

# **Colville River Special Area Management Plan**

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Bureau of Land Management  
Arctic Field Office  
Fairbanks, Alaska

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## **Chapter I - Background**

### **Introduction**

The Colville River Special Area (CRSA) was designated in 1977 to protect nesting and foraging habitat of the then endangered arctic peregrine falcon (*Falco peregrinus tundrius*). The CRSA is entirely within the bounds of the National Petroleum Reserve – Alaska. In 1999, the Kikiakrorak and Kogosukruk Rivers—which are tributaries to the Colville River—and lands two miles either side of each river were added to the CRSA because these areas appeared to be particularly important for peregrine falcon nesting (FR Vol. 64, No. 65, pg 16747, April 6 1999). Protections for the arctic peregrine falcon also extend into a conservation easement outside of the CRSA on Native corporation selected lands within the Colville River’s floodplain. The CRSA is now approximately 2.44 million acres, and it provides nesting habitat for approximately one-fourth of Alaska’s arctic peregrine falcon population (Nigro and Ritchie 2004; Swem 2007). To afford additional protections to the arctic peregrine falcon, the Record of Decision (ROD) from the 2004 Integrated Activity Plan/Environmental Impact Statement (IAP/EIS) for the Northwest planning unit of the NPR-A required a management plan for the arctic peregrine falcon in the CRSA prior to any lease sales (BLM 2004). The final ROD for the Northeast planning unit of NPR-A also requires a management plan for the arctic peregrine falcon (BLM 2008b).

### **Purpose of the CRSA Management Plan (CRSAMP)**

The CRSAMP meets the requirements of the Northwest and Northeast NPR-A RODs (BLM 2004, BLM 2008b). The CRSAMP addresses arctic peregrine protection measures, research and monitoring, education program, and a map book for cataloging the various resources in the CRSA. BLM will use this plan while processing applications or other requests for activities in the CRSA in order to ensure protection of the arctic peregrine falcon. Management actions and decisions related to implementing arctic peregrine falcon protection measures have been analyzed in an associated CRSA Environmental Assessment (EA). Actions associated with research and monitoring, education program, and the map book are categorically excluded from the NEPA process and were not analyzed in the EA.

### **CRSA Location**

The entire 2.44 million acre CRSA lies north of the Brooks Range, in Alaska’s North Slope. The Colville River is the largest river north of Alaska’s Brooks Range, and its flow through and alongside the CRSA covers approximately 391 miles from its headwaters to the river’s delta on the Beaufort Sea (see Map 1).

## **CRSA Resources**

The environmental attributes of NPR-A, including the CRSA, have been described extensively in previous planning documents (BLM 1983; BLM and MMS 2003; BLM 2008a). Additional information is also presented in the accompanying EA for the CRSAMP. Refer to these documents for an overview of the physical, biological, and social factors within the CRSA.

Arctic peregrine falcons are highly migratory and winter from the southern United States south to Argentina (Cade et al. 1971). The CRSA provides the North Slope's single most important peregrine falcon nesting habitat area, with a high proportion of the region's population of arctic peregrine falcon occupying bluffs and cliffs within its boundaries. The arctic peregrine falcon population in the Colville River drainage has been monitored since the early 1950s and the initial surveys documented the widespread distribution and abundance of these birds within CRSA (Kessel and Cade 1958). Monitoring indicates a relatively stable population level since the early 1990s (Nigro and Ritchie 2004).

## **Management Activities Occurring in the CRSA**

Oil and gas activities include exploration, development, operation, maintenance, and abandonment of oil fields and infrastructure, and related transportation. These activities are described in detail in BLM and MMS (2003) and BLM (2008a). Lease sales have occurred within the Northeast planning unit's portion of the CRSA, and currently there are a small number of tracts (16) under lease (BLM 2008a). Future lease sales are possible in the CRSA portions of both the Northeast and Northwest planning units pursuant to each planning area's respective IAP.

