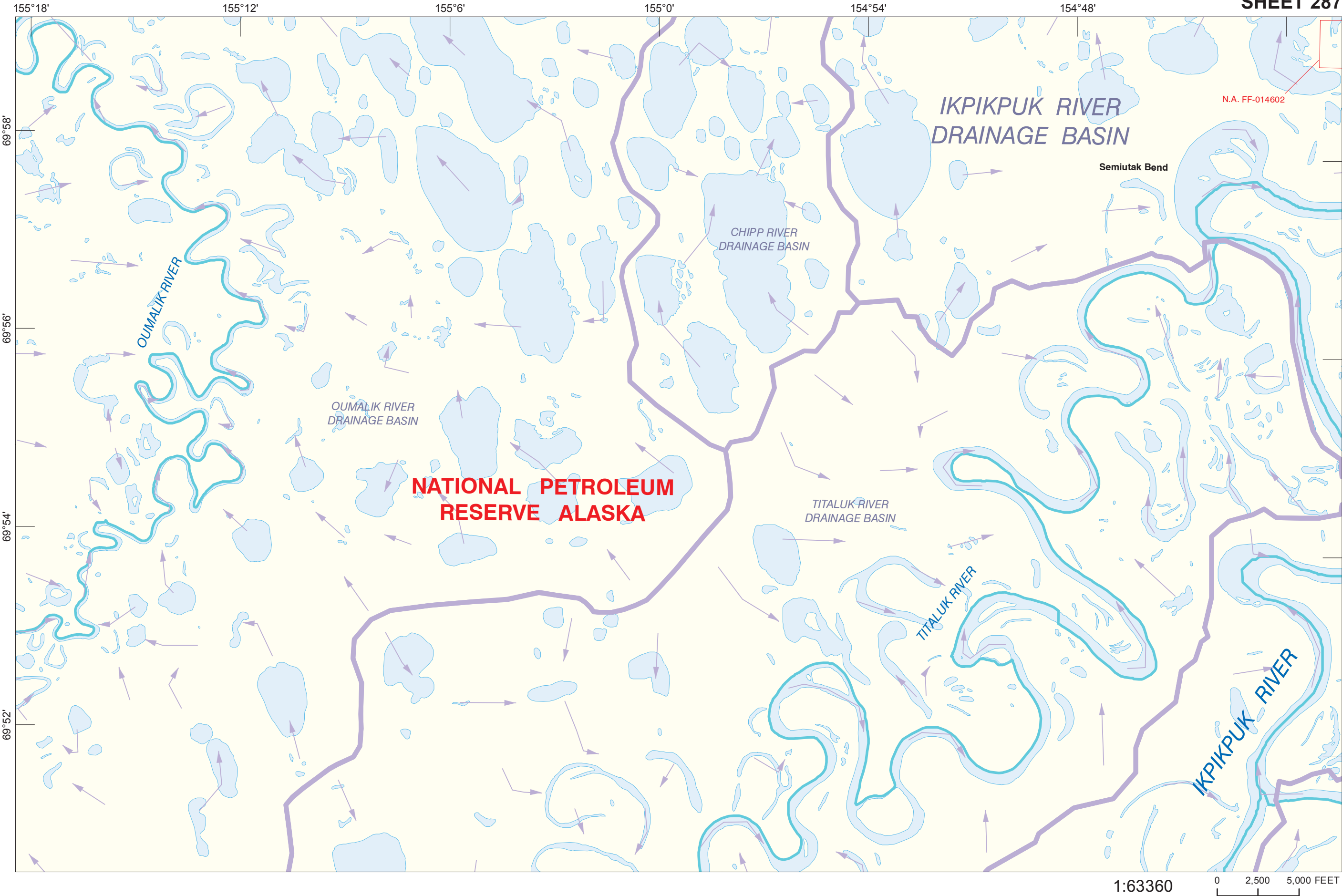
- An irregularly attended, 5,000 ft. gravel private airstrip is located at Inigok Test 1 (Sheet 171), approximately 46 miles east-northeast from the center of this map. Runway condition unknown.
- An unattended, 4,400 ft. gravel airstrip serving the village of Atqasuk (located out of map coverage area) is located approximately 68 miles northwest of the center of this map. Visual inspection recommended prior to use.
- An unattended, 5,400 ft. gravel airstrip serving the village of Umiat (Sheet 275) is located approximately 79 miles southeast from the center of this map. Visual inspection recommended prior to use. No winter maintenance or snow removal.




VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.



Continue on sheet 288



NORTH SLOPE SPILL RESPONSE

ACS

A WORLD CLASS ORGANIZATION

PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.


GENERAL SENSITIVITIES

- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.
- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- Caribou present in winter.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



NORTH SLOPE SPILL RESPONSE

ACS

A WORLD CLASS ORGANIZATION

AIR ACCESS*

- An irregularly attended, 5,000 ft. gravel private airstrip is located at Inigok Test 1 (Sheet 171), approximately 32 miles east-northeast from the center of this map. Runway condition unknown.
- An unattended, 5,400 ft. gravel airstrip serving the village of Umiat (Sheet 275) is located approximately 66 miles southeast from the center of this map. Visual inspection recommended prior to use. No winter maintenance or snow removal.
- An unattended, 4,400 ft. gravel airstrip serving the village of Atqasuk (located out of map coverage area) is located approximately 82 miles northwest of the center of this map. Visual inspection recommended prior to use.

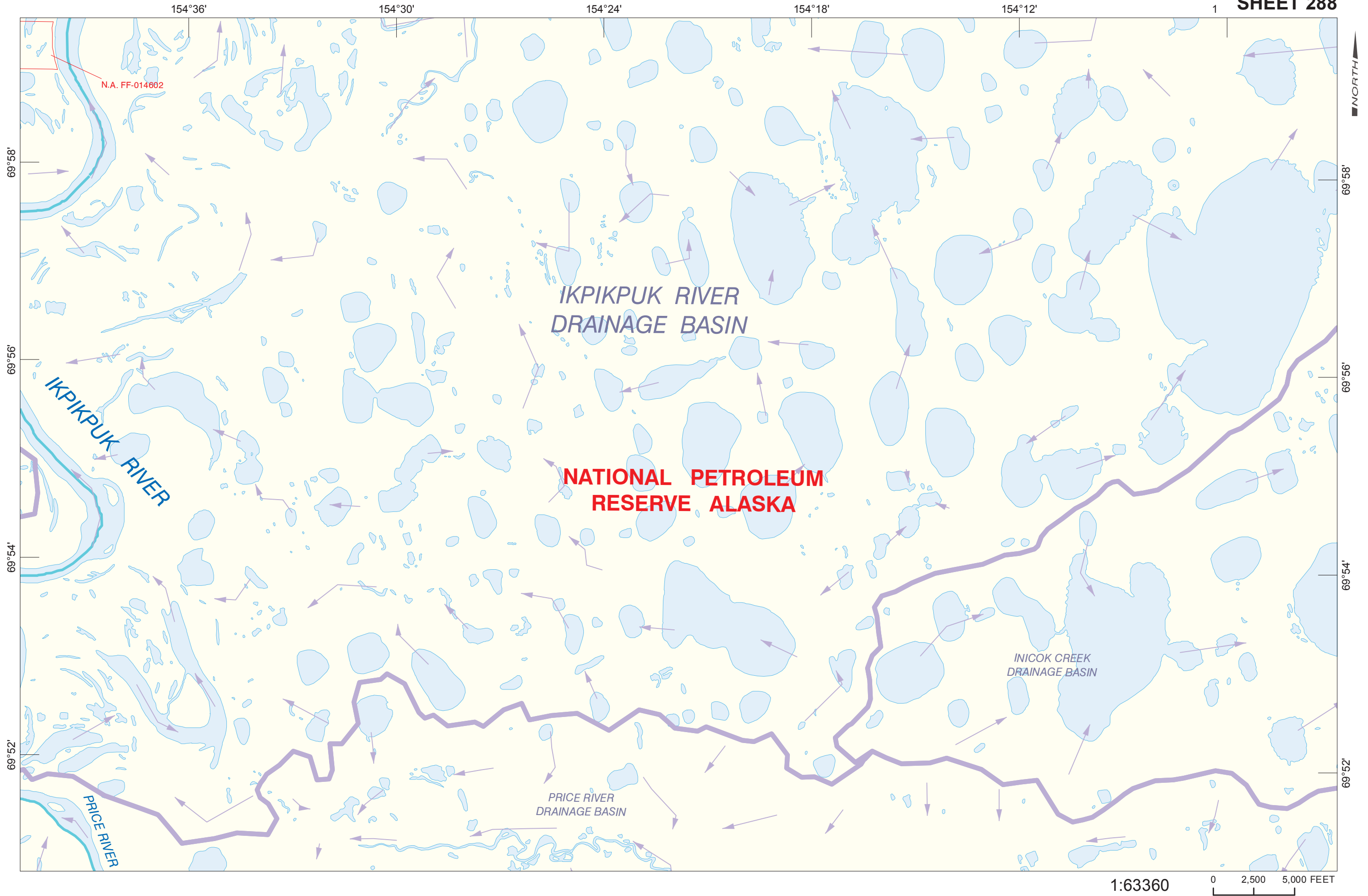
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 287

Continue on sheet 289





PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

GENERAL SENSITIVITIES

- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.
- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- Caribou present in winter.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

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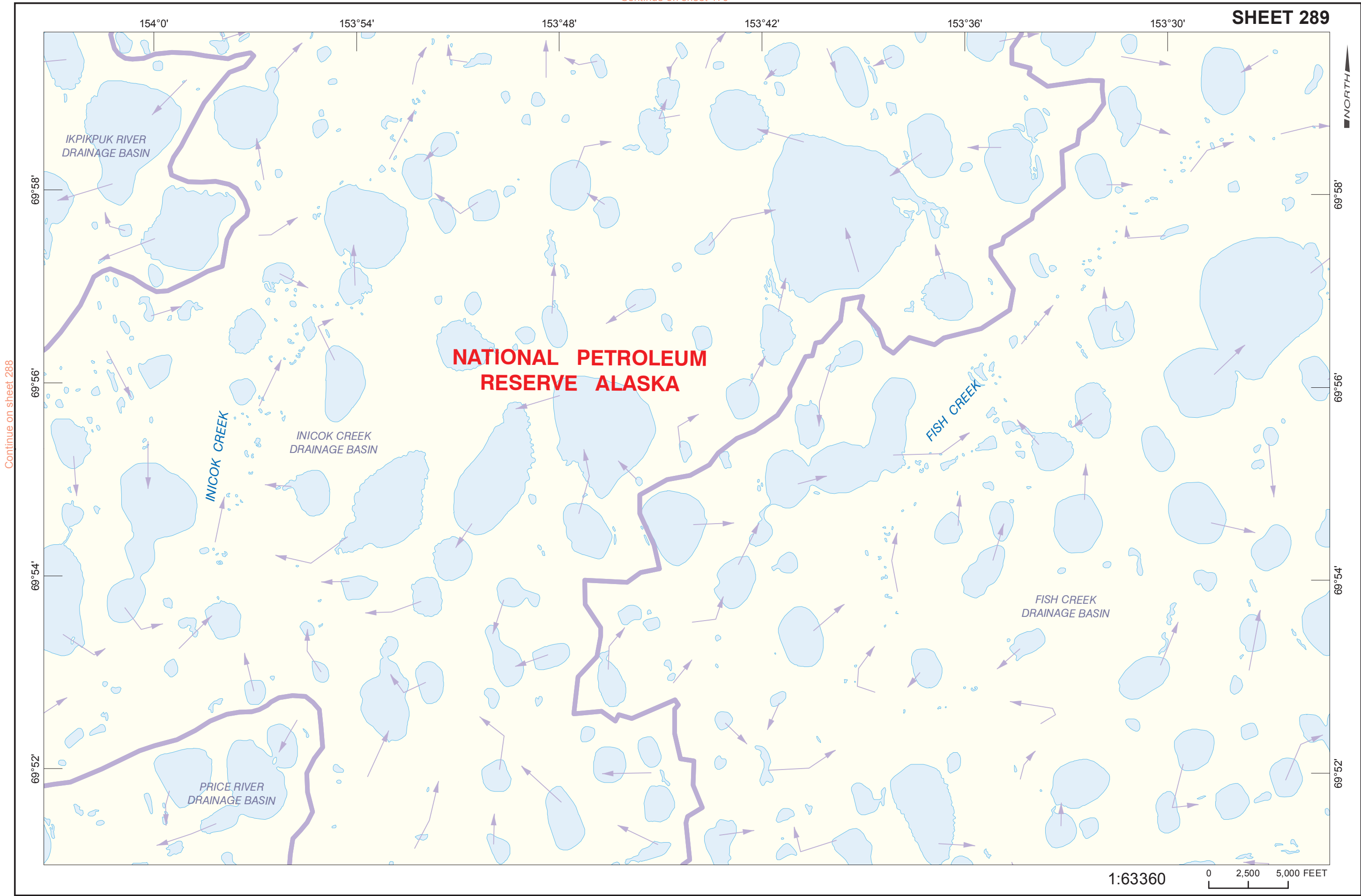
AIR ACCESS*

- An irregularly attended, 5,000 ft. gravel private airstrip is located at Inigok Test 1 (Sheet 171), approximately 16 miles east-northeast from the center of this map. Runway condition unknown.
- An unattended, 5,400 ft. gravel airstrip serving the village of Umiat (Sheet 275) is located approximately 54 miles southeast from the center of this map. Visual inspection recommended prior to use. No winter maintenance or snow removal.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 69 miles east-northeast from the center of this map. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.





PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

GENERAL SENSITIVITIES

- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.
- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- Caribou present in winter.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- An irregularly attended, 5,000 ft. gravel private airstrip is located at Inigok Test 1 (Sheet 171), approximately 5 miles north from the center of this map. Runway condition unknown.
- An unattended, 5,400 ft. gravel airstrip serving the village of Umiat (Sheet 275) is located approximately 45 miles south-southeast from the center of this map. Visual inspection recommended prior to use. No winter maintenance or snow removal.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 55 miles northeast from the center of this map. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.
- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 60 miles northeast from the center of this map. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.

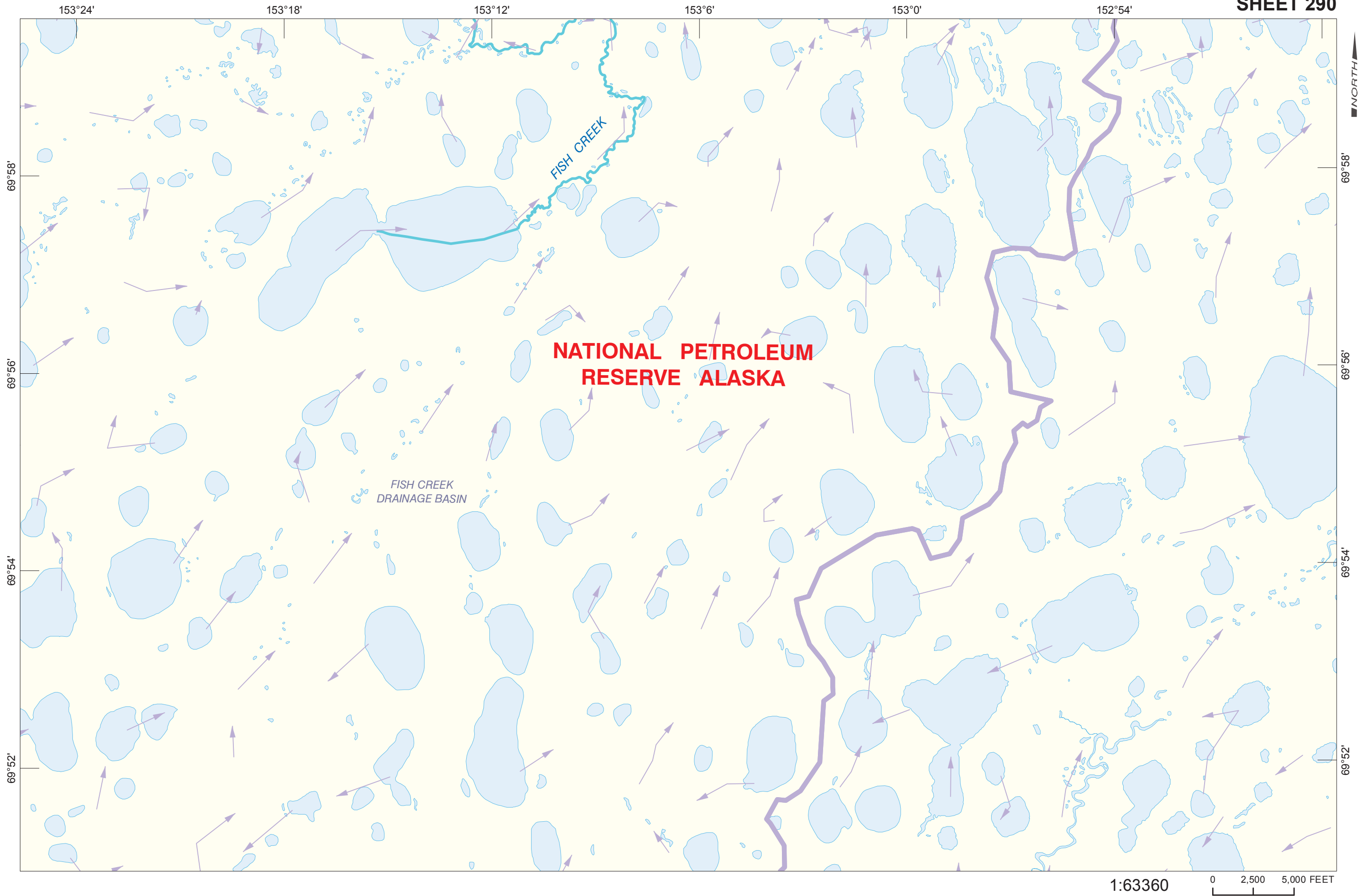
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS


- There are no marine waters or shorelines on this map.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 289

Continue on sheet 291





NORTH SLOPE SPILL RESPONSE

ACS

A WORLD CLASS ORGANIZATION

PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.


GENERAL SENSITIVITIES

- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.
- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- Caribou present in winter.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



NORTH SLOPE SPILL RESPONSE

ACS

A WORLD CLASS ORGANIZATION

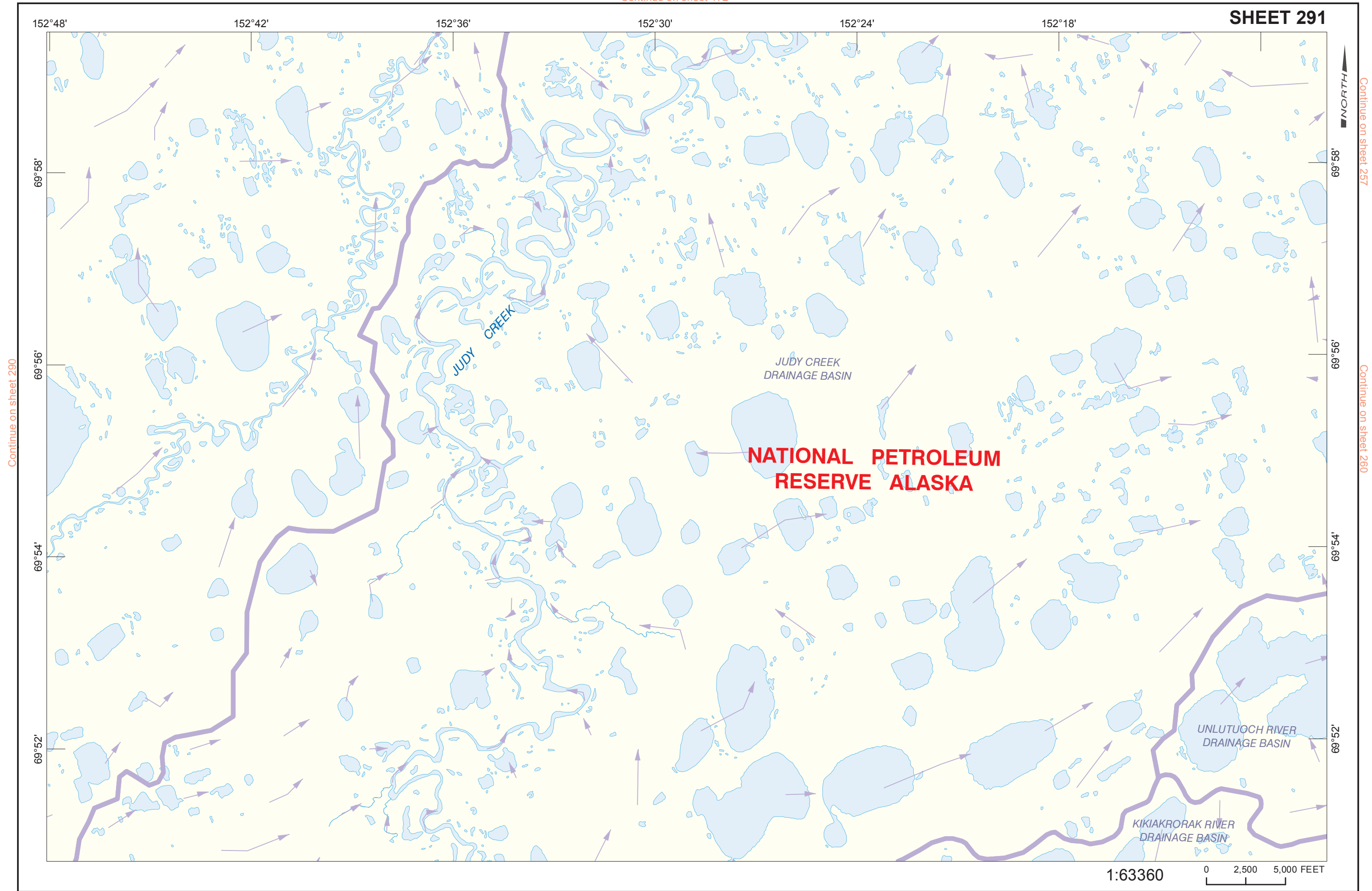
AIR ACCESS*


- An irregularly attended, 5,000 ft. gravel private airstrip is located at Inigok Test 1 (Sheet 171), approximately 15 miles northwest from the center of this map. Runway condition unknown.
- An unattended, 5,400 ft. gravel airstrip serving the village of Umiat (Sheet 275) is located approximately 38 miles south from the center of this map. Visual inspection recommended prior to use. No winter maintenance or snow removal.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 41 miles northeast from the center of this map. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.
- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 47 miles northeast from the center of this map. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.


*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.






PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.



GENERAL SENSITIVITIES


- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.
- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- Caribou present in winter.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats.



CULTURAL SITES


The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.




AIR ACCESS*

- An irregularly attended, 5,000 ft. gravel private airstrip is located at Inigok Test 1 (Sheet 171), approximately 48 miles northeast from the center of this map. Runway condition unknown.
- An unattended, 4,400 ft. gravel airstrip serving the village of Atqasuk (located out of map coverage area) is located approximately 74 miles northwest of the center of this map. Visual inspection recommended prior to use.
- An unattended, 5,400 ft. gravel airstrip serving the village of Umiat (Sheet 275) is located approximately 75 miles southeast from the center of this map. Visual inspection recommended prior to use. No winter maintenance or snow removal.



VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS


- There are no marine waters or shorelines on this map.



*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.


NOTE: All values given on these pages are for planning purposes only.






PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.



GENERAL SENSITIVITIES


- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.
- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- Caribou present in winter.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats.



CULTURAL SITES


The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.




AIR ACCESS*

- An irregularly attended, 5,000 ft. gravel private airstrip is located at Inigok Test 1 (Sheet 171), approximately 34 miles northeast from the center of this map. Runway condition unknown.
- An unattended, 5,400 ft. gravel airstrip serving the village of Umiat (Sheet 275) is located approximately 61 miles southeast from the center of this map. Visual inspection recommended prior to use. No winter maintenance or snow removal.
- An unattended, 4,400 ft. gravel airstrip serving the village of Atqasuk (located out of map coverage area) is located approximately 86 miles northwest of the center of this map. Visual inspection recommended prior to use.



VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

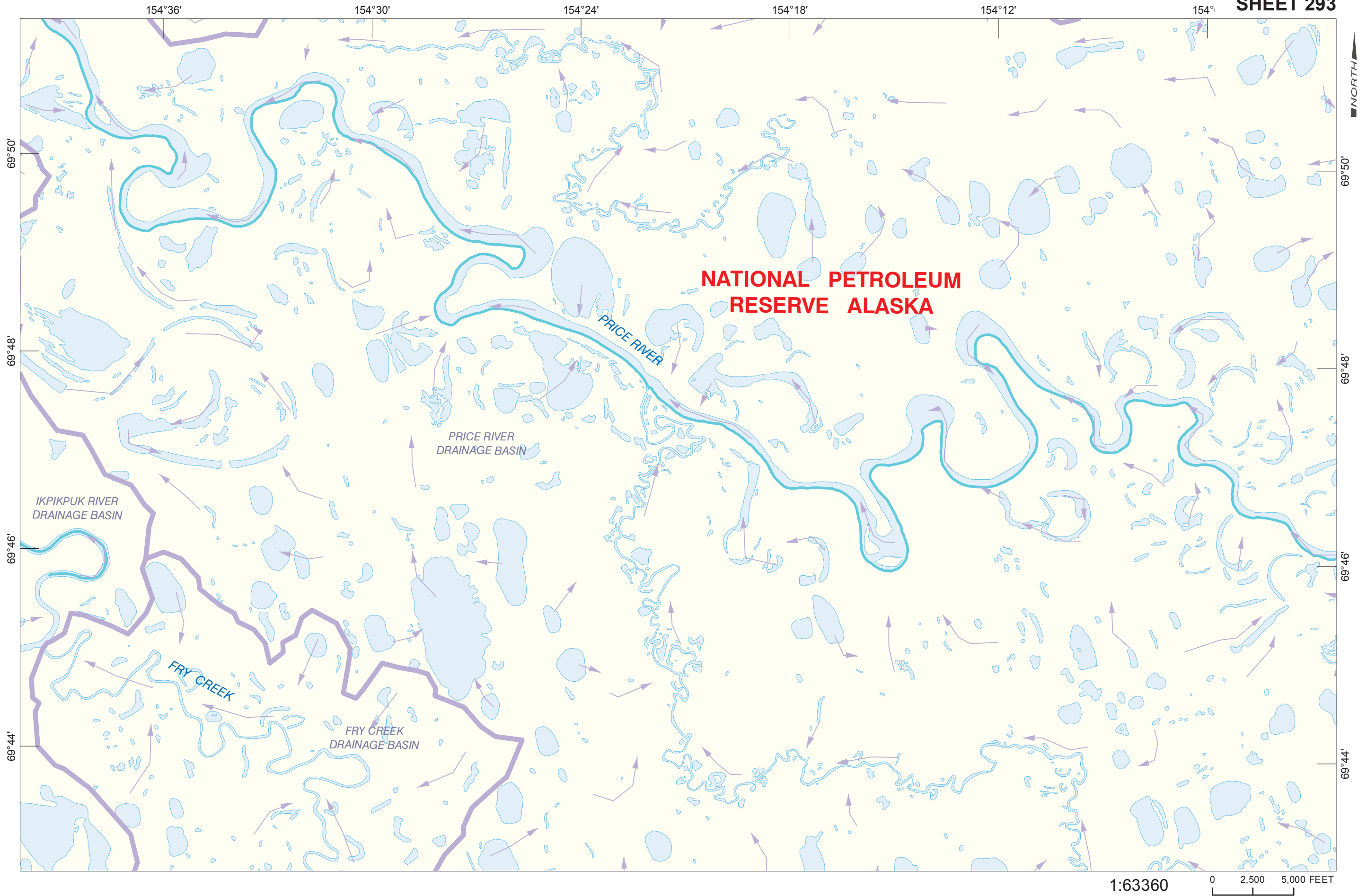


*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

NOTE: All values given on these pages are for planning purposes only.


Continue on sheet 292

Continue on sheet 294



1:63360

0 2,500 5,000 FEET



NORTH SLOPE SPILL RESPONSE

ACS

A WORLD CLASS ORGANIZATION

PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.


GENERAL SENSITIVITIES

- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.
- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- Caribou present in winter.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



NORTH SLOPE SPILL RESPONSE

ACS

A WORLD CLASS ORGANIZATION

AIR ACCESS*

- An irregularly attended, 5,000 ft. gravel private airstrip is located at Inigok Test 1 (Sheet 171), approximately 21 miles northeast from the center of this map. Runway condition unknown.
- An unattended, 5,400 ft. gravel airstrip serving the village of Umiat (Sheet 275) is located approximately 48 miles southeast from the center of this map. Visual inspection recommended prior to use. No winter maintenance or snow removal.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 72 miles northeast from the center of this map. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

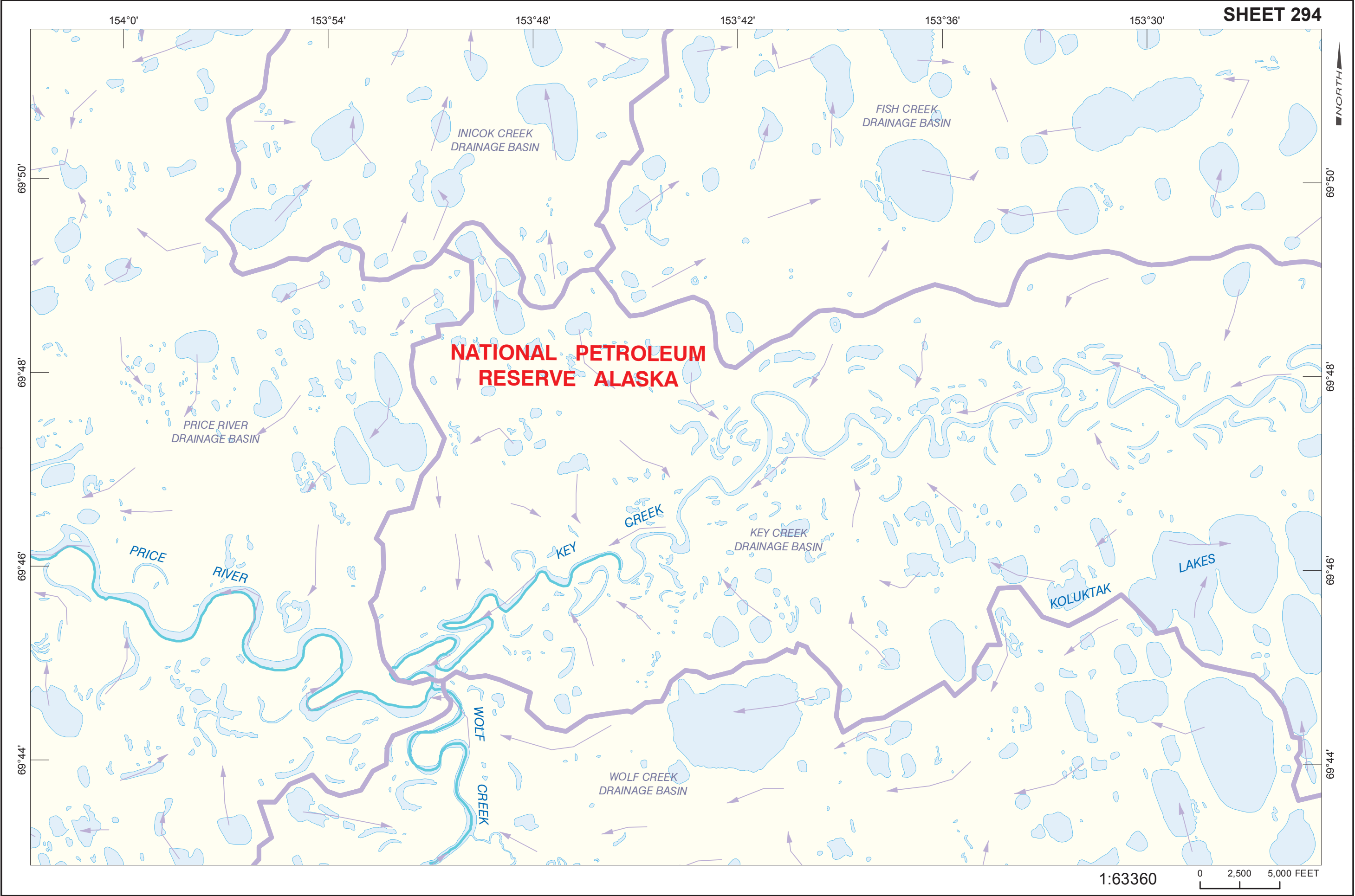
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 293

Continue on sheet 295





PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

GENERAL SENSITIVITIES

- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.
- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- Caribou present in winter.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*


- An irregularly attended, 5,000 ft. gravel private airstrip is located at Inigok Test 1 (Sheet 171), approximately 15 miles north from the center of this map. Runway condition unknown.
- An unattended, 5,400 ft. gravel airstrip serving the village of Umiat (Sheet 275) is located approximately 37 miles southeast from the center of this map. Visual inspection recommended prior to use. No winter maintenance or snow removal.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 58 miles northeast from the center of this map. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.
- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 65 miles northeast from the center of this map. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.





NORTH SLOPE SPILL RESPONSE

ACS

A WORLD CLASS ORGANIZATION

PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.


GENERAL SENSITIVITIES

- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.
- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- Caribou present in winter.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

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NORTH SLOPE SPILL RESPONSE

ACS

A WORLD CLASS ORGANIZATION

AIR ACCESS*

- An irregularly attended, 5,000 ft. gravel private airstrip is located at Inigok Test 1 (Sheet 171), approximately 21 miles northwest from the center of this map. Runway condition unknown.
- An unattended, 5,400 ft. gravel airstrip serving the village of Umiat (Sheet 275) is located approximately 29 miles south-southeast from the center of this map. Visual inspection recommended prior to use. No winter maintenance or snow removal.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 46 miles northeast from the center of this map. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.
- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 53 miles northeast from the center of this map. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 295


Continue on sheet 290

Continue on sheet 296



1:63360

0 2,500 5,000 FEET



NORTH SLOPE SPILL RESPONSE

ACS

A WORLD CLASS ORGANIZATION

PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.


GENERAL SENSITIVITIES

- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.
- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- Caribou present in winter.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats.

CULTURAL SITES

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NORTH SLOPE SPILL RESPONSE

ACS

A WORLD CLASS ORGANIZATION

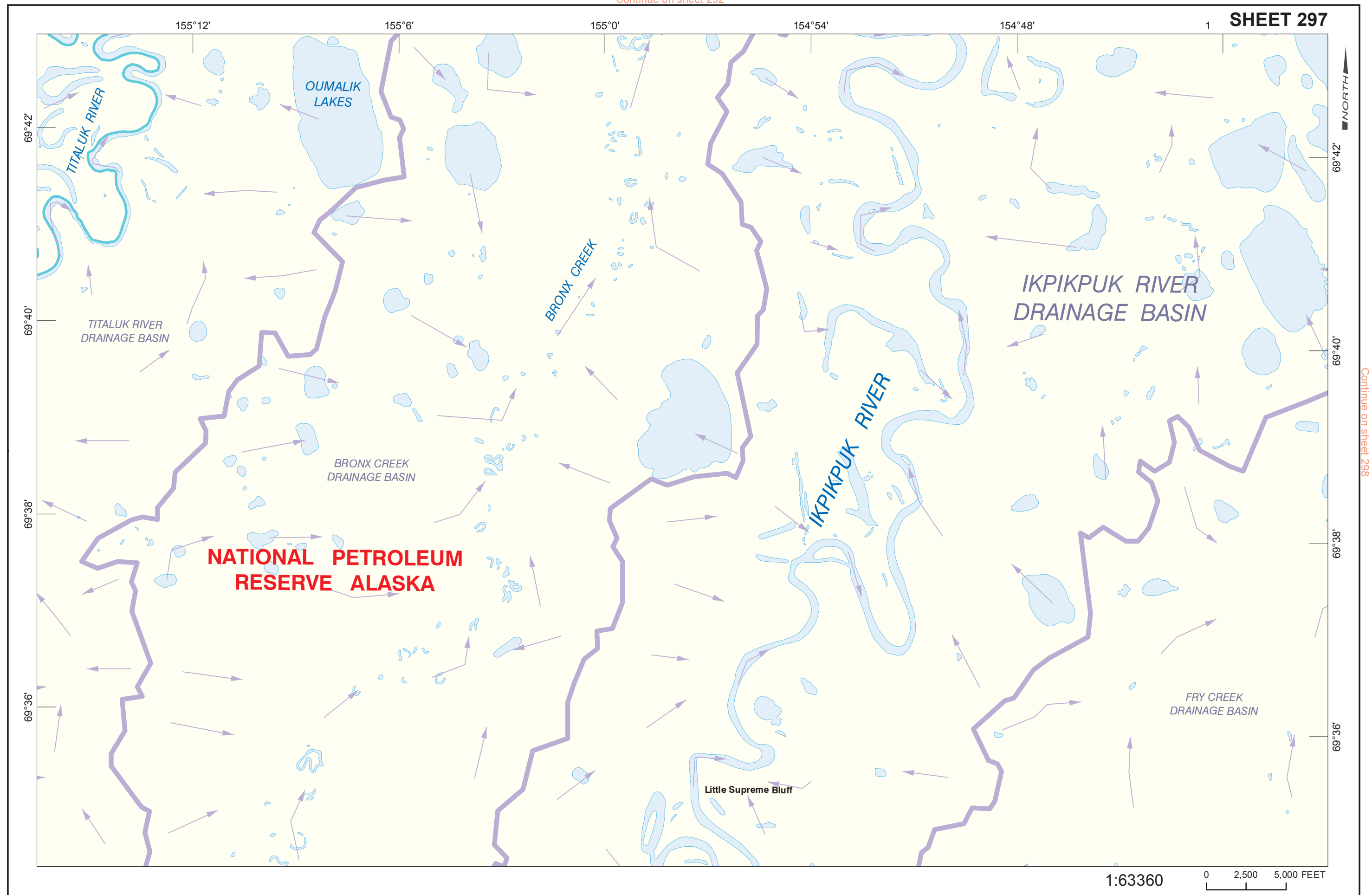
AIR ACCESS*


- An irregularly attended, 5,000 ft. gravel private airstrip is located at Inigok Test 1 (Sheet 171), approximately 52 miles northeast from the center of this map. Runway condition unknown.
- An unattended, 5,400 ft. gravel airstrip serving the village of Umiat (Sheet 275) is located approximately 72 miles east-southeast from the center of this map. Visual inspection recommended prior to use. No winter maintenance or snow removal.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.


*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.






PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.



GENERAL SENSITIVITIES


- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.
- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- Caribou present in winter.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats.



CULTURAL SITES


The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.




AIR ACCESS*

- An irregularly attended, 5,000 ft. gravel private airstrip is located at Inigok Test 1 (Sheet 171), approximately 39 miles northeast from the center of this map. Runway condition unknown.
- An unattended, 5,400 ft. gravel airstrip serving the village of Umiat (Sheet 275) is located approximately 58 miles southeast from the center of this map. Visual inspection recommended prior to use. No winter maintenance or snow removal.



VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.




*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

NOTE: All values given on these pages are for planning purposes only.

Continue on sheet 297


Continue on sheet 299






PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.



GENERAL SENSITIVITIES


- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.
- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- Caribou present in winter.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats.



CULTURAL SITES


The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.




AIR ACCESS*

- An irregularly attended, 5,000 ft. gravel private airstrip is located at Inigok Test 1 (Sheet 171), approximately 28 miles north-northeast from the center of this map. Runway condition unknown.
- An unattended, 5,400 ft. gravel airstrip serving the village of Umiat (Sheet 275) is located approximately 44 miles southeast from the center of this map. Visual inspection recommended prior to use. No winter maintenance or snow removal.



VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.



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*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

NOTE: All values given on these pages are for planning purposes only.


Continue on sheet 298

Continue on sheet 300



1:63360

0 2,500 5,000 FEET



NORTH SLOPE SPILL RESPONSE

ACS

A WORLD CLASS ORGANIZATION

PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.


GENERAL SENSITIVITIES

- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.
- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- Caribou present in winter.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



NORTH SLOPE SPILL RESPONSE

ACS

A WORLD CLASS ORGANIZATION

AIR ACCESS*

- An irregularly attended, 5,000 ft. gravel private airstrip is located at Inigok Test 1 (Sheet 171), approximately 24 miles north from the center of this map. Runway condition unknown.
- An unattended, 5,400 ft. gravel airstrip serving the village of Umiat (Sheet 275) is located approximately 30 miles southeast from the center of this map. Visual inspection recommended prior to use. No winter maintenance or snow removal.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 64 miles northeast from the center of this map. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 299

Continue on sheet 301

**NATIONAL PETROLEUM
RESERVE ALASKA**

KEY CREEK

WOLF CREEK
DRAINAGE BASIN

KEY CREEK
DRAINAGE BASIN

JUDY
CREEK

JUDY CREEK
DRAINAGE BASIN


KIKIAKRORAK RIVER
DRAINAGE BASIN

SQUARE LAKE

NORTH

1:63360

0 2,500 5,000 FEET



NORTH SLOPE SPILL RESPONSE

ACS

A WORLD CLASS ORGANIZATION

PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.


GENERAL SENSITIVITIES

- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.
- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- Caribou present in winter.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



NORTH SLOPE SPILL RESPONSE

ACS

A WORLD CLASS ORGANIZATION

AIR ACCESS*

- An unattended, 5,400 ft. gravel airstrip serving the village of Umiat (Sheet 275) is located approximately 21 miles south-southeast from the center of this map. Visual inspection recommended prior to use. No winter maintenance or snow removal.
- An irregularly attended, 5,000 ft. gravel private airstrip is located at Inigok Test 1 (Sheet 171), approximately 28 miles north-northwest from the center of this map. Runway condition unknown.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 53 miles northeast from the center of this map. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

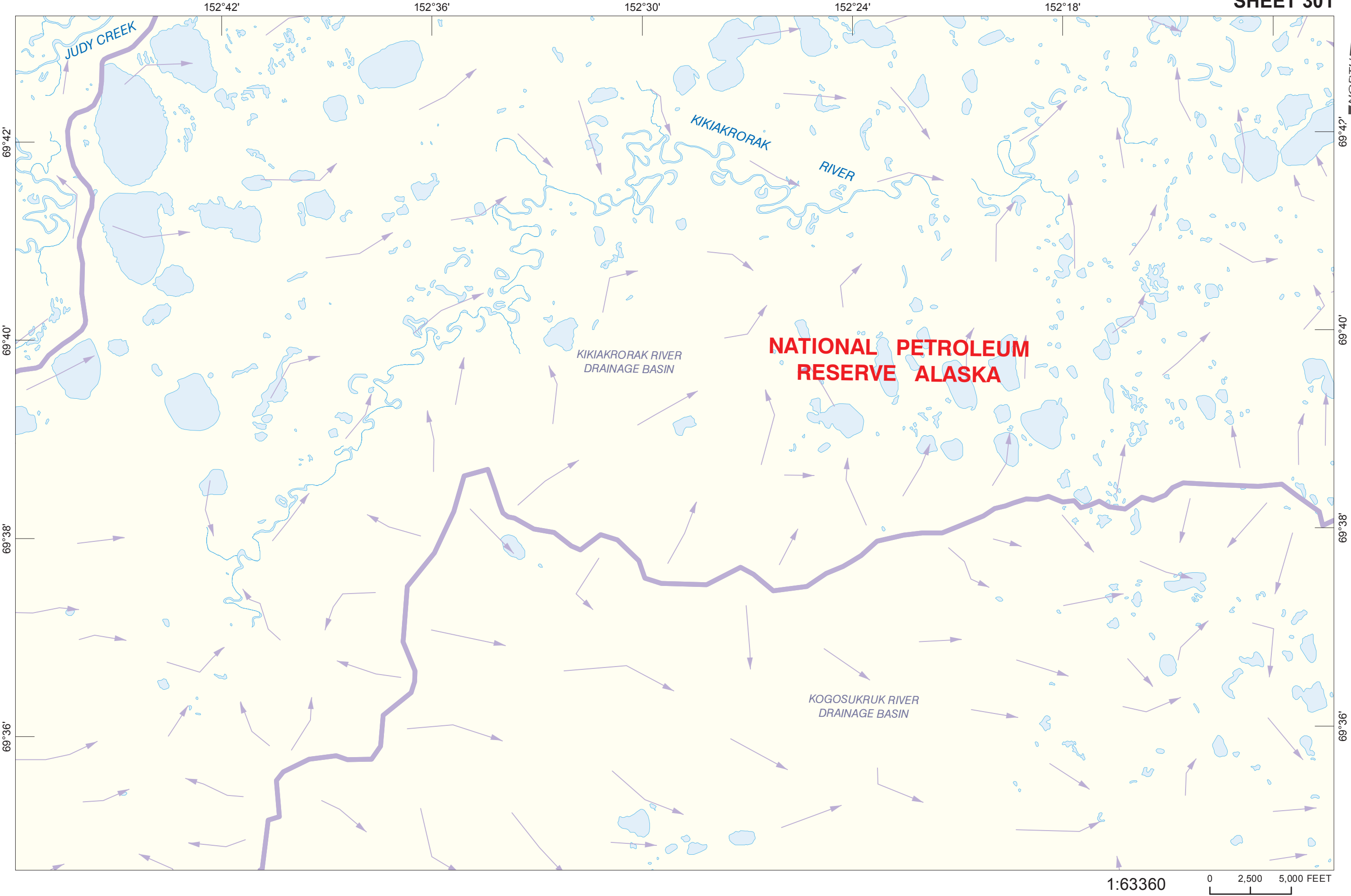
- There are no marine waters or shorelines on this map.


*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 300

Continue on sheet 293


Continue on sheet 266






PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.



GENERAL SENSITIVITIES


- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.
- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- Caribou present in winter.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats.



CULTURAL SITES


The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.




AIR ACCESS*

- An irregularly attended, 5,000 ft. gravel private airstrip is located at Inigok Test 1 (Sheet 171), approximately 56 miles northeast from the center of this map. Runway condition unknown.
- An unattended, 5,400 ft. gravel airstrip serving the village of Umiat (Sheet 275) is located approximately 70 miles east-southeast from the center of this map. Visual inspection recommended prior to use. No winter maintenance or snow removal.



VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

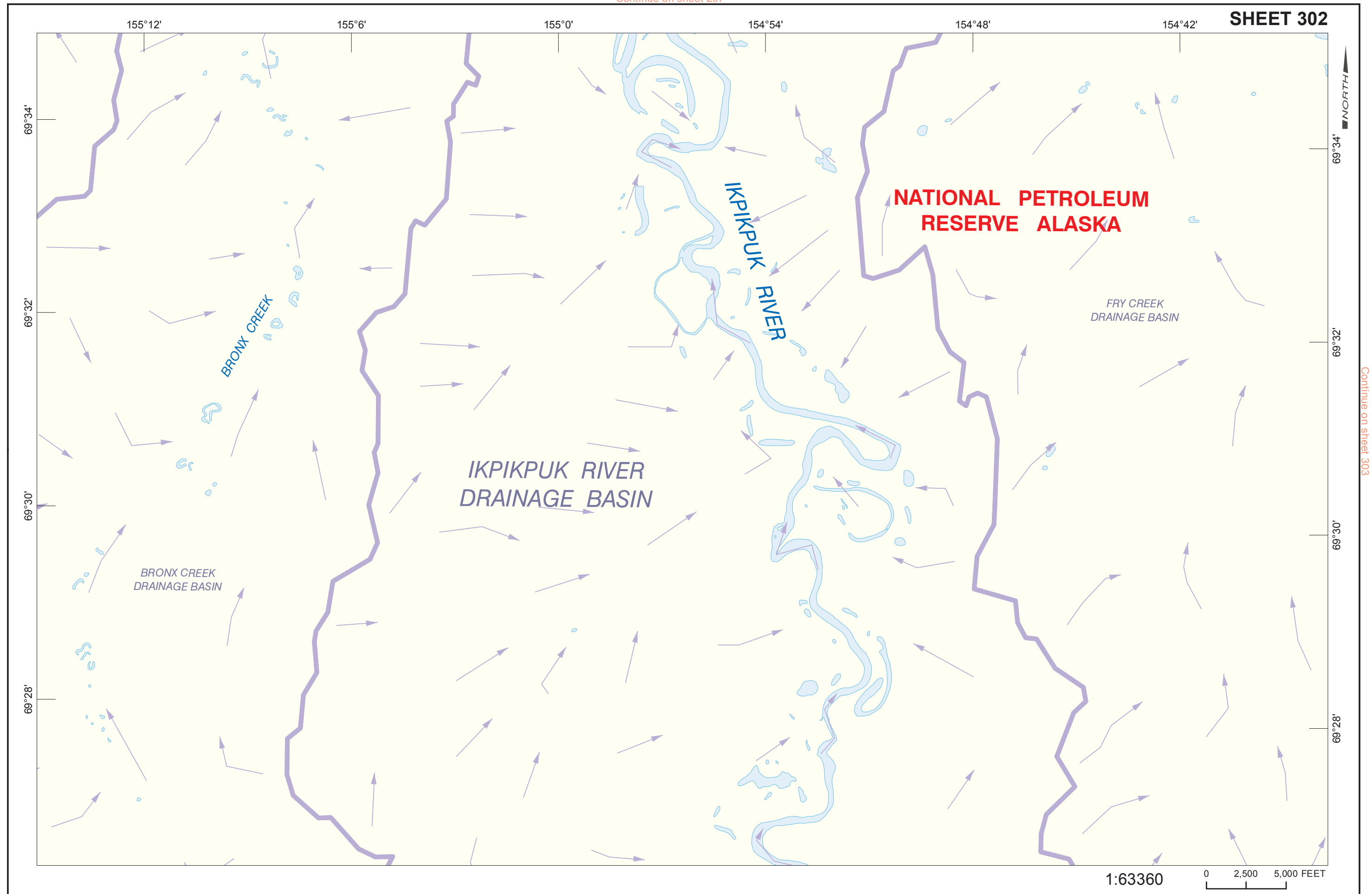



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*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.





PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.


