

Montana Department of Natural Resources and Conservation
Water Resources Division
Water Rights Bureau

ENVIRONMENTAL ASSESSMENT
For Routine Actions with Limited Environmental Impact

Part I. Proposed Action Description

1. Applicant/Contact name and address: Alpine Pacific Utilities Hydro, LLC
75 Somers Rd.
Somers, MT 59932
2. Type of action: Application for Beneficial Water Use Permit No. 40F 30106314.
3. Water source name: Milk River.
4. Location affected by project: The Applicant proposes to use Fresno Dam, an existing structure operated by the Department of the Interior - Bureau of Reclamation, in order to generate electricity. Fresno Dam was constructed on the Milk River in 1939 and is located in the Southeast quarter of Section 19, Township 33 North, Range 14 East, Hill County. Proposed construction for the project mainly includes alterations to the existing structures at Fresno Dam, but there will be new facilities constructed on ground not occupied by the dam. In the Southeast quarter of the Northeast quarter of the Southeast quarter of Section 19, Township 33 North, Range 14 East, construction of a transformer, powerhouse containing two turbines/generating units, and a 100.0 foot long penstock leading from the existing outlet structure are proposed. Also proposed is replacement of approximately 1.0 mile of existing single-phase overhead wire with three-phase overhead wire. The overhead wire which is to be replaced originates in the Southeast quarter of the Northeast quarter of the Southeast quarter of Section 19, Township 33 North, Range 14 East and connects into an existing three-phase overhead line located in the Southeast quarter of the Northeast quarter of the Southeast quarter of Section 30, Township 33 North, Range 14 East. For an overview of the proposed project, see Figure 1 on the following page.
5. Narrative summary of the propose project, purpose, action to be taken, and benefits: The applicant has requested authorization to utilize discharges from Fresno Dam in a nonconsumptive manner to produce electricity. The existing structures at Fresno Dam are to undergo several alterations and additions so that electricity can be generated from outlet discharges. The volume and flow rate for Milk River downstream from Fresno Dam will remain totally unchanged, as electricity will only be produced when the Bureau of Reclamation (dam operator) releases sufficient water from the dam.
6. Agencies consulted during preparation of the Environmental Assessment: Montana Natural Heritage Program, Natural Resources Conservation Service (NRCS) Soils Data

Website, Department of Environmental Quality, National Wetlands Inventory Website, and the Natural Resources Information System, and the Department of Fish, Wildlife, & Parks.

