

NPR-A Greater Mooses Tooth 1 and Context for the Regional Mitigation Strategy

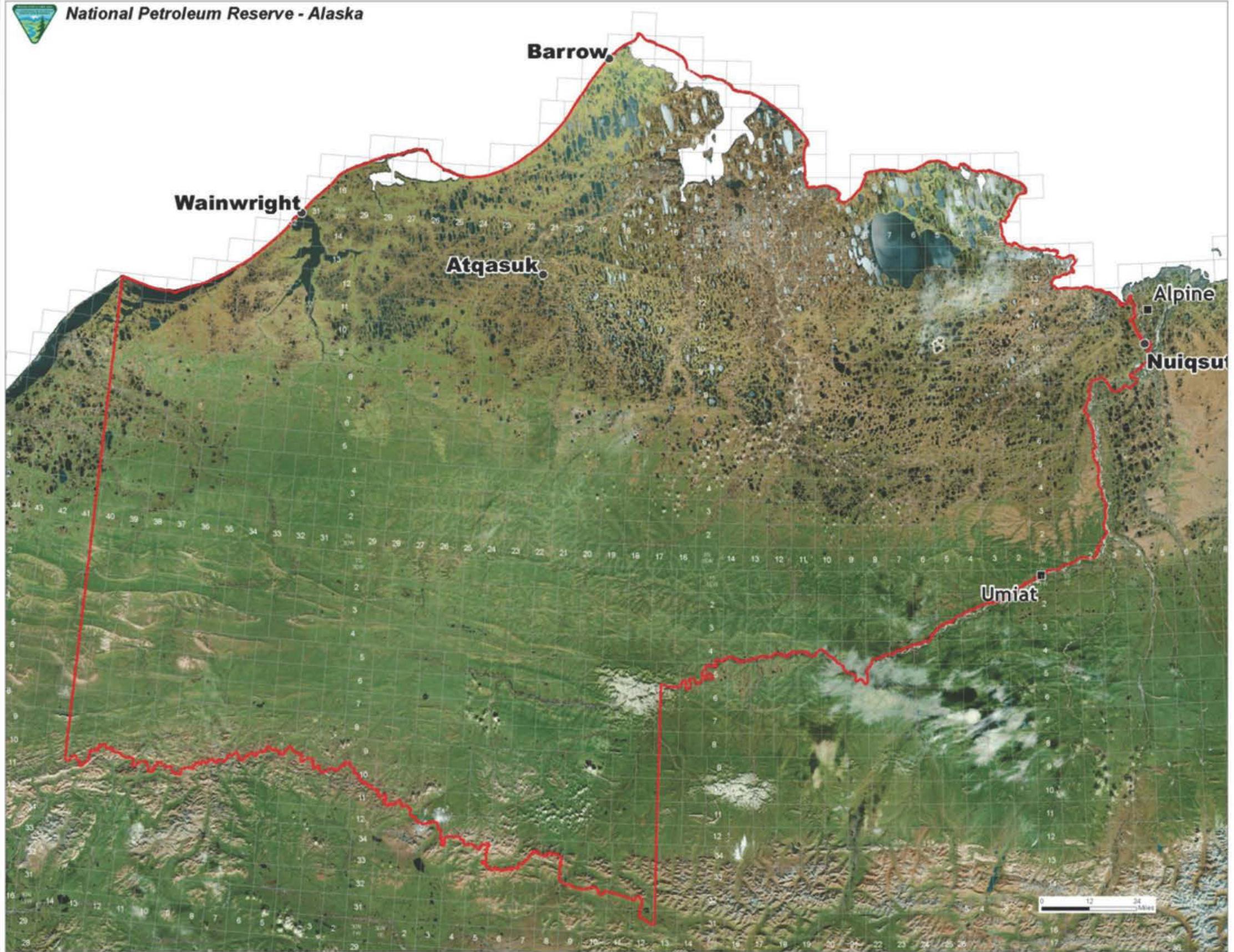


**Regional Mitigation Strategy Workshop
March 31, 2015**



Presentation Outline

- Brief Overview of the National Petroleum Reserve in Alaska
- Overview of the GMT1 Supplemental EIS and ROD.
- Resource impacts identified in the Supplemental EIS
 - Subsistence Impacts
- Overview of NPR-A Integrated Activity Plan/EIS Best Management Practices (BMPs)
- New Supplemental BMPs from GMT1 ROD
- Questions





NPR-A Management Objectives

- Conduct an expeditious program of competitive oil and gas leasing
- Manage exploration and development, and all other uses consistent with the purposes of the reserve
- Protect environmental, fish and wildlife, and historical or scenic values
- Designate and protect special areas
- Protect subsistence opportunities
- Comply with other laws (e.g. ESA)

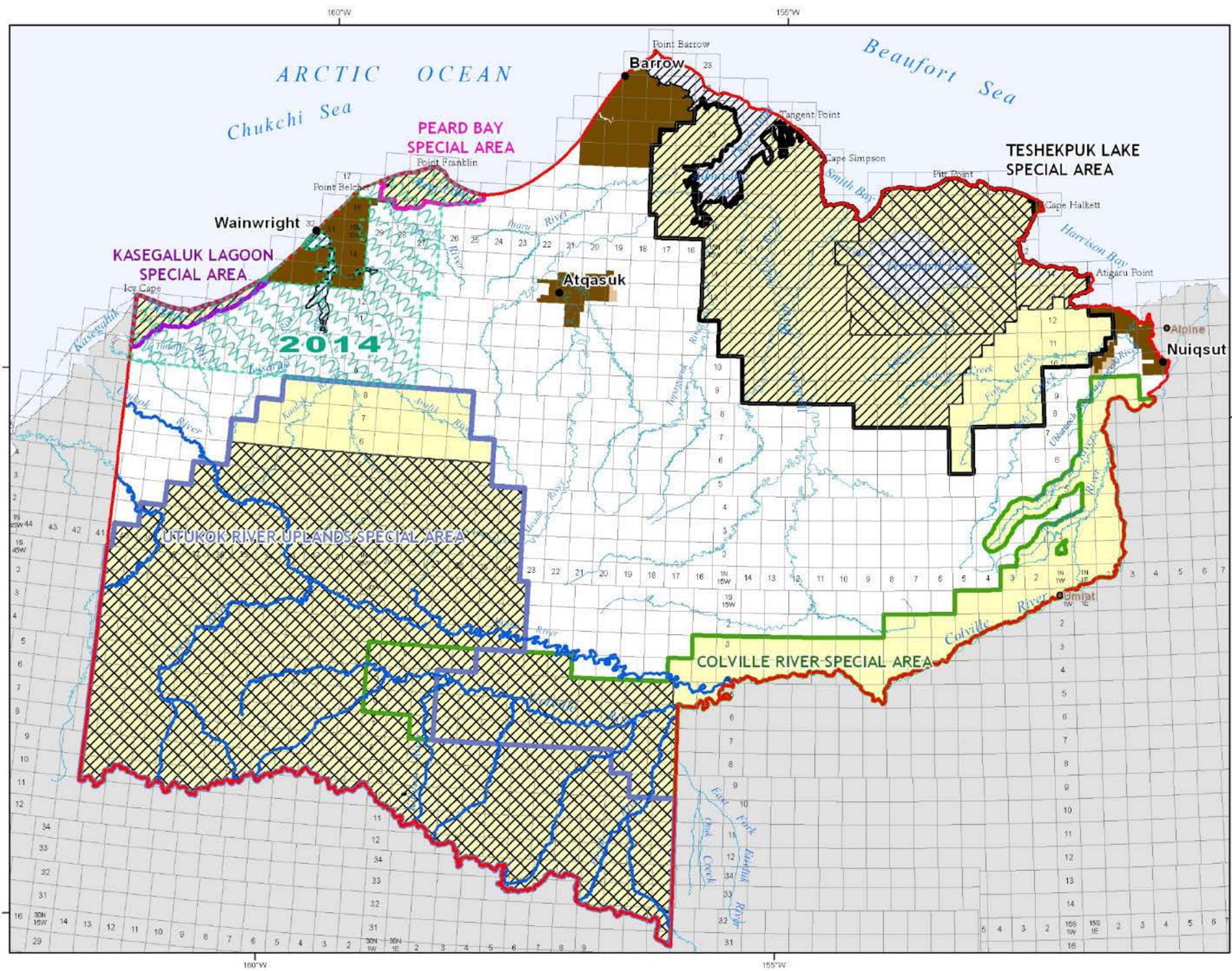
NPR-A Mitigation

Three primary types of mitigation

- Avoidance
- Minimization
- Compensatory



NPR-A IAP: Avoidance



MAP 1
Land Allocations

Oil & Gas Leasing and Infrastructure

- Unavailable for leasing or exploratory drilling
- Unavailable for leasing and no new non-subsistence infrastructure or exploratory drilling; all other BLM-managed lands would be available for applications for permanent infrastructure in support of offshore oil and gas development.
- Leasing deferred to 2014

