United States Department of the Interior
KENAI NATIONAL WILDLIFE REFUGE
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COMPATIBILITY DETERMINATION

The National Wildlife Refuge System Administration Act of 1966, as amended (16 U.S.C. 668dd-668ee) states that "The Secretary is authorized, under regulations as [s]he may prescribe, to – (A) permit the use of any area within the [National Wildlife Refuge] System for any purpose, including but not limited to hunting, fishing, public recreation and accommodations, and access wherever [s]he determines that such uses are compatible' and that "... the Secretary shall not initiate or permit a new use of a refuge or expand, renew, or extend an existing use of a refuge, unless the Secretary has determined that the use is a compatible use and that the use is not inconsistent with public safety." A compatible use is defined as "A proposed or existing wildlife-dependent recreational use or any other use of a national wildlife refuge that, based on sound professional judgment, will not materially interfere with or detract from the fulfillment of the National Wildlife Refuge System mission or the purposes of the national wildlife refuge." The compatibility determination is to be a written determination signed and dated by the Refuge Manager and Regional Chief of the National Wildlife Refuge System, signifying that a proposed or existing use of a national wildlife refuge is a compatible use or is not a compatible use.

Applicable compatibility regulations in 50 CFR Parts 25, 26, and 29 were published in the Federal Register October 18, 2000 (Vol. 65, No. 202, pp 62458 – 62483). 50 CFR 25.21(b)(1) states that compatibility determinations will be completed for uses of Alaska Native Claims Settlement Act Section 22(g) lands. Compatibility determinations for proposed uses of 22(g) lands will only evaluate how the proposed use would affect the ability of the refuge to meet its mandated purposes. The National Wildlife Refuge System Mission will not be considered in the evaluation [50 CFR 25.21(b)(1)(iii)]. Compatibility determinations for proposed uses of 22(g) lands will only evaluate the effects of the proposed use on the adjacent refuge lands, and the ability of that refuge to achieve its purposes, and not the effects of the proposed use to the 22(g) lands [50 CFR 25.21(b)(1)(v)].

Use: Seismic exploration (3-D) activities on Tyonek Native Corporation 22(g) lands within the Kenai National Wildlife Refuge.

Refuge: Kenai National Wildlife Refuge

Establishing and Acquisition Authorities: The Refuge was first established as the Kenai National Moose Range by Executive Order 8979 on December 16, 1941. The boundaries were modified, purposes expanded, and name changed to Kenai National Wildlife Refuge under the provisions of the Alaska National Interest Lands Conservation Act (ANILCA) on December 2, 1980 (Public Law 96-487 Stat. 2371).

Refuge Purposes: The Executive Order purpose was primarily to "... protect the natural breeding and feeding range of the giant Kenai moose on the Kenai Peninsula, Alaska...". ANILCA purposes for the Refuge include: "(i) to conserve fish and wildlife populations and habitats in their natural diversity including, but not limited to moose, bear, mountain goats, Dall sheep, wolves and other furbearers, salmonids and other fish, waterfowl and other migratory and nonmigratory birds; (ii) to fulfill the international treaty obligations of the United States with respect to fish and wildlife and their habitats; (iii) to ensure to the maximum extent practicable and in a manner consistent with the purposes set forth in paragraph (i), water quality and necessary water quantity with the refuge; (iv) to provide in a manner consistent with subparagraphs (i) and (ii), opportunities for scientific research, interpretation, environmental education, and land management training; and (v) to provide, in a manner compatible with these purposes, opportunities for fish and wildlife oriented recreation." The Wilderness Act of 1964 (Public Law 88-577) purposes are to secure an enduring resource of wilderness, to protect and preserve the wilderness character of areas within the National Wilderness Preservation System, and to administer this wilderness system for the use and enjoyment of the American people in a way that will leave them unimpaired for future use and enjoyment as wilderness.

