



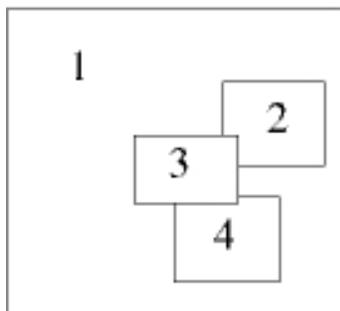
U.S. Department of the Interior
Bureau of Land Management

Alpine Satellite Development Plan **Record of Decision**

November 2004



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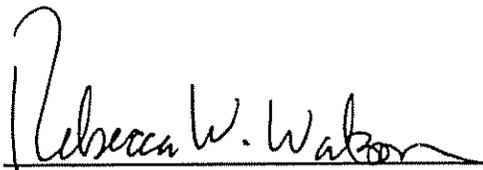
Cover Photos:

1, 2, 4. Mike Nagy, Entrix
Photo 1 of the Ublutuoch River
Photo 2 of CD-2 of the existing Alpine facility
Photo 4 of the village of Nuiqsut
3. Darlene Cullor, Entrix
Photo of a caribou

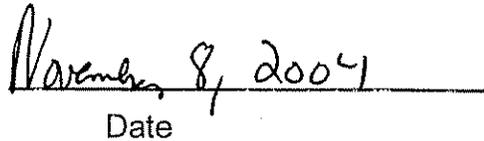
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Alpine Satellite Development Plan Environmental Impact Statement

Record of Decision



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Assistant Secretary
Land and Minerals Management


Date

Prepared by:
U.S. Department of the Interior
Bureau of Land Management

Alpine Satellite Development Plan

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Summary

This Record of Decision (ROD) documents the Department of the Interior's decision to approve rights-of-way and permits to drill on public lands in response to an application by ConocoPhillips Alaska, Inc. (CPAI). These authorizations will be issued by the Bureau of Land Management (BLM) following completion of the state's coastal zone consistency review and receipt of a certification to that effect from CPAI. The authorizations will allow development of federal oil leases on BLM-managed land in the National Petroleum Reserve-Alaska. These authorizations will adopt the Preferred Alternative, with minor modifications (see Appendix A), in the Alpine Satellite Development Plan (ASDP) Final Environmental Impact Statement (FEIS).

The ASDP Environmental Impact Statement (EIS) analyzed CPAI's proposal to develop oil accumulations from five drill pads, two of which are on BLM-managed lands. The decisions in this ROD are limited to federal lands. Authorizations for development on non-federal lands will be issued by the U.S. Corps of Engineers (USACE), the U.S. Coast Guard (USCG), the U.S. Environmental Protection Agency (EPA), and the State of Alaska. The decision for BLM-managed land in this ROD is consistent with the ASDP EIS Preferred Alternative that will form the basis for decisions by the cooperating agencies, including decisions regarding development on non-federal lands.

The ASDP EIS fulfills the obligation of BLM and its federal cooperating agencies under the National Environmental Policy Act (NEPA), 42 U.S.C. 4321, to analyze the environmental impacts of federal authorizations necessary for CPAI to undertake its proposed development. Furthermore, authorizing CPAI's development helps address the nation's energy needs. North Slope oil production, centered at Prudhoe Bay, is central to the nation's domestic oil supply. The North Slope contributes about 16 percent of America's current domestic production. The oil industry has discovered and developed other fields to the east and west of Prudhoe. However, production is in decline from these older fields and development of CPAI's project will help offset this decline. Moreover, the authorization of development of leases in the National Petroleum Reserve-Alaska satisfies the purpose of the Naval Petroleum Reserves Production Act of 1976 (NPRPA) to explore and develop oil and gas resources in the Petroleum Reserve. Specifically, the NPRPA, as amended, encourages oil and gas leasing in the Reserve while requiring protection of important surface resources and uses. Development of the satellite oil accumulations with appropriate environmental protection measures is consistent with the president's directive to his National Energy Policy Development Group to "promote dependable, affordable and environmentally sound production of energy for the future" (National Energy Policy Development Group 2001). Furthermore, President Bush issued Executive Order 13212 on May 18, 2001, calling on federal agencies to give priority to energy-related projects: "For energy-related projects, agencies shall expedite their review of permits or take other actions as necessary to accelerate the completion of such projects, while maintaining safety, public health, and environmental protections." Completion of the ASDP EIS and issuance of this ROD fulfills agency responsibilities under this directive.

The ASDP FEIS analyzed a full range of alternatives. They include:

- CPAI's proposed project,
- a Preferred Alternative,
- three other alternatives (two with subalternatives) that would achieve development of the oil accumulations targeted by CPAI using different methods and creating different footprints and impacts on the land, and
- a "No Action Alternative."

Each action alternative offered a different approach to development while protecting surface resources from "unnecessary and undue degradation," as required by the Federal Land Policy and Management Act (FLPMA).

The decision emphasizes environmentally responsible development. The decision includes protections for physical and biological resources, including subsistence resources, and local residents' ability to continue their subsistence way of life. At the same time, the decision enables leaseholders to develop the oil resources they discovered on federal lease tracts and deliver that product to serve America's energy needs.

The findings in the EIS and the decisions reflected in this ROD were based on an open and collaborative planning and environmental analysis process. While the information on some aspects of the environment was limited, all available information related to surface and subsurface resources and impacts was presented in the EIS. Indeed, in the course of the EIS new data was gathered and analyzed. Modeling was done to predict specific impacts associated with proposed infrastructure. Some of the additional data, modeling, and analysis was conducted to address specific comments on the DEIS. The analysis utilized knowledge of impacts of past North Slope oil development occurring in environments similar to those to be impacted by the ASDP. The analysis and decision have benefited from close coordination among the scientists and other resource and use specialists of the contractor, BLM, the cooperating agencies, the U.S. Fish and Wildlife Service; the National Oceanic and Atmospheric Administration, Fisheries; and the North Slope Borough (NSB); and by an ongoing dialogue with North Slope residents, particularly those of Nuiqsut (the closest community to the project). The result has been an FEIS that provides sufficient detailed analysis to adequately inform the decision maker for purposes of this ROD.

The Preferred Alternative in its entirety contemplates development of one pad on state land and two pads on non-federal land owned by Kuukpik Corporation, Nuiqsut's village corporation (surface), and the Arctic Slope Regional Corporation (subsurface) in addition to the two pads on BLM-managed land. Revenues from all development will benefit local residents and communities through Native corporation revenues or NSB taxes. Local residents and communities will also benefit indirectly from revenues that will accrue to the state from development of one pad and associated leases on state lands and from the sharing with the state of revenues from development on federal lands. While allowing this development, however, the decision has addressed local residents concerns regarding protection of their subsistence way of life and the resources on which they depend.

1. Decision

This ROD approves the development of the ASDP on BLM-managed lands and leases as described in the Preferred Alternative of the ASDP Final EIS with minor adjustments explained in Appendix A.

This ROD concludes the ASDP EIS process for the BLM. It fulfills the NEPA requirements associated with consideration of CPAI's application to use federal lands to develop oil accumulations leased by BLM to CPAI.

The ROD approves issuance of appropriate BLM rights-of-way, permits to drill, and other authorizations necessary for development of the ASDP. This includes:

- Construction of two gravel drilling and production pads (CD-6 and CD-7; casefiles AA-081821 and AA-081800, respectively)
- Construction of roads, bridges, and pipelines on BLM-managed lands that will link these two drilling and production pads with a processing facility located on State land at CD-1 (FF-094318)
- Sale and extraction of gravel from the Clover Gravel Mine

The location of the pads, roads, bridges, pipelines and gravel mine are described in the Preferred Alternative and CPAI's Alpine Satellite Development Program application (January 16, 2004) as revised (revision 1, January 30, 2004; updated description and drawings, August 12, 2004). The pads would each cover approximately 9.1 acres. The main road accessing CD-7 from Kuukpik Corporation land will cross approximately 15 miles of BLM-managed land; a spur from that road to CD-6 will be approximately 2.2 miles long. Pipelines mounted on vertical support members (VSMs) parallel the roads. The Clover Gravel Mine will be located in Sec. 12, T. 10 N., R. 3 E., U.M. and encompass approximately 65 acres. The exact specifications for these facilities may vary slightly from those shown on the Final EIS and application drawings to meet the requirements of permits issued by other federal and state agencies. This ROD authorizes a bridge that is a minimum of 120 feet long over the Ublutuoch River; however, other agencies may require a longer bridge.

This ROD grants exceptions to three stipulations included in the *Northeast National Petroleum Reserve-Alaska Final Integrated Activity Plan/Environmental Impact Statement Record of Decision* (IAP/EIS ROD) signed in October 1998. Consistent with the exception clause in the IAP/EIS ROD, BLM will grant exceptions to:

- Stipulation 39(d): to allow permanent oil and gas facilities within a 3-mile setback from Fish Creek, based on technical, economic, and environmental factors
- Stipulation 41: to allow some permanent oil and gas facilities within 500 feet of some waterbodies, based on technical factors
- Stipulation 48: to allow gravel roads between "separate oil fields," based on environmental factors

Additional discussion of the rationale for granting these exceptions is included below under Management Considerations. All other stipulations attached to leases issued as a result of the 1998 IAP/EIS will remain in place.

This decision also incorporates additional protective measures through adoption of the following mitigation measures. These measures were selected from potential mitigation measures described in the FEIS and through additional analysis by BLM.

General

1. All research and monitoring activities by the permittee will follow protocols described by the Authorized Officer that will be designed to minimize disturbance and mortality.
2. CPAI will do the required monitoring and studies, though to enhance cooperation among research and monitoring entities and to avoid duplication, the Authorized Officer may waive this requirement of CPAI if the monitoring or study is being done by another entity.

Surface Water – Lakes

3. Prior to lake water withdrawals, lake monitoring studies that evaluate lake habitat recharge and actual recharge during break-up will be completed at BLM direction.
4. The permittee will submit to the Authorized Officer for approval, a monitoring plan for lakes where withdrawals are expected. In order to ensure that lakes maintain their natural ability to support the same suite of species as they have in the past without water withdrawal, the plan will be for monitoring water quantity and quality throughout the period of withdrawal and the rest of the year. The monitoring will continue as long as withdrawals take place or until BLM determines that further monitoring is unnecessary.