Other activities in the CRSA include use of aircraft for surveys or recreation, use of watercraft to transport people or supplies, scientific data collection and excavations, camps for research or recreation, and overland moves to transport equipment. Additional activities include recreational and subsistence hunting and fishing, tourist activities, scientific research, and resource monitoring.

## **CRSA Management Issues**

The Northwest and Northeast IAP/EISs (BLM and MMS 2003; BLM 2008a) provide a spectrum of protections, relative to oil and gas development, to minimize impacts to arctic peregrine falcons. However, these planning documents acknowledge the need for additional planning in the CRSA to protect arctic peregrine falcons. In addition, although this formerly endangered bird has been provided protection in the Northeast and Northwest NPR-A plans, the protections are not consistent between the two planning units and no plan exists to provide such protections for the part of the CRSA in the South NPR-A planning area. The South NPR-A planning area includes all lands within NPR-A not in the Northeast or Northwest planning areas. This CRSAMP addresses these specific issues:

- The need for additional protection measures to protect arctic peregrine falcon nesting habitat
- Consistency of protection measures for arctic peregrine falcon across the NPR-A
- Needed research on arctic peregrine falcons

- Impacts of human activity on arctic peregrine behavior
- Planning maps for inventory of arctic peregrine falcon features (nest sites, preferred habitat, etc.)
- Visitors to the CRSA (recreationists, subsistence users, hunters, anglers, etc.) and reducing impacts from user groups
- Long term monitoring of the ecology of the arctic peregrine falcon in the CRSA

### **Management Constraints/Planning Criteria for the CRSAMP**

The following decisions, which have arisen from planning documents, policy, or regulations, have placed constraints on the management of the CRSA:

- Oil and gas development will be a primary land use in NPR-A, including CRSA
- The plan will be consistent with previous oil and gas leasing decision and planning documents
  - Management practices will be developed with the assumption that subsistence hunting, recreation, scientific study or monitoring will continue to occur within the area
- Access to subsistence activities will be allowed to continue. ANILCA Section 811 (a) and (b) ensures that subsistence users will have reasonable access to public lands using transportation that has been traditionally used for subsistence harvesting
- BLM will coordinate with agencies and governments, adjacent landowners, and key constituent groups throughout the planning process
- The plan will not address the cleanup of a contaminated site near Umiat
- Although wild and scenic river studies will not be addressed, actions developed in the plan will not preclude wild and scenic river studies as part of future land allocation plans
- Wilderness designation will not be addressed
- Although oil and gas leasing decisions will not be addressed, the plan may identify areas/locations of special concern where additional terms and conditions could be applied to future permits and authorizations associated with oil and gas operations

## Chapter II – CRSAMP Actions

### Management Plan

In accordance with its designation in 1977, the CRSA will be managed to provide maximum protection to the arctic peregrine falcon while allowing other activities including oil and gas development, recreation, subsistence, and scientific research. General categories of protections include measures to reduce surface disturbance of peregrine falcon habitat, and protection of nest sites from human activity. The plan also includes actions to ensure proactive management in the CRSA to ensure continued protection of the arctic peregrine falcon.

### Protection Measures

The protections listed below have been consolidated from planning documents and memoranda used by the BLM.

#### Protection 1

Objective: Minimize the loss of arctic peregrine falcon nesting habitat in the CRSA

Requirement/Standard: To minimize the direct loss of arctic peregrine falcon nesting habitat and to protect nest sites in the CRSA the following protective measures apply: Permanent oil and gas facilities, including gravel pads, roads, airstrips, and pipelines, are prohibited in the stream bed and adjacent to the rivers listed below at the distances identified. On a case-by-case basis, and in consultation with Federal, State, and North Slope Borough regulatory and resource agencies (as appropriate - based on agency legal authority and jurisdictional responsibility), essential pipeline and road crossings perpendicular to the main channel will be permitted through setback areas.