Special Areas

- Colville River
- Teshekpuk Lake
- Utukok River Uplands
- Peard Bay
- Kasegaluk Lagoon
- Free flow, water quality, and outstandingly remarkable river values maintained

Land Status

- Native Patent or IC
- Native Selected
- NPR-A Boundary

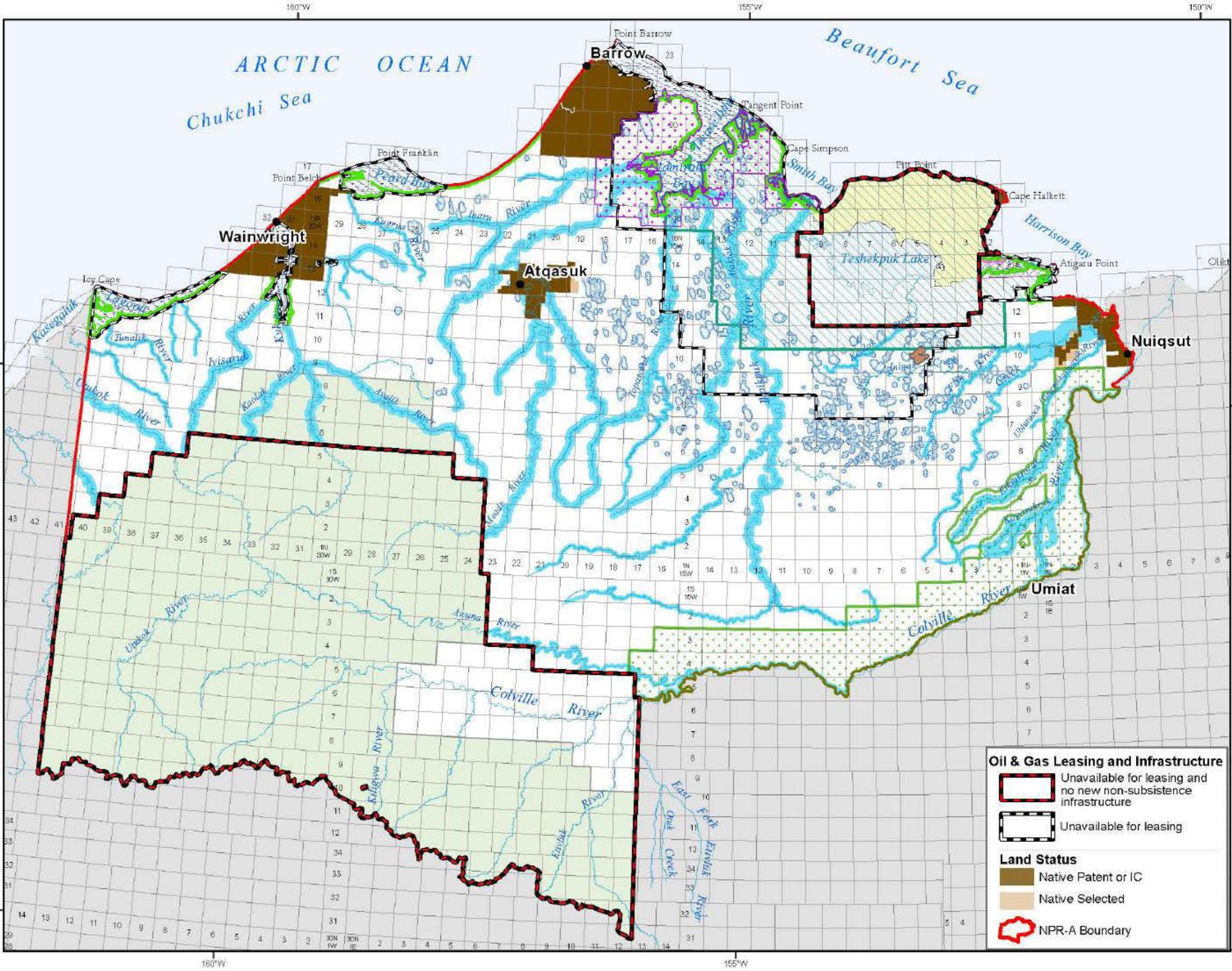
0 6 12 24 36 48 Miles

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data, or for purposes not intended by BLM. Spatial information may not meet National Map Accuracy Standards. This information may be updated without notification. For official land status information refer to Cadastral Survey plats, Master Title Plats and land status case-files.