Surface Water Quality

5. The permittee will implement a monitoring program that is approved by the Authorized Officer, which incorporates the collection of samples of suspended sediment upstream and downstream of the Ublutuoch River bridge. This monitoring program will assist in the analysis of scour and fill processes occurring in the vicinity of the bridge and determine future erosion abatement measures to be taken. The monitoring will continue until BLM determines that further monitoring is unnecessary.

Air Quality

6. The permittee will implement a plan approved by the Authorized Officer for limiting fugitive dust. Methods of dust control could include road watering, vehicle washing, covering of stockpiled material, ceasing construction during wind events, the use of chemical stabilizers, and chip seal, and could vary for the frozen and non-frozen seasons.

Terrestrial Vegetation and Wetlands

7. Where necessary, fill slopes will be stabilized using revetments, soil binders, or other methods approved by the Authorized Officer.
8. Construction, development, and operations actions will be conducted in a manner that avoids riparian shrub areas whenever possible.

Fish

9. CPAI will perform fish surveys and hydrologic modeling for water bodies at proposed bridge and culvert sites. The results of these surveys and modeling will be incorporated into the designs of bridges and culverts. Based on the surveys and modeling, CPAI will install bridges or culverts in roadbeds in low-lying areas to ensure fish passage during high-water conditions. The fish surveys and hydrologic modeling will continue until BLM determines that further surveys and modeling are unnecessary.
10. CPAI will continue fish monitoring studies in the Plan Area to ensure that the health of regional and locally important fish stocks is maintained.
11. On a schedule to be approved by the BLM, CPAI will monitor all culverts to ensure that they are properly maintained and are providing access by fish to critical summer spawning and rearing grounds. CPAI will promptly repair any culverts that are not meeting these intended fish passage goals.
12. CPAI will develop a mitigation plan that includes remedial measures to be taken should monitoring detect adverse impacts from the project.
13. Intake structures specially designed to eliminate the potential for fish being impinged, entrained, or entrapped during withdrawal of water shall be used at all water sources. These structures must meet the standards developed by Alaska Department of Fish and Game.

Birds

14. If deemed necessary by BLM, the Authorized Officer may require vehicle traffic restrictions during brood rearing of specific species. The Authorized Officer will determine the time-frame that the traffic restrictions will be in place and what the reduced speed and amount of allowable traffic will be.

Predation

15. Permittee shall utilize best available technology to prevent facilities from providing nesting, denning, or shelter sites for gulls, ravens, raptors, and foxes. The permittee shall provide the Authorized Officer with an annual report on the use of oil and gas facilities by gulls, ravens, raptors, and foxes as nesting, denning, and shelter sites.

Terrestrial Mammals

16. The permittee will develop and implement a monitoring plan for caribou movement and vehicle traffic on the roads leading to CD-6 and CD-7. CPAI will then develop and apply adaptive management approved by the BLM that is aimed at minimizing traffic impacts to caribou based on what is learned.

Cultural Resources

17. Before construction of ice roads, CPAI will evaluate and assess possible cultural resources in the immediate areas of the proposed ice roads.

Visual Resources

18. All permanent painted structures, including emergency spill containers located along watercourses, will be painted to blend with the natural environment. All colors will be pre-approved by the Authorized Officer. BLM will use computer generated colors and on-site testing to determine the color for structures that will blend in best with the background colors of the natural landscape. Self-weathering steel, non-specular surfaces, or best management practice, shall be used on all metal structures not otherwise painted.

This decision also adopts reasonable and prudent measures, terms and conditions, and a conservation recommendation presented by the FWS in their Biological Opinion and incorporated below.

Reasonable and Prudent Measures

The Service believes that the following reasonable and prudent measures are necessary and appropriate to minimize take of spectacled eiders:

1. To minimize the likelihood that migrating spectacled eiders will strike drill rigs and associated infrastructure within the ASDP Area, BLM and appropriate cooperating agencies and the Service will cooperatively develop a lighting/marketing protocol intended to reduce radiation of light outward from structures and to increase the visibility of structures to migrating eiders.
2. To avoid and reduce temporary impacts to productivity resulting from disturbance within 200 meters of occupied spectacled nests, from June 1 through August 1, ground level activity (by vehicle or on foot) within 200 meters of occupied spectacled eider nests will be restricted to existing thoroughfares. Construction of permanent/temporary facilities, placement of fill, alteration of habitat, and introduction of high noise levels within 200 meters of occupied spectacled eider nests is prohibited. The Service does not intend this RPM to be interpreted as a potential restriction on aircraft flights to areas of existing gravel fill and CD-3's airstrip.

Terms and Conditions

In order to be exempt from the prohibitions of Section 9 of the Endangered Species Act, BLM must comply with the following terms and conditions, which implement the reasonable and prudent measures described above and outline required reporting/monitoring requirements. These terms and conditions are non-discretionary.

1. To minimize the likelihood that migrating spectacled eiders will strike structures associated with drilling activities, BLM, cooperating agencies and Service will cooperatively develop a lighting/operating protocol to be used on all drill rigs and associated production infrastructure. The Service and BLM will work together to identify when and where the protocol should be applied. Any protocol developed will be in compliance with Federal Aviation Administration (FAA) regulations. The lighting protocol shall ensure that radiation of light outward from all drill rigs and associated infrastructure will be minimized. This will be achieved by shading and/or light fixture placement to direct light inward and downward to living and work surfaces while minimizing light radiating upward and outward.
2. Temporary impacts to spectacled eider productivity due to disturbance and direct habitat impacts must be minimized by ensuring protection of females with nests. Ground-level activity (by vehicle or on foot) within 200 meters of occupied spectacled eider nests, from June 1 through August 1, will be restricted to existing thoroughfares. This includes “working” gravel on existing fill (pads and roads). Construction of permanent facilities, placement of fill, alteration of habitat, and introduction of high noise levels within 200 meters of occupied spectacled eider nests will be prohibited. In instances where minimal summer support/construction activity must occur off existing thoroughfares, Service-approved nest surveys must be conducted during mid-June of each year in which activities take place between June 1 and August 1. BLM and cooperating agencies will also work with the Service to schedule oil spill response training in riverine, marine and inter-tidal areas that occurs within 200 meters of shore, outside sensitive nesting/brood-rearing periods or conduct nest surveys. The protocol and timing of nest surveys for spectacled eiders will be determined in cooperation with the Service, and must be approved by the Service. Surveys should be supervised by biologists who have previous experience with spectacled eider nest surveys.

Conservation Recommendation

To better understand the potential adverse impacts that summer (June 1 to September 31) aircraft flights have on spectacled eiders in Northeast National Petroleum Reserve-Alaska and the Colville River Delta, the Service encourages BLM/CPAI to collect and make available data on aircraft flights associated with construction, operation, support and abandonment of ASDP facilities. The Service is particularly interested in quantifying helicopter flights associated with ASDP-related research and facility tours. Field research, flight seeing and facility tours in North Slope oilfields typically occur during the summer months, but numbers,

locations, and type of activities remain speculative. Our experience tells us that on an individual basis, these flights probably do not cause take of spectacled eiders. However, without a greater understanding of the extent of these activities in Petroleum Reserve, it is difficult to determine whether the cumulative effects may result in take. It is important to quantify these actions because they could result in: 1) displacing adults and/or broods from preferred habitats during pre-nesting, nesting, brood rearing and migration; 2) displacing females from nests, fragmenting broods and exposing eggs or small young to inclement weather or predators; and 3) reducing foraging efficiency and feeding time.

This decision will result in no unnecessary or undue degradation of public lands. Adverse impacts to these lands and the uses of these lands are minimized by:

- provisions in leases the BLM issued to CPAI,
- protections incorporated into the project by the Preferred Alternative,
- additional mitigation measures developed through the course of the EIS as described above,
- additional protective measures adopted based upon the FWS's Biological Opinion,
- applicable federal, state, and NSB laws and regulations, and
- permitting decisions to be provided by the cooperating agencies.

In addition, the applicant's proposed design includes measures that help to minimize impacts.

2. Alternatives

The elements of the alternatives presented in the ASDP EIS relevant to federal lands are consistent with the purposes of the statutes governing the National Petroleum Reserve-Alaska and with BLM's responsibilities under FLPMA. Each alternative offers a different approach to approving CPAI's applications to produce oil reserves on its leases. The alternatives also serve the "total energy needs of the nation"—a goal of the NPRPA—while protecting surface resources from "unnecessary and undue degradation" as required by the FLPMA. The following provides descriptions of the alternatives as they apply to both federal and non-federal lands, followed by shorter descriptions that highlight the elements on federal lands.

Alternative A (CPAI's original proposal): Five production pads, CD-3 through CD-7, would be built, and produced fluids would be transported by pipeline for processing at the existing Alpine processing facility. Gravel roads would connect CD-4 through CD-7 to the existing Alpine Field road. CD-3 would be constructed with a gravel airstrip but without a gravel access road. Gravel used for construction of roads, pads, and airstrips would be obtained from the existing ASRC Mine Site and the Clover Gravel Mine. A bridge approximately 1,200 feet long across the Nigliq Channel near CD-2 would accommodate road traffic and the pipelines. Aboveground pipelines would be supported on VSMs and would be at elevations of at least 5 feet above the tundra. Powerlines would be supported by cable trays placed on the pipeline VSMs, except between CD-6 and CD-7, which would be on separate power poles. Cable trays would not hang below the pipelines. Industry, local residents, and government would use the gravel roads. CD-6 and the road and pipelines to it, most of the road and pipelines to CD-7, and the powerline from CD-6 to CD-7 would be within a 3-mile no-permanent-oil-and-gas-facilities setback (Stipulation 39[d] of the IAP/EIS ROD) from Fish Creek, and would require an exception consistent with the BLM's Northeast National Petroleum Reserve – Alaska IAP/EIS ROD. Additional exceptions would be required to locate oil infrastructure within 500 feet of some water bodies (Stipulation 41) and to locate roads between separate oilfields (Stipulation 48). In addition, although BLM does not interpret the first sentence of Stipulation 48 of the IAP/EIS ROD to apply to the applicant's proposed action (i.e., the agency does not consider the road between CD-1 and CD-2 or the additional proposed road to CD-4 to constitute a connection to a "road system" outside the Northeast National Petroleum Reserve-Alaska planning area), out of an abundance of caution, if it is determined that this sentence applies in this case, the BLM would modify Stipulation 48 to allow the road from public land connecting to the existing Alpine field road. Finally, the USACE would have to determine that the applicant's proposed alternative for a road to CD-4 met the intent of Special Condition 10 of its 1998 permit that authorized the placement of fill associated with the construction of the existing Alpine facilities. Special Condition 10 required roadless development in the Delta, unless an environmentally preferable alternative is available or roadless was infeasible, and that any alternative dependent on roads must be approved by the USACE as preferable to a roadless alternative.