GENERAL SENSITIVITIES

- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.
- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- Caribou present in winter.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- An irregularly attended, 5,000 ft. gravel private airstrip is located at Inigok Test 1 (Sheet 171), approximately 45 miles northeast from the center of this map. Runway condition unknown.
- An unattended, 5,400 ft. gravel airstrip serving the village of Umiat (Sheet 275) is located approximately 55 miles east-southeast from the center of this map. Visual inspection recommended prior to use. No winter maintenance or snow removal.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

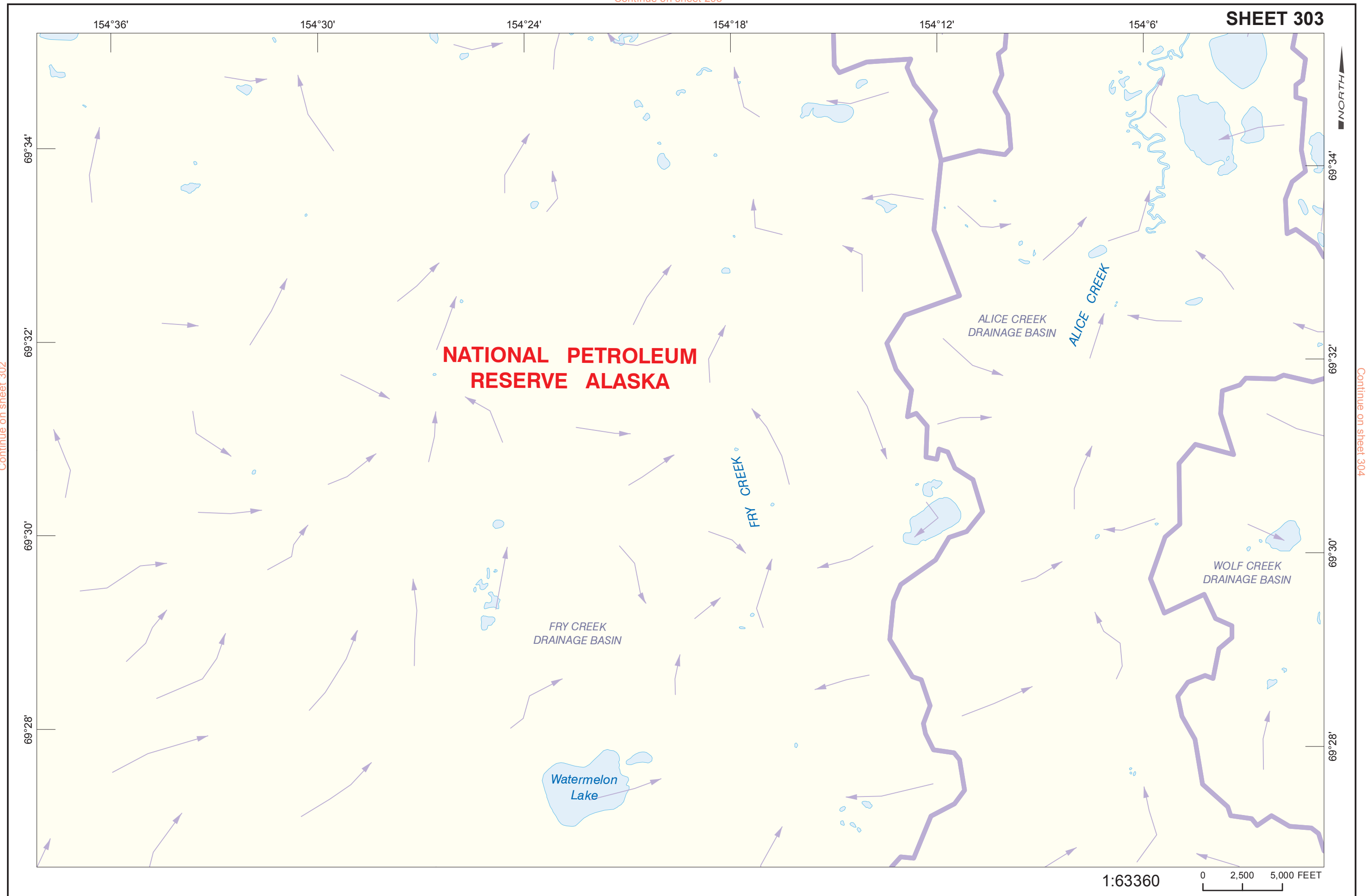
- There are no marine waters or shorelines on this map.


*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

NOTE: All values given on these pages are for planning purposes only.

Continue on sheet 302

Continue on sheet 304





NORTH SLOPE SPILL RESPONSE

ACS

A WORLD CLASS ORGANIZATION

PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.


GENERAL SENSITIVITIES

- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.
- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- Caribou present in winter.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



NORTH SLOPE SPILL RESPONSE

ACS

A WORLD CLASS ORGANIZATION

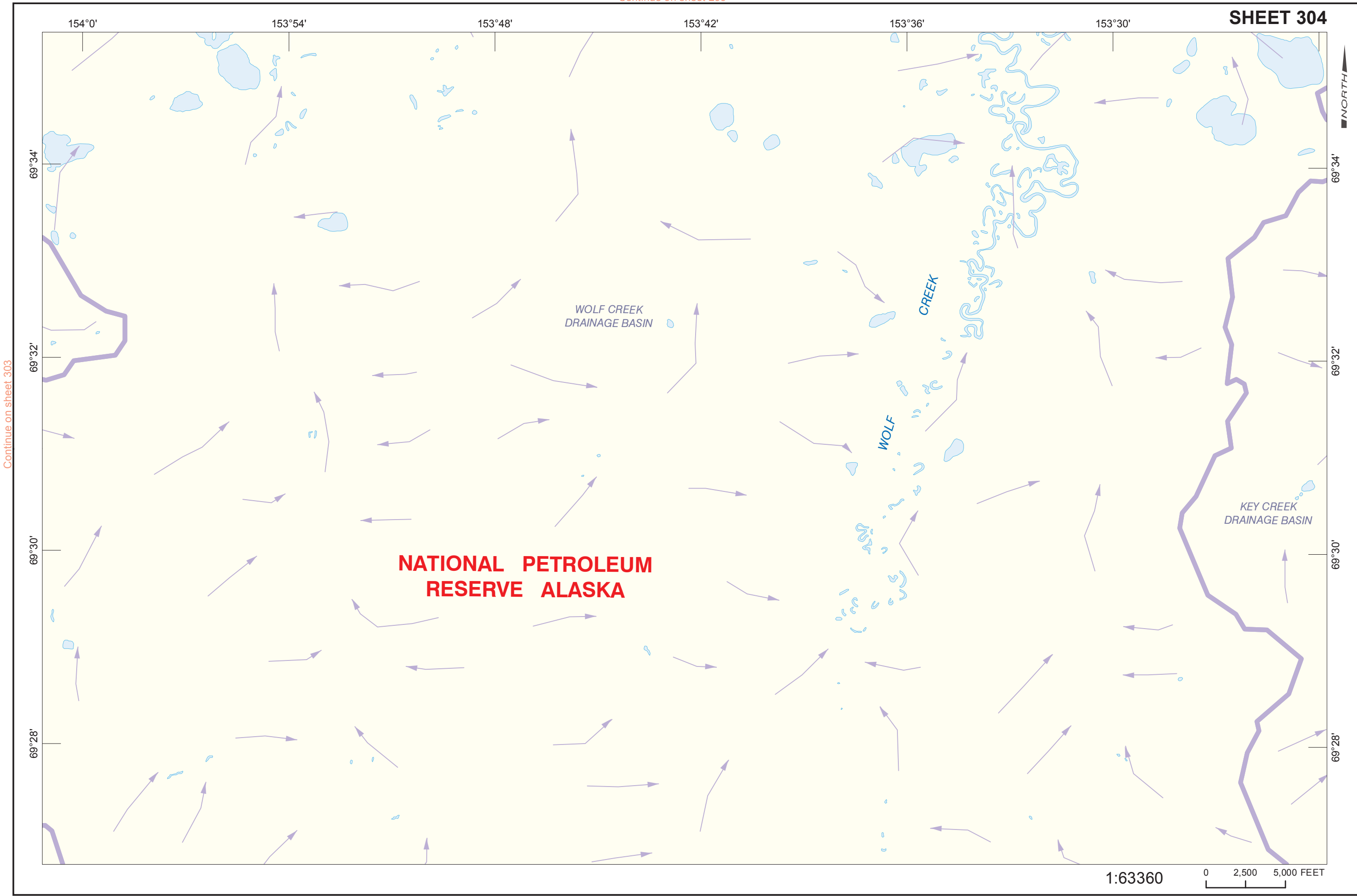
AIR ACCESS*

- An irregularly attended, 5,000 ft. gravel private airstrip is located at Inigok Test 1 (Sheet 171), approximately 36 miles north-northeast from the center of this map. Runway condition unknown.
- An unattended, 5,400 ft. gravel airstrip serving the village of Umiat (Sheet 275) is located approximately 40 miles east-southeast from the center of this map. Visual inspection recommended prior to use. No winter maintenance or snow removal.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS


- There are no marine waters or shorelines on this map.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.




Continue on sheet 303

Continue on sheet 305




PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.



GENERAL SENSITIVITIES


- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.
- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- Caribou present in winter.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats.



CULTURAL SITES


The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.




AIR ACCESS*

- An unattended, 5,400 ft. gravel airstrip serving the village of Umiat (Sheet 275) is located approximately 26 miles southeast from the center of this map. Visual inspection recommended prior to use. No winter maintenance or snow removal.
- An irregularly attended, 5,000 ft. gravel private airstrip is located at Inigok Test 1 (Sheet 171), approximately 33 miles north from the center of this map. Runway condition unknown.



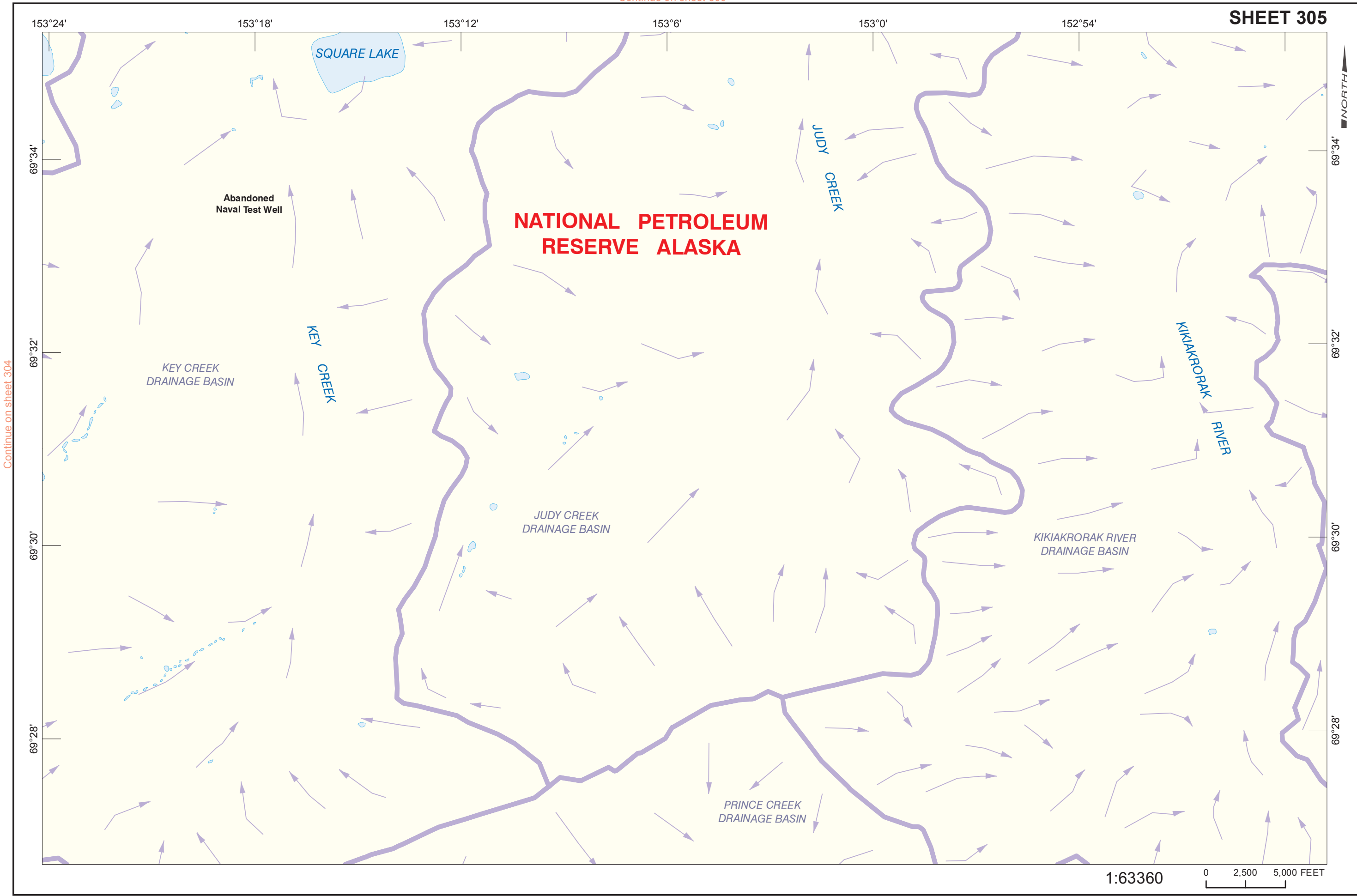
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.



*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

NOTE: All values given on these pages are for planning purposes only.





PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

GENERAL SENSITIVITIES

- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.
- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- Caribou present in winter.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- An unattended, 5,400 ft. gravel airstrip serving the village of Umiat (Sheet 275) is located approximately 13 miles southeast from the center of this map. Visual inspection recommended prior to use. No winter maintenance or snow removal.
- An irregularly attended, 5,000 ft. gravel private airstrip is located at Inigok Test 1 (Sheet 171), approximately 36 miles north-northwest from the center of this map. Runway condition unknown.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 59 miles northeast from the center of this map. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 301

SHEET 306

Continue on sheet 305

Continue on sheet 296

Continue on sheet 329

TRUE NORTH

69°32'

69°30'

69°28'

152°42'

152°36'

152°30'

152°24'

152°18'

69°34'

69°32'

69°30'

69°28'

KIKIAKRORAK RIVER
DRAINAGE BASIN

KOGOSUKRUK RIVER
DRAINAGE BASIN


KOGOSUKRUK
RIVER

**NATIONAL PETROLEUM
RESERVE ALASKA**

1:63360


0 2,500 5,000 FEET

Continue on sheet 311




PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.



GENERAL SENSITIVITIES


- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.
- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- Caribou present in winter.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats.



CULTURAL SITES


The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.




AIR ACCESS*


- An irregularly attended, 5,000 ft. gravel private airstrip is located at Inigok Test 1 (Sheet 171), approximately 62 miles northeast from the center of this map. Runway condition unknown.
- An unattended, 5,400 ft. gravel airstrip serving the village of Umiat (Sheet 275) is located approximately 69 miles east from the center of this map. Visual inspection recommended prior to use. No winter maintenance or snow removal.



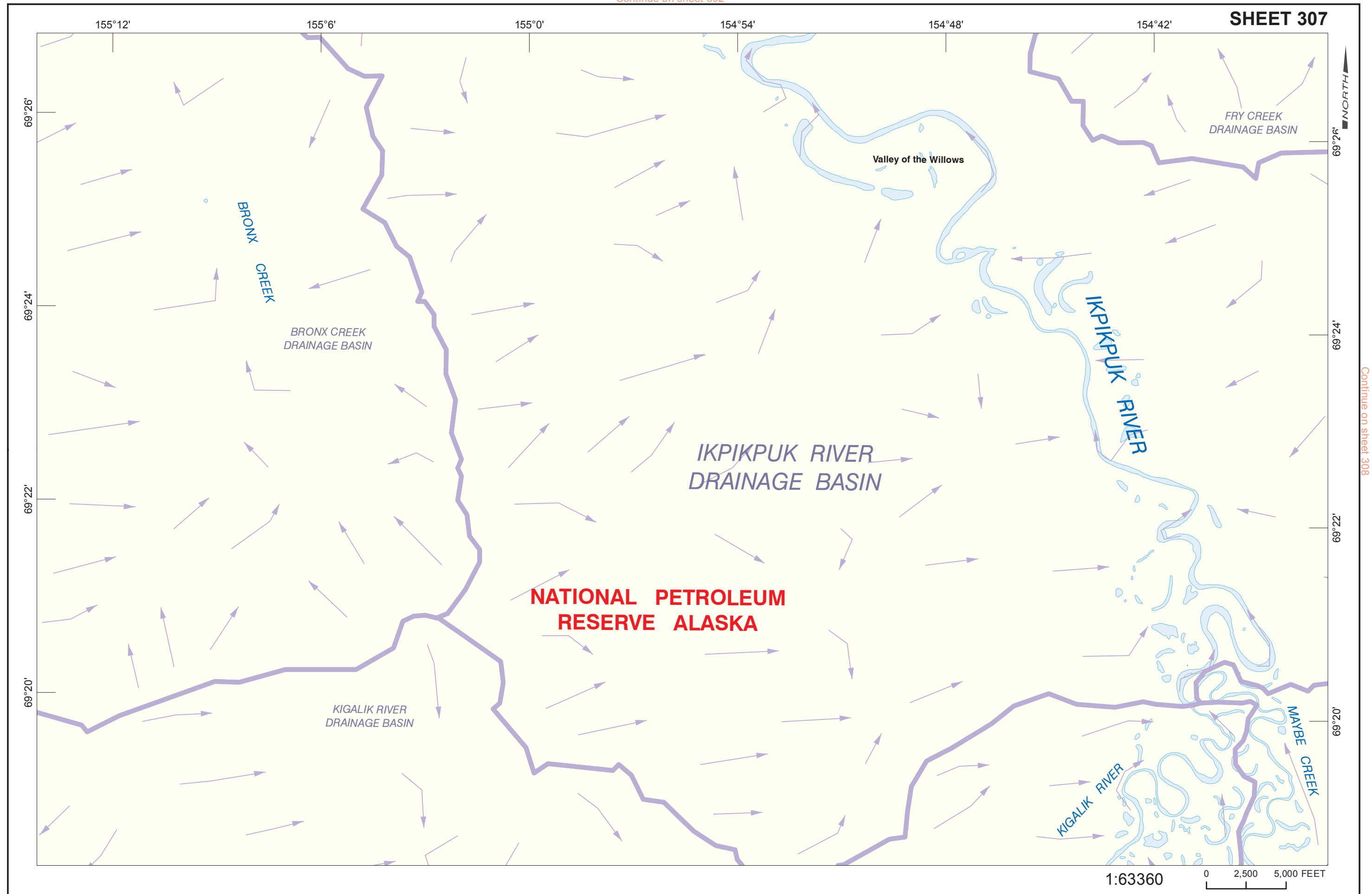
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS


- There are no marine waters or shorelines on this map.






</






PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.



GENERAL SENSITIVITIES


- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.
- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- Caribou present in winter.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats.



CULTURAL SITES


The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.




AIR ACCESS*

- An irregularly attended, 5,000 ft. gravel private airstrip is located at Inigok Test 1 (Sheet 171), approximately 52 miles north-northeast from the center of this map. Runway condition unknown.
- An unattended, 5,400 ft. gravel airstrip serving the village of Umiat (Sheet 275) is located approximately 54 miles east from the center of this map. Visual inspection recommended prior to use. No winter maintenance or snow removal.



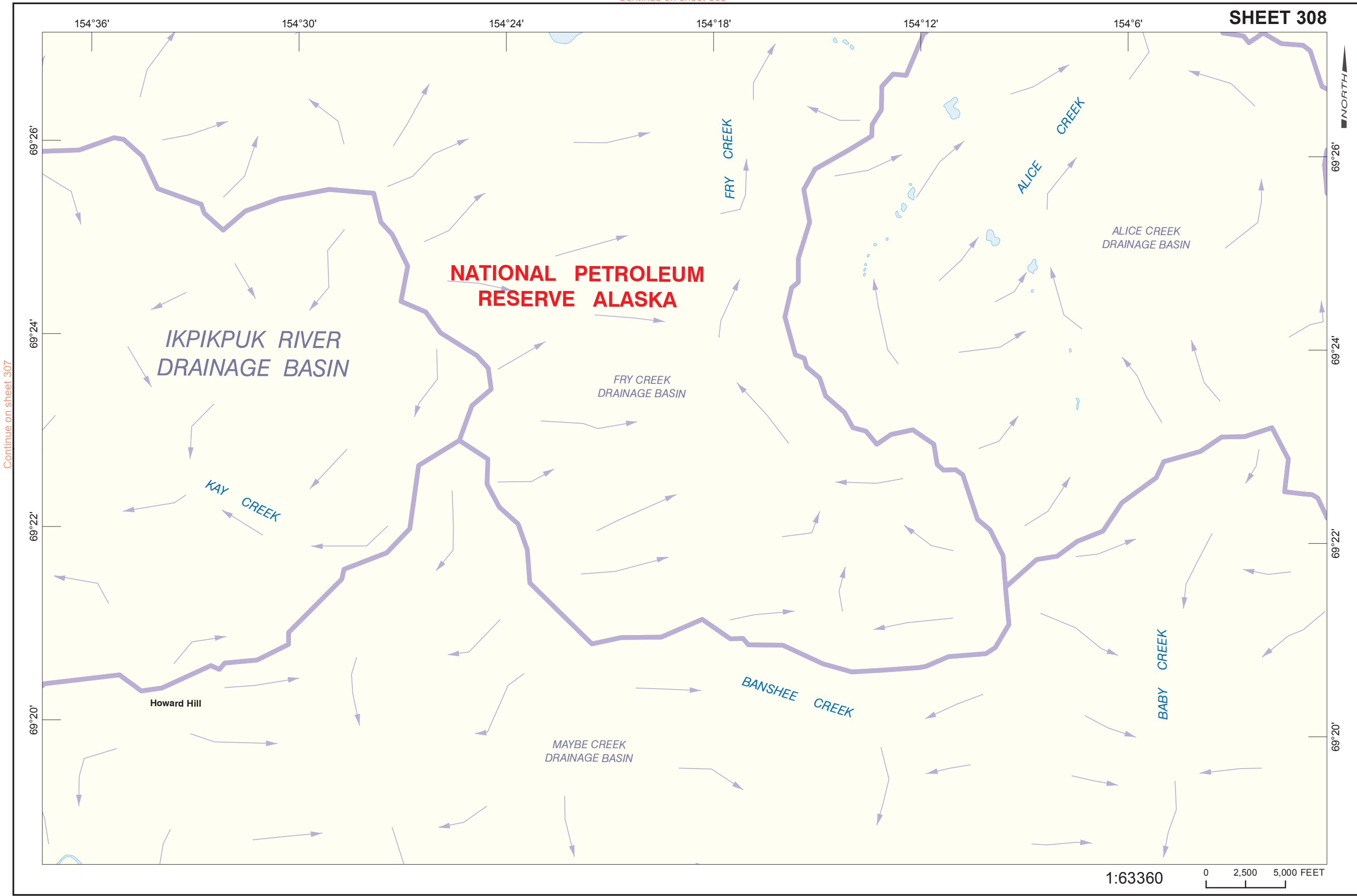
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS


- There are no marine waters or shorelines on this map.



*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.


NOTE: All values given on these pages are for planning purposes only.






PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.



GENERAL SENSITIVITIES


- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.
- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- Caribou present in winter.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats.



CULTURAL SITES


The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.




AIR ACCESS*

- An unattended, 5,400 ft. gravel airstrip serving the village of Umiat (Sheet 275) is located approximately 39 miles east from the center of this map. Visual inspection recommended prior to use. No winter maintenance or snow removal.
- An irregularly attended, 5,000 ft. gravel private airstrip is located at Inigok Test 1 (Sheet 171), approximately 45 miles north-northeast from the center of this map. Runway condition unknown.



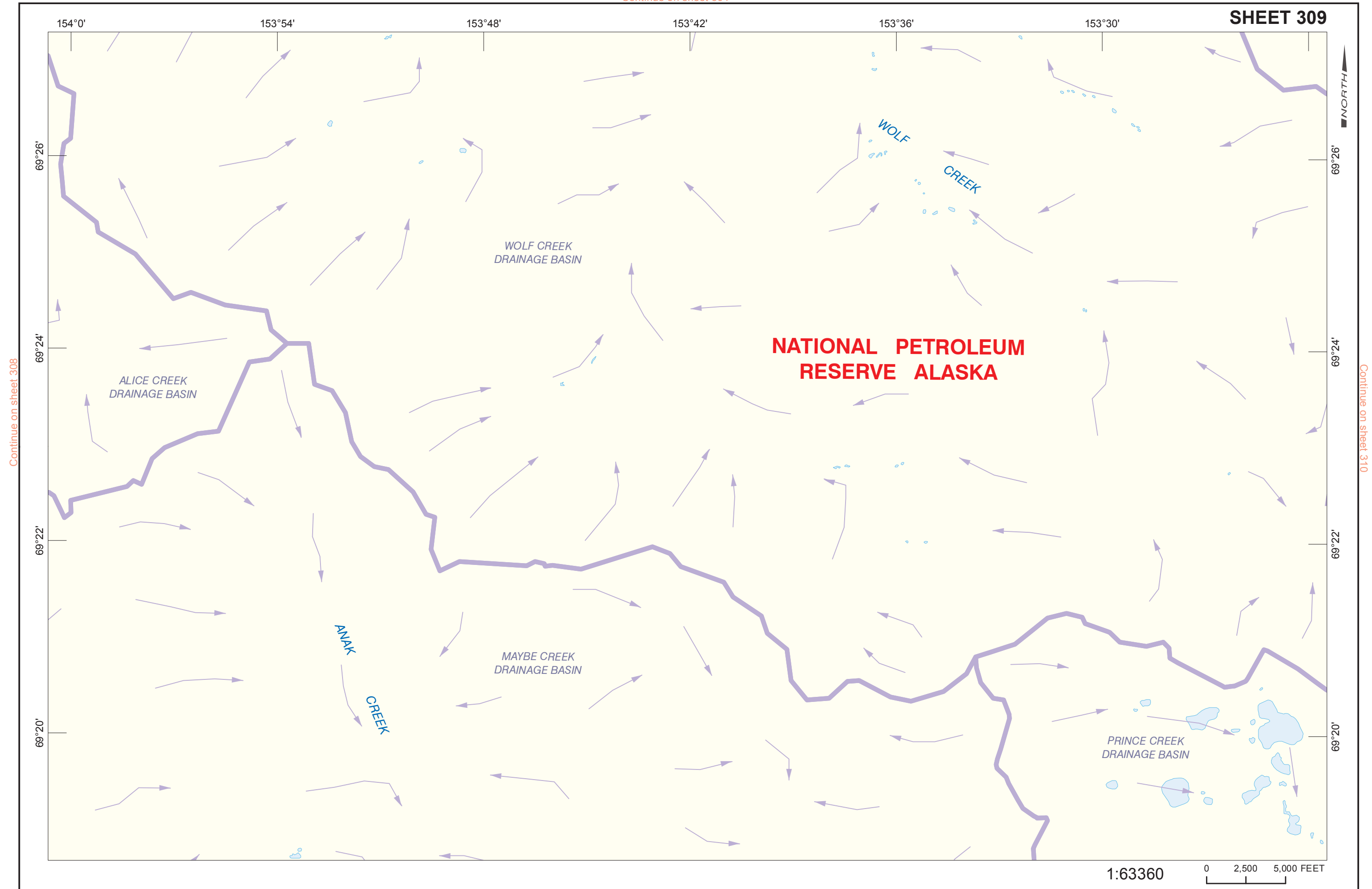
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS


- There are no marine waters or shorelines on this map.