Projection: Albers Conic Equal Area referencing NAD83

Bureau of Land Management - Alaska
National Petroleum Reserve - Alaska
Record of Decision

NPR-A IAP: Minimization



MAP 2 Stipulations for Select Biologically Sensitive Areas

- K-1 River: No permanent or temporary facilities in stream bed. No permanent facilities within listed distance from river except essential pipelines and road crossings.
- K-2 Deep Water Lakes: No permanent or temporary facilities on lakes. Only essential permanent facilities within 1/4 mile of lakes.
- K-3a Kogru River, Dease Inlet, Admiralty Bay, Elson Lagoon, Peard Bay, Wainwright Inlet, Kuk River, Kasagalik Lagoon, and their associated islands: Special stipulations for exploration and development.
- K-4a Goose Molting Area
- K-4b Brent Survey Area
- K-5 Teshekpuk Lake Caribou Habitat Area
- K-6 Coastal Area: Special restrictions on facility development in coastal waters and within 1 mile of coast.
- K-7 Colville River Special Area raptor protection and CRSAMP Protection 2.
- K-8a Flk Dunes: Surface structures, except approximately perpendicular pipeline crossings and ice pads, are prohibited.
- K-9 Caribou Movement Corridors: Permanent oil and gas facilities, with the exception of pipelines, prohibited.
- K-10 Southern Caribou Calving Area: Permanent oil and gas facilities, with the exception of pipelines, prohibited.
- K-11 Western Arctic Herd Habitat Area

Oil & Gas Leasing and Infrastructure

- Unavailable for leasing and no new non-subsistence infrastructure
- Unavailable for leasing

Land Status

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Bureau of Land Management - Alaska
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Record of Decision

Greater Mooses Tooth-1 Overview

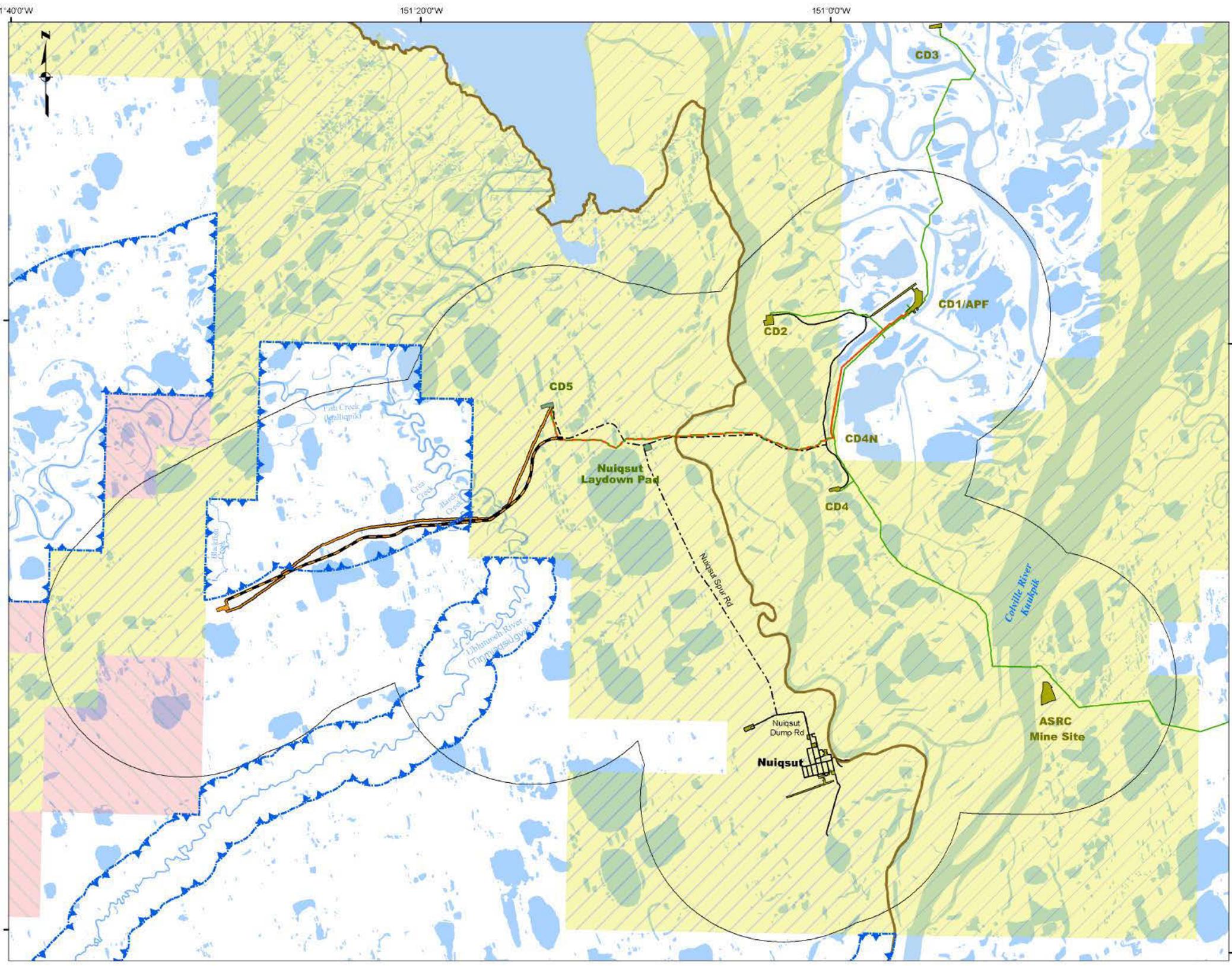
- CPAI submitted application for right-of-way grant and APD July 2013
- Project connects Alpine Central Processing Facility with proposed GMT-1 pad in NPR-A, via the CD5 pad
- Access to Arctic Slope Regional Corporation & BLM mineral resources
- Supplemental Environmental Impact Statement (SEIS) builds on existing plans
 - Alpine Satellite Development Plan/EIS (2004)
 - NPR-A Integrated Activity Plan/EIS (2012)
- Final SEIS released to public on October 29, 2014
- Record of Decision issued Feb 13, 2015