On Federal Lands: Two production pads, CD- 6 and CD-7, would be built. They would be connected by gravel road and pipeline to the eastern extent of federal lands and beyond over non-federal lands to the existing Alpine facility. Gravel would be extracted from the proposed Clover Gravel Mine. Aboveground pipelines would be supported on VSMs and would be at elevations of at least 5 feet above the tundra. Powerlines would be supported by cable trays placed on the pipeline VSMs, except between CD-6 and CD-7, which would be on separate power poles. Cable trays would not hang below the pipelines. Industry, local residents, and government would use the gravel roads. Exceptions consistent with the IAP/EIS ROD would be required for Stipulations 39[d], 41, and 48 (and potentially a modification of Stipulation 48 for this project) as described above.

Alternative B: Except as described below, all activities would be the same as described for Alternative A. CD-6 and its associated access road would be moved south, outside the 3-mile setback for Fish Creek. A gravel road would connect CD-4 with CD-1 and CD-6 with CD-7, but CD-3 and CD-5 would be roadless. Only CD-4 would be connected by road to the existing Alpine facilities. Airstrips would be required at CD-3, CD-5, and CD-6. Permanent oil infrastructure would be located at least 500 feet from water bodies to the maximum extent possible. Traffic on gravel roads would be open to industry and government and closed to local residents. The bridge crossing the Nigliq Channel near CD-2 would be for pipelines only. Powerlines would be buried in roads or at the toe of the slope of roads everywhere there is a road. Where there are no roads, powerlines would be buried in tundra adjacent to the pipelines. Powerlines would be hung off pipeline bridges at stream crossings and trenched across minor drainages. Consistent with the BLM's Northeast National Petroleum Reserve – Alaska IAP/EIS ROD, an exception may be required to Stipulation 41 in cases in which it is not possible to locate infrastructure at least 500 feet from water bodies. The USACE would have to determine that the alternative for the road to CD-4 met the intent of Special Condition 10 of its 1998 permit that authorized the placement of fill associated with the construction of the existing Alpine facilities.

On Federal Lands: Except as described below, all activities would be the same as described for Alternative A. CD-6 and its associated access road and pipeline would be moved south, outside the 3-mile setback for Fish Creek. A road would connect CD-6 to an airstrip that would be built nearby and to CD-7, but there would be no other road construction on federal land. Permanent oil infrastructure would be located at least 500 feet from water bodies to the maximum extent possible. Traffic on gravel roads would be open to industry and government and closed to local residents. Powerlines would be buried in roads or at the toe of the slope of road everywhere there is a road. Where there are no roads, powerlines would be buried in tundra adjacent to the pipelines. Powerlines would be hung off pipeline bridges at stream crossings and trenched across minor drainages. An exception consistent with the IAP/EIS ROD may be required for Stipulation 41 as described above.

Alternative C: Except as described below, all activities would be the same as described for Alternative A. All pads would be connected by gravel roads to the existing Alpine facility. Roads to CD-5, CD-6, and CD-7 would connect to either the existing Alpine facility (Sub-Alternative C-1) via a road and pipeline bridge near CD-4 or to existing

oilfields east of the Colville River using the state's proposed Colville River Road (Sub-Alternative C-2). Both sub-alternatives would provide road access from Nuiqsut to the oilfields. To take better advantage of the state road under Sub-Alternative C-2, a bypass of Nuiqsut would be constructed from the state road to the satellite road of the applicant's proposed action (and the spur from the latter road to the north end of the village would be deleted) and an approximately two-acre pad would be added along the bypass primarily for vehicle storage. Powerlines would be hung from power poles. No new airstrips would be constructed. Pipelines would be supported on VSMs and would be at elevations of at least 7 feet above the tundra, as measured at VSM locations. Use of roads on BLM lands would be unrestricted; all other roads would be open to industry, local residents, and government only. Both sub-alternatives would require the same exceptions to BLM stipulations as Alternative A; however, Sub-Alternative C-2 would also require that BLM modify Stipulation 48 to allow connection of roads on BLM-managed lands with the state's proposed road. The USACE would have to determine that the roads to CD-3 and CD-4 meet the intent of Special Condition 10 of its 1998 permit that authorized the placement of fill associated with the construction of the existing Alpine facility.

On Federal Lands: Except as described below, all activities would be the same as described for Alternative A. Roads from CD-6 and CD-7 would take a more southerly route to connect to either the existing Alpine facility (Sub-Alternative C-1) or to existing oilfields east of the Colville River using the state's proposed Colville River Road (Sub-Alternative C-2). Under Sub-Alternative C-2, a portion of the Nuiqsut bypass road would be on federal lands. Powerlines would be hung from power poles. Pipelines would be supported on VSMs and would be at elevations of at least 7 feet above the tundra, as measured at VSM locations. Use of roads would be unrestricted. Exceptions consistent with the IAP/EIS ROD would be required for Stipulations 39[d], 41, and 48 (and a modification of Stipulation 48 under Sub-Alternative C-2 and potentially under Sub-Alternative C-1).

Alternative D: Except as described below, all activities would be the same as described for Alternative A. In Alternative D all gravel roads are eliminated and the production pads would be accessible only by air, ice road, and low-pressure vehicle. Air access would be via fixed-wing aircraft (Sub-Alternative D-1) or helicopter (Sub-Alternative D-2). The pipeline crossing across the Nigliq Channel near CD-2 would employ horizontal directional drilling in lieu of a pipeline bridge. Aboveground pipelines would be supported on VSMs and would be at elevations of at least 7 feet above the tundra as measured at VSMs. Powerlines between pads would be in cable trays mounted on the pipeline VSMs. Consistent with the IAP/EIS ROD, this alternative would provide for the exceptions to Stipulations 39[d] and 41 of that ROD.

On Federal Lands: Except as described below, all activities would be the same as described for Alternative A. Airstrips (Sub-Alternative D-1) or helipads (Sub-Alternative D-2) would be constructed near CD-6 and CD-7. In addition to air access, the pads would only be accessible by ice roads and low-pressure vehicles. Except for short roads to these airstrips or helipads, there would be no roads constructed. Aboveground pipelines would be supported on VSMs and would be at elevations of at least 7 feet above the tundra as

measured at VSMS. Powerlines would be in cable trays mounted on the pipeline VSMS. Consistent with the IAP/EIS ROD, this alternative would provide for the exceptions to Stipulations 39[d] and 41 of that ROD.

Alternative E (No Action): Under this alternative, CPAI would not be authorized to develop the five oil accumulations for which it currently seeks authorization. No oil in the Plan Area, except that extracted from CD-1 and CD-2, would be produced in the near future, and no new roads, airstrips, pipelines, or other oil facilities would be constructed beyond what is authorized in connection with CPAI's current development at CD-1 and CD-2. Alternative E is the environmentally preferred alternative both for the entire proposal and for that proposed on federal lands. However, that alternative was not chosen because it would not authorize CPAI to produce oil from accumulations on its leased lands and it would not fulfill legislative direction, the national energy policy, and the purpose and objectives for which the National Petroleum Reserve-Alaska is managed.

On Federal Lands: CPAI would not be authorized to develop the two oil accumulations for which it currently seeks authorization on federal lands or to extract gravel from the Clover Gravel Mine.

Alternative F (Agency Preferred Alternative): Except as described below, all activities would be the same as described for Alternative A. The Preferred Alternative modifies key components of the applicant's proposed action (Alternative A) to minimize, mitigate, or avoid certain potential environmental impacts identified by the BLM, the cooperating agencies, or the public through the NEPA process while achieving the purpose and need described in Section 1 of the EIS. The modified elements of Alternative F—the Preferred Alternative—were either adopted directly from alternatives analyzed in detail in the DEIS or reflect measures identified through the DEIS comment process or agency review of the applicant's proposal.

Except as described below, all activities would be the same as described for Alternative A:

- Substantial infrastructure would be removed from the Fish Creek 3-mile setback. (Consistent with the exception clause provision of the IAP/EIS, CD-6 and some infrastructure would be allowed to be located as requested by CPAI within the setback.)
- The elevation of pipelines would be raised from 5 feet to a minimum of 7 feet as measured at the VSMS.
- Powerlines will be placed on cable trays between CD-6 and CD-7 rather than on separate power poles.
- Artificial exterior lighting on structures over 20 feet tall would be controlled. Except for required safety lighting as may be required by FAA and OSHA, illumination of taller structures would be designed to direct artificial exterior lighting inward and downward, rather than upward and outward.
- The road and pipeline bridge across the Nigliq Channel would extend from bank to bank defined as the active flow-way and the frequently active floodplain between topographical rises. This would require a bridge approximately 1,650 feet long at

the currently proposed location; though, the bridge could be relocated close to the proposed crossing where the bank-to-bank span would be less.

- The road and pipeline bridge across the Ublutuooh River would extend from bank to bank defined as the active flow-way and the frequently active floodplain between topographical rises. This would require a bridge approximately 350 feet long at the currently proposed location; though, the bridge could be relocated close to the proposed crossing where the bank-to-bank span would be less.
- Approaches to both the Nigliq Channel and Ublutuooh River bridges would provide for natural water flow.
- The road to CD-4 would be either relocated around Lake 9323 or engineered to provide for natural water flow and fish passage.

Of the alternatives that would allow development, Alternative F is the environmentally preferred alternative. Alternative E, the no action alternative, is the overall environmentally preferred alternative. However, that alternative was not chosen because it would not adequately fulfill the purpose and objective of the applicant's proposal and would not further the objectives for which the National Petroleum Reserve-Alaska is managed.