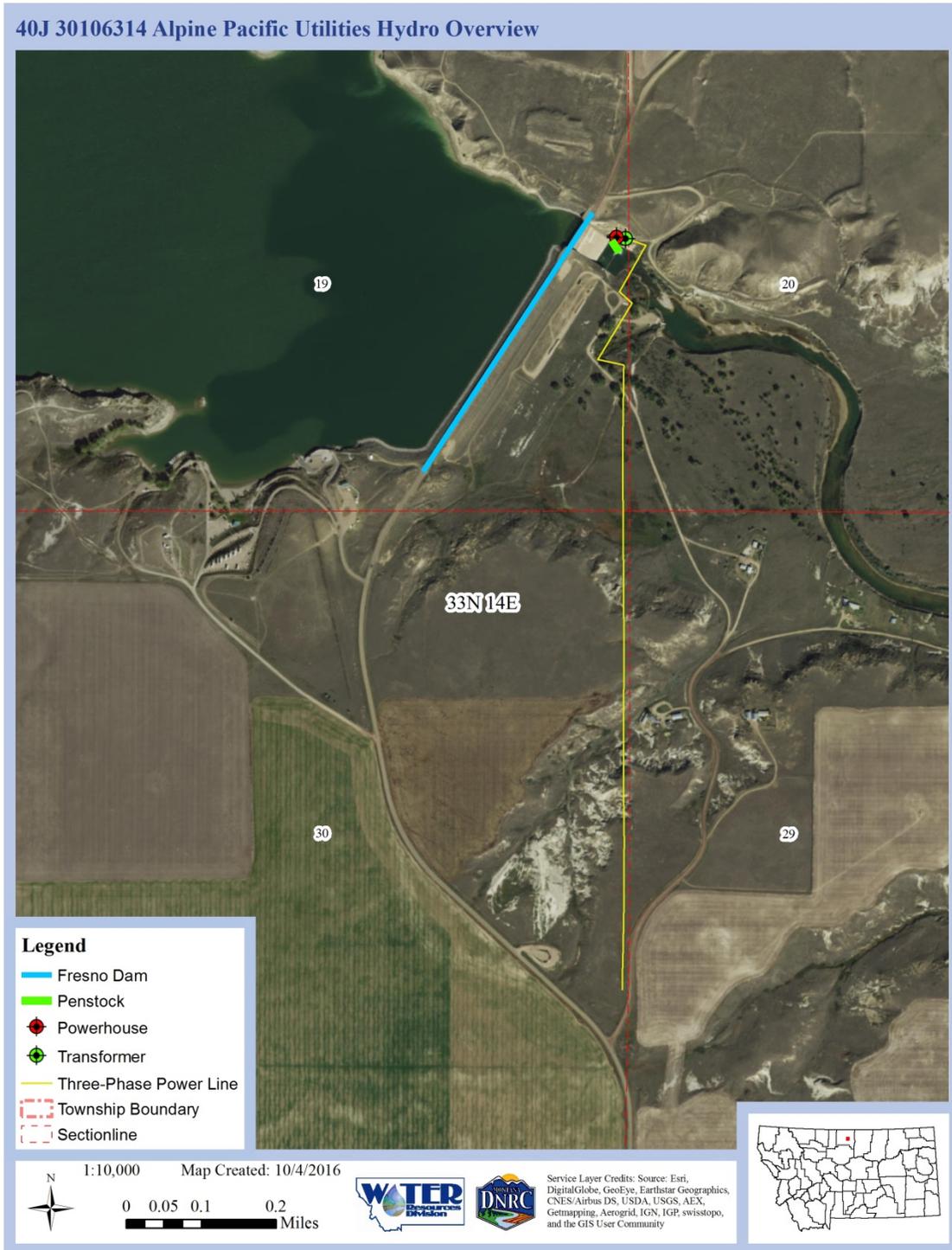


Figure 1-An overview of the proposed project.

Part II. Environmental Review

1. Environmental Impact Checklist:

<h2>PHYSICAL ENVIRONMENT</h2>

WATER QUANTITY, QUALITY, AND DISTRIBUTION

Water quantity-The proposed use is nonconsumptive. Power will be generated only when releases from Fresno Dam are sufficient enough to do so.

Determination: No impacts to water quantity are expected to result from the proposed nonconsumptive power generation.

Water quality-Power generation will occur via sluice gate diversions, which will direct flows into three penstocks housing three turbines. The turbines will discharge all water directly into the Fresno Dam spillway, and no worsening of water quality will occur.

Determination: No impacts to water quality are expected.

Groundwater-The proposed project involves a surface water source.

Determination: Assessment not applicable.

Diversion Works-Fresno Dam has been operational since 1939. In order to generate electricity, several minor alterations to the existing diversion works are proposed. The current and historical outlet works included two sluice gate structures which controlled Fresno Reservoir releases. In order to generate electricity, these two sluice gates are proposed to be the inlet to a chamber, where more sluice gate structures are housed. A total of five sluice gates will occupy the chamber; two being sluice gates of similar size as the release controlling gates, and three small gates that will direct water to the turbines. These five sluice gates have a greater hydraulic capacity than the two release-regulating sluice gates. From the turbines, water will be discharged directly onto the existing spillway. The redundant sluice gate system allows the power generating turbines to be bypassed completely if necessary. Because Alpine Pacific Utilities Hydro will not be in charge of controlling releases, electricity will only be generated during times when releases are sufficient enough to do so.

Determination: All work has been completed by Professional Engineers under close coordination with USA Bureau of Reclamation and the Federal Energy Regulatory Commission. The proposed alterations needed for electricity production are not expected to impact the functionality of the existing diversion works.

UNIQUE, ENDANGERED, FRAGILE, OR LIMITED ENVIRONMENTAL RESOURCES

Endangered and threatened species-The Montana Natural Heritage Program lists one species of bird and four species of fish as species of concern. The table below contains specific information about the species of concern located in the project area. Additionally, the proposed project is located on area designated as general habitat for Sage Grouse as described in Executive Orders 12-2015 and 21-2015. Alpine Pacific Utilities Hydro has fulfilled all necessary requirements for the Montana Sage Grouse Habitat Conservation Program and has received a letter of recommendations and information from the Program Manager.

Species of Concern										
5 Species										
Filtered by the following criteria:										
Township = 033N014E (based on mapped Species Occurrences)										
BIRDS (AVES)										1 SPECIES
										TOWNSHIP = 033N014E (based on mapped Species Occurrences)
SCIENTIFIC NAME COMMON NAME TAXA SORT	FAMILY (SCIENTIFIC) FAