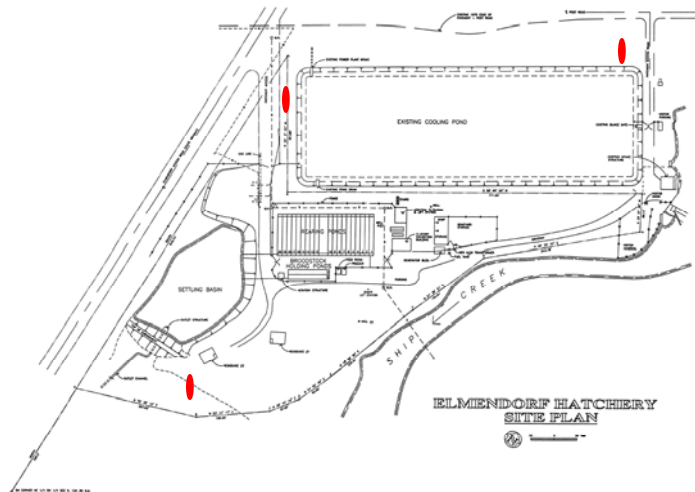


**ENVIRONMENTAL ASSESSMENT**  
**Case File Numbers: AA-085927 and AA-09596**  
**AK-040-06-EA-043**

Applicant: Alaska Department of Fish and Game  
Sport Fish Division, Elmendorf Hatchery  
Division of Sport Fish  
941 N. Reeve Boulevard  
Anchorage, Alaska 99501



Type of Action: FLPMA Right-of-Way, 43 CFR §2800 and R&PP Lease Adjustment §2912

Location: NE $\frac{1}{4}$ SW $\frac{1}{4}$ , Section 9, T. 13 N., R. 3 W., Seward Meridian.

Prepared By: Dorothy Bonds, Realty Specialist

Preparing Office: Bureau of Land Management  
Anchorage Field Office  
6881 Abbott Loop Rd.  
Anchorage, Alaska 99507

Date: May 31, 2006

I. INTRODUCTION:

A. Background:

The Alaska Department of Fish and Game (ADF&G), Division of Sport Fish, operates the Elmendorf Fish Hatchery (Hatchery) on land leased under the Recreation and Public Purposes Act (R&PPA). In August 2005, BLM issued ADF&G a right-of-way (AA-85927) to authorize the use of a small area adjacent to the hatchery lease area. ADF&G operates two hatcheries in this area, the Elmendorf Hatchery and the Fort Richardson Fish Hatchery. Due to the closure of the Air Force power plant, the hatchery must rely on more groundwater rather than creek water. The result is that the Elmendorf Hatchery needs to increase ground water supplies to continue production.

B. Purpose and Need for the Proposed Action:

The hatchery has identified a need to secure more ground water to continue fish production.

C. Conformance with Land Use Plan:

The Proposed Action has been reviewed and found to be in compliance with the Southcentral Management Framework Plan (MFP), March 1980. Objective Number L-1 of the MFP states the BLM intends to “Satisfy state and local government needs as well as public and/or private demonstrated needs for land as they arise.”

II. PROPOSED ACTION AND ALTERNATIVE

A. Proposed Action:

ADF&G is proposing to construct three additional wells within and near the boundary of the Elmendorf Fish Hatchery Lease Area; this will include Wells 6, 7 and 8. Wells 6 and 7 are within the existing boundary of the hatchery lease area. Well 8 is located outside the boundary of the current lease area, located in the northeast corner of the decommissioned power plant cooling pond, and will require an amendment to right-of-way grant AA-85927, for the wellhead and the connecting pipeline and electrical lines. Providing that there is sufficient water in this new location and development of the well system is determined to be practical, ADF&G will apply for permanent water rights and connect the wells to the existing water system supporting the hatchery.



**Test Well area used for Well 6**



**Proposed site for Well 7**



**Well 8 located near Visitor's Parking**



**Proposed site of Well 8**

The diameter of the well casings will be 12-16 inches with the expectation of producing up to 3000 gallons of water per minute. Only the lower confined aquifer shall be developed and screened. The depth of the wells will be at least 130 feet deep and a maximum of 440 feet deep depending on the depth of the aquifer. The drill sites will be on lands that have been cleared previously. Soil extracted during the drilling process will be spread around the area to a maximum depth of 2 inches. During the initial capacity testing, water will be discharged into an existing settling pond.

Connecting the well to the existing water system will require digging a ditch to accommodate a pipeline. The ditch will start at the Aeration Filtration and Lift Station and run to Well 6 or 7. For Well 8 the ditch will run from the intake building to Well 8. The dimensions for each well will be as follows: Trenching for Well 6 is approximately 3½ feet deep x 650 feet long, Well 7 is approximately 3½ feet deep x 450 feet long and Well 8 is approximately 3½ feet deep x 250 feet long with the excavated soil piled next to the trench. Trenching will be accomplished with a small rubber tired backhoe, and refilled at the end of the work. The pipeline will consist of 6 to 10" inch HDPE pipe buried approximately 3½ feet deep. A conduit for electrical wiring will be laid in the same trench. The electrical tie in will be with an existing electrical box located at the Aeration Filtration and Lift Station. See the attached Hatchery Site Plan.

- B. No Action Alternative:  
The No Action Alternative would be to deny this request.

### III. AFFECTED ENVIRONMENT

- A. Critical Elements:  
The following critical elements of the human environment have been analyzed and are either not present or will not be affected by the Proposed Action or the No Action Alternative.