On Federal Lands: Except as described below, all activities would be the same as described for Alternative A:

- Substantial infrastructure would be removed from the Fish Creek 3-mile setback. (Consistent with the exception clause provision of the IAP/EIS, CD-6 and some infrastructure would be allowed to be located as requested by CPAI within the setback.)
- The elevation of pipelines would be raised from 5 feet to a minimum of 7 feet as measured at the VSMs.
- Powerlines will be placed on cable trays between CD-6 and CD-7 rather than on separate power poles.
- Artificial exterior lighting on structures over 20 feet tall would be controlled. Except for required safety lighting as may be required by FAA and OSHA, illumination of taller structures would be designed to direct artificial exterior lighting inward and downward, rather than upward and outward.
- The road and pipeline bridge across the Ublutuooh River would extend from bank to bank defined as the active flow-way and the frequently active floodplain between topographical rises. This would require a bridge approximately 350 feet long at the currently proposed location; though, the bridge could be relocated close to the proposed crossing where the bank-to-bank span would be less.
- Approaches to the Ublutuooh River bridge would provide for natural water flow.

3. Management Considerations

The ASDP EIS fulfills the obligation of BLM and its federal cooperating agencies under the National Environmental Policy Act (NEPA), 42 U.S.C. 4321, to analyze the environmental impacts of federal authorizations necessary for CPAI to undertake its proposed development. Furthermore, authorizing CPAI's development helps address the nation's energy needs. North Slope oil production, centered at Prudhoe Bay, is central to the nation's domestic oil supply. The North Slope contributes about 16 percent of America's current domestic production. The oil industry has discovered and developed other fields to the east and west of Prudhoe. However, production is in decline from these older fields and development of CPAI's project will help offset this decline. Moreover, the authorization of development of leases in the National Petroleum Reserve-Alaska satisfies the purpose of the NPRPA to explore and develop oil and gas resources in the Petroleum Reserve. Specifically, the NPRPA, as amended, encourages oil and gas leasing in the Reserve while requiring protection of important surface resources and uses. Development of the satellite oil accumulations with appropriate environmental protection measures is consistent with the president's directive to his National Energy Policy Development Group to "promote dependable, affordable and environmentally sound production of energy for the future" (National Energy Policy Development Group 2001). Furthermore, President Bush issued Executive Order 13212 on May 18, 2001, calling on federal agencies to give priority to energy-related projects: "For energy-related projects, agencies shall expedite their review of permits or take other actions as necessary to accelerate the completion of such projects, while maintaining safety, public health, and environmental protections." Completion of the ASDP EIS and issuance of this ROD fulfills agency responsibilities under this directive.

Federal laws, including the NPRPA, FLPMA, Alaska National Interest Lands Conservation Act (ANILCA), the Endangered Species Act, and NEPA, require BLM to protect soil, water, air, vegetation, wildlife, archaeological and paleontological resources and subsistence uses while fulfilling the agencies multiple use mission. These resources are protected through:

- provisions in leases the agency issued to CPAI,
- additional protections incorporated into the project (such as the road and pipeline routings, elevation of the pipeline to at least 7 feet, lighting provisions to avoid bird strikes, etc.) required in the Preferred Alternative,
- additional mitigation measures as described above in part 1 and adopted in this ROD,
- applicable federal, state, and NSB laws and regulations, and
- permitting decisions to be provided by the cooperating agencies and the NSB.

In addition, the applicant's proposal included design elements that could reduce impacts, such as small pad size and the installation of pipeline valves on either side of larger river channels. Implementation of these proposed design elements, except where they are inconsistent with the adopted decision, is required of the applicant.

Consistency with the Northeast National Petroleum Reserve-Alaska IAP/EIS

The Northeast National Petroleum Reserve-Alaska IAP/EIS ROD issued in 1998 required that numerous protections be made through stipulations in oil and gas leases on the federal land being developed by CPAI. These protections address measures to deal with potential impacts related to waste prevention, handling, and disposal; spills; ice roads and water use; overland moves; facility design and construction, ground transportation; air traffic; oil field abandonment; subsistence, orientation program; traditional land use sites; and other activities. These stipulations are required for CPAI's development, with the exception of three stipulations discussed below.

The IAP/EIS ROD provided flexibility to deal with unique aspects of oil and gas development proposals that are impossible to know prior to exploratory drilling. Consistent with the requirements of the IAP/EIS, this ROD grants exceptions to three stipulations as requested by CPAI in a letter to BLM dated April 8, 2004. Exceptions are granted in accordance with the following exception clause:

In the event that an exception to a lease or permit stipulation is requested and before an exception may be granted, the AO [Authorized Officer] shall find that implementation of the stipulation is:

1. a. technically not feasible, or
b. economically prohibitive, or
c. an environmentally preferable alternative is available, and
2. the alternative means proposed by the lessee fully satisfies the objective(s) of the stipulation.

In additional, prior to the consideration or granting of an exception to a lease or permit stipulation, all conditions and/or consultation requirements specific to a stipulation must be met. The AO shall consult with appropriate federal, state, and NSB regulatory and resource agencies before an exception may be granted, except in the case of an emergency. The AO's power to grant stipulation exceptions is limited to those subjects, uses, and permits over which the BLM has authority. Exceptions may be granted in emergencies involving human health and safety.

Exceptions are granted for the following three stipulations based upon the above requirements.

Stipulation 39

Stipulation 39 of the Northeast National Petroleum Reserve-Alaska IAP/EIS states:

Permanent oil and gas facilities, including roads, airstrips, and pipelines, are prohibited within and adjacent to the waterbodies listed below at the distances identified to protect fish and raptor habitat, cultural and paleontological resources, and subsistence and other resource values. Setbacks include the bed of the waterbody and are measured from the bank's highest high water mark.

The stipulation designates a 3-mile setback from Fish Creek downstream from Section 31, T11N, R1E, and a ½-mile setback farther upstream. The setback from Fish Creek was designated for “fish and subsistence resources.”

This decision removes substantial infrastructure that was included in the applicant’s proposed action from within the Fish Creek setback, but retains CD-6 within the setback based on technical, economic, and environmental factors. Drilling many wells from a single pad entails use of directional drilling. Drilling from outside the setback would require directional drilling for long distances through geologically unstable shale. This drilling approach is very problematic because shale in this area tends to collapse holes. Maintaining drill holes would be difficult and expensive. (CPAI estimates the additional directional drilling costs at \$35 million to \$45 million.) In addition, the BLM estimates that 10 to 30 percent of the reserves reachable from CD-6, located where proposed by CPAI, would not be recoverable from the south side of the setback, further undermining the economic viability of placing the pad outside the setback. Placing a second pad on the north side of the Fish Creek setback to attempt to reach the 10 to 30 percent of the reserve unreachable from the south side of the setback would not only dramatically increase costs (thus undermining the economics of the applicant’s proposed action), but would entail increased environmental impacts through construction of a second pad, a pipeline crossing of Fish Creek either on BLM-managed lands in the 3-mile Fish Creek setback or on Kuukpik Corporation lands in the Fish Creek delta, and either a road paralleling the pipeline or air access over Fish Creek. It is environmentally preferable to keep the project to one drill pad in this sensitive area.

This decision relocates substantial portions of the road and pipeline between CD-5 and CD-6 and nearly all of the road and pipeline between CD-6 and CD-7 to greatly reduce the permanent oilfield infrastructure in the 3-mile setback. However, the decision leaves some infrastructure in the setback based on environmental factors. Moist tussock tundra and moist sedge-shrub meadow habitats exist between CD-2 and CD-7. These habitats are the preferred types for road construction for the Plan Area. These are relatively high and dry habitat areas compared to other habitat in the area. They are less prone to flooding and the resultant impacts, and they are less important habitat for waterbirds. The road proposed under the Preferred Alternative utilizes these habitats to the maximum practicable extent. A route utilizing these habitats is available just south of the setback for the western portion of the road on BLM-managed lands. Several large closely spaced lakes both east and west of the Ublutuoch River constrict road building immediately south of the eastern portion of the 3-mile setback. Much of the land near these lakes is low and wet. Utilization of moist tussock tundra and moist sedge-shrub meadow habitat for roads outside the setback would require relocating the road approximately 5 miles south of the Preferred Alternative route. This relocation would require approximately 10 more miles of roads and the resultant environmental impacts associated with habitat destruction or alteration through gravel mining and gravel road construction. The pipeline could be moved just outside the setback without incurring the same ground-disturbing impacts to sensitive habitats as placement of gravel roads. However, separating the pipeline from the road by 1 to 2 miles (and in

some places separating them with a lake) complicates spill response and would likely incur additional environmental impacts in the event of a spill. Therefore, leaving the eastern portion of the road and pipeline on BLM-managed land in the 3-mile setback as in this decision is environmentally preferable to moving the road outside the setback.

The setback for permanent oil and gas facilities from Fish Creek was established to minimize impacts to “fish and subsistence resources.” The location of CD-6 and its associated road and pipeline approximately 2 miles from Fish Creek are not anticipated to have adverse impacts to fish. Although locating the pad farther from Fish Creek would further reduce the potential for contaminants to reach the creek, the likelihood of contaminants reaching the creek is already small and spills are not likely to have a measurable effect on arctic fish populations. No important fish habitat has been identified in the immediate area of the pad. Caribou and other subsistence resources may incur some disturbance during operations from infrastructure closer to riparian areas. However, elevating the pipeline to a minimum of 7 feet as measured at the VSMs; maintaining at least a 500-foot distance between the road and pipeline if feasible; restricting road use to industry, local residents, and government employees; and other design and operation features of the Preferred Alternative will ensure that impacts to subsistence resources and uses are avoided or minimized and the objectives of the stipulations are fully satisfied.

Stipulation 41

Stipulation 41 of the Northeast National Petroleum Reserve-Alaska IAP/EIS states:

For those waterbodies not listed in stipulation 39, permanent oil and gas facilities, including roads, airstrips, and pipelines, are prohibited upon or within 500 feet as measured from the highest high water mark of the active floodplain. Essential pipeline and road crossings will be permitted on a case-by-case basis.

The Northeast National Petroleum Reserve-Alaska IAP/EIS ROD contains the following definitions relevant to Stipulation 41:

Active Floodplain: The lowland and relatively flat areas adjoining inland and coastal waters including flood-prone areas of offshore islands, including at a minimum that area subject to a 1 percent or greater chance of flooding in any given year (also referred to as the 100-year or base floodplain).