The main Alpine pad and processing facilities (CD-1) in summer. The pipeline in the foreground is coming from the CD-4 satellite.

Final Project Decision

- The Final Supplemental EIS considered five action alternatives.
- The ROD identified Alternative A as the BLM's selected development alternative, which the U.S. Army Corps of Engineers identified as the Least Environmentally Damaging Practicable Alternative.
 - This was a change from the Preferred Alternative (B) in the Final SEIS
 - Alternative A provides for an 11.8 acre gravel pad located on BLM-managed lands accessed by a 7.6 mile gravel road and pipeline routed through the southern portion of the Fish Creek setback.
- The ROD adopted new mitigation measures, called Supplemental Best Management Practices (BMPs), intended to minimize and avoid adverse impacts.



GMT1 Project Layout

Legend

- | | |
|--|---|
| GMT1 Project Infrastructure | Proposed or Permitted (not part of GMT1) |
| Road | Pipeline |
| Pipeline | Road |
| Facility | Facility |
| 14 inch Water Injection Line | Existing |
| Bridge | Pipeline |
| Boundaries | Road |
| NPR-A Project Study Area | Facility |
| Setback Areas | Surface Land Ownership |
| Fish Creek 3mi
Ublutuch River 0.5mi | Conveyed |
| | Selected |

Footnote:
 1:14 inch Water Injection line from CD1/APF to CD4N will be constructed on a new pipe rack. From CD4N to CD5 the 14-inch Water Injection line will be placed on the already proposed or permitted pipe rack (not part of GMT1).

Date: 1/29/2015



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 NAD 1983 StatePlane Alaska 4 FIPS 5004 Feet



Bureau of Land Management - Alaska
 National Petroleum Reserve - Alaska
 ASDP SEIS ROD

Impacts to Resources

BLM identified minor to moderate impacts to surface resources in the Supplemental EIS.

- Air quality
- Wildlife impacts
- Water quality and hydrology impacts from gravel and ice roads
- Potential impacts from a spill
- Vegetation and wetlands impacts



Impacts to Subsistence

- BLM identified major potentially major impacts to subsistence in the Final Supplemental EIS
 - Aircraft flights
 - Vehicle traffic
 - Impacts to caribou migration
 - User avoidance and access issues

Mitigation Measures

The ROD adopted Supplemental Best Management Practices (BMPs) focusing on the following resources:

- Subsistence and aircraft impacts
- Caribou
- Spill response planning
- Pipeline leak detection and project design measures
- Air quality
- Public health
- The ROD also establishes a compensatory mitigation fund to finance development of a long-term landscape level Regional Mitigation Strategy.

These Supplemental BMPs are in addition to the BMPs already required by the 2013 NPR-A IAP/EIS ROD.



Next Steps

- Development of a Regional Mitigation Strategy
- Continued monitoring of impacts
- Finalize permit to drill and right-of-way applications

An aerial photograph of a vast, flat landscape, likely a coastal plain or salt flat. The terrain is characterized by a complex network of water channels and pools, creating a mosaic of light and dark patches. The water appears to be shallow and reflects the sky. The horizon is flat and distant, with a cloudy sky above. The overall scene is desolate and expansive.

Questions?