*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.


NOTE: All values given on these pages are for planning purposes only.






PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.



GENERAL SENSITIVITIES


- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.
- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- Caribou present in winter.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats.



CULTURAL SITES


The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.




AIR ACCESS*

- An unattended, 5,400 ft. gravel airstrip serving the village of Umiat (Sheet 275) is located approximately 24 miles east from the center of this map. Visual inspection recommended prior to use. No winter maintenance or snow removal.
- An irregularly attended, 5,000 ft. gravel private airstrip is located at Inigok Test 1 (Sheet 171), approximately 42 miles north from the center of this map. Runway condition unknown.



VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

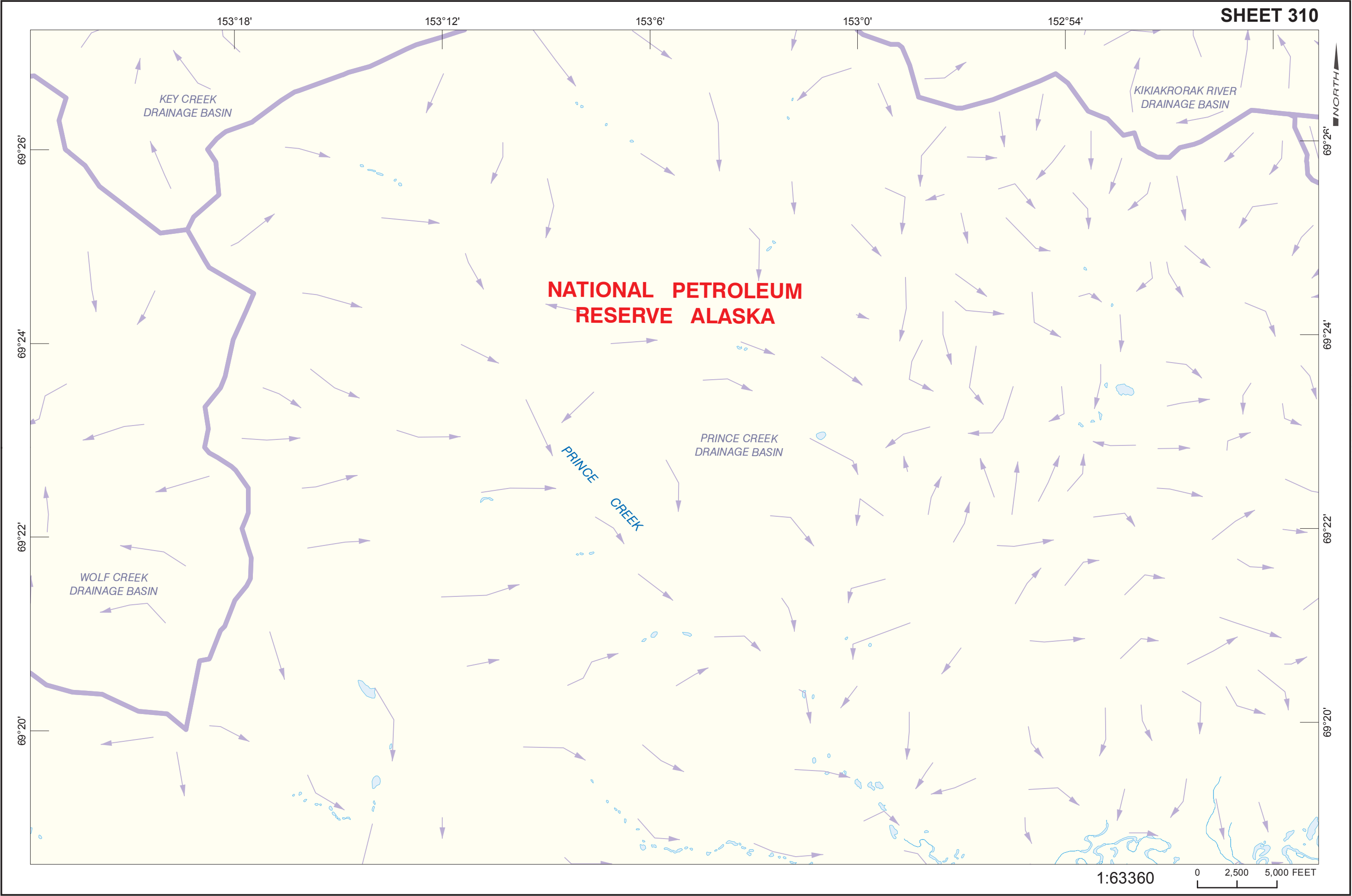


*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

NOTE: All values given on these pages are for planning purposes only.

Continue on sheet 309

Continue on sheet 311





PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

GENERAL SENSITIVITIES

- All activities within the National Petroleum Reserve – Alaska (NPRA).
- The Colville River is a migratory pathway for char, cisco, and whitefish.
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.
- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- The cliffs along the Colville River provide critical nesting sites and food hunting areas for peregrine falcons, gyrfalcons, golden eagles and rough-legged hawks.
- Caribou present in winter.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- An unattended, 5,400 ft. gravel airstrip serving the village of Umiat (Sheet 275) is located approximately 8 miles east from the center of this map. Visual inspection recommended prior to use. No winter maintenance or snow removal.
- An irregularly attended, 5,000 ft. gravel private airstrip is located at Inigok Test 1 (Sheet 171), approximately 45 miles north-northwest from the center of this map. Runway condition unknown.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

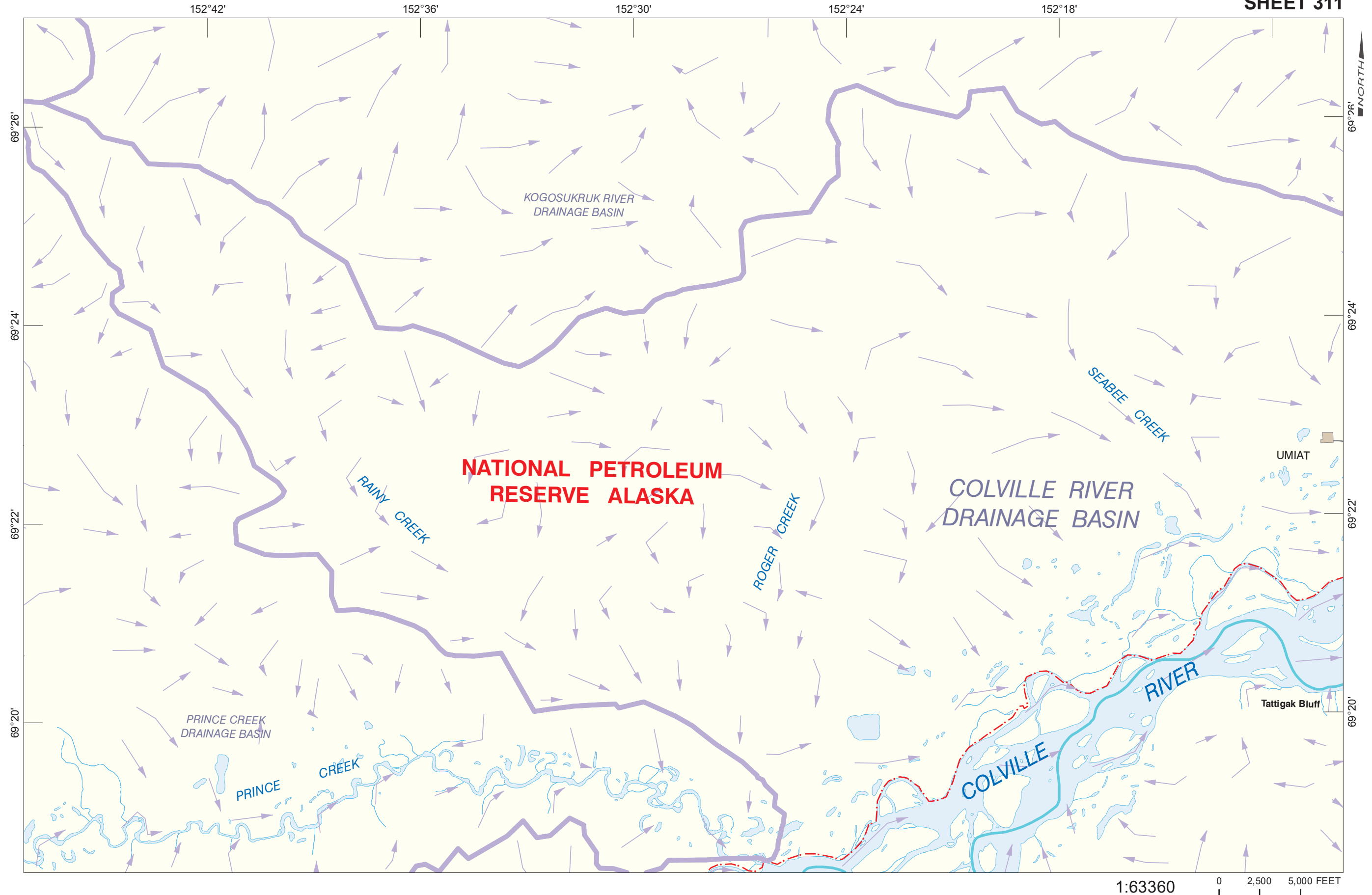
- There are no marine waters or shorelines on this map.


*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 310

Continue on sheet 289

Continue on sheet 275





NORTH SLOPE SPILL RESPONSE

ACS

A WORLD CLASS ORGANIZATION

PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.


GENERAL SENSITIVITIES

- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.
- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- Caribou present in winter.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



NORTH SLOPE SPILL RESPONSE

ACS

A WORLD CLASS ORGANIZATION

AIR ACCESS*


- An irregularly attended, 5,000 ft. gravel private airstrip is located at Inigok Test 1 (Sheet 171), approximately 68 miles northeast from the center of this map. Runway condition unknown.
- An unattended, 5,400 ft. gravel airstrip serving the village of Umiat (Sheet 275) is located approximately 70 miles east-northeast from the center of this map. Visual inspection recommended prior to use. No winter maintenance or snow removal.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.


*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.






PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.



GENERAL SENSITIVITIES


- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.
- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- Caribou present in winter.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats.



CULTURAL SITES


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AIR ACCESS*

- An unattended, 5,400 ft. gravel airstrip serving the village of Umiat (Sheet 275) is located approximately 54 miles east-northeast from the center of this map. Visual inspection recommended prior to use. No winter maintenance or snow removal.
- An irregularly attended, 5,000 ft. gravel private airstrip is located at Inigok Test 1 (Sheet 171), approximately 59 miles north-northeast from the center of this map. Runway condition unknown.



VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

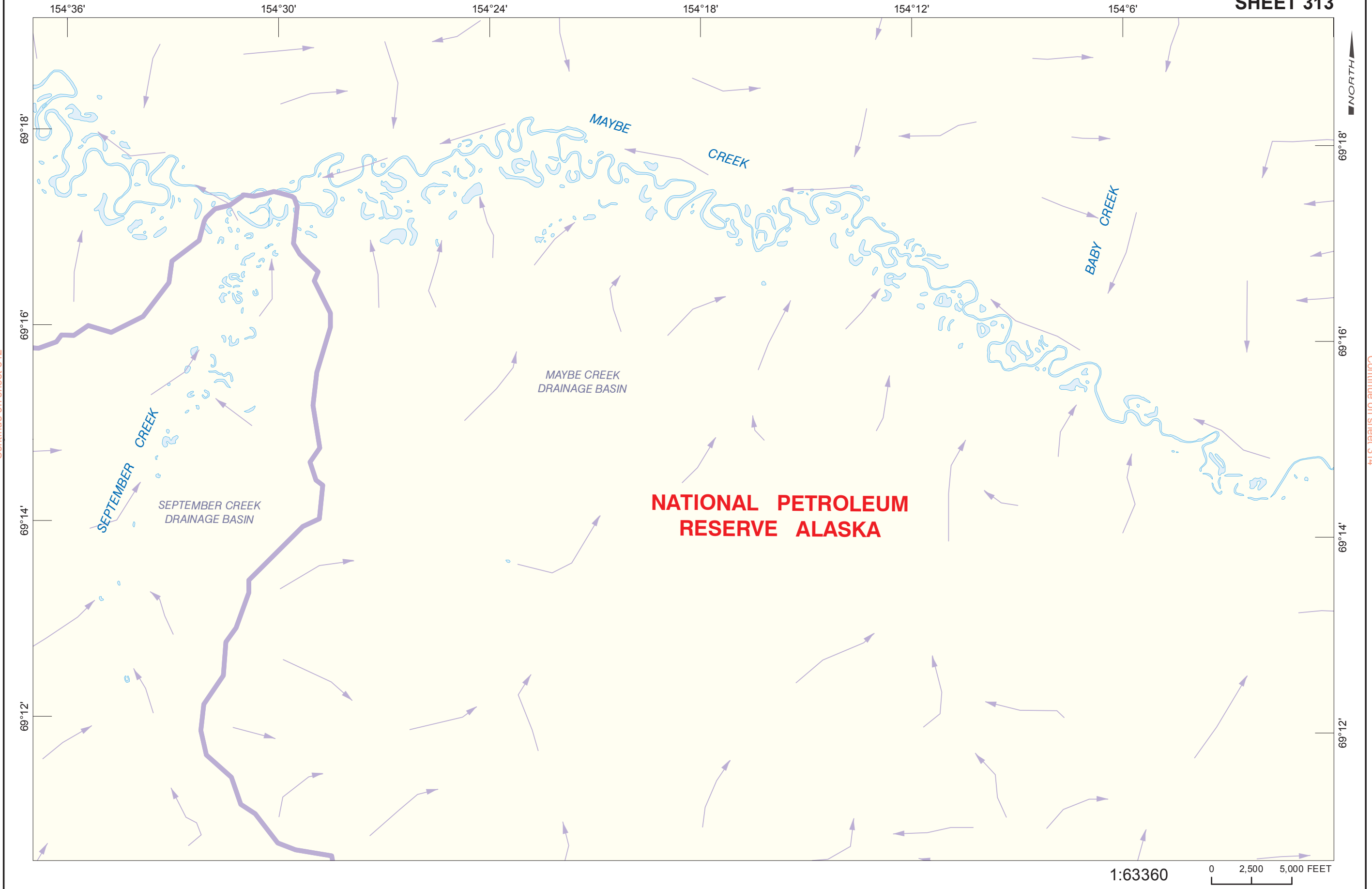



*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

NOTE: All values given on these pages are for planning purposes only.

Continue on sheet 312


Continue on sheet 314






PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.



GENERAL SENSITIVITIES


- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.
- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- Caribou present in winter.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats.



CULTURAL SITES


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Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.




AIR ACCESS*

- An unattended, 5,400 ft. gravel airstrip serving the village of Umiat (Sheet 275) is located approximately 39 miles east-northeast from the center of this map. Visual inspection recommended prior to use. No winter maintenance or snow removal.
- An irregularly attended, 5,000 ft. gravel private airstrip is located at Inigok Test 1 (Sheet 171), approximately 53 miles north-northeast from the center of this map. Runway condition unknown.



VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

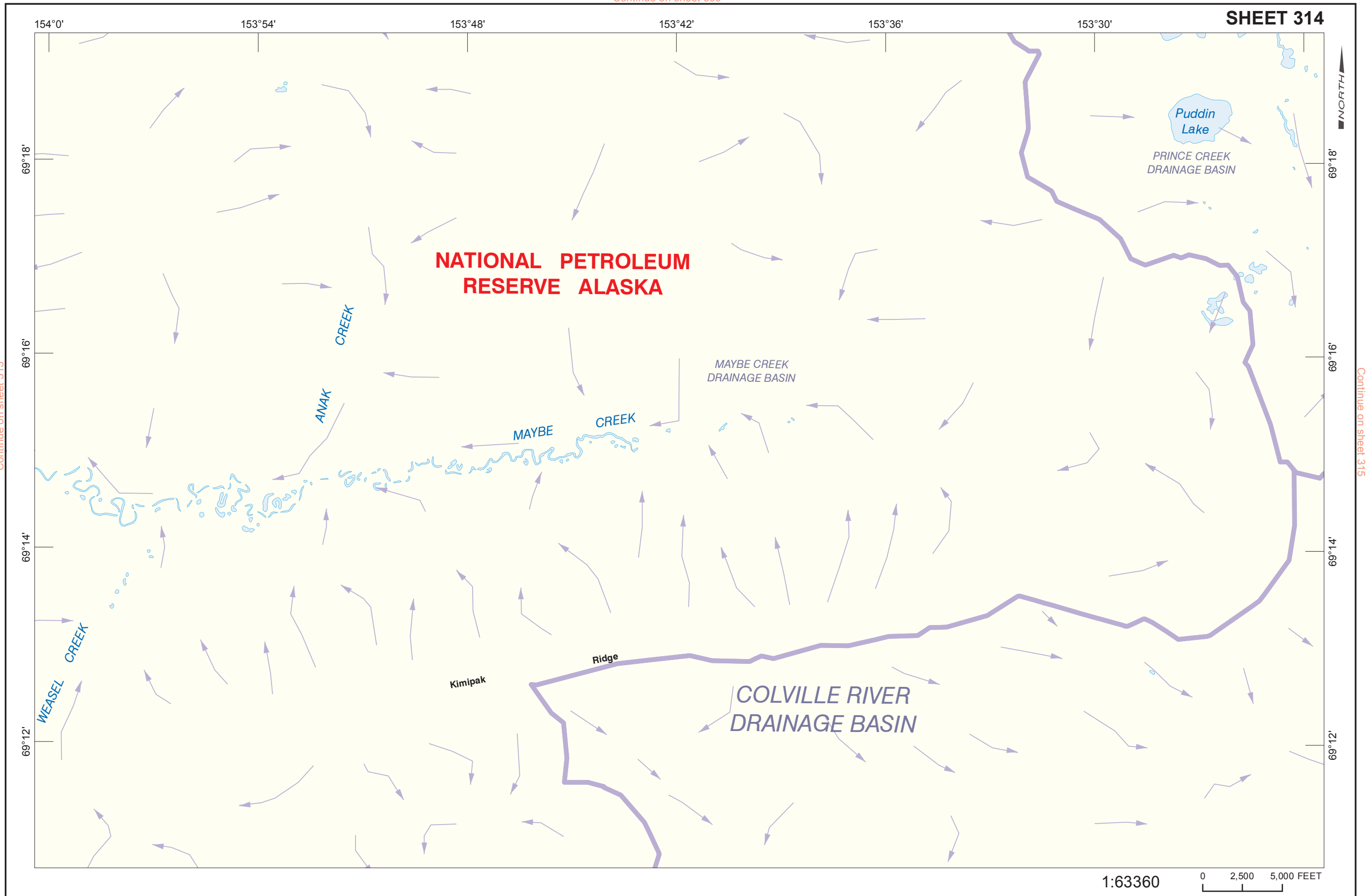



*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

NOTE: All values given on these pages are for planning purposes only.

Continue on sheet 313

Continue on sheet 315





NORTH SLOPE SPILL RESPONSE

ACS

A WORLD CLASS ORGANIZATION

PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.


GENERAL SENSITIVITIES

- All activities within the National Petroleum Reserve – Alaska (NPRA).
- The Colville River is a migratory pathway for char, cisco, and whitefish.
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.
- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- The cliffs along the Colville River provide critical nesting sites and food hunting areas for peregrine falcons, gyrfalcons, golden eagles and rough-legged hawks.
- Caribou present in winter.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats.

CULTURAL SITES

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Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



NORTH SLOPE SPILL RESPONSE

ACS

A WORLD CLASS ORGANIZATION

AIR ACCESS*

- An unattended, 5,400 ft. gravel airstrip serving the village of Umiat (Sheet 275) is located approximately 25 miles east-northeast from the center of this map. Visual inspection recommended prior to use. No winter maintenance or snow removal.
- An irregularly attended, 5,000 ft. gravel private airstrip is located at Inigok Test 1 (Sheet 171), approximately 51 miles north from the center of this map. Runway condition unknown.

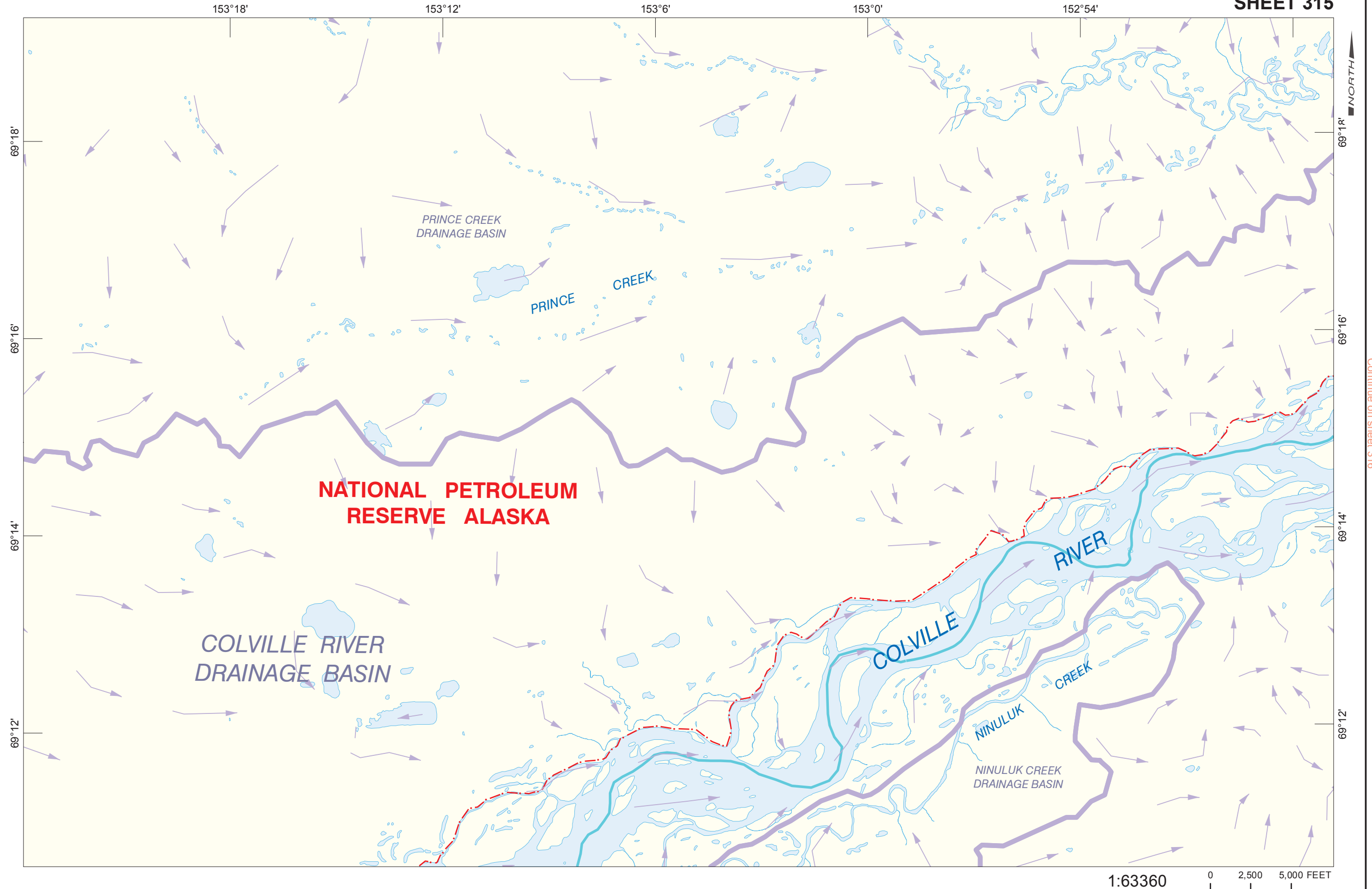
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS


- There are no marine waters or shorelines on this map.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 314

Continue on sheet 316





NORTH SLOPE SPILL RESPONSE

ACS

A WORLD CLASS ORGANIZATION

PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.