Body of Water or Waterbody: A lake, river, stream, creek, or pond that holds water throughout the summer and supports a minimum of aquatic life.

This decision allows the essential pipeline and road crossing of the Ublutuooh River. As much of the major infrastructure as possible is located on relatively high and dry moist tussock tundra and moist sedge-shrub meadow habitats away from lakes and streams. However, the Plan Area, including that between CD-5 and CD-7, is characterized by many small water bodies. It may not be possible in all instances to

avoid encroachment within 500 feet of every water body. Therefore, this decision grants an exception to Stipulation 41 based on technical infeasibility.

The purpose of the 500-foot setback from water bodies is to protect fish, water quality, and aquatic habitat from impacts, including oil and fuel spills. On-the-ground inspections of the route of the road and pipeline prior to construction will determine where it is impossible to locate facilities outside of the 500-foot setback. It is anticipated that this inspection, along with existing stream and lake studies, would assist in agency determinations on facility design to minimize impacts to water bodies in any cases in which facilities cannot be placed 500 feet from water bodies. In addition, aspects of the applicant's proposed action, such as use of containment tanks and tank and pipeline inspections, and other Northeast National Petroleum Reserve-Alaska IAP/EIS stipulations (e.g., stipulations 13 through 16 dealing with the handling of fuel and other pollutants) provide requirements that substantially reduce the potential for impacts to water bodies. As a consequence, the objectives of this stipulation would be met.

Stipulation 48

Stipulation 48 of the Northeast National Petroleum Reserve-Alaska IAP/EIS states:

Permanent roads (i.e. gravel, sand) connecting to a road system or docks outside the planning area are prohibited, and no exceptions may be granted. Permanent roads necessary to connect pads within independent, remote oil fields are allowed but they must be designed and constructed to create minimal environmental impacts. Roads connecting production sites between separate oil fields may be considered if road-connected operations are environmentally preferable to independent, consolidated operations that each include airstrip, housing, production, and support facilities. This exception will only be granted following consultations with appropriate Federal, State, and NSB regulatory and resources agencies, and the appropriate level of NEPA review.

The oil accumulations at CD-5 are part of the Alpine Field, but those at CD-6 and CD-7 are geologically distinct from each other and from the Alpine Field. These accumulations may be considered separate "fields." Consequently, the third sentence of Stipulation 48 applies in the case of the applicant's proposed action.

This decision would allow roads connecting CD-6 with CD-7 and those two pads to the Alpine Field based on environmental factors. Locating an airstrip, housing, and support facilities with production facilities at both of these pads would require a large gravel footprint for the airstrips, generate additional air traffic, and introduce air, water, waste, and other impacts associated with human presence. A road from these pads to the existing Alpine facilities allows operation of these pads to be accomplished from the base at the existing facilities. CD-6 and CD-7 will be unmanned, thus generating much less impacts than manned facilities. A gravel road also eliminates the need for regular ice road construction to these pads and reduces waste and chemical storage

needs at separate pads. In addition, locating a road parallel to the pipeline facilitates pipeline leak detection and spill response. Therefore, a decision to grant an exception to Stipulation 48 is justified because it is environmentally preferable.

The objective of Stipulation 48 is to protect subsistence use and access to traditional subsistence hunting and fishing areas and minimize the impact of oil and gas activities on air, land, water, fish, and wildlife resources. Construction of roads is to be limited to those cases in which it is environmentally preferable to have roads rather than construct separate stand-alone facilities accessible only by air and ice road. Construction of the road linking CD-6 and CD-7 to the existing oil infrastructure at Alpine would meet the objective of the stipulation by eliminating impacts from duplicative airstrips, housing, and support facilities and from regular ice road construction, by providing better leak detection and spill response, and, because the road would be available for use by local residents, thus aiding access to traditional subsistence hunting and fishing areas.

Note: BLM does not interpret the first sentence of this stipulation to be applicable to the applicant's proposed action. The first sentence of the stipulation was intended to prohibit any connection from BLM-managed lands in the Petroleum Reserve to a road network that reaches the rest of Alaska, i.e., the North Slope's spine road or the Dalton Highway that connects the North Slope at Prudhoe Bay with the main Alaskan road system. The roads from the different production pads authorized in this ROD connect only to the existing Alpine facility at CD-1 and CD-2. The current Alpine facility does not connect to any outside road system. Indeed, it is not itself connected to any other roads; the nearest gravel road is more than thirty miles away and on the other side of the unbridged main channel of the Colville River. However, if it is determined that the first sentence of this stipulation applies in the case of the road proposed by CPAI, this decision will modify Stipulation 48 to allow the applicant's proposed road from public land to connect to the existing Alpine facility.

Endangered Species Consultation

Section 7(a)(2) of the Endangered Species Act (ESA) requires Federal agencies to consult with the U.S. Fish and Wildlife Service (FWS) and the National Oceanic and Atmospheric Administration, Fisheries (NOAA Fisheries), as appropriate, to ensure that their actions do not jeopardize the continued existence of species listed as threatened or endangered under ESA, or destroy or adversely modify their critical habitat. NOAA Fisheries in a letter dated June 25, 2003 determined that there were no federally listed threatened, endangered, or candidate species under its jurisdiction that could be affected by CPAI's proposed development. A Biological Assessment was completed by a contractor under the direction of the BLM to address species identified by the FWS. This assessment determined that actions may have an effect on the threatened spectacled eider. Although a small amount of habitat may be disturbed or modified by the development, the planning area has no designated critical habitat.

The FWS issued its Biological Opinion on September 28, 2004. The opinion addressed the Preferred Alternative for all pads proposed by CPAI. The FWS concluded that the development described in the Biological Assessment is not likely to jeopardize the species or destroy or adversely modify critical habitat. The BLM adopts the reasonable and prudent measures, terms and conditions, and a conservation recommendation presented by FWS in the Biological Opinion relevant to CPAI's development on BLM-managed land, as listed above under the Decision section of this ROD, thus ensuring protection for the two threatened species.

Essential Fish Habitat Consultation

Consultation on essential fish habitat (EFH) was undertaken with NOAA Fisheries in accordance with the Magnuson-Stevens Fishery Conservation and Management Act. An EFH Assessment was included in the Final EIS as Appendix N after close consultation with NOAA Fisheries. It described the project, potential impacts, and proposed mitigation. In response to this consultation, NOAA Fisheries determined that no Conservation Recommendations were required for EFH and concluded that consultation had been satisfactorily completed.

Wetlands (Executive Order 11990)

Executive Order 11990 concerning the protection of wetlands requires that BLM consider factors relevant to the proposal's effect on the survival and quality of wetlands. Factors to be considered include the following:

1. Public health, safety, and welfare, including water supply, quality, recharge and discharge; pollution; flood and storm hazards; and sediment and erosion;
2. Maintenance of natural systems, including conservation and long term productivity of existing flora and fauna, species and habitat diversity and stability, hydrologic utility, fish, wildlife, timber, and food and fiber resources; and
3. Other uses of wetlands in the public interest, including recreation, scientific, and cultural uses.

In furtherance of the National Environmental Policy Act of 1969 (42 U.S.C. 4331(b)(3) to improve and coordinate federal plans, functions, programs and resources to the end that the nation may attain the widest range of beneficial uses of the environment without degradation and risk to health or safety, the agency, to the extent permitted by law, shall avoid undertaking or providing assistance for new construction located in wetlands unless the head of the agency finds:

1. there is no practicable alternative to such construction, and

2. the proposed action includes all practicable measures to minimize harm to wetlands which may result from such use. In making this finding the head of the agency may take into account economic, environmental and other pertinent factors.

The following discussion summarizes the evaluation of impacts to wetlands for the Preferred Alternative and the findings that are a result of that evaluation. In addition, specific protective mitigation developed to avoid or lessen impacts to wetlands is presented.

Approximately 95 percent of the 4.6 million acres in the Northeast National Petroleum Reserve-Alaska (Northeast National Petroleum Reserve-Alaska Draft Amended IAP/EIS, 2004, p. 3-31) and 99 percent of the 890,000 acres in the ASDP plan area can be classified as wetlands. The Preferred Alternative would result in gravel pads and roads covering about 135 acres of BLM-managed land (approximately 250 acres for the entire Preferred Alternative development) and 65 acres of BLM-managed lands would be excavated to obtain gravel. Indirect impacts from dust and changes in the moisture and thermal regimes may impact an additional 720 acres (approximately 1,200 acres for the entire Preferred Alternative development). Thus, direct and indirect impacts from development on BLM-managed lands could occur on approximately 0.1 percent of the wetlands in the ASDP plan area and a much smaller proportion of the Northeast National Petroleum Reserve-Alaska plan area. Because virtually the entire area contains wetlands, it would not be possible to produce the oil reserves on CPAI's leases without impacting some wetlands.

Key wetland habitats identified in the EIS (Table 3.3.1-3) west of the Nigliq Channel (which includes all of the BLM-managed land as well as some privately held land that would be directly impacted by the Preferred Alternative) include deep open water with islands or polygonized margins (0.1 acres), young basin wetland complex (4.6 acres), old basin wetland complex (5.2 acres), riverine complex (0.4 acres), and riverine low and tall shrub (0.3 acres). In addition, indirect impacts from dust and changes in the moisture and thermal regimes may impact the following key wetlands west of the Nigliq Channel: deep open water without islands (0.5 acres), young basin wetland complex (15.7 acres), old basin wetland complex (38.7 acres), riverine complex (3.5 acres), and riverine low and tall shrub (1.6 acres). These represent negligible proportions of these habitats. For example, of the 175,153 acres whose habitat types have been mapped west of the Nigliq Channel, which includes all lands that would be impacted by the Preferred Alternative west of the channel, there are 16,297 acres of young and old basin wetlands. Direct and indirect impacts on 64.2 acres of these basin wetlands represent less than 0.4 percent of all such habitats mapped.

Furthermore, these impacts will be mitigated through provisions of the leases on federal land and through requirements of the Preferred Alternative (as modified herein) and mitigation adopted in this ROD. All leases on federal land include stipulations from the IAP/EIS. These include provisions relevant to CPAI's proposal that protect the function and values of wetlands, including provisions to address:

- waste prevention, handling, disposal, and spills; ice roads and water use;
- overland moves;
- facility design and construction;
- ground transportation;
- air traffic;
- oil field abandonment;
- subsistence.