a. **Colville River:** downstream of the Etivluk River a continuous 1-mile setback measured from the highest high water mark on the left bank (facing downstream); upstream of the Etivluk River a 1-mile setback measured from the ordinary high water mark of the bank on both sides of the river. Development of road crossings intended to support oil and gas activities shall be consolidated with other similar projects and uses to the maximum extent possible. This provision does not apply to intercommunity or other permanent roads constructed with public funds for general transportation purposes.

b. **Kikiarorak River:** downstream from T. 2 N., R. 4 W., U.M., a continuous 1-mile setback as measured from the top of the bluff (or bank if there is no bluff) of both sides of the river.

c. **Kogosukruk River:** downstream from T. 2 N., R. 3 W., U.M., a continuous 1-mile setback as measured from the top of the bluff (or bank if there is no bluff) of both sides of the river and several of its tributaries.

Source: This protection has been adapted from K-1 Lease Stipulation from the Records of Decision for the Northwest NPR-A IAP/EIS (BLM and MMS 2004) and Northeast NPR-A Supplemental IAP/EIS (BLM 2008b).

## Protection 2

Objective: Prevent or minimize loss of arctic peregrine falcon foraging habitat in the CRSA

Requirement/Standard: To minimize the direct loss of arctic peregrine falcon foraging habitat in the CRSA the following measures apply: If necessary to construct permanent facilities within the CRSA, all reasonable and practicable efforts shall be made to locate permanent facilities as far from arctic peregrine falcon nests as feasible. Within 15 miles of arctic peregrine falcon nest sites, significant alteration of high quality foraging habitat shall be prohibited unless the lessee can demonstrate on a site-specific basis that impacts would be minimal or it is determined that there is no feasible or prudent alternative. Of particular concern are ponds, lakes, wetlands, and riparian habitats. Note: On a case-by case basis, and in consultation with appropriate federal and state regulatory and resource agencies, essential pipeline and road crossings will be permitted through these areas where no other feasible or prudent options are available.

Source: This protection has been adapted from K-7 Lease Stipulation from the Records of Decision for the Northwest NPR-A IAP/EIS (BLM and MMS 2004) and Northeast NPR-A Supplemental IAP/EIS (BLM 2008b).

## Protection 3

Objective: Minimize the effects of low-flying aircraft on nesting arctic peregrine falcons in the CRSA

Requirement/Standard: To minimize disturbance to nesting arctic peregrine falcons, aircraft authorized by BLM are required to maintain an altitude of at least 1,500 feet above ground level (AGL) when within ½ mile of cliffs identified as arctic peregrine falcon nesting sites from April 15 through August 15. This protection is not intended to restrict flights necessary to conduct wildlife surveys to obtain information necessary to satisfy wildlife data collection requirements. However, flights necessary to gain this information will be restricted to the minimum necessary to collect such data.

Source: This protection has been adapted from F-1 ROP from the Records of Decision for the Northwest NPR-A IAP/EIS (BLM and MMS 2004) and Northeast NPR-A Supplemental IAP/EIS (BLM 2008b).

## Protection 4

Objective: Minimize disturbance impacts on nesting arctic peregrine falcons in the CRSA by reducing effects of campsite activity.

Requirement/Standard: To reduce disturbance from campsite activity to nesting arctic peregrine falcons campsites authorized by BLM, including short and long-term camps and agency work camps, shall be located at least 500 meters from any known arctic peregrine falcon nest site. Exceptions may be granted by the authorized officer on a case-by-case basis.

Source: This protection has been adapted from the memorandum, Implementation of Recommendations from NPR-A Raptor Workshop (BLM 2000).

#### Protection 5

Objective: Minimize disturbance impacts to nesting arctic peregrine falcons from authorized activities at cliff sites.

Requirement/Standard: All users authorized by BLM, including BLM and other agency personnel, shall submit for approval an operational plan that includes dates, locations, and schedule of visits to cliff sites, when dates are between April 15 and August 15.