GENERAL SENSITIVITIES

- All activities within the National Petroleum Reserve – Alaska (NPRA).
- The Colville River is a migratory pathway for char, cisco, and whitefish.
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.
- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- The cliffs along the Colville River provide critical nesting sites and food hunting areas for peregrine falcons, gyrfalcons, golden eagles and rough-legged hawks.
- Caribou present in winter.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats.

CULTURAL SITES

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NORTH SLOPE SPILL RESPONSE

ACS

A WORLD CLASS ORGANIZATION

AIR ACCESS*

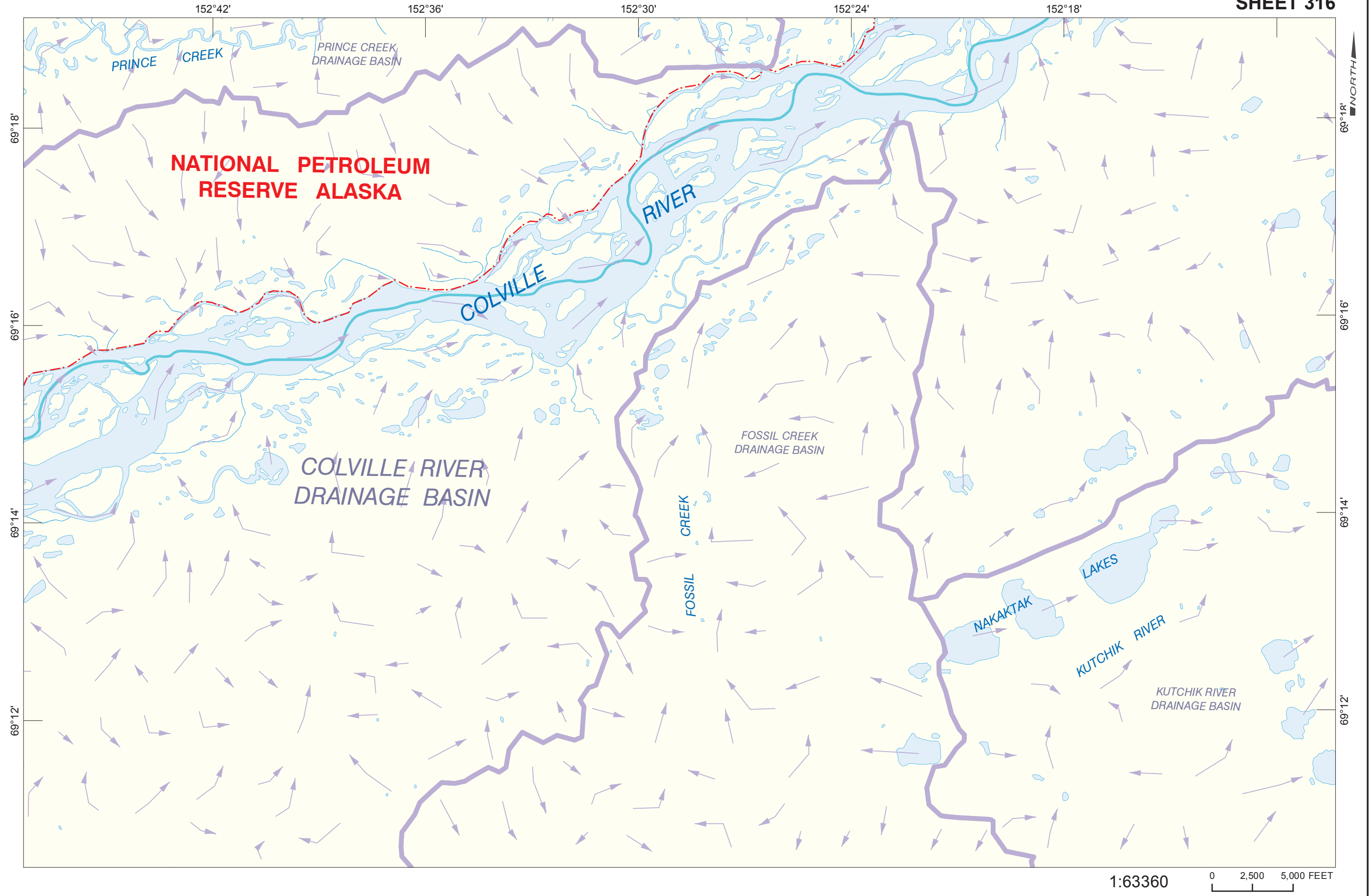
- An unattended, 5,400 ft. gravel airstrip serving the village of Umiat (Sheet 275) is located approximately 12 miles east-northeast from the center of this map. Visual inspection recommended prior to use. No winter maintenance or snow removal.
- An irregularly attended, 5,000 ft. gravel private airstrip is located at Inigok Test 1 (Sheet 171), approximately 54 miles north-northwest from the center of this map. Runway condition unknown.


VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 315





PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.


GENERAL SENSITIVITIES

- All activities within the National Petroleum Reserve – Alaska (NPRA).
- The Colville River is a migratory pathway for char, cisco, and whitefish.
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.
- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- The cliffs along the Colville River provide critical nesting sites and food hunting areas for peregrine falcons, gyrfalcons, golden eagles and rough-legged hawks.
- Caribou present in winter.
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Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



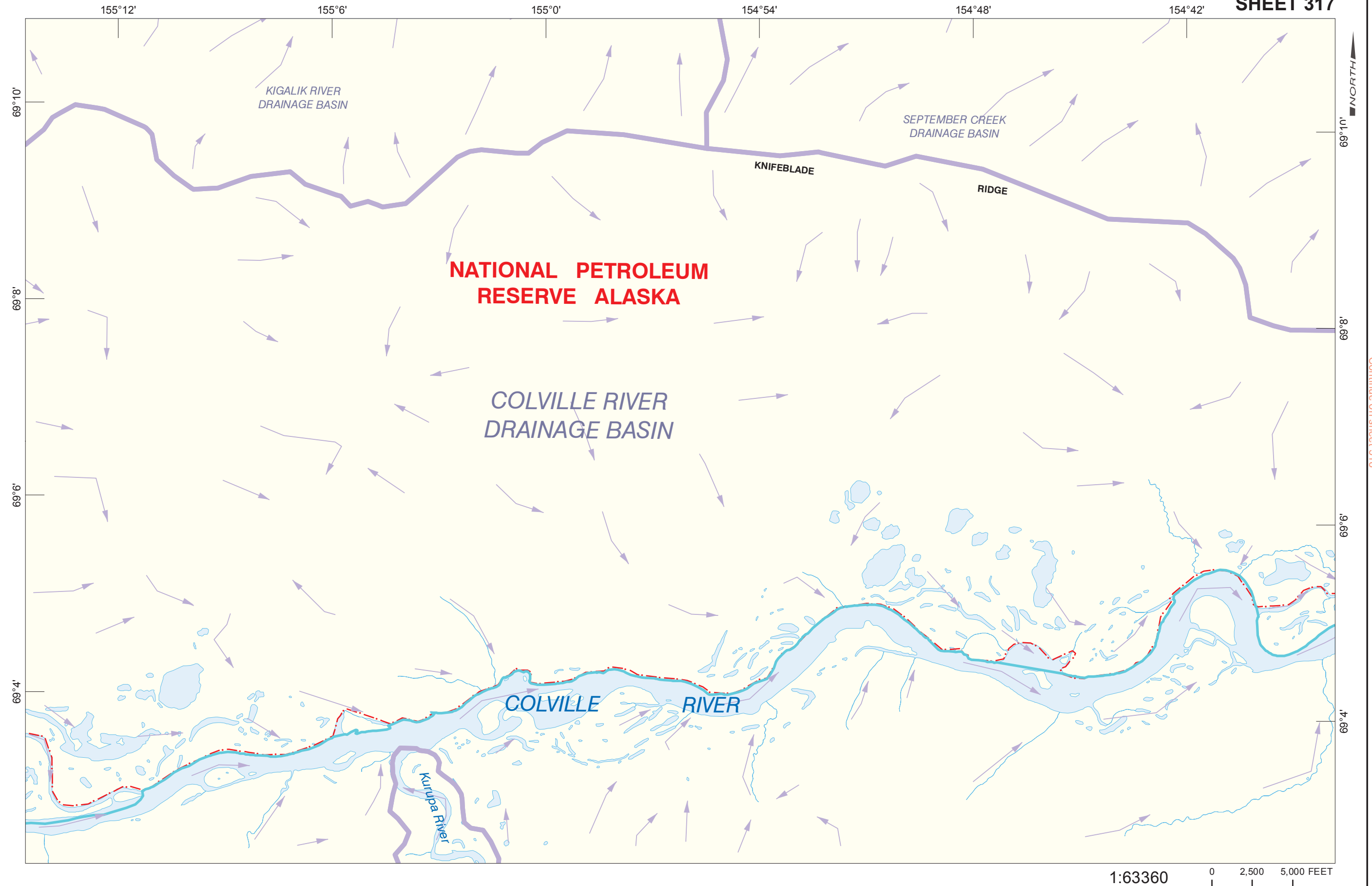
AIR ACCESS*

- An unattended, 5,400 ft. gravel airstrip serving the village of Umiat (Sheet 275) is located approximately 72 miles east-northeast from the center of this map. Visual inspection recommended prior to use. No winter maintenance or snow removal.
- An irregularly attended, 5,000 ft. gravel private airstrip is located at Inigok Test 1 (Sheet 171), approximately 76 miles north-northeast from the center of this map. Runway condition unknown.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.



PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

GENERAL SENSITIVITIES

- All activities within the National Petroleum Reserve – Alaska (NPRA).
- The Colville River is a migratory pathway for char, cisco, and whitefish.
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.
- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- The cliffs along the Colville River provide critical nesting sites and food hunting areas for peregrine falcons, gyrfalcons, golden eagles and rough-legged hawks.
- Caribou present in winter.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats.

CULTURAL SITES

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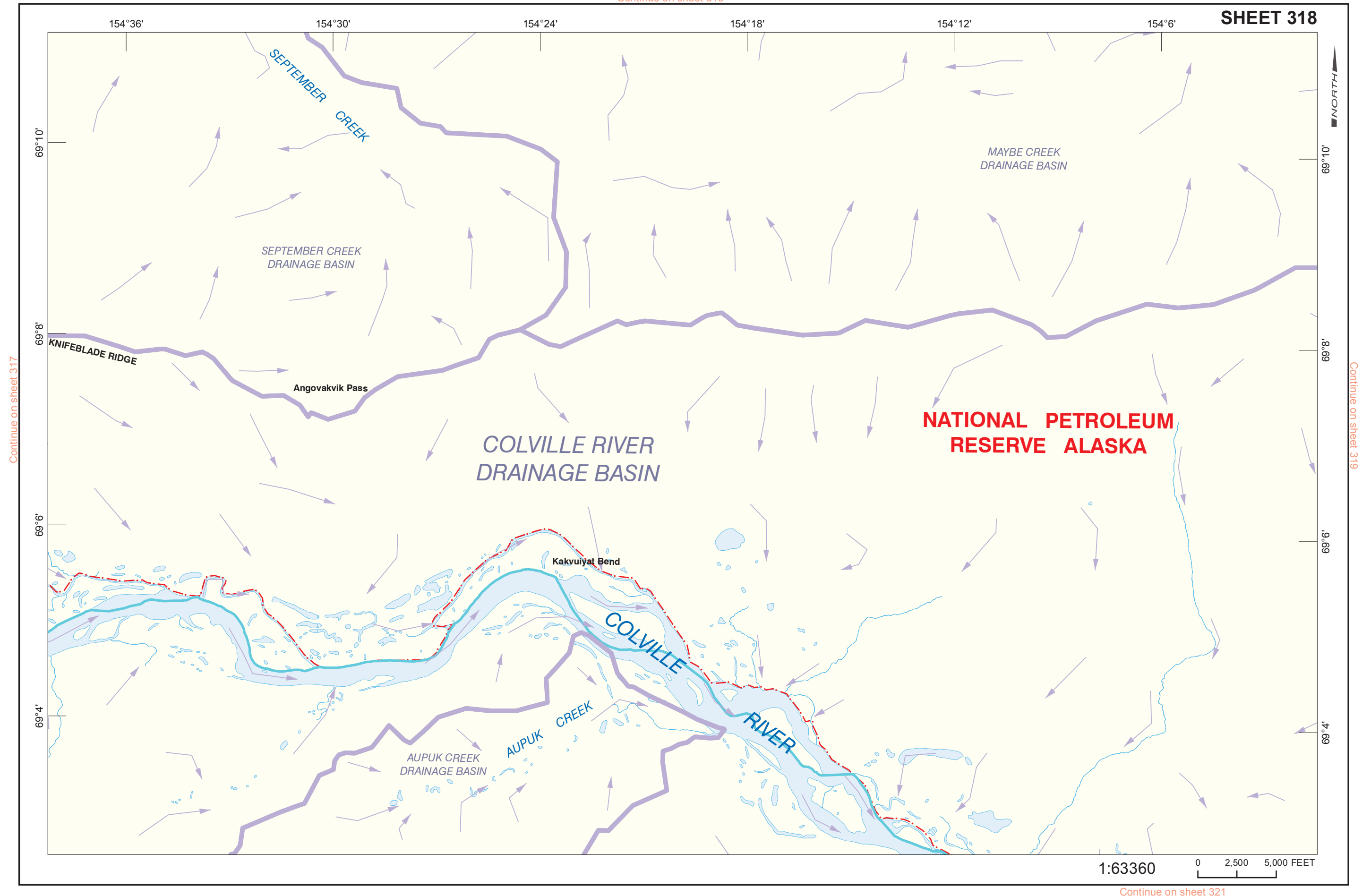
AIR ACCESS*


- An unattended, 5,400 ft. gravel airstrip serving the village of Umiat (Sheet 275) is located approximately 57 miles east-northeast from the center of this map. Visual inspection recommended prior to use. No winter maintenance or snow removal.
- An irregularly attended, 5,000 ft. gravel private airstrip is located at Inigok Test 1 (Sheet 171), approximately 68 miles north-northeast from the center of this map. Runway condition unknown.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.





PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.


GENERAL SENSITIVITIES

- All activities within the National Petroleum Reserve – Alaska (NPRA).
- The Colville River is a migratory pathway for char, cisco, and whitefish.
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.
- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- The cliffs along the Colville River provide critical nesting sites and food hunting areas for peregrine falcons, gyrfalcons, golden eagles and rough-legged hawks.
- Caribou present in winter.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats.

CULTURAL SITES

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AIR ACCESS*

- An unattended, 5,400 ft. gravel airstrip serving the village of Umiat (Sheet 275) is located approximately 43 miles northeast from the center of this map. Visual inspection recommended prior to use. No winter maintenance or snow removal.
- An irregularly attended, 5,000 ft. gravel private airstrip is located at Inigok Test 1 (Sheet 171), approximately 62 miles north-northeast from the center of this map. Runway condition unknown.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

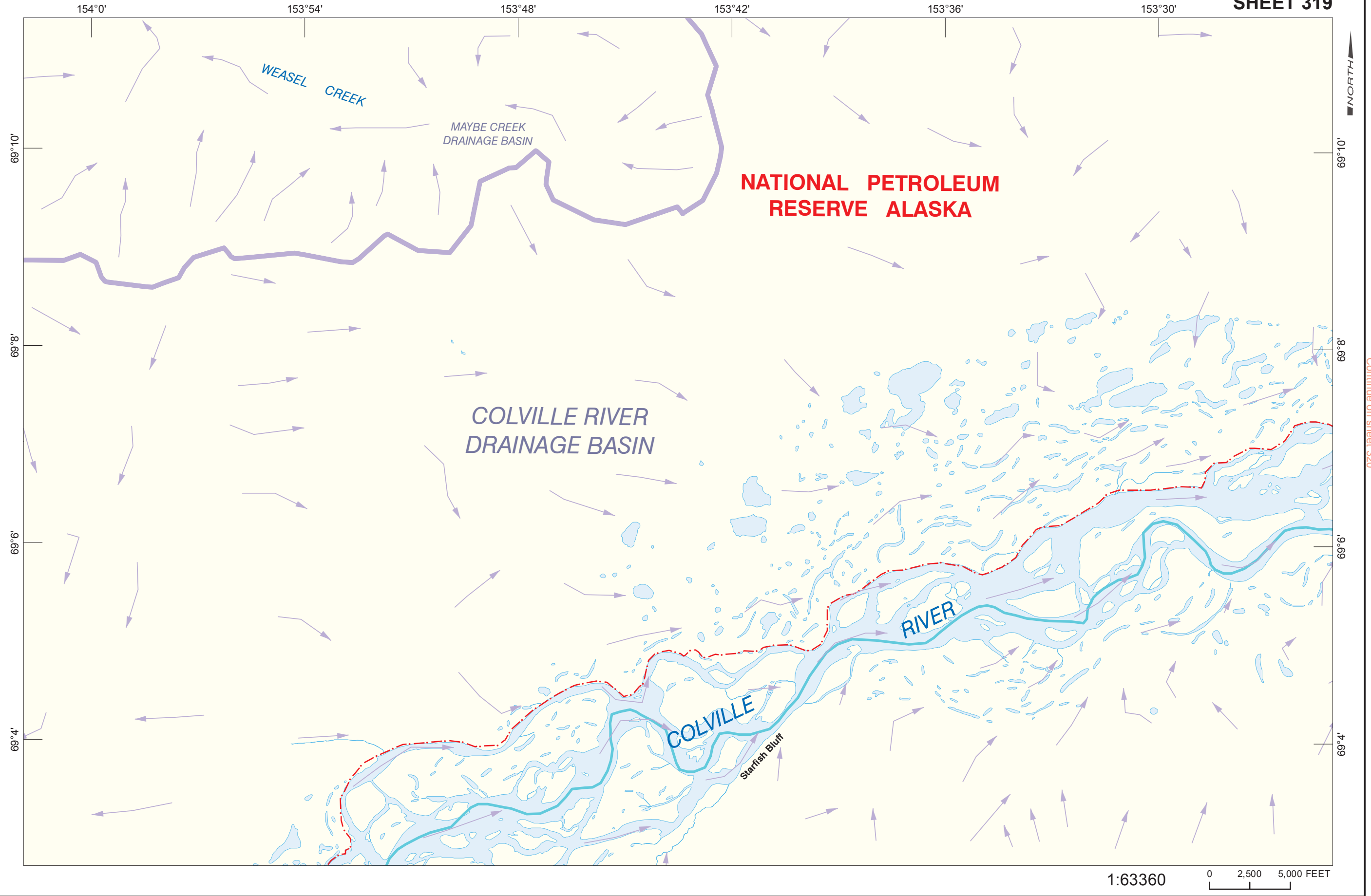
*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 314

SHEET 319

Continue on sheet 318

Continue on sheet 320



Continue on sheet 321



PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

GENERAL SENSITIVITIES

- All activities within the National Petroleum Reserve – Alaska (NPRA).
- The Colville River is a migratory pathway for char, cisco, and whitefish.
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.
- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- The cliffs along the Colville River provide critical nesting sites and food hunting areas for peregrine falcons, gyrfalcons, golden eagles and rough-legged hawks.
- Caribou present in winter.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

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AIR ACCESS*

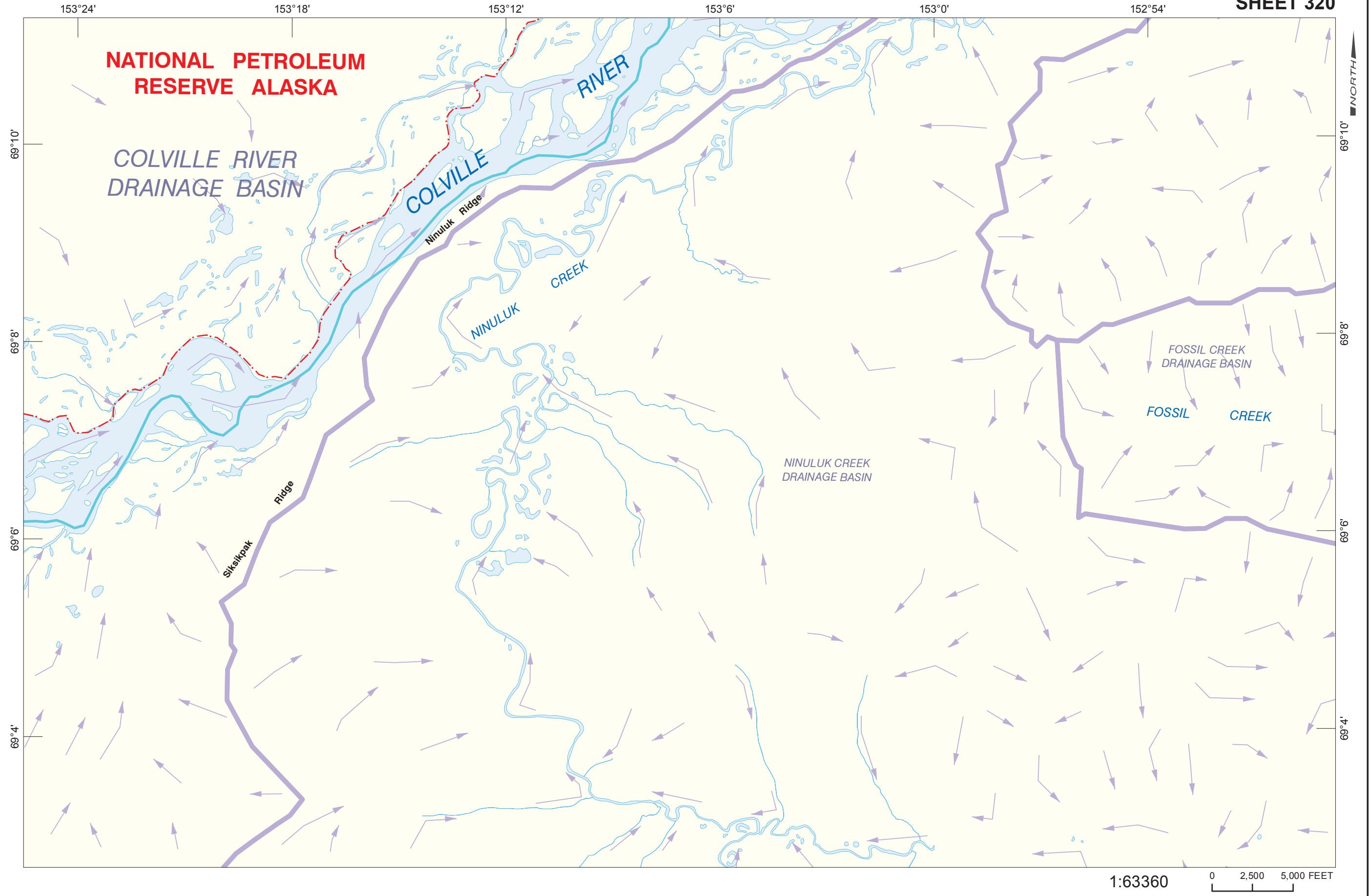
- An unattended, 5,400 ft. gravel airstrip serving the village of Umiat (Sheet 275) is located approximately 30 miles northeast from the center of this map. Visual inspection recommended prior to use. No winter maintenance or snow removal.
- An irregularly attended, 5,000 ft. gravel private airstrip is located at Inigok Test 1 (Sheet 171), approximately 60 miles north from the center of this map. Runway condition unknown.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 319





PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

GENERAL SENSITIVITIES

- All activities within the National Petroleum Reserve – Alaska (NPRA).
- The Colville River is a migratory pathway for char, cisco, and whitefish.
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.
- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- The cliffs along the Colville River provide critical nesting sites and food hunting areas for peregrine falcons, gyrfalcons, golden eagles and rough-legged hawks.
- Caribou present in winter.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats.

CULTURAL SITES

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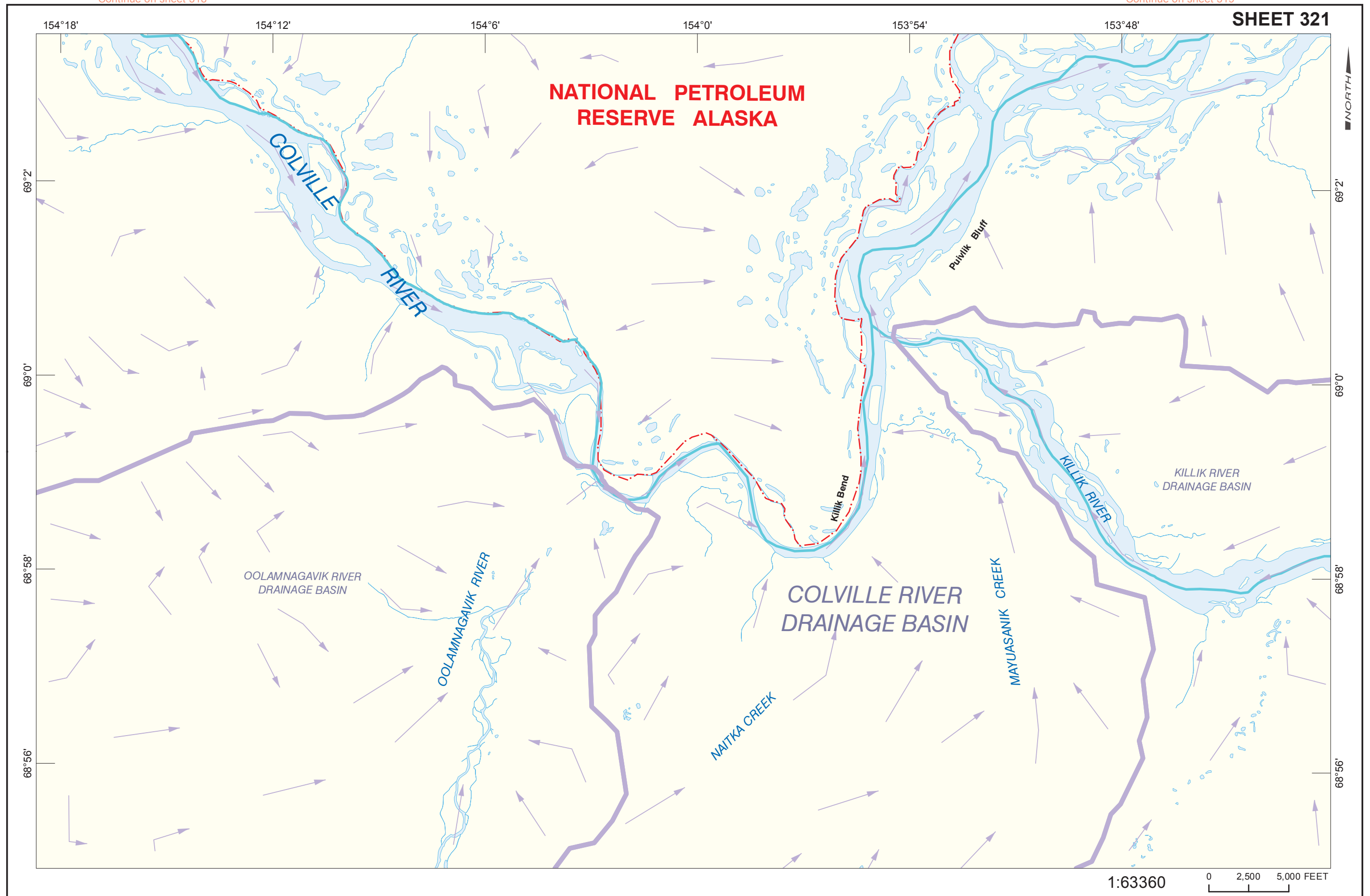
AIR ACCESS*

- An unattended, 5,400 ft. gravel airstrip serving the village of Umiat (Sheet 275) is located approximately 54 miles northeast from the center of this map. Visual inspection recommended prior to use. No winter maintenance or snow removal.
- An irregularly attended, 5,000 ft. gravel private airstrip is located at Inigok Test 1 (Sheet 171), approximately 73 miles north-northeast from the center of this map. Runway condition unknown.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.



PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

GENERAL SENSITIVITIES

- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Coastal areas and inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during the open water months (generally April - October). Expect to deploy bird hazing systems.
- Known nesting area for threatened Spectacled eiders and good nesting habitat for Steller’s eiders.
- Black brant and snow geese breeding, nesting, and rearing area during the summer.
- Freshwater rivers and inland lakes may contain resident and anadromous fish species important to subsistence users.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.

AIR ACCESS*

- Commercial and air freight services are available at Wiley Post / Will Rogers Memorial Airport in Barrow (Sheet 195), located approximately 28 miles north-northeast of the center of this map. Runway is 6,500 ft. asphalt.
- An unattended, 4,400 ft. gravel airstrip serving the village of Atqasuk (Sheet 337) is located approximately 31 miles south-southwest of the center of this map. Visual inspection recommended prior to use.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

COUNTERMEASURES CONSIDERATIONS


- This area is wet tundra and peat, dotted with numerous small lakes and creeks. Expect it to be very unstable, presenting a high risk to load-bearing machinery, equipment and personnel.
- Waterbirds will occupy leads in the ice during spring breakup.

*See the latest Supplement, Alaska and United States Coast Pilot for current information on air and vessel access, respectively.

Continue on sheet 256

Continue on sheet 207





PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS170	Mouth of unnamed river on south shore of Peard Bay.	Most sensitive during open water season. Prevent oil from entering the river.	C-14	100'

* Priority Protection Area -- The entire Peard Bay area, including the Point Franklin spit/barrier island and Sea-horse Islands, should be viewed as one large Priority Protection Area during open water season due to high concentrations of migratory birds. On-site conditions may require the use of open water tactics to prevent oil migration into sensitive habitat.


GENERAL SENSITIVITIES

- Polar Bear denning area.
- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl, diving, shore and sea birds during the open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- Peard Bay is an important bird staging area.
- Walrus may be present off shore on ice floes, Mar-Nov.
- Bearded Seals may be present in coastal waters and/or on ice, Jan-Dec.
- Ringed Seal breeding and pupping along shorefast ice, Jun-Feb.
- Concentrated Spotted Seal haulout area in Peard Bay, Jul-Nov.
- Bowhead Whales (endangered species) migrate to the Arctic Ocean and may be present, Mar-Jun.
- Beluga Whales in Arctic Ocean Jul-Oct, and in high concentration in Peard Bay, Apr-Jun.
- Gray Whales may be present in Chukchi Sea, Jun-Sep.
- Chinook Salmon are present in Chukchi Sea/coastal waters, Jun-Sep.
- Freshwater rivers and inland lakes may contain resident and anadromous fish species important to subsistence users.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- An unattended, 4,500 ft. gravel airstrip serving the village of Wainwright (Sheet 250 & 251) is located approximately 32 miles west-southwest of the center of this map. Visual inspection recommended prior to use.
- Wainwright Air Station (Sheet 250) is located approximately 31 miles southwest of the center of this map. This facility is closed to the public and should be considered for emergency landing only. The unattended, 3,000 ft. gravel runway is not maintained and its condition is unknown. Visual inspection recommended prior to use. May be used for spill response operations upon approval by Elmendorf Air Force Base, 11th Air Force Airfield Management, (907) 552-7384/3636/5265.
- An unattended, 4,400 ft. gravel airstrip serving the village of Atqasuk (Sheet 337) is located approximately 32 miles southeast of the center of this map. Visual inspection recommended prior to use.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

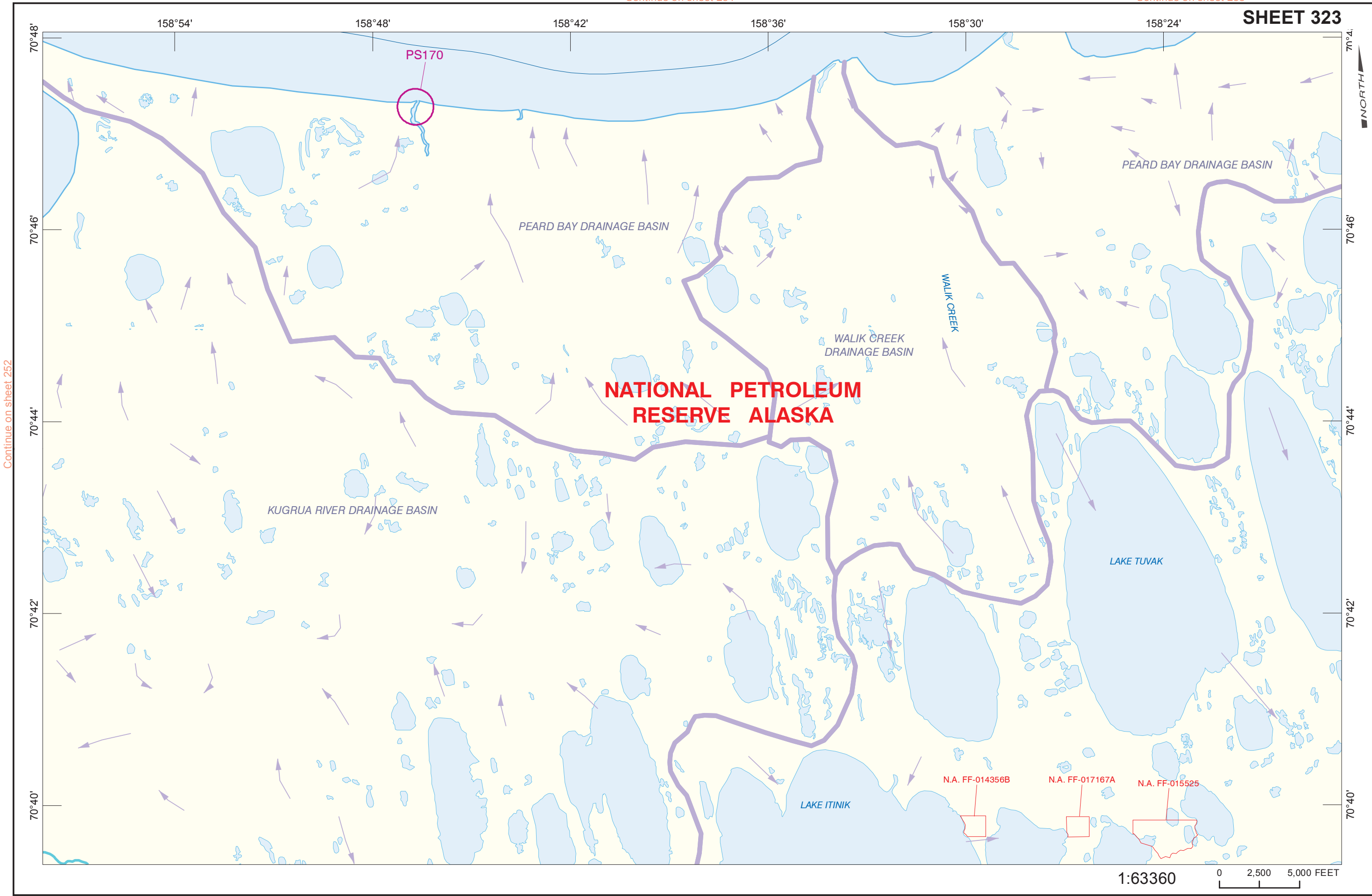
- A northeasterly current flows at 1-2 knots along the shore, then forms a big eddy that circulates clockwise in the bight of Point Franklin. This eddy extends approximately 20 miles northeast of the point and 5-6 miles from shore.
- Peard Bay has uniform depths of approximately 20 ft. over the greater portion of its area. Its mud and clay bottom is excellent holding ground.
- Vessels drafting less than approximately 4 ft. may enter Kugrua Bay. Mid-bay depths are approximately 10-12 ft.
- Chukchi Sea currents near shore flow north at not less than 1 knot when unopposed by wind or stopped by ice. If the ice is open from shore all the way to Point Barrow, the funneling effect it creates increases current velocity to 2-3 knots near Point Barrow.
- Pack ice in this area breaks off from the shore ice in May, moving off and closing back in again with changing winds, until gradually moving off to the north and west. Young ice forms in the vacated spaces, but gradually gets thinner until it disappears in early July. Average freeze up in this area occurs around the first of October.

COUNTERMEASURES CONSIDERATIONS

- This area is wet tundra and peat, dotted with numerous small lakes and creeks. Expect it to be very unstable, present-ing a high risk to load-bearing machinery, equipment and personnel.
- Waterbirds will occupy leads in the ice during spring breakup.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

NOTE: All values given on these pages are for planning purposes only.





PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

GENERAL SENSITIVITIES

- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Coastal areas and inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during the open water months (generally April - October). Expect to deploy bird hazing systems.
- Peard Bay to the northwest is an important bird staging area.
- Known nesting area for threatened Spectacled eiders and good nesting habitat for Steller’s eiders.
- Black brant and snow geese breeding, nesting, and rearing area during the summer.
- Freshwater rivers and inland lakes may contain resident and anadromous fish species important to subsistence users.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- An unattended, 4,400 ft. gravel airstrip serving the village of Atqasuk (Sheet 337) is located approximately 23 miles south-southeast of the center of this map. Visual inspection recommended prior to use.
- Commercial and air freight services are available at Wiley Post / Will Rogers Memorial Airport in Barrow (Sheet 195), located approximately 45 miles northeast of the center of this map. Runway is 6,500 ft. asphalt.
- An unattended, 4,500 ft. gravel airstrip serving the village of Wainwright (Sheet 250 & 251) is located approximately 47 miles west-southwest of the center of this map. Visual inspection recommended prior to use.
- Wainwright Air Station (Sheet 250) is located approximately 44 miles west-southwest of the center of this map. This facility is closed to the public and should be considered for emergency landing only. The unattended, 3,000 ft. gravel runway is not maintained and its condition is unknown. Visual inspection recommended prior to use. May be used for spill response operations upon approval by Elmendorf Air Force Base, 11th Air Force Airfield Management, (907) 552-7384/3636/5265.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

COUNTERMEASURES CONSIDERATIONS

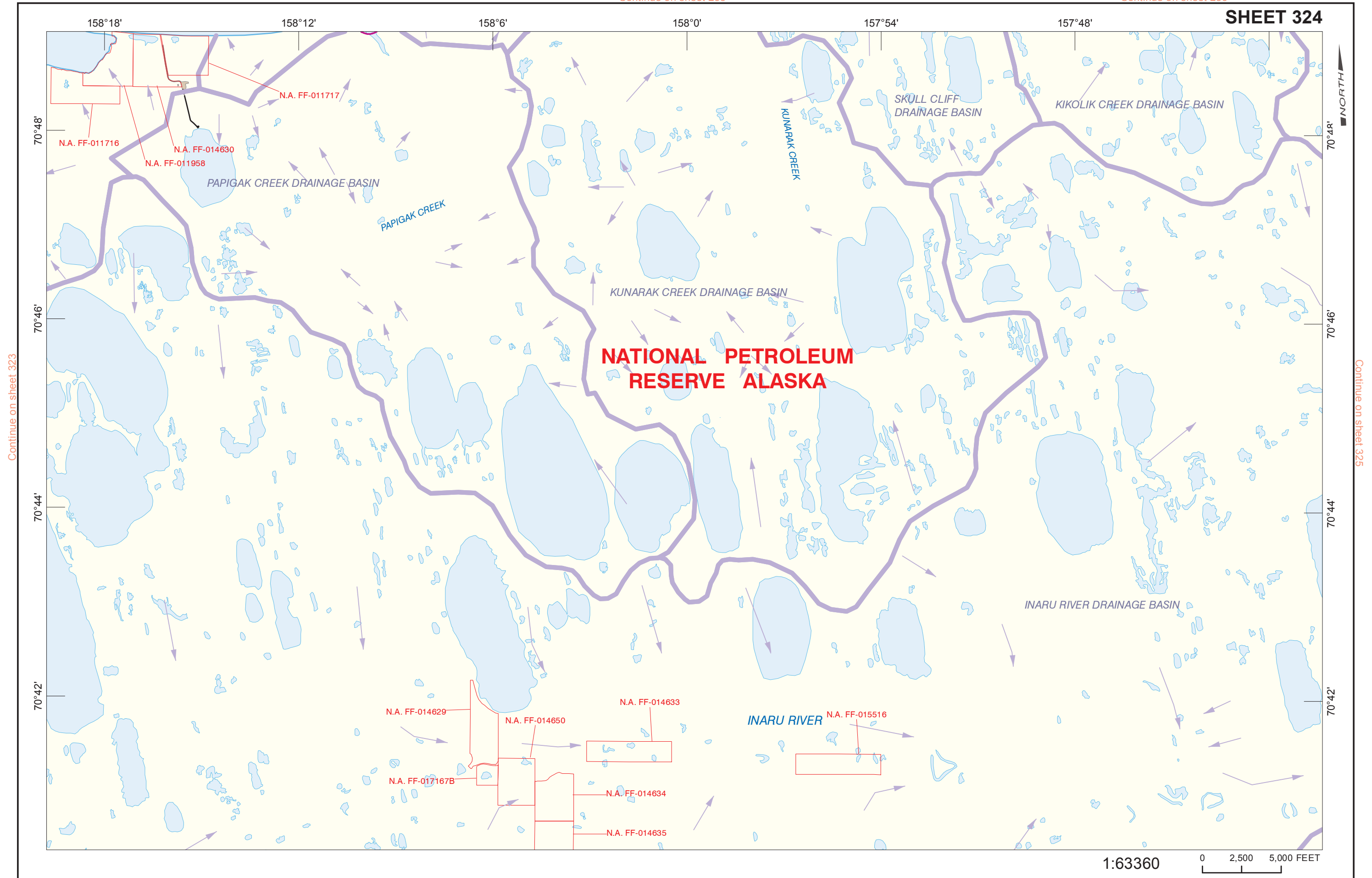
- This area is wet tundra and peat, dotted with numerous small lakes and creeks. Expect it to be very unstable, presenting a high risk to load-bearing machinery, equipment and personnel.
- Waterbirds will occupy leads in the ice during spring breakup.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 255

Continue on sheet 256

SHEET 324



Continue on sheet 323

Continue on sheet 325

Continue on sheet 329

Continue on sheet 330



PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

GENERAL SENSITIVITIES

- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Coastal areas and inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during the open water months (generally April - October). Expect to deploy bird hazing systems.
- Known nesting area for threatened Spectacled eiders and good nesting habitat for Steller’s eiders.
- Black brant and snow geese breeding, nesting, and rearing area during the summer.
- Freshwater rivers and inland lakes may contain resident and anadromous fish species important to subsistence users.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

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AIR ACCESS*

- An unattended, 4,400 ft. gravel airstrip serving the village of Atqasuk (Sheet 337) is located approximately 20 miles south of the center of this map. Visual inspection recommended prior to use.
- Commercial and air freight services are available at Wiley Post / Will Rogers Memorial Airport in Barrow (Sheet 195), located approximately 40 miles north-northeast of the center of this map. Runway is 6,500 ft. asphalt.

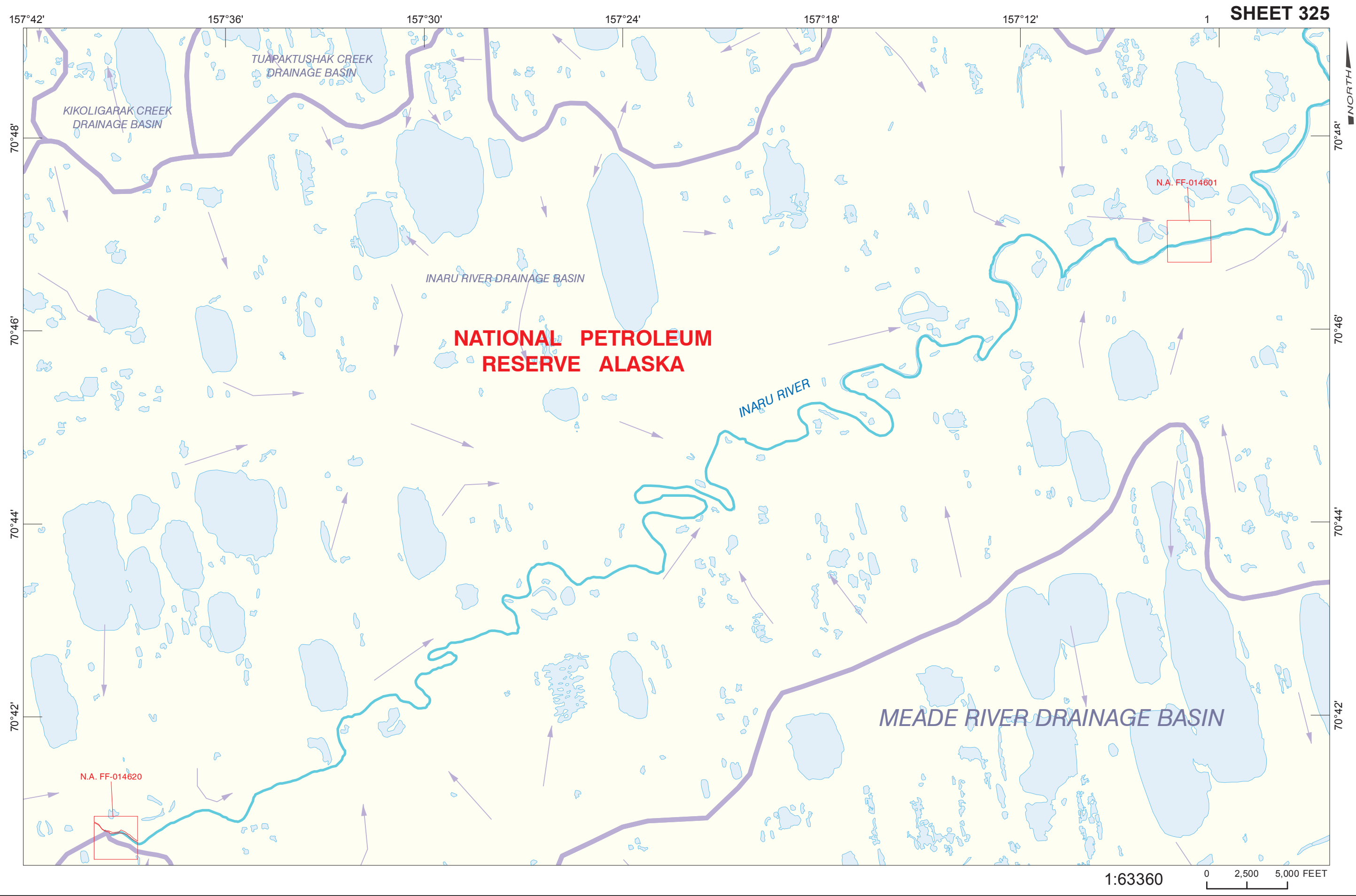
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

COUNTERMEASURES CONSIDERATIONS

- This area is wet tundra and peat, dotted with numerous small lakes and creeks. Expect it to be very unstable, presenting a high risk to load-bearing machinery, equipment and personnel.
- Waterbirds will occupy leads in the ice during spring breakup.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.





PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

GENERAL SENSITIVITIES

- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Coastal areas and inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during the open water months (generally April - October). Expect to deploy bird hazing systems.
- Known nesting area for threatened Spectacled eiders and good nesting habitat for Steller’s eiders.
- Black brant and snow geese breeding, nesting, and rearing area during the summer.
- Freshwater rivers and inland lakes may contain resident and anadromous fish species important to subsistence users.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- An unattended, 4,400 ft. gravel airstrip serving the village of Atqasuk (Sheet 337) is located approximately 25 miles southwest of the center of this map. Visual inspection recommended prior to use.
- Commercial and air freight services are available at Wiley Post / Will Rogers Memorial Airport in Barrow (Sheet 195), located approximately 36 miles north of the center of this map. Runway is 6,500 ft. asphalt.

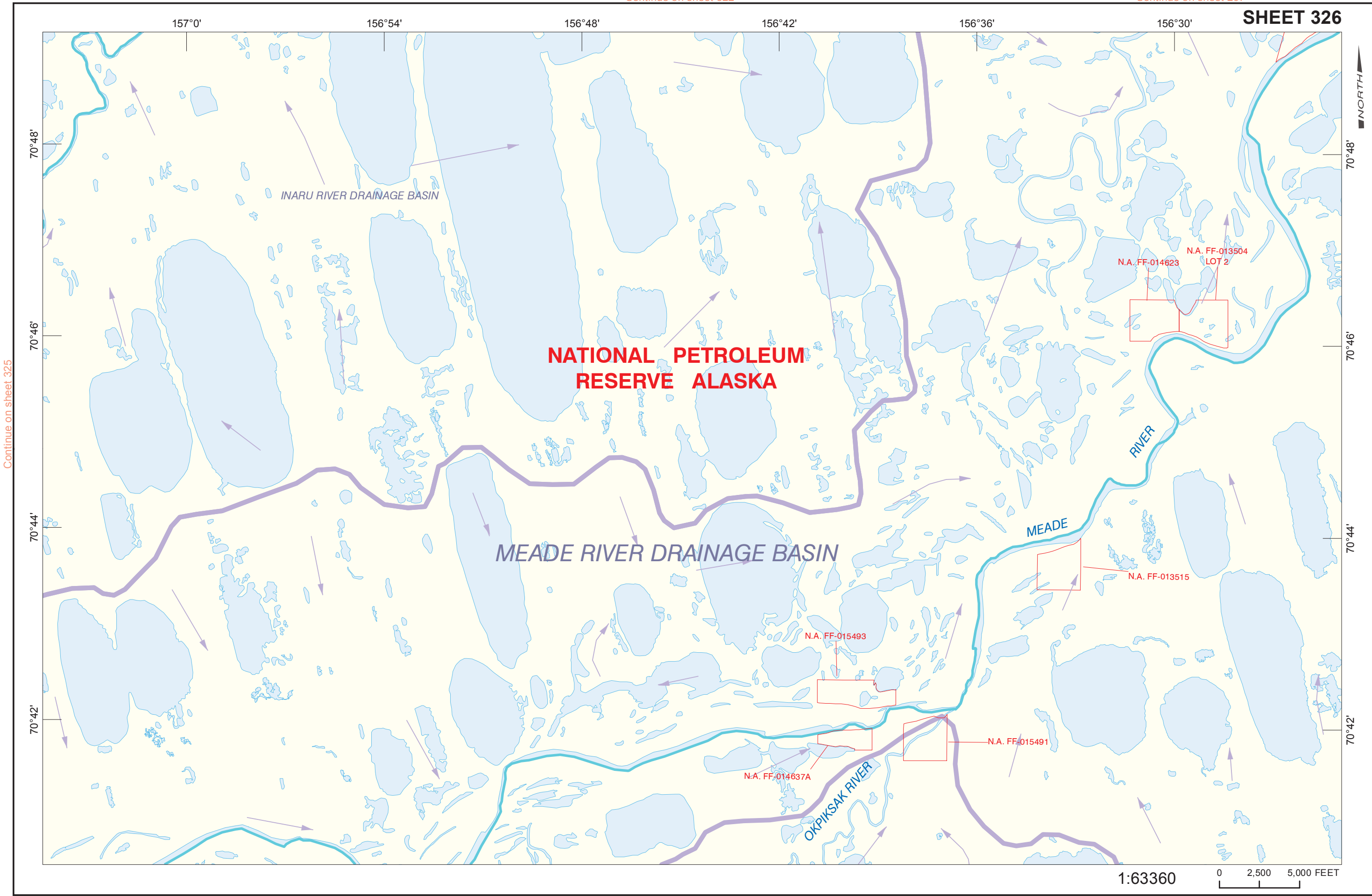
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS


- There are no marine waters or shorelines on this map.