Additional protection of wetlands is provided by the Preferred Alternative and mitigation adopted in this ROD. These include, but are not limited to, the following measures.

- The footprint will be reduced by minimizing pad size and drilling multiple wells from a single pad and by minimizing the road footprint while avoiding the most important wetlands.
- Construction of facilities will occur to the greatest extent possible on relatively higher elevation and less critical wetlands. Only 6 percent of the gravel footprint west of the Nigliq Channel (10.6 acres of 172 acres) would be on key wetlands. The overwhelming proportion (80 percent) of the gravel footprint west of the Nigliq would occur on relatively dry moist sedge-shrub meadow and moist tussock tundra. This habitat also accounts for approximately 90 percent of the land to be excavated at the Clover Gravel Mine.
- Extraction of gravel and construction of gravel roads, pads, and pipelines will occur in winter using ice roads, thus minimizing potential impacts to the tundra.
- Road watering would occur to help control dust.
- Bridge abutments would be armored, with sheet-pile wing walls.
- Bridges or culverts would be placed in known drainage locations and, at a minimum, culverts, or bridges if water flow justifies it, will be placed at approximately every 500 feet along roads.
- Valves will be placed in the produced fluids pipeline on both sides of the Ublutuoch River and spill containment equipment will be installed below each valve.
- The Clover Gravel Mine will be rehabilitated (see the rehabilitation plan in Appendix O of the FEIS), including interim reclamation.
- Incorporation of the findings of fish surveys and hydrologic modeling into the design of proposed bridges and culverts and subsequent monitoring of culverts and remedial measures based on this monitoring.
- Monitoring of water withdrawals from lakes.
- A program to monitor water quality above and below the proposed Ublutuoch River bridge and, if necessary, identify additional erosion abatement measures.

Because of the protections identified in the FEIS, the FEIS determined that development and operation of CPAI's project would be unlikely to significantly impact any wetland plant species or community, cause significant soil loss, or result in other than short-term and localized loss of water resources or water quality. Therefore, no significant impacts are expected that would affect public health, safety, and welfare through changes in the

supply, quality, recharge or discharge and pollution of water, or, flood and storm hazards or sedimentation and erosion. No impacts will occur that would result in long-term changes in the natural ecosystem, or, prevent normal uses of wetlands by the public for recreational, scientific, or cultural purposes.

While other alternatives considered in the EIS would disturb marginally fewer acres of key wetlands west of the Nigliq Channel (Alternative B—8.3 acres; Alternative D-1—8.5 acres; Alternative D-2—4.3 acres compared to 10.6 acres for the Preferred Alternative), the Preferred Alternative adopted in this decision includes all practicable measures to minimize harm to wetlands when considering all economic, environmental, and other pertinent factors. These other alternatives' reduction in impacts to key wetlands habitats result from the elimination of a road connection to the existing Alpine facility. While this reduces some of the impacts to the surface, it incurs other impacts. These other alternatives would rely on air transportation and winter ice road transportation to CD-6 and CD-7. Noise from air transportation creates impacts to wildlife and subsistence users; Nuiqsut residents have frequently complained about existing air traffic disturbance. Regular ice road construction to these pads can result in impacts to the tundra. Without gravel road access to the existing Alpine facility there would be a need for increased waste and chemical storage at the separate pads, which both enlarges the pad size and creates additional spill potential. Moreover, locating a road parallel to the pipeline facilitates pipeline leak detection and spill response.

Therefore, BLM finds that there is no practicable alternative to construction of the ASDP project in wetlands and that all practicable measures to minimize harm to wetlands have been taken, given the technical, economic, and environmental factors that must be weighed.

Floodplains (Executive Order 11988)

Executive Order 11988 concerning the protection of floodplains requires an agency to provide leadership and to take action to minimize the impact of floods on human safety, health, and welfare, and to restore and preserve the natural and beneficial values served by floodplains in carrying out its responsibilities. In carrying out activities required by EO 11988, the agency has a responsibility to:

1. Evaluate the potential effects of any actions that may take place in a floodplain;
2. Ensure that its planning programs and budget requests reflect consideration of flood hazards and floodplain management; and
3. Prescribe procedures to implement the policies and requirements of EO 11988.

Additional requirements are as follows:

4. Before taking an action, each agency shall determine whether the proposed action will occur in a floodplain and the evaluation required will be included in any

statement prepared under Section 102(2)(C) of the National Environmental Policy Act (Section 4332(2)(C)).

5. If an agency has determined to, or proposes to, conduct, support, or allow an action to be located in a floodplain, the agency shall consider alternatives to avoid adverse effects and incompatible development in the floodplains. If the head of the agency finds that the only practicable alternative consistent with the law and with the policy set forth in this executive order requires siting in a floodplain, the agency shall, prior to taking action,
 - a. design or modify its action in order to minimize potential harm to or within the floodplain, consistent with regulations, and
 - b. prepare documentation explaining why the action is proposed to be located in the floodplain.

The long-term effects, both direct and cumulative, on floodplains of CPAI's development on BLM-managed lands as approved in this ROD are expected to be insignificant (negligible to minimal), and would be mitigated to the greatest extent practicable. As with wetlands, total avoidance of floodplains is impossible because the project area is so flat. However, this decision avoids and minimizes impacts to floodplains, including those of Fish Creek and the Ublutuoch River, the largest streams near CPAI's project on BLM-managed lands. At its nearest point, the project is approximately 2 miles from Fish Creek and 1.5 miles from its 100-year floodplain (see FEIS figure 3.2.2.1-9). The trunk road and pipeline cross the Ublutuoch River. The road crosses the river on a bridge that spans the main channel and lower floodplain and restricts the flow only in high water events or in the event of ice jamming. A 100-year flood event would raise the water level less than a foot and thus could, in those rare high water circumstances, induce some scouring and sedimentation. However, the amount of scour and sedimentation will be reduced by armoring and by subsequent engineering based upon the findings of monitoring required by the decision. The pipeline is conveyed over the river on VSMs. There will be valves in the pipeline as well as spill containment equipment on both sides of the river to minimize effects in the unlikely event of a spill. By locating all facilities as much as possible on relatively dry moist sedge-shrub meadow and moist tussock tundra and through the protections required in stipulations on the federal leases being developed as well as other protective measures incorporated in the Preferred Alternative and mitigation adopted in this ROD (see discussion above under Wetlands (Executive Order 11990)), the facilities authorized in this ROD will avoid impacts to floodplains to the maximum extent practicable and will have minimal to negligible impacts on the functions and values of floodplains.

Environmental Justice (E.O. 12898)

Executive Order 12898 requires that an agency identify and address "as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations." The FEIS identified direct and indirect impacts that may affect the residents of Nuiqsut,

Barrow, Atqasuk, and Anaktuvuk Pass. These communities all qualify as minority and low-income populations and all could potentially be disproportionately impacted by the Preferred Alternative in its entirety. Impacts from development on BLM-managed land could be potentially high and adverse for residents of Nuiqsut if there is a large spill that affects, or is perceived by local residents as affecting, important subsistence resources. Spills could contaminate subsistence resources and cause subsistence gatherers to avoid the resources. The presence of the pipeline and roads to and between CD-6 and CD-7 could also result in a high and adverse impact if they were to disturb, displace, or obstruct the movement of caribou in such a way that the animals become substantially more difficult to harvest.

Stipulations on the leases on BLM-managed lands avoid or mitigate these potential high and adverse impacts. Relevant stipulations include, but are not limited to, those that require ready access to spill cleanup materials, spill response training, preparation of a spill prevention and response plan, a required separation distance between roads and pipelines (reducing the combined facilities' potential to obstruct caribou movement), and consultation with subsistence users. The Preferred Alternative and mitigation measures avoids or mitigates potentially high and adverse impacts from a large spill on BLM-managed lands to the maximum extent practicable by design features, including, but not limited to:

- the installation of pipeline valves on either side of the Ublutuoch River and placement of spill containment equipment below each valve,
- a pipeline monitoring and surveillance program, and
- locating roads near to and parallel the pipelines, thereby facilitating leak detection and spill response,

The Preferred Alternative and mitigation measures avoids or mitigates potentially high and adverse impacts from a disturbance, displacement, or obstruction of caribou movement on BLM-managed lands to the maximum extent practicable by design features, including, but not limited to:

- elevating pipe a minimum of 7 feet above the tundra, as measured at the VSMs, and
- use of a non-reflective finish on all pipelines.

Nuiqsut residents have expressed concern that they will lose access to subsistence areas because of the introduction of CPAI's infrastructure. CPAI's proposal and the Preferred Alternative adopted in this ROD does not preclude access by local residents and the Preferred Alternative specifically states that the roads would be available for their use. The NSB's conflict avoidance provisions of its permit for CD-4 also assure access to "the Alpine Satellite areas."

Colville River Special Area

The NPRPA authorized the designation of Special Areas within the National Petroleum Reserve-Alaska that contain significant resource values. Federal regulations (43 CFR

2361.0-5(f) define Petroleum Reserve's Special Areas as "areas within the reserve identified by the Secretary of the Interior as having significant subsistence, recreational, fish and wildlife, or historical or scenic value and therefore, warranting maximum protection of such values to the extent consistent with the requirements of the Act for the exploration of the Reserve." The regulations (43 CFR 2361.1(c)) require that "maximum protection measures shall be taken on all actions" within the special area. These measures may include rescheduling activities, use of alternative routes, requirements on types of vehicles and loadings, limitations on types of aircraft used and their altitude and distance from identified places, and special fuel handling procedures. The regulations go on to state (43 CFR 2361.1(e)(1)) that "to the extent consistent with the requirements of the Act, . . . the authorized officer may limit, restrict, or prohibit use of and access to lands within the Reserve, including special areas." On June 3, 1977 (*Federal Register*, pp. 28723-24) the Secretary of the Interior designated the Colville River Special Area. In doing so, the Secretary stated that the "central Colville River and some of its tributaries provide critical nesting habitat for the Arctic peregrine falcon, an endangered species. The bluffs and cliffs along the Colville River provide nesting sites with the adjacent areas being utilized as food hunting areas." No other special values were noted in the designation and no other special values would be impacted by the ASDP.

CD-7, approximately 8 miles of road and pipeline, and the proposed Clover Gravel Mine are within T. 10 N., Rs. 2-3 E, U.M., which comprise the northern limit of the Colville River Special Area. Raptors, including peregrine falcon, are not known to nest within approximately 5 or 6 miles of the proposed facilities. (See Figure 3.3.3.5-1 in the FEIS.) Gravel mining will have little impact on peregrine falcon partly because mining extraction will occur during winter when the birds have migrated out of the area. In addition, stipulations on CPAI's leases and design and construction measures and other protective measures incorporated into the Preferred Alternative and approved by this ROD reduce the potential adverse impacts to the Special Area. For example, all access to the gravel mine will be by ice roads and interim rehabilitation of the site will proceed as gravel extraction is completed, thus reducing potential impacts on natural resources in the area. Moreover, placing CD-7 outside of the Special Area would make it impossible to extract the oil in that location, an outcome inconsistent with the purposes of the NPRPA. Prohibiting extraction of gravel from the Clover Gravel Mine would eliminate the only known source of gravel on the west side of the Nigliq Channel, effectively making development of the western oil satellites infeasible. Reducing the road and pipeline in the Special Area would be possible, but only at the expense of additional intrusion into the Fish Creek setback. Placing infrastructure in the Special Area rather than in the Fish Creek setback is consistent with the IAP/EIS, which included provisions to restrict infrastructure in the setback, but not in this part of the Special Area. This judgment is consistent with the fact that the most important habitat in the Special Area for raptors is the bluffs immediately adjacent to the Colville River (and approximately 8 miles from the nearest proposed infrastructure), for which the IAP/EIS ROD did provide surface restrictions, and that the Arctic peregrine falcon was removed from the Endangered Species list in 1994. Therefore, placement of a portion of the Preferred Alternative infrastructure within this northern portion of the Special Area is consistent with the NPRPA and provides maximum

protection for the Special Area and specifically for the resources for which the Special Area was designated.

Management Decisions by Other Agencies

CPAI's proposal is subject to approval by the federal and state cooperating agencies and the North Slope Borough. The authorities of these agencies are described in Section 1 of the FEIS. To date, these agencies have not issued decisions related to CPAI's proposal on BLM-managed land. If a decision of another authorizing agency is inconsistent with the decision in this ROD, BLM will revisit this ROD's decision and make modifications as necessary. BLM will not issue permits or rights-of-way until the state has completed its review of the applicant's coastal zone consistency certification and issued its concurrence for development on BLM-managed lands.

The other agencies' decision may provide mitigation in addition to that provided by BLM. Provisions of a permit issued by the NSB for a satellite outside BLM-managed lands have provided mitigation relevant to development on BLM-managed lands. The NSB permit for CD-4 requires annual funding from CPAI over ten years to evaluate impacts to the movement and distribution of caribou, the number and distribution of subsistence fish species, and the subsistence of Nuiqsut residents. These studies cover all of the proposed Alpine satellites, including those on BLM-managed lands. The NSB permit for CD-4 requires CPAI to contribute \$50,000 annually to a Mitigation Fund to be administered by a committee composed of NSB government, tribal, and Kuukpik representatives. The fund is to be used to offset costs related to mitigation of impacts on subsistence harvests associated with the construction and operation of all of the satellites. The permit also states that there will be no restriction on access by Nuiqsut residents of Alpine satellite facilities, except within 1,000 or certain exploration, production, and transportation facilities and requires CPAI to conduct an inventory of archaeological and historical sites prior to construction and report and make efforts to preserve and protect any prehistoric, historic, and archaeological object discovered during operations.

4. ANILCA: Section 810 Summary

The Alaska National Interest Lands Conservation Act § Section 810(a) requires that a subsistence evaluation be completed for any federal determination to “withdraw, reserve, lease, or otherwise permit the use, occupancy or disposition of public lands.” CPAI’s proposed project encompasses lands that are owned or managed by three entities: the Kuukpik Corporation (private lands); the State of Alaska (state lands), and the BLM (federal or public lands). Because ANILCA requires an evaluation of potential impacts to subsistence on public lands, an ANILCA § 810 evaluation must be completed for the ASDP EIS. The evaluations of the subsistence effects of each alternative only apply to those lands that are administered by the BLM. The impacts of the entire project, together with past, present, and reasonably foreseeable activities in the surrounding region, are evaluated in the cumulative impacts section of this § 810 Analysis.

The ANILCA also requires that this evaluation include findings on three specific issues:

1. the effect of such use, occupancy, or disposition on subsistence uses and needs;
2. the availability of other lands for the purpose sought to be achieved; and
3. other alternatives that would reduce or eliminate the use, occupancy, or disposition of public lands needed for subsistence purposes (16 U.S.C. §3120).

The following discussion summarizes the ANILCA §810 evaluation for the “Preferred Alternative” as set out in greater detail in Appendix B of the FEIS.

The effects of Preferred Alternative fall above the level of significantly restricting subsistence use for the community of Nuiqsut. While access to key subsistence harvest areas near Fish Creek is enhanced by 7’ tall pipelines, the potential impacts to subsistence resources by displacement, and impacts to current subsistence patterns of use exceed the non-significant level; therefore, a positive determination pursuant to ANILCA § 810 is required.

The positive finding for the Preferred Alternative of a significant restriction to subsistence for the village of Nuiqsut is based on the following:

- Displacement of caribou, wolf and wolverine from the Fish Creek traditional hunting area during the winter construction phase is expected to last for two years; two years is considered greater than “occasional redistribution.”
- The presence of oil and gas infrastructure in the Fish Creek traditional hunting area is considered more than a “slight inconvenience” to the subsistence users in Nuiqsut, who have historically altered their traditional hunting patterns to avoid oil and gas development (See the FEIS at Section 4F.4.3.1 Operation Period)

- The Fish Creek area is proportionately the area with the highest use for Nuiqsut’s winter harvest of caribou (FEIS Figure 3.4.3.2-6), and 25 percent of Nuiqsut’s caribou harvest for 1993, 1994–1995, 2001, and 2002 come from the Fish and Judy creeks area (FEIS Figure 3.4.3.2-7). Fish Creek is also an important Nuiqsut harvest area for geese (more than 45 percent) (FEIS Figure 3.4.3.2-15), and more than half of wolves harvested by Nuiqsut hunters come from the Fish and Judy Creek areas (FEIS Figure 3.4.3.2-21). Infrastructure, traffic, and industrial effects such as noise and emissions in this area have the potential to reduce the abundance of harvestable resources, alter the distribution of these resources, and result in the non-use of traditional harvest areas.

Depending on the resulting migration patterns for the Teshekpuk Lake Herd, and the areas of relocation for other subsistence species, the communities of Barrow, Atqasuk, and Anaktuvuk Pass may also be affected. However, existing data summarized in the FEIS does not warrant a positive finding under ANILCA § 810 for these three communities.

The cumulative effects of all past, present, and reasonably foreseeable future actions, which are presented in Section 4G of the FEIS, exceed the “may significantly restrict” threshold for the communities of Barrow, Atqasuk, Nuiqsut, and Anaktuvuk Pass, and thus a positive ANILCA § 810 determination must be made for the cumulative case.

ANILCA § 810(a) provides that no “withdrawal, reservation, lease, permit, or other use, occupancy or disposition of the public lands which would significantly restrict subsistence uses shall be effected” until the Federal Agency gives the required notice and holds a hearing in accordance with §810(a)(1) and (2) and makes the three determinations required by § 810(a)(3)(A), (B), and (C). The BLM has found in this subsistence evaluation that all of the alternatives considered in this EIS (including the no-action alternative), when considered together with all the past, present, and reasonably foreseeable future cumulative effects discussed in the EIS, may significantly restrict subsistence uses. Therefore, BLM undertook the notice and hearing procedures required by ANILCA §810(a)(1) and (2), as described above, and now must make the three determinations required by §810(a)(3)(A), (B), and (C). 16 U.S.C. §3120(a)(3)(A), (B), and (C).

The BLM has determined that the plan meets the following requirements (16 U.S.C. §3120(a)(3)(A), (B), and (C)) for Federal actions that may result in a significant restriction on subsistence uses:

1. *The significant restriction of subsistence uses is necessary, consistent with sound management principles for the utilization of the public lands.*

The BLM has prepared this EIS to address CPAI’s applications to produce certain oil accumulations on its leased lands. The EIS fulfills the mandates of the President’s energy policy and BLM’s responsibility to manage the National Petroleum Reserve-Alaska under the authority of two laws passed in 1976—the

Naval Petroleum Reserves Production Act as amended, and the Federal Land Policy and Management Act. The President's energy policy directs the Secretary of the Interior to "consider additional environmentally responsible oil and gas development, based on sound science and the best available technology." The NPRPA authorizes and directs the Secretary of the Interior to "further explore, develop and operate" the National Petroleum Reserve-Alaska (10 U.S.C. § 7421). At the same time, the statute also requires that all oil and gas activities "undertaken pursuant to this section shall include or provide for such conditions, restrictions, and prohibitions as the Secretary deems necessary or appropriate to mitigate reasonably foreseeable and significantly adverse effects on the surface resources" of the National Petroleum Reserve-Alaska (42 U.S.C. § 6508).

It was in furtherance of these objectives, together with other management guidance found in the NPRPA, FLPMA, NEPA, and ANILCA that this EIS was undertaken. After considering a broad range of alternatives, a Preferred Alternative was developed that provides for the applicant's proposed action while minimizing impacts to important subsistence resources and subsistence-use areas. The resulting Preferred Alternative considers the necessity for economically feasible development of the oil discoveries on CPAI's leases while providing effective protections to minimize any impacts on subsistence resources and uses. Under the Preferred Alternative, the stipulations that currently exist in the 1998 Northeast National Petroleum Reserve-Alaska Record of Decision serve as additional mitigation measures to be used to reduce the impact of the proposed activity on subsistence resources.

As described elsewhere in this ROD, the BLM has considered and balanced a variety of factors with regard to the proposed activity on public lands, including, most prominently, the limitations to effective oil recovery imposed by the subsurface geology at the CD-6 pad and the comments received from residents and subsistence users of the planning area. The BLM has determined that the significant restriction that may occur under the Preferred Alternative, when considered together with all the possible impacts of the cumulative case, is necessary, consistent with sound management principles for the use of these public lands, and for BLM to fulfill the management goals for the Planning Area as guided by the statutory directives in the NPRPA, FLPMA, and other applicable laws.