U.S. Fish and Wildlife Service compatibility policy (603 FW 2) directs that pre-ANILCA purposes of Alaska national wildlife refuges remain in force and effect, except to the extent that they may be inconsistent with ANILCA or the Alaska Native Claims Settlement Act, and that such purposes only apply to those areas of the Refuge in existence prior to ANILCA. For conducting compatibility determinations for proposed uses on ANCSA 22(g) lands, regulations require that both pre-ANILCA and ANILCA purposes be considered, so long as they do not conflict. If conflicts arise, ANILCA purposes will take precedence [50 CFR 25.21(b)(1)(iii)]. The Executive Order purpose to protect Kenai moose, however, is treated as complimentary to the broader ANILCA purpose of conserving fish and wildlife populations; therefore, no special attention is given the Executive Order purpose in this compatibility review process.

Sec. 4(a) of the Wilderness Act provides that the purposes of the Act are to be within and supplemental to the purposes for which national wildlife refuges are established and administered. These purposes are applied to the approximately 1.3 million acres of Congressionally designated wilderness within the Refuge. While these purposes do not apply to the remaining approximately 700,000 acres of Refuge lands that are not designated as wilderness, we must consider the effects of uses on any Refuge lands that might affect the wilderness areas.

Alaska Native Claims Settlement Act: The Alaska Native Claims Settlement Act (ANCSA) was enacted in 1971 to settle aboriginal land claims of Alaska's Natives by

providing land and money in exchange for extinguishment of their land claims. Section 22(g) of ANCSA made National Wildlife Refuge lands available for selection by Native village corporations, but contained a provision that " . . . such lands remain subject to the laws and regulations governing use and development of such Refuge." Selections and conveyances of 22(g) lands within the Refuge include 31,620.15 acres to the Tyonek Native Corporation (TNC). The proposed use would occur on these TNC lands.

Description of Use:

(a) What is the use and how will it be conducted?
The use involves the surveying and staking of locations, placement and retrieval of wireless receiver nodes which will record sound waves generated by 3-D seismic survey being conducted to obtain high quality imaging of subsurface geologic features of adjacent, off-Refuge State and privately-owned mineral estates underlying Cook Inlet and transition zone intertidal and terrestrial areas. This work is part of a larger scale multiyear 3-D seismic survey in the Cook Inlet Basin being conducted by Apache Alaska Corporation (Apache).

Surveying will be accomplished by crews of up to 20 surveyors, in teams of 2, who will enter the TNC 22(g) lands within the Refuge on foot or be transported by Bell 204 or 205 helicopter (or similar) on a daily basis. Pedestrian survey crews will traverse the project area on foot, with occasional transport by helicopters, and mark pre-plotted receiver locations with wood lathe and flagging. Four Bell 407 helicopters will be used to transport and drop-off sling loads of wood lathing for surveyors and wireless receivers for recording crews. Recording crews of 5 people will walk into or be transported and dropped off by helicopter, walk along the staked receiver lines and place and retrieve the wireless receiver nodes. Snowmachine use may occur to transport crews if authorized by the Refuge, pending adequate snow cover. Receiver nodes are approximately 5 inches in diameter and 6 inches high, and have a 4 inch spike at their base to hold their position in the soil. Wireless receiver nodes will be placed 165 feet apart along the lines, and receiver lines will be 1,320 feet apart. Helicopter landings will occur in designated landing zones.

Apache's overall Cook Inlet seismic survey project operations will include conducting a full 3-D seismic survey on lands within the Refuge overlying Cook Inlet Region, Incorporated (CIRI) –owned coal, oil and gas resources, which include the TNC 22(g) lands. However, the Service must allow exploratory activities for CIRI's subsurface resources under the terms of legal agreements with CIRI, and must allow "adequate and feasible" access to CIRI's subsurface resources within the Refuge under Title XI of ANILCA, and these operations are therefore not subject to compatibility regulations. Surveying, drilling, detonation of sound sources, recording and clean-up will occur on TNC 22(g) lands as part of Apache's overall 3-D seismic survey of CIRI-owned subsurface resources within the Refuge, and these activities are not addressed in this compatibility determination.

(b) Where would the use occur?
The use would occur on the 31,620.12 acres of TNC 22(g) lands, located in the northwestern portion of the Refuge.

(c) When would the use occur?
Land surveying and receiver deployment would occur on the TNC 22(g) lands from August 15 to December 15. A final determination is yet to be made as to whether the project will be conducted in 2013 or 2014.