Air Quality  
Areas of Critical Environmental Concern

Cultural Resources/Paleontology  
Environmental Justice  
Farmlands (Prime or Unique)  
Flood plains  
Native American Religious Concerns  
Subsistence  
Threatened and Endangered Species  
Wastes (Hazardous/Solid)  
Water Quality (Surface/Ground)  
Wetlands/Riparian Zones  
Wild and Scenic Rivers  
Wilderness

1. ANILCA Section 810 Clearance:  
The Proposed Action and Alternative have been analyzed and determined to have no effect on any subsistence uses or needs under Section 810.
2. Cultural Resources:  
No cultural resources are known for the Area of Potential Effect. Given the previous disturbance in the area of the project, previously unknown cultural resources are unlikely to occur in the project area.
3. Threatened and Endangered (T&E) Species Clearance:  
The Proposed Action and Alternative were evaluated in accordance with the Endangered Species Act of 1973, as amended. The Proposed Action and Alternative were determined to have no effect on threatened and endangered plants and animals and their habitats. No consultation with the U.S. Fish and Wildlife Service (USF&WS) is necessary pursuant to Section 7 of the Act.

B. Land Status:

By Executive Order 8102, this land is under a withdrawal for a military reservation. BLM's role is to manage the vegetative and mineral resources. BLM issues land authorizations for this withdrawal, subject to the concurrence of the military. The U.S. Air Force will issue a letter of non-objection prior to authorization being given to construct any improvements.

C. Vegetation:

The project area is within the Cook Inlet/Susitna Lowlands major land resource area. Vegetation in and around the project area has been cleared in the past. Climax vegetation would consist of paper birch, white spruce and cottonwoods, interspersed with thick patches of alder and willow brush.

D. Visual Resources:

This area is managed under a Class IV Objective. The objective for this class is to provide for management activities which require major modification of the existing character of the landscape. The level of change to the characteristic landscape can be high. Management activities may attract attention, but should not dominate the view of the casual observer.

E. Recreation:

The area for this project has limited recreation value as the land is reserved for military purposes. One area is near Post Road, which may be crossed occasionally by a walker or person on a bicycle, but because this area is near a heavily used vehicular road, use would be infrequent. The other area described is within the Elmendorf Fish Hatchery Lease Area and is utilized by visitors to view the hatchery's salmon viewing area. Work will be accomplished in the off season to prevent inference with pedestrian traffic.

F. Wildlife:

The site of the Proposed Action is located near the northeast corner of an already disturbed and cleared area. The surrounding area supports a variety of animal species. Resident populations include moose, porcupine, snowshoe hare, microtine rodents and at least 40 species of resident and migrant land birds. Non-resident species that have been seen include fox, coyote, wolf, lynx, brown bear and black bear. Many migrant birds pass through the area during spring and fall migration, including several raptor and many neo-tropical species. Shrub and forest habitats provide nesting habitat for land birds and raptors, particularly Bald Eagles. There is one species of amphibian, the wood frog, which occurs in the area.

IV. ENVIRONMENTAL CONSEQUENCES

A. Impacts of the Proposed Action:

1. Critical Element - Invasive, Non-Native Species:

Areas that are trenched and refilled can be invaded by invasive, non-native species. The likelihood depends on whether there are seed sources in nearby areas or if seeds are transported in on construction equipment. The quicker disturbed sites re-vegetate, the less chance of invasive, non-native species becoming established. Disposal of cuttings around the well head has the potential to provide a site where non-native species would become established.

2. Vegetation:

The vegetation has already been manipulated in the project area. Some of the area has been cleared entirely and there will be no subsequent impact to vegetation. The placement of the pipeline and well head in a grass area will not result in a deleterious effect to the vegetation in the

overall area. Disturbed soil could re-colonize the first few years in weeds.

3. Visual Resources:

There will be limited visual impact in the form of the 8 inch well casing and the scar of the approximately 400 foot trenched and filled pipeline path. Seeding and natural re-vegetation of the trench corridor will eventually obscure the pipeline path from casual view.

4. Wildlife:

The project area is an already disturbed area and would not be heavily used by wildlife. Construction noise and activity may temporarily displace wildlife in the surrounding area. This will be short term and of limited impact.

5. Soils:

No adverse consequences are anticipated other than minimal disturbance associated with drilling and building construction.

B. Impacts of the No Action Alternative:

Under the No Action Alternative there will be no impacts because the project will not take place.

C. Cumulative Impacts:

The Proposed Action will allow the hatchery to increase fish production to meet current needs of the Alaska Department of Fish and Game. The location of the improvements is in an area that was cleared or filled in the past when the hatchery was originally constructed. Therefore no further impacts are associated with this Proposed Action.

D. Residual Impacts:

There will be no residual impacts beyond what has already occurred due to past clearing.

E. Mitigation Measures:

To minimize introduction of invasive non-native plant species, equipment, and other materials brought on-site should be free of weed sources. Disturbed sites should be monitored to determine if non-native species become established. If these species are found, they should be removed. Excess soils from trenching and drilling should be raked smooth and seeded in areas that are not intended to remain cleared of vegetation.

V. CONSULTATION AND COORDINATION:

A. Individuals and Agencies Consulted

Darrell Keifer, ADF&G, Sport Fish

B. List of Preparers:

Doug Ballou, Recreation Planner

Chuck Denton, Hydrologist

Jeff Denton, Wildlife Biologist

Dorothy Bonds, Realty Specialist - Lead Preparer

Dave Kelley, Natural Resources Specialist

Donna Redding, Archaeologist

Tim Sundlov, Fisheries Biologist

Bruce Seppi, Wildlife Biologist