COUNTERMEASURES CONSIDERATIONS

- This area is wet tundra and peat, dotted with numerous small lakes and creeks. Expect it to be very unstable, presenting a high risk to load-bearing machinery, equipment and personnel.
- Waterbirds will occupy leads in the ice during spring breakup.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.





NORTH SLOPE SPILL RESPONSE

ACS

A WORLD CLASS ORGANIZATION

PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.


GENERAL SENSITIVITIES

- Polar Bear denning area.
- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl, diving, shore and sea birds during the open water months (generally Apr-Oct). Expect to deploy bird hazing systems.
- Wainwright Inlet to the west has high populations of migrating waterfowl, Jul-Aug.
- Freshwater rivers and inland lakes may contain resident and anadromous fish species important to subsistence users.
- Several species of salmon as well as smelt and Cisco may be found in the Kuk River, year round.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



NORTH SLOPE SPILL RESPONSE

ACS

A WORLD CLASS ORGANIZATION

AIR ACCESS*

- An unattended, 4,500 ft. gravel airstrip serving the village of Wainwright (Sheet 250 & 251) is located approximately 13 miles west of the center of this map. Visual inspection recommended prior to use.
- Wainwright Air Station (Sheet 250) is located approximately 10 miles west of the center of this map. This facility is closed to the public and should be considered for emergency landing only. The unattended, 3,000 ft. gravel runway is not maintained and its condition is unknown. Visual inspection recommended prior to use. May be used for spill response operations upon approval by Elmendorf Air Force Base, 11th Air Force Airfield Management, (907) 552-7384/3636/5265.
- An unattended, 4,400 ft. gravel airstrip serving the village of Atqasuk (Sheet 337) is located approximately 47 miles east-southeast of the center of this map. Visual inspection recommended prior to use.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

COUNTERMEASURES CONSIDERATIONS

- This area is wet tundra and peat, dotted with numerous small lakes and creeks. Expect it to be very unstable, presenting a high risk to load-bearing machinery, equipment and personnel.
- Waterbirds will occupy leads in the ice during spring breakup.

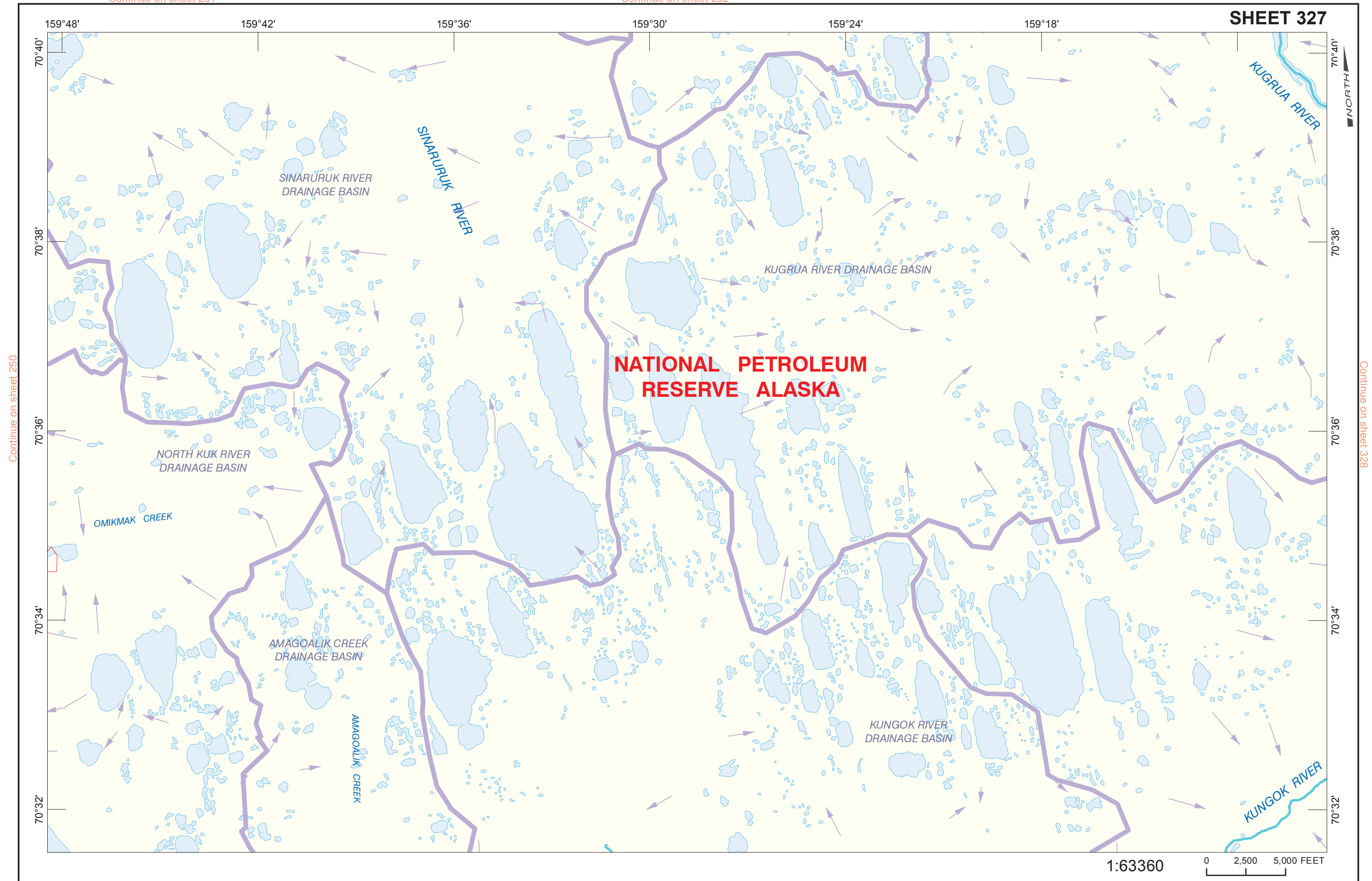
*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.


NOTE: All values given on these pages are for planning purposes only.

Continue on sheet 251

Continue on sheet 252


SHEET 327






PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.



GENERAL SENSITIVITIES


- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during the open water months (generally April - October). Expect to deploy bird hazing systems.
- Freshwater rivers and inland lakes may contain resident and anadromous fish species important to subsistence users.



CULTURAL SITES


The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.




AIR ACCESS*

- An unattended, 4,500 ft. gravel airstrip serving the village of Wainwright (Sheet 250 & 251) is located approximately 26 miles west of the center of this map. Visual inspection recommended prior to use.
- Wainwright Air Station (Sheet 250) is located approximately 23 miles west of the center of this map. This facility is closed to the public and should be considered for emergency landing only. The unattended, 3,000 ft. gravel runway is not maintained and its condition is unknown. Visual inspection recommended prior to use. May be used for spill response operations upon approval by Elmendorf Air Force Base, 11th Air Force Airfield Management, (907) 552-7384/3636/5265.
- An unattended, 4,400 ft. gravel airstrip serving the village of Atqasuk (Sheet 337) is located approximately 35 miles east-southeast of the center of this map. Visual inspection recommended prior to use.



VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.




COUNTERMEASURES CONSIDERATIONS

- This area is wet tundra and peat, dotted with numerous small lakes and creeks. Expect it to be very unstable, presenting a high risk to load-bearing machinery, equipment and personnel.
- Waterbirds will occupy leads in the ice during spring breakup.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.





PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.


GENERAL SENSITIVITIES

- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during the open water months (generally April - October). Expect to deploy bird hazing systems.
- Freshwater rivers and inland lakes may contain resident and anadromous fish species important to subsistence users.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

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AIR ACCESS*

- An unattended, 4,400 ft. gravel airstrip serving the village of Atqasuk (Sheet 337) is located approximately 23 miles southeast of the center of this map. Visual inspection recommended prior to use.
- An unattended, 4,500 ft. gravel airstrip serving the village of Wainwright (Sheet 250 & 251) is located approximately 39 miles west of the center of this map. Visual inspection recommended prior to use.
- Wainwright Air Station (Sheet 250) is located approximately 36 miles west of the center of this map. This facility is closed to the public and should be considered for emergency landing only. The unattended, 3,000 ft. gravel runway is not maintained and its condition is unknown. Visual inspection recommended prior to use. May be used for spill response operations upon approval by Elmendorf Air Force Base, 11th Air Force Airfield Management, (907) 552-7384/3636/5265.

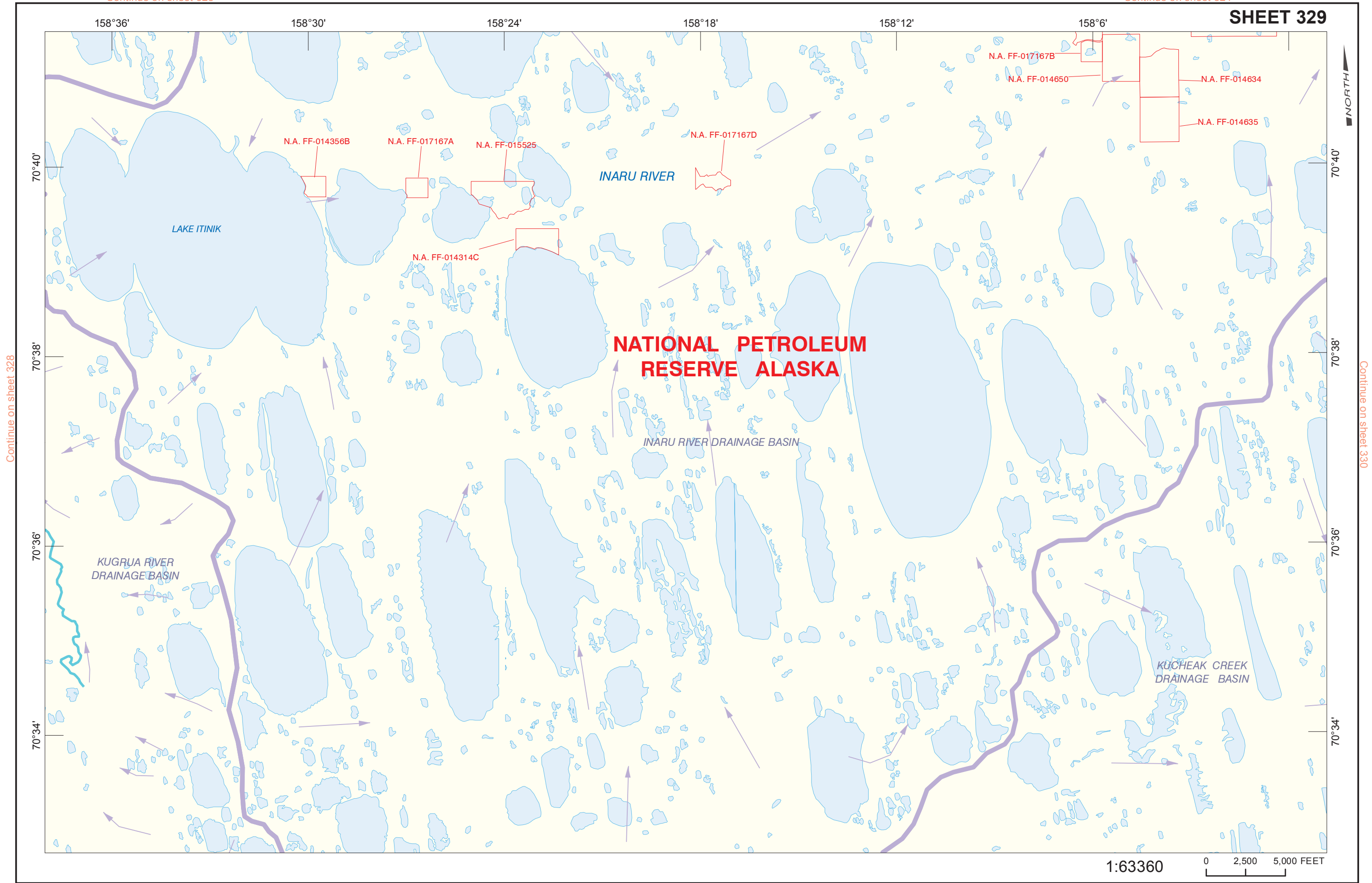
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS


- There are no marine waters or shorelines on this map.

COUNTERMEASURES CONSIDERATIONS

- This area is wet tundra and peat, dotted with numerous small lakes and creeks. Expect it to be very unstable, presenting a high risk to load-bearing machinery, equipment and personnel.
- Waterbirds will occupy leads in the ice during spring breakup.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.





PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.


GENERAL SENSITIVITIES

- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during the open water months (generally April - October). Expect to deploy bird hazing systems.
- Freshwater rivers and inland lakes may contain resident and anadromous fish species important to subsistence users.

CULTURAL SITES

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AIR ACCESS*

- An unattended, 4,400 ft. gravel airstrip serving the village of Atqasuk (Sheet 337) is located approximately 12 miles south-southeast of the center of this map. Visual inspection recommended prior to use.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

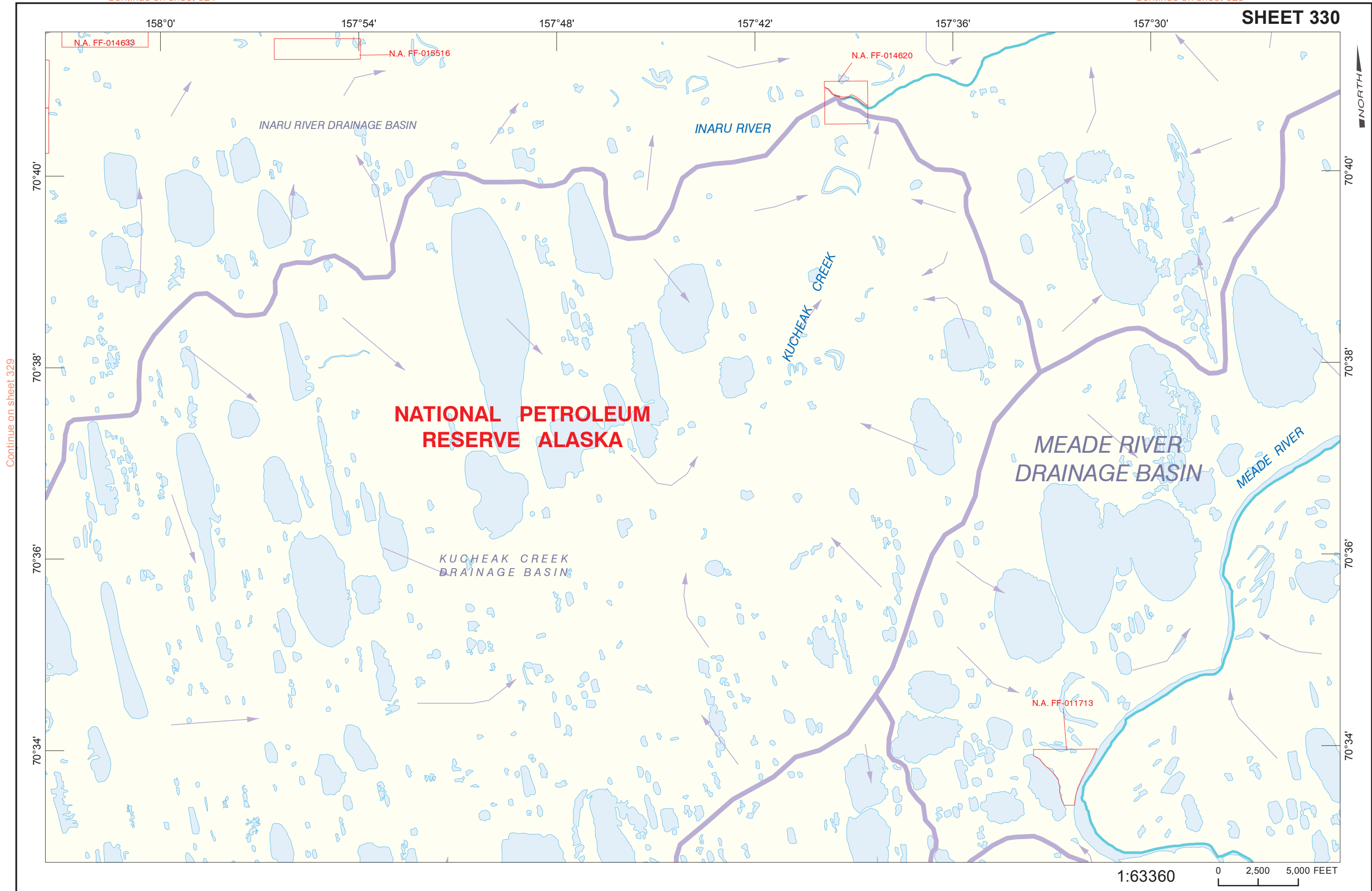
- There are no marine waters or shorelines on this map.


COUNTERMEASURES CONSIDERATIONS

- This area is wet tundra and peat, dotted with numerous small lakes and creeks. Expect it to be very unstable, presenting a high risk to load-bearing machinery, equipment and personnel.
- Waterbirds will occupy leads in the ice during spring breakup.

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NOTE: All values given on these pages are for planning purposes only.





PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.


GENERAL SENSITIVITIES

- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during the open water months (generally April - October). Expect to deploy bird hazing systems.
- Freshwater rivers and inland lakes may contain resident and anadromous fish species important to subsistence users.

CULTURAL SITES

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AIR ACCESS*

- An unattended, 4,400 ft. gravel airstrip serving the community of Atqasuk (Sheet 337) is located approximately 12 miles south-southwest of the center of this map. Visual inspection recommended prior to use.

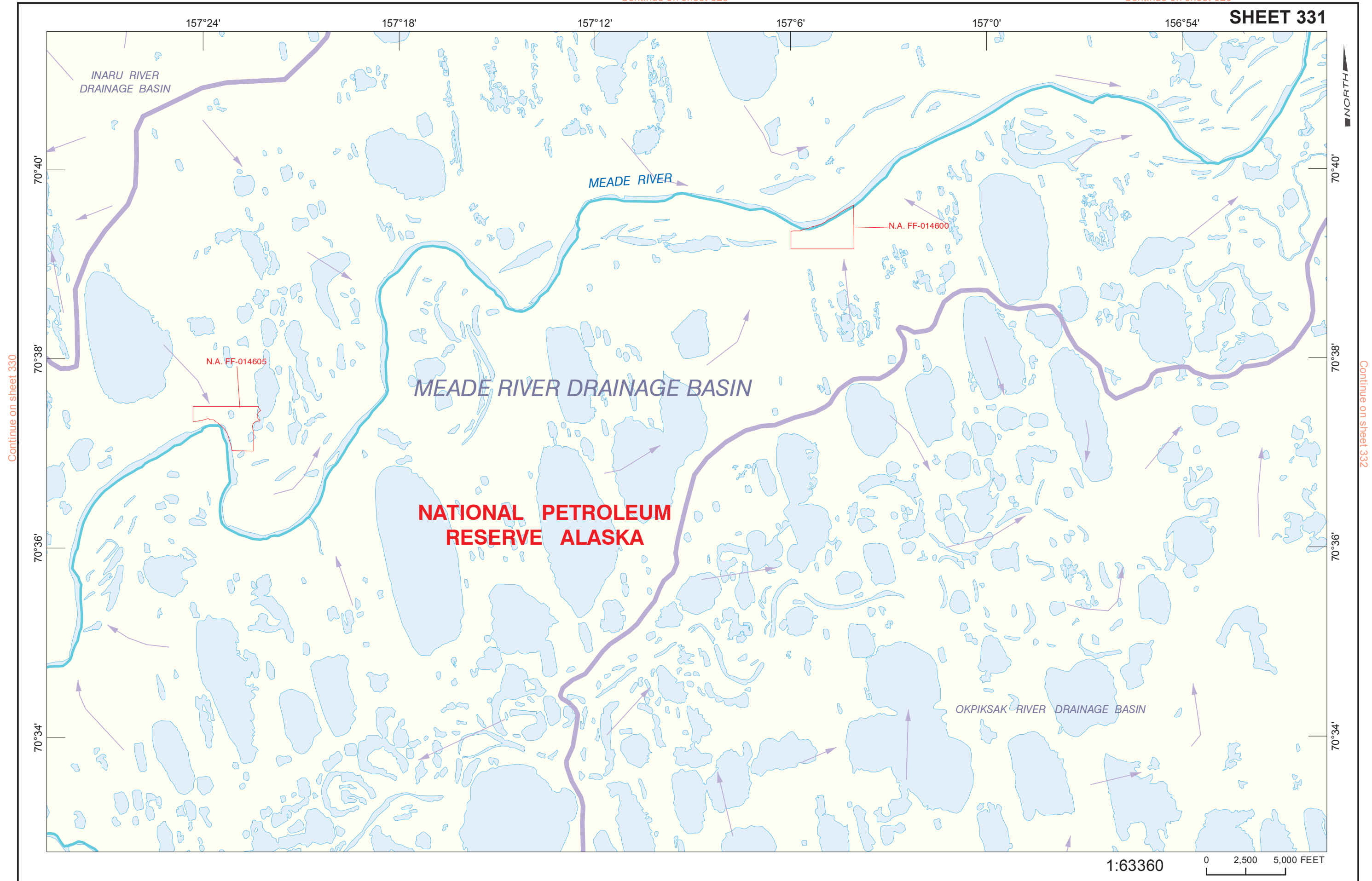
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS


- There are no marine waters or shorelines on this map.

COUNTERMEASURES CONSIDERATIONS

- This area is wet tundra and peat, dotted with numerous small lakes and creeks. Expect it to be very unstable, presenting a high risk to load-bearing machinery, equipment and personnel.
- Waterbirds will occupy leads in the ice during spring breakup.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.





PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.


GENERAL SENSITIVITIES

- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during the open water months (generally April - October). Expect to deploy bird hazing systems.
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AIR ACCESS*

- An unattended, 4,400 ft. gravel airstrip serving the community of Atqasuk (Sheet 337) is located approximately 23 miles southwest of the center of this map. Visual inspection recommended prior to use.

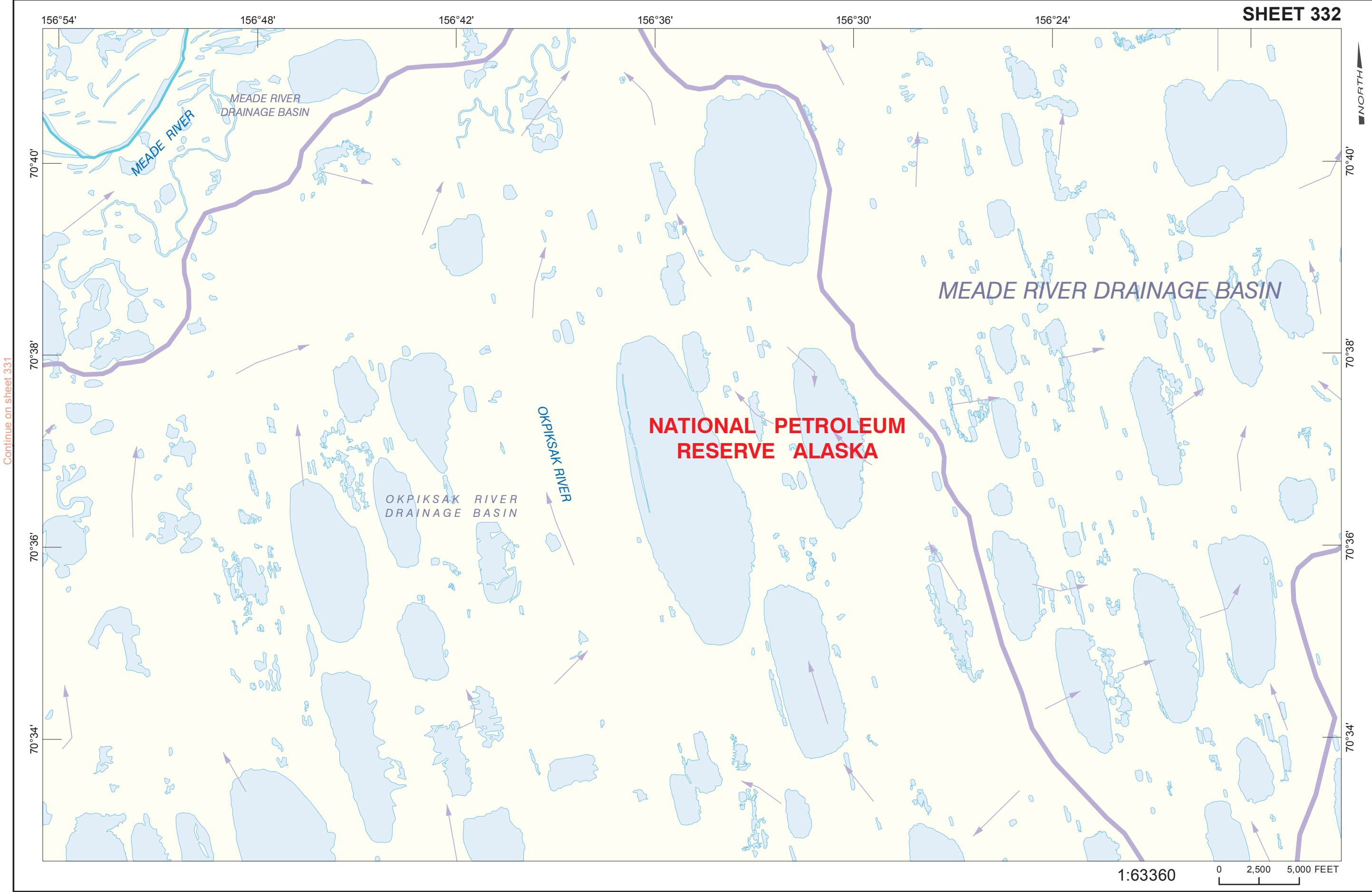
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

COUNTERMEASURES CONSIDERATIONS

- This area is wet tundra and peat, dotted with numerous small lakes and creeks. Expect it to be very unstable, presenting a high risk to load-bearing machinery, equipment and personnel.
- Waterbirds will occupy leads in the ice during spring breakup.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.





PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

GENERAL SENSITIVITIES

- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during the open water months (generally April - October). Expect to deploy bird hazing systems.
- Known nesting area for threatened Spectacled eiders and good nesting habitat for Steller’s eiders.
- Black brant and snow geese breeding, nesting, and rearing area during the summer.
- Freshwater rivers and inland lakes may contain resident and anadromous fish species important to subsistence users.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

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AIR ACCESS*

- An unattended, 4,400 ft. gravel airstrip serving the village of Atqasuk (Sheet 337) is located approximately 30 miles west-southwest of the center of this map. Visual inspection recommended prior to use.
- Lonely Air Station (Sheet 141) is located approximately 66 miles east-northeast of the center of this map. This facility is closed to the public and should be considered for emergency landing only. The unattended, 5,000 ft. gravel runway is not maintained and its condition is unknown. Visual inspection recommended prior to use. May be used for spill response operations upon approval by Elmendorf Air Force Base, 11th Air Force Airfield Management, (907) 552-7384/3636/5265.
- Commercial and air freight services are available at Wiley Post / Will Rogers Memorial Airport in Barrow (Sheet 195), located approximately 48 miles north-northwest of the center of this map. Runway is 6,500 ft. asphalt.

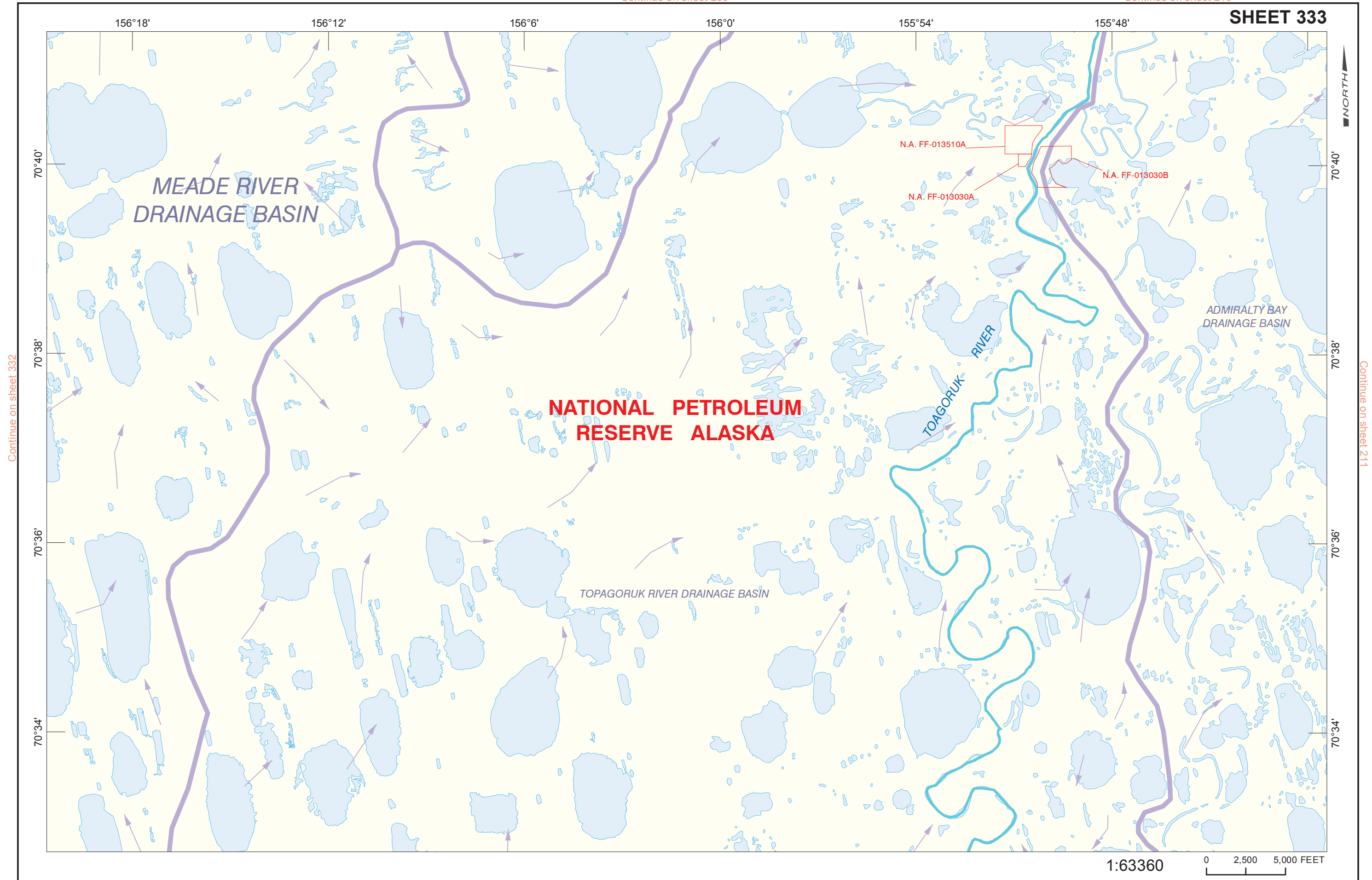
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS


- There are no marine waters or shorelines on this map.

COUNTERMEASURES CONSIDERATIONS

- This area is wet tundra and peat, dotted with numerous small lakes and creeks. Expect it to be very unstable, presenting a high risk to load-bearing machinery, equipment and personnel.
- Waterbirds will occupy leads in the ice during spring breakup.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.





PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.


GENERAL SENSITIVITIES

- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during the open water months (generally April - October). Expect to deploy bird hazing systems.
- Freshwater rivers and inland lakes may contain resident and anadromous fish species important to subsistence users.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

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AIR ACCESS*

- An unattended, 4,500 ft. gravel airstrip serving the village of Wainwright (Sheet 250 & 251) is located approximately 27 miles northwest of the center of this map. Visual inspection recommended prior to use.
- Wainwright Air Station (Sheet 250) is located approximately 24 miles northwest of the center of this map. This facility is closed to the public and should be considered for emergency landing only. The unattended, 3,000 ft. gravel runway is not maintained and its condition is unknown. Visual inspection recommended prior to use. May be used for spill response operations upon approval by Elmendorf Air Force Base, 11th Air Force Airfield Management, (907) 552-7384/3636/5265.
- An unattended, 4,400 ft. gravel airstrip serving the village of Atqasuk (Sheet 337) is located approximately 35 miles east of the center of this map. Visual inspection recommended prior to use.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

COUNTERMEASURES CONSIDERATIONS

- This area is wet tundra and peat, dotted with numerous small lakes and creeks. Expect it to be very unstable, presenting a high risk to load-bearing machinery, equipment and personnel.
- Waterbirds will occupy leads in the ice during spring breakup.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.


Continue on sheet 249

Continue on sheet 335



1:63360

0 2,500 5,000 FEET



PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.


GENERAL SENSITIVITIES

- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during the open water months (generally April - October). Expect to deploy bird hazing systems.
- Freshwater rivers and inland lakes may contain resident and anadromous fish species important to subsistence users.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- An unattended, 4,400 ft. gravel airstrip serving the village of Atqasuk (Sheet 337) is located approximately 21 miles east of the center of this map. Visual inspection recommended prior to use.
- An unattended, 4,500 ft. gravel airstrip serving the village of Wainwright (Sheet 250 & 251) is located approximately 39 miles west-northwest of the center of this map. Visual inspection recommended prior to use.
- Wainwright Air Station (Sheet 250) is located approximately 36 miles west-northwest of the center of this map. This facility is closed to the public and should be considered for emergency landing only. The unattended, 3,000 ft. gravel runway is not maintained and its condition is unknown. Visual inspection recommended prior to use. May be used for spill response operations upon approval by Elmendorf Air Force Base, 11th Air Force Airfield Management, (907) 552-7384/3636/5265.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

COUNTERMEASURES CONSIDERATIONS

- This area is wet tundra and peat, dotted with numerous small lakes and creeks. Expect it to be very unstable, presenting a high risk to load-bearing machinery, equipment and personnel.
- Waterbirds will occupy leads in the ice during spring breakup.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.


NOTE: All values given on these pages are for planning purposes only.

Continue on sheet 334

Continue on sheet 336



1:63360 0 2,500 5,000 FEET



PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.


GENERAL SENSITIVITIES

- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during the open water months (generally April - October). Expect to deploy bird hazing systems.
- Freshwater rivers and inland lakes may contain resident and anadromous fish species important to subsistence users.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- An unattended, 4,400 ft. gravel airstrip serving the village of Atqasuk (Sheet 337) is located approximately 7 miles east of the center of this map. Visual inspection recommended prior to use.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

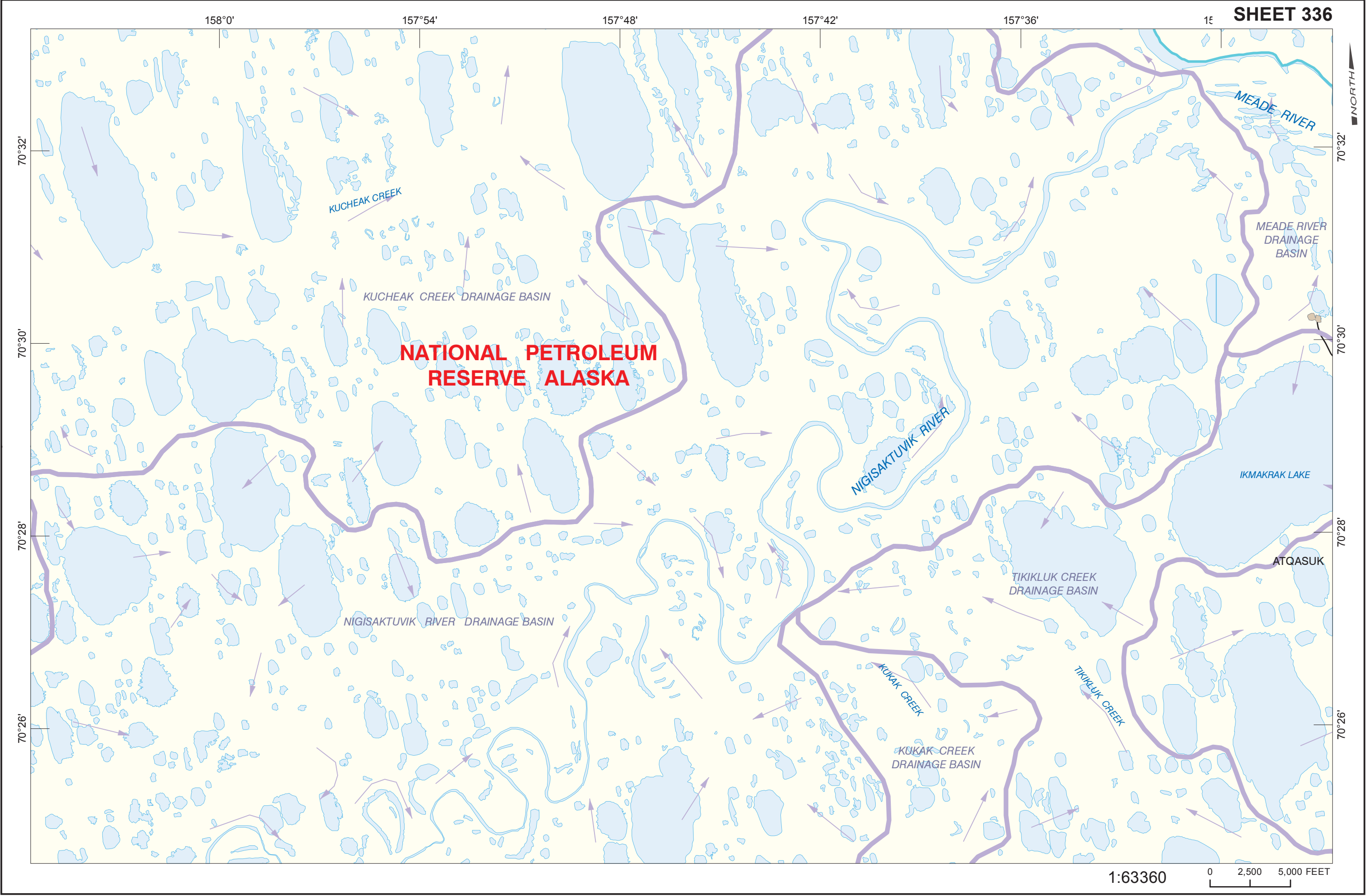
COUNTERMEASURES CONSIDERATIONS


- This area is wet tundra and peat, dotted with numerous small lakes and creeks. Expect it to be very unstable, presenting a high risk to load-bearing machinery, equipment and personnel.
- Waterbirds will occupy leads in the ice during spring breakup.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 335

Continue on sheet 337





PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.


GENERAL SENSITIVITIES

- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during the open water months (generally April - October). Expect to deploy bird hazing systems.
- Freshwater rivers and inland lakes may contain resident and anadromous fish species important to subsistence users.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- An unattended, 4,400 ft. gravel airstrip serves the community of Atqasuk (located mid-left this map). Visual inspection recommended prior to use.

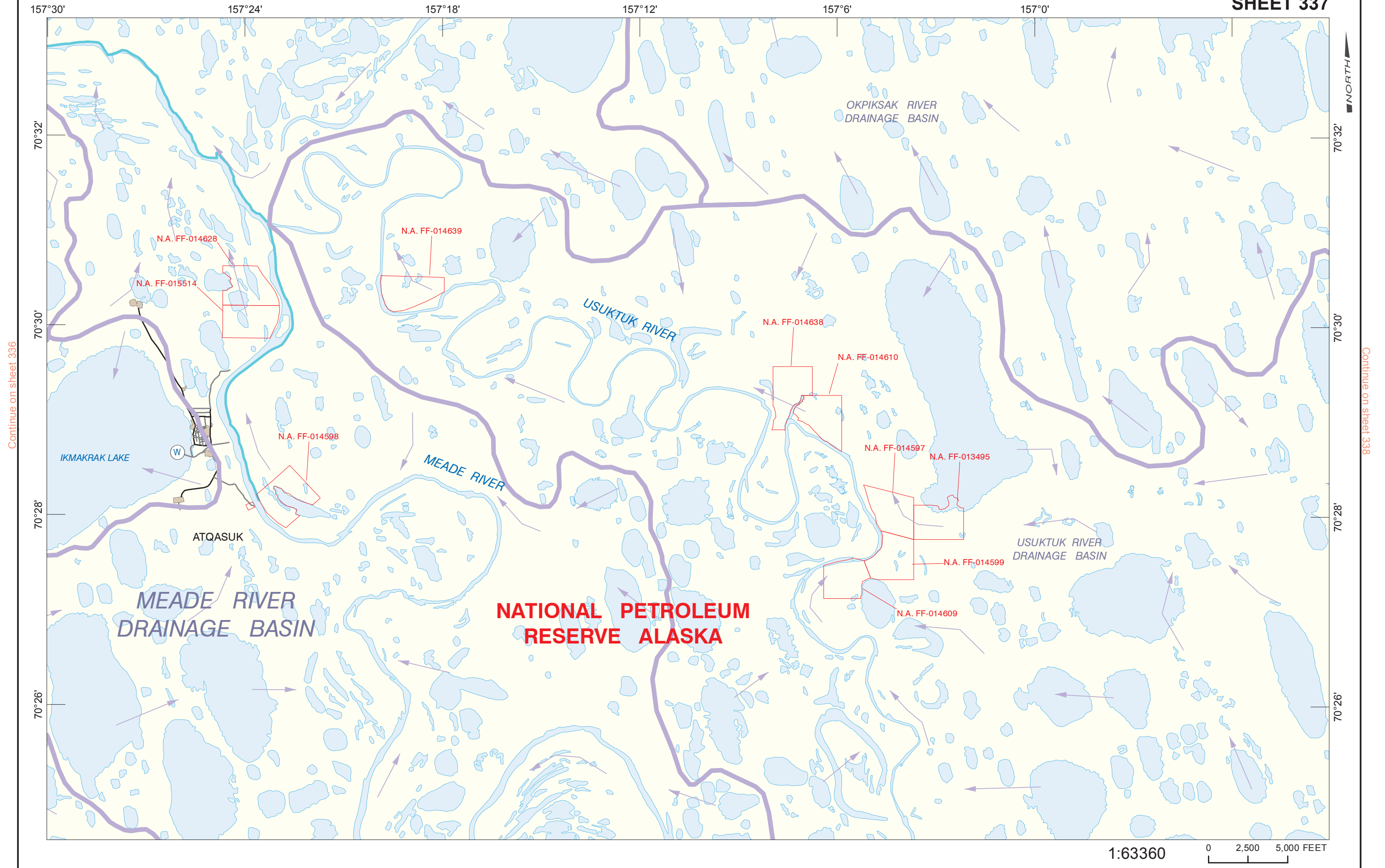
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS


- There are no marine waters or shorelines on this map.

COUNTERMEASURES CONSIDERATIONS

- This area is wet tundra and peat, dotted with numerous small lakes and creeks. Expect it to be very unstable, presenting a high risk to load-bearing machinery, equipment and personnel.
- Waterbirds will occupy leads in the ice during spring breakup.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.





PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.


GENERAL SENSITIVITIES

- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during the open water months (generally April - October). Expect to deploy bird hazing systems.
- Freshwater rivers and inland lakes may contain resident and anadromous fish species important to subsistence users.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- An unattended, 4,400 ft. gravel airstrip serving the community of Atqasuk (Sheet 337) is located approximately 15 miles west of the center of this map. Visual inspection recommended prior to use.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS


- There are no marine waters or shorelines on this map.

COUNTERMEASURES CONSIDERATIONS

- This area is wet tundra and peat, dotted with numerous small lakes and creeks. Expect it to be very unstable, presenting a high risk to load-bearing machinery, equipment and personnel.
- Waterbirds will occupy leads in the ice during spring breakup.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.





PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.


GENERAL SENSITIVITIES

- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during the open water months (generally April - October). Expect to deploy bird hazing systems.
- Freshwater rivers and inland lakes may contain resident and anadromous fish species important to subsistence users.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- An unattended, 4,400 ft. gravel airstrip serving the community of Atqasuk (Sheet 337) is located approximately 30 miles west of the center of this map. Visual inspection recommended prior to use.
- Lonely Air Station (Sheet 141) is located approximately 69 miles east-northeast of the center of this map. This facility is closed to the public and should be considered for emergency landing only. The unattended, 5,000 ft. gravel runway is not maintained and its condition is unknown. Visual inspection recommended prior to use. May be used for spill response operations upon approval by Elmendorf Air Force Base, 11th Air Force Airfield Management, (907) 552-7384/3636/5265.

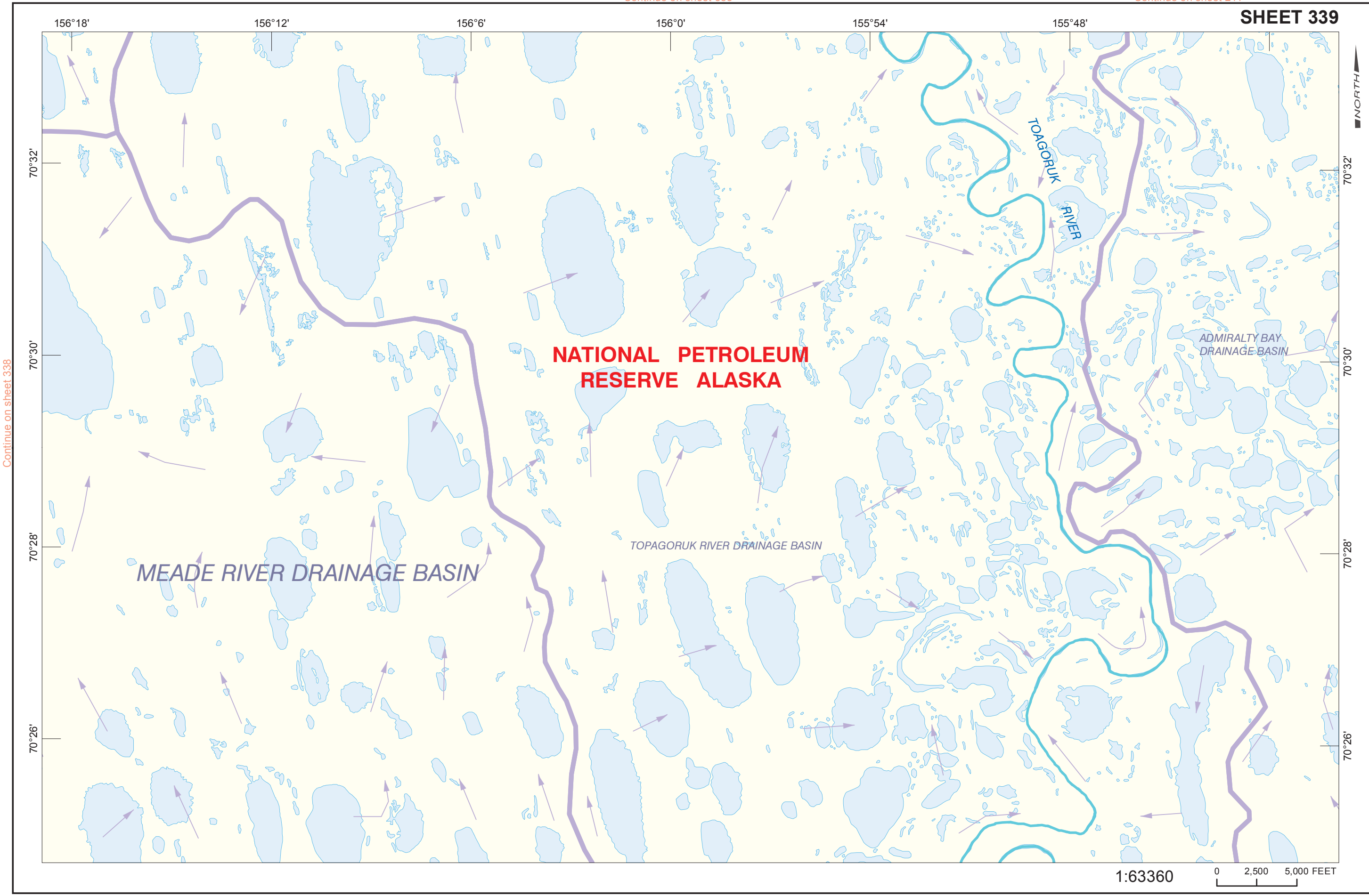
VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

COUNTERMEASURES CONSIDERATIONS

- This area is wet tundra and peat, dotted with numerous small lakes and creeks. Expect it to be very unstable, presenting a high risk to load-bearing machinery, equipment and personnel.
- Waterbirds will occupy leads in the ice during spring breakup.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.





PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

GENERAL SENSITIVITIES

- All activities within the National Petroleum Reserve – Alaska (NPRA).
- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during the open water months (generally April - October). Expect to deploy bird hazing systems.
- Known nesting area for threatened Spectacled eiders and good nesting habitat for Steller’s eiders.
- Black brant and snow geese breeding, nesting, and rearing area during the summer.
- Caribou may be present in the area during summer months.
- Freshwater rivers and inland lakes may contain resident and anadromous fish species important to subsistence users.

CULTURAL SITES

The location of known cultural resource sites in this area is confidential and thus not shown on the accompanying map. This information is instead contained in a secure, online database accessible through the State Historical Preservation Office (SHPO) at (907) 269-8721. Planners, responsible parties and response teams should consult SHPO directly to acquire the latest, updated information on known cultural sites in the area.

Additionally, responsible parties and response teams should be particularly attentive to the possible existence of previously-unknown cultural resource sites at/on coastal barrier islands, elevated terraces or cut-bank bluffs along rivers, pingos, most shoreline areas (particularly near embayments or promontories), and prominent inland hills.



AIR ACCESS*

- An unattended, 4,400 ft. gravel airstrip serving the community of Atqasuk (Sheet 337) is located approximately 45 miles west of the center of this map. Visual inspection recommended prior to use.
- Lonely Air Station (Sheet 141) is located approximately 58 miles northeast of the center of this map. This facility is closed to the public and should be considered for emergency landing only. The unattended, 5,000 ft. gravel runway is not maintained and its condition is unknown. Visual inspection recommended prior to use. May be used for spill response operations upon approval by Elmendorf Air Force Base, 11th Air Force Airfield Management, (907) 552-7384/3636/5265.

VESSEL ACCESS* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

COUNTERMEASURES CONSIDERATIONS

- This area is wet tundra and peat, dotted with numerous small lakes and creeks. Expect it to be very unstable, presenting a high risk to load-bearing machinery, equipment and personnel.
- Waterbirds will occupy leads in the ice during spring breakup.

*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