(d) Why is the use proposed?
The proposed use is part of a larger scale multiyear 3-D seismic survey in the Cook Inlet Basin being conducted by Apache. The 3-D seismic survey being conducted to obtain high quality imaging of subsurface geologic features of adjacent, off-Refuge State and privately-owned mineral estates underlying Cook Inlet and transition zone intertidal and terrestrial areas.

Availability of Resources: Administering the proposed use will require oversight and coordination with project personnel during planning and project implementation phases. Existing refuge staff have responsibility for coordination and oversight of oil and gas activities on the Refuge, and no additional costs will be incurred.

Anticipated Impacts of the Use: There are potentially both long-term and short-term biological impacts associated with the proposed use. The primary long-term impact is the introduction and dispersal of non-native plants, some of which are invasive and injurious. More than 110 exotic vascular plants now occur on the Kenai Peninsula, most of which occur on lands outside Refuge boundaries. While the potential for this impact would be reduced with snow cover, helicopter operations and foot travel could result in transport of invasive plant seeds during snow free periods. Seed production of many invasive plant species is in full swing during August and September. This impact would be mitigated by ensuring that helipads and crew staging areas are weed-free and all equipment is clean.

The primary short-term biological impacts associated with the proposed use would be the temporary disturbance and displacement of wildlife during the August 15 to December 15 period of project activities, particularly as a result of helicopter operations supporting transport of crews and equipment.

Low level helicopter operations and landings would be the main source of disturbance. By mid-August, most juvenile migratory landbirds will have fledged, however juvenile survival could be impacted for some migratory waterbirds if disturbance results in separation from attendant adults. Trumpeter swan nesting and brood rearing have been documented in previous years on numerous wetlands both on the TNC22(g) lands and immediately adjacent Refuge lands within one mile of the TNC 22(g) lands. Because of their proximity to documented swan nests/brood rearing habitats on the TNC22 lands, these areas may represent habitats within nesting and brood rearing territories that are used differentially between and among years by the same swan pairs and their broods in

this overall area. Observing required 1000' buffer non-fly zones around adult swans with broods during flight operations would reduce the potential for any impacts. This will require continuous monitoring and flexibility since adult swans and broods become increasingly mobile during the August to September time period.

Presence and travel of crews on the ground for surveying and receiver deployment would likely only cause minimal disturbance to all wildlife species. Deployment of receivers would not require disturbance or clearing of vegetation.

The biological impacts described above would be localized and occur almost exclusively on the TNC 22(g) lands, since project activities subject to this compatibility determination would only occur on these lands. Disturbance and displacement of wildlife on adjacent Refuge lands would occur, but only from helicopter operations conducted proximal to the land ownership boundary. These localized impacts would not be expected to have population level impacts to the overall populations of any wildlife species utilizing the Refuge.

Most public use in the general area of the project during the project timeframe would occur on the Swanson River and on two lakes within the Refuge immediately adjacent to the TNC 22(g) lands. Approximately 1.3 miles of the Swanson River traverse the southeast corner of the TNC 22(g) lands. The Swanson River is part of the Swanson River Canoe Trail, which was designated in 1981 as a National Recreation Trail. Canoeing on the Swanson River is a popular recreational activity, often associated with fishing and hunting, during the ice-free months from late spring through the summer and early fall. There are 2 Refuge public use cabins on Refuge lands immediately adjacent to the TNC 22(g) lands. For the period 2005-2011, the McClain Lake cabin received peak use during the months of August and September, and the Snag Lake cabin received peak use during the month of June. These cabins receive relatively little use during the months of October, November and December. Moose hunting and recreational fishing are the primary recreational activities occurring in the area in August and September. A small number of trappers may utilize the area beginning on November 10, accessing the area via the Swanson River, by aircraft into area lakes, or by snowmachine on or after December 1st if there is adequate snow cover and the Refuge has been opened to snowmachining.