The cumulative number of authorized visits (defined as each day in which work is done within 500 meters of a nest site) to any cliff per nesting season (April 15 through August 15) by all authorized users shall be limited to three. Exceptions may be granted if the detailed operations plan documents why the necessary work could be done no other way.

Raptor biologists must coordinate their activities with the BLM, U.S. Fish and Wildlife Service (USFWS), Alaska Department of Fish and Game (ADF&G) and the North Slope Borough (NSB); follow the guidelines for conduct activities near arctic peregrine falcon nests; and follow Protection 4 regarding campsite placement. Exceptions to this requirement may be granted when necessary to conduct certain studies.

Source: This protection has been adapted from the memorandum, Implementation of Recommendations from NPR-A Raptor Workshop (BLM 2000).

#### Protection 6

Objective: Minimize disturbance impacts to arctic peregrine falcons in the CRSA from construction and non-emergency clean up.

Requirement/Standard: To reduce disturbance impacts to arctic peregrine falcons in the CRSA, off-road foot traffic construction or non-emergency hazardous materials or solid waste clean-up efforts within 1 mile of known arctic peregrine falcon nests shall be prohibited during the period April 15 through August 15. Construction refers to building permanent facilities, not those used in winter only. Non-emergency clean-up refers to remediation of old sites, such as removal of drums, buildings with asbestos, or soil that has been contaminated longer than one season. Off-road foot-traffic refers to human activity (walking) associated with construction or clean-up, occurring off the gravel road or pad, or off the immediate site clean-up.

Source: This protection has been adapted from the memorandum, Implementation of Recommendations from NPR-A Raptor Workshop (BLM 2000).

### Protection 7

Objective: Minimize disturbance impacts to nesting arctic peregrine falcons in the CRSA from motorized ground-vehicle use.

Requirement/Standard: Motorized ground-vehicle use within the CRSA authorized by BLM shall be minimized within one mile of any known arctic peregrine falcon nest from April 15 through August 15. Such use shall be prohibited within ½ mile of nests during the same period unless an exception is granted by BLM.

Source: This protection has been adapted from the C-2 ROP from the Record of Decision for the Northeast NPR-A Supplemental IAP/EIS (BLM 2008b).

### Protection 8

Objective: Minimize impacts to arctic peregrine falcon in the CRSA from power lines.

Requirement/Standard: To minimize impacts to arctic peregrine falcons in the CRSA from the power lines, construction projects will comply with the most up to date suggested practices for arctic peregrine falcon protection on power lines. All power lines and poles shall be designed and constructed in a manner which reflects safe configurations to prevent death of arctic peregrine falcons by electrocution (BLM 2008b).

Source: This protection has been adapted from E-16 ROP from the Record of Decision for the Northeast NPR-A Supplemental IAP/EIS (BLM 2008b).

### Protection 9

Objective: Minimize impacts from sand and/or gravel extraction to arctic peregrine falcons in the CRSA.

Requirement/Standard: To reduce impacts to arctic peregrine falcons in the CRSA from sand or gravel extraction the following measures apply:

- a. Removal of greater than 100 cubic yards of sand and/or gravel from cliffs shall be prohibited.
- b. Any extraction of sand and/or gravel from an active river or stream channel shall be prohibited unless preceded by a hydrological study that indicates no potential impact by the action to the integrity of the river bluffs (BLM 2008b).

Source: This protection has been adapted from E-15 ROP from the Record of Decision for the Northeast NPR-A Supplemental IAP/EIS (BLM 2008b).

### **Action Measures**

In addition to Protections 1 through 9 above, the BLM will implement the following actions in order to ensure that the management of arctic peregrine falcons in the CRSA is proactive.

### Action 1

**Objective:** To minimize incidental disturbance to arctic peregrine falcons in the CRSA  
BLM will provide educational/informational materials to the public who use resources in the CRSA.