- 2. The proposed activity will involve the minimal amount of public lands necessary to accomplish the purposes of such use, occupancy, or other disposition.*

The BLM has determined that the Preferred Alternative involves the minimal amount of public lands necessary to accomplish the purposes of the ASDP. A total of two oil production pads and approximately 17.2 miles of road and pipeline will result in surface activity on approximately 130 acres in the 4.6 million acre Northeast Planning Area. Advances in oil field technology over the past two decades have made it possible to reduce the size of drilling pads significantly and rely on directional drilling to reach accumulations of oil throughout the fields. It

would not be practicable to further reduce the amount of land needed for CPAI's project and still produce the oil accumulations from these lands.

3. *Reasonable steps will be taken to minimize adverse impacts upon subsistence uses and resources resulting from such actions.*

When BLM began its NEPA scoping process for this EIS, it identified subsistence as one of the major issues to be addressed. In order to assure that the best and most up-to-date and reliable information was available, a subsistence specialist (Stephen Braund and Associates) was contracted to conduct interviews with the residents of Nuiqsut, the village with the most potential to be impacted by the proposed development. This information, as well as the results of public scoping meetings in the villages of the North Slope, meetings with the National Petroleum Reserve-Alaska Subsistence Advisory Panel, and through consultation with tribal and local governments, was used to analyze and evaluate the range of impacts to subsistence use as a result of the proposed activity.

When crafting the final preferred alternative, the BLM took into consideration comments from the villages and individuals of the North Slope during the ANILCA Subsistence Hearings conducted in conjunction with the draft EIS public meetings. This information resulted in several modifications to the Applicant's Proposed Action, and resulted in Alternative F, the Agencies Preferred Alternative. Those modifications that apply to public lands under the stewardship of the BLM include:

- Removing substantial infrastructure from the Fish Creek 3-mile setback
- Increasing the elevation of pipelines to 7 feet minimum at vertical support members (VSMs)

Given these steps, as well as the requirement to follow the existing 1998 Northeast ROD stipulations, and others discussed in detail above and in Section II of the EIS that have been or will be taken during the life of the ASDP, BLM has determined that the Preferred Alternative includes all reasonable steps to minimize adverse impacts on subsistence uses and resources.

5. Mitigation and Monitoring

Stipulations designed to protect the resources and uses on BLM-managed land were described in the IAP/EIS ROD and are listed in the ASDP EIS in Appendix D. They are part of the leases CPAI purchased and CPAI's development is subject to them. These stipulations include restrictions and guidelines on waste and spill prevention, handling, and disposal; ice roads and water use; overland moves; oil and gas facility design and construction; ground and air transportation; and field abandonment. The IAP/EIS ROD also contains additional stipulations to protect subsistence resources and activities and traditional land use sites. Exceptions to a small number of the stipulations in the IAP/EIS have been approved in instances in which implementation of a stipulation is technically not feasible, economically prohibitive, or an environmentally preferable option is available, and where the objectives of the stipulations can still be satisfied. In addition, the ASDP ROD adopts mitigation measures and measures proposed by FWS as described above under Decision. It has been determined that all practical means to avoid or minimize environmental harm from the project on BLM-managed lands have been adopted in this ROD.

Monitoring will be undertaken to determine the status of the various resources in the planning area, to ensure compliance with and enforcement of lease stipulations and decisions in this ROD, and to measure the effectiveness of protective measures. Mitigation measures adopted by this decision and described above in the Decision section of this ROD include requirements for monitoring water, water quality, fish, and caribou and monitoring is also called for under the terms and conditions proposed by the FWS.

The BLM will work with CPAI to further refine monitoring plans. These plans will address how both entities will proceed to determine the effectiveness of stipulations and other mitigation measures. At the same time, the BLM is working with its Research and Monitoring Team (RMT) created pursuant to the Northeast National Petroleum Reserve-Alaska IAP/EIS ROD on a monitoring plan for all of the National Petroleum Reserve-Alaska. The more specific monitoring plans for the Alpine Satellite Development will have to be consistent with the broader goals and objectives of the National Petroleum Reserve-Alaska plan, so the Alpine satellite monitoring plans may be reviewed by the RMT prior to implementation.

6. Public Involvement

Public and government agencies provided valuable assistance and comments throughout the development of the ASDP EIS. Public outreach is described in Section 5 of the FEIS. It consisted of the following.

Scoping. Formal scoping began when BLM published a Notice of Intent (NOI) to prepare the ASDP EIS in the *Federal Register* on February 18, 2003. Publication of the NOI initiated the 45-day public scoping period, which ended on March 31, 2003. One hundred twelve individuals signed-in at the four scoping meetings. Thirty-five written comments and one phone message were received during the scoping period.

Draft EIS Comments. The EPA's Notice of Availability of the ASDP Draft EIS was published in the *Federal Register* on January 16, 2004. Comments on the Draft EIS were received via letters, e-mail, fax, website, and formal public meetings. Public meetings were held in Anaktuvuk Pass (February 17, 2004), Anchorage (February 23, 2004), Atqasuk (February 24, 2004), Barrow (February 9, 2004), Fairbanks (February 18, 2004), and Nuiqsut (February 10, 2004). The meetings at Anaktuvuk Pass, Atqasuk, Barrow, and Nuiqsut also served as ANILCA 810 subsistence hearings. At the request of the NSB, the comment period was extended by one week and closed March 8, 2004.

Approximately 40,000 individual comment media were received via letter, e-mail, fax, website, and formal public meetings. Of these, approximately 39,700 comments arrived in response to solicitations from advocacy groups. Many of the comments prompted by campaigns organized by environmental organizations were identical statements. More than 70 people made statements at the comment meetings/ANILCA 810 hearings held in Anaktuvuk Pass, Anchorage, Atqasuk, Barrow, Fairbanks, and Nuiqsut.

Development of the Preferred Alternative. After the public meetings and closing of the public comment period, BLM and the cooperating agencies reviewed the comments, engaged with the contractor in revising the EIS, and jointly developed the Preferred Alternative. BLM consulted directly with leaders of Nuiqsut in developing the components of the Preferred Alternative on BLM-managed lands. All comments were considered in the development of the Preferred Alternative.

Consultation with Federally Recognized Tribes. Federally recognized tribes have a special, unique legal and political relationship with the government of the United States as defined by the U.S. Constitution, treaties, statutes, court decisions, and executive orders. These definitive authorities are also the basis for the federal government's obligation to acknowledge the status of federally recognized tribes in Alaska.

The BLM consults with federally recognized tribes consistent with the Presidential Executive Memorandum on Government-to-Government Relations with Native American Tribal Governments, dated April 29, 1994; Executive Order 13175 on Consultation and Coordination with Indian Tribal Governments, dated November 6, 2000; and the January

18, 2001, Department of the Interior-Alaska Policy on Government-to-Government Relations with Alaska Native Tribes. The BLM together with the federal cooperating agencies formally consults with federally recognized tribes in Alaska before undertaking activities that will have a substantial, direct effect on federally recognized tribes, their assets, rights, services, or programs. To this end, government-to-government meetings and consultation with three federally recognized tribes—the Native Village of Barrow (NVB), the Native Village of Nuiqsut, and the Iñupiat Community of the Arctic Slope (ICAS)—occurred in the course of developing the ASDP EIS. The FEIS provides additional detail on specific government-to-government meetings with federally recognized tribes and state and local governments.

Throughout the planning process, comments and issues brought forward through formal government-to-government consultation with Native tribal governments consistently focused on a few topics. These issues included concerns about the proposed development's potential impacts on subsistence resources and local residents' subsistence way of life. Both the NVB and the ICAS expressed interest that the federal government be especially sensitive to the concerns of Nuiqsut residents who are closer to the proposed development. Specific concerns expressed included: deflection/avoidance by caribou of roads and pipelines, impediments to caribou and human travel presented by pipelines, particularly by pipelines only 5 feet high, location of oil infrastructure within the 3-mile setback established in the 1998 IAP/EIS, the introduction of additional infrastructure which local residents avoid during subsistence activities, the introduction of infrastructure into the Colville Delta which experiences severe flooding events, and limitations on local employment opportunities. All comments and recommendations from tribes were considered.

Final ASDP EIS Comments. The BLM has received thirteen letters commenting on the FEIS. Most letters stated opposition to the project and/or restated arguments made during the comment period on the DEIS.

APPENDIX A: Modifications and Clarifications

The following list highlights clarifications and minor modifications that BLM has made to the Preferred Alternative presented in the ASDP FEIS for adoption here as the Department's decision.

Ublutuoch River Bridge: The BLM has determined not to require that the bridge over the Ublutuoch River span the active channel and primary floodplain terraces, i.e., reach from bank to bank, or that the approaches to the bridge provide for natural water flow as described in the FEIS's Preferred Alternative. These design features were incorporated into the Preferred Alternative at the request of some of the cooperating agencies to assure that the alternative included aspects important for them to fulfill their regulatory responsibilities. CPAI's proposed bridge and approach design is acceptable to BLM. The impacts of CPAI's design proposal for the Ublutuoch River bridge were disclosed and evaluated in the FEIS, particularly Sections 4A.2.2 and 4A.3.2. Although the higher west floodplain is flooded under high water flows and spring breakup, it does not convey a significant part of the total flow of the Ublutuoch River. Rather, most flow is conveyed along the lower west floodplain and the main channel, both of which are spanned by the bridge proposed by CPAI. Even at the 100-year flood level, it is estimated that the bridge proposed by CPAI will elevate water levels less than a foot. This ROD incorporates a mitigation measure requiring a program to monitor sedimentation upstream and downstream of the bridge. This program will assist in the analysis of scour and fill processes and assist BLM to determine if and what erosion mitigation measures may be required in addition to those incorporated into CPAI's design. BLM acknowledges that cooperating agencies may require a longer bridge or minor relocation and special design features for the bridge approaches as part of their decisions. BLM approves of such modifications provided they are at least as protective of the environment as the bridge and approach design approved in this ROD.

Mitigation measures: The BLM reviewed the potential mitigation measures contained in the FEIS and has determined to adopt the measures described above under Decision. In addition, this ROD also adopts the terms and conditions and one of the conservation recommendations provided by the FWS in its Endangered Species Act Biological Opinion. These are also described in the Decision section of this ROD.