Project activities, particularly helicopter operations, occurring in the vicinity of the Swanson River and McClain and Snag Lakes could negatively impact visitor experience in this otherwise remote and undisturbed area. These impacts would be mitigated to the extent possible by providing advanced notice of project activities to visitors at canoe trail entry points, the refuge website and on the reservations.gov electronic cabin reservation database, and to Refuge trapping permittees. Impacts would be limited to August to December timeframe and when project operations would occur proximal to these areas. No impacts to subsistence users would be expected from project activities. The public use occurring in the vicinity of the project area represents a very small proportion of the overall public visitation and use of the Refuge.

Public Review and Comment: This compatibility determination has been prepared in response to a request by the Tyonek Native Corporation for use of their 22(g) lands within the Kenai National Wildlife Refuge by Apache Alaska Corporation to conduct seismic survey operations supporting the imaging of off-Refuge subsurface resources. Legal notice of the draft compatibility determination was published in the Anchorage Daily News and Peninsula Clarion on March 12 and March 14, 2013, respectively. The comment period extended through March 31, 2013. The notice was also posted on a bulletin board at the Refuge headquarters for the same time period, made available on the refuge website http://fws.gov/refuge/kenai, made available on a list server fws-akrefugecompatibility@lists.fws.gov to 101 addresses, and made available on the Regional Refuge Planning web site at http://alaska.fws.gov/nwr/planning/completed.htm.

Comments were received from Apache Alaska Corporation and the Friends of Kenai National Wildlife Refuge. Apache requested the U.S. Fish and Wildlife Service (Service) to allow project operations to begin on August 15 rather than October 1. The Service revised the compatibility determination to evaluate additional impacts resulting from the adjusted timeframe. The primary additional impacts are an increased potential for introduction of invasive species and disturbance to trumpeter swan broods. This analysis did not affect the final finding that the use is compatible. Other comments were editorial in nature or addressed the comprehensive nature of the draft compatibility determination.

Determination (check one below):

_____ Use is Not Compatible

____X____ Use is Compatible With Following Stipulations

Stipulations Necessary to Ensure Compatibility:

1) Project personnel will coordinate with Refuge staff providing oversight of project activities.
2) Project operations will be conducted under a Refuge Special Use Permit. Special emphasis will be placed on mitigating disturbance impacts to wildlife and minimizing potential for introduction of invasive species.
3) Project operations associated with activities needed to image adjacent off-Refuge mineral estates, including all supporting helicopter operations, conducted within the Kenai NWR will be limited to TNC 22(g) lands within the Refuge.

Justification:

Compatibility determinations for proposed uses of 22(g) lands only evaluate how the proposed use would affect the ability of the refuge to meet its mandated purposes. The National Wildlife Refuge System Mission is not be considered in the evaluation [50 CFR 25.21(b)(1)(iii)]. Compatibility determinations for proposed uses of 22(g) lands only evaluate the effects of the proposed use on the adjacent refuge lands, and the ability of that refuge to achieve its purposes, and not the effects of the proposed use to the 22(g)

lands [50 CFR 25.21(b)(1)(v)].

Most of proposed project's short-term biological impacts will be localized, and occur almost exclusively on the Tyonek 22(g) lands. A potential long-term impact is the introduction of invasive plants to the Refuge; this can be mitigated through careful selection of off-refuge staging areas and best management practices. Impacts to adjacent Refuge lands and resources would be limited to only those resulting from project activities, specifically helicopter operations, occurring near the land ownership boundary. Adhering to required no-fly buffer zones around wetlands with trumpeter swan broods will be required. Minor impacts to recreational users would be expected, primarily to users of the Swanson River Canoe Trail and public use cabins on Snag and McClain lakes. The proposed project on the Tyonek 22(g) lands will not materially interfere or detract from achieving the legislatively mandated purposes of the Kenai National Wildlife Refuge.

Signature (Refuge Manager): Andy Loranger April 5, 2013
Signature and Date

Concurrence (Regional Chief): Matt Ellis April 11, 2013
Signature and Date

Mandatory 10- or 15-year Re-evaluation Date:
Re-evaluation is not required for compatible uses on 22(g) lands unless the use changes significantly, significant new information is available that could affect the compatibility determination, or if requested by the 22(g) landowner.