**Requirement/Standard:** To minimize incidental disturbance to arctic peregrine falcons in the CRSA the BLM will implement educational measures to ensure conservation. These measures include: work with USFWS to educate the public on reasons (legal and conservation) for not killing arctic peregrine falcons; ensure that pilots understand that AGL means above bluff tops, not above the river; pursue strategies to ensure compliance with aircraft restrictions by authorized users and the general public; develop educational material to influence hunters and recreational users of the Colville River area to follow the same guidelines provided to authorized users for conduct around arctic peregrine falcon nest sites.

**Source:** This action has been adapted from the memorandum, Implementation of Recommendations from NPR-A Raptor Workshop (BLM 2000).

### Action 2

**Objective:** Improve knowledge about the ecology, life history, and behavior of arctic peregrine falcons to help decision makers and managers make informed decisions on proposals that could have an impact on falcons.

**Requirement/Standard:** To improve knowledge about the arctic peregrine falcon in the CRSA and to subsequently improve management, the research questions listed below have been identified. Subject to feasibility and funding, BLM will conduct research and monitoring to address the following questions:

- In which habitats in the CRSA do arctic peregrine falcons focus their foraging during the pre-breeding, egg-laying, incubation, chick-rearing, and fledgling periods?
- Which prey species, in what proportions, are taken in the CRSA by arctic peregrine falcons during the pre-breeding, egg-laying, incubation, chick-rearing, and fledgling periods?
- What are the baseline arctic peregrine falcon prey population levels in the CRSA?
- Which habitat types are selected for nest sites by peregrine falcons and how does habitat type selection/availability vary over the length of the CRSA?
- What is the home range size for arctic peregrine falcons in the CRSA?
- How do contemporary contaminant levels in arctic peregrine falcons eggs from the CRSA compare to those found in peregrine falcon eggs sampled in 1979 - 1995?
- What are disturbance thresholds (for nest abandonment) for arctic peregrine falcons from different types of disturbance (aircraft, pedestrian, watercraft, etc.) during the pre-breeding, egg-laying, incubation, chick-rearing, and fledgling periods?

Source: This action has been adapted from the memorandum, Implementation of Recommendations from NPR-A Raptor Workshop (BLM 2000).

### Action 3

Objective: Provide decision makers, managers, resource specialists, and users with planning tools to help make informed decisions when site-specific development or activity proposals are submitted and considered.

Requirement/Standard: To ensure proactive management and informed decision-making, the BLM will develop a planning map book for the CRSA to be used by planners, resource specialists, and interested publics to ensure that potential impacts to falcons are evaluated with future land use decisions.

The planning map book will be organized by township and will include all townships within the CRSA. The base map will be a USGS topographic map, and the layers will include the 1 mile setback, 15 mile foraging area, 500 meter campsite restriction areas, and the recreational easement along Native Selected lands. This map book will be updated as technology and data layers improve.

Source: The need for this action was identified during development of the CRSAMP.

### Action 4

Objective: Minimize potential adverse effects to arctic peregrine falcons in the CRSA from harvest of falcon fledglings to be used for falconry.

Requirement/Standard: BLM will monitor the potential of collection of fledgling arctic peregrine falcons or gyrfalcons for sport falconry and possible impacts to the arctic peregrine falcon population in the CRSA. BLM may impose restrictions or prohibitions on this activity in the CRSA.

Source: The need for this action was identified during agency consultation for the development of this plan.

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## **Tribes, Individuals, Organizations, and Agencies Consulted**

### **Agencies**

Alaska Department of Fish and Game  
Alaska Department of Natural Resources  
U.S. Fish and Wildlife Service

### **Governments**

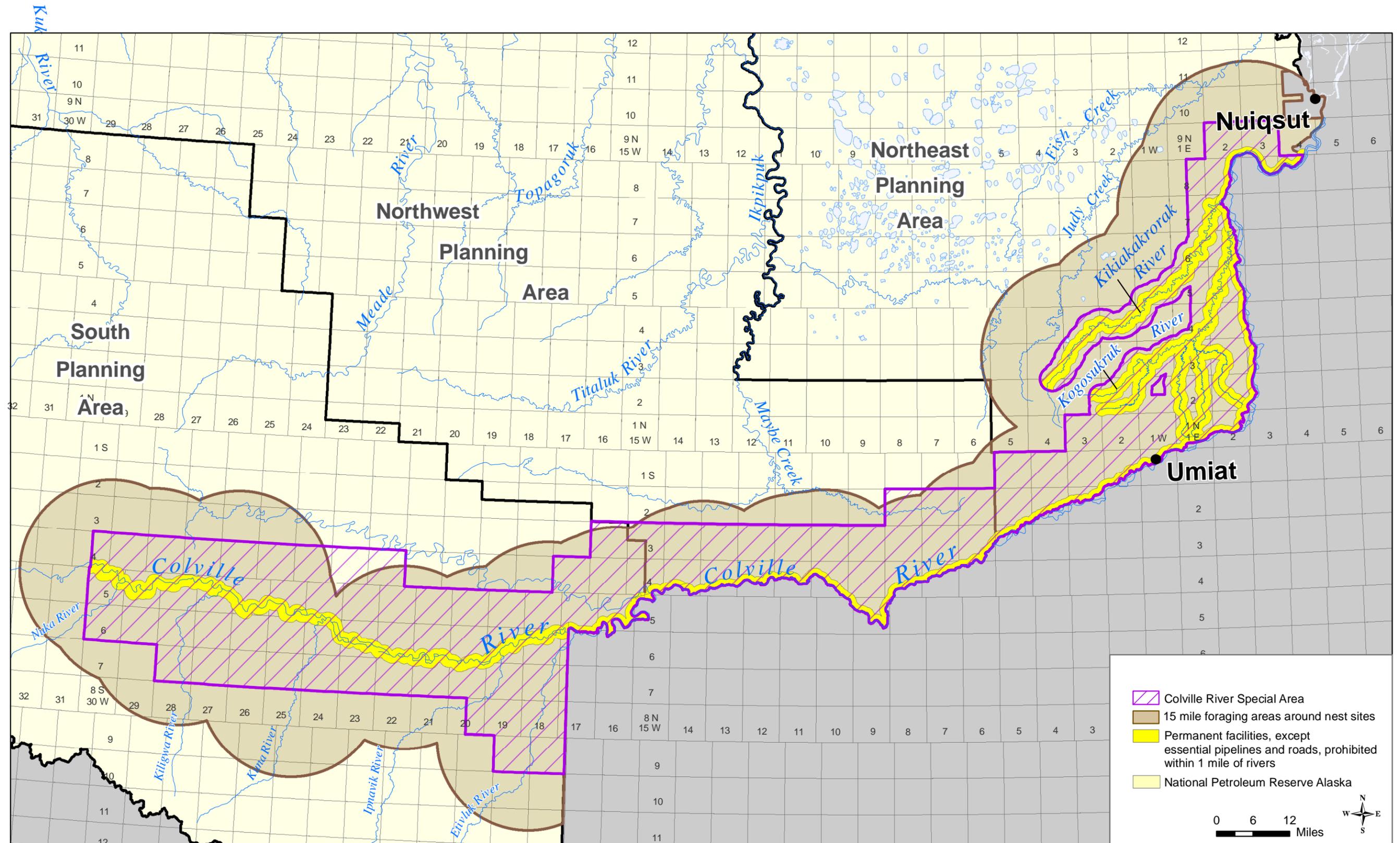
Native Village of Nuiqsut  
North Slope Borough

### **Organizations**

Alaska Audubon  
Arctic Slope Regional Corporation  
BLM-Alaska Resource Advisory Council (including representatives from the oil and gas industry)  
BLM NPR-A Subsistence Advisory Panel (including representatives from tribal and local governments)  
Northern Alaska Environmental Center

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Source:BLM 2007

Map 1. Colville River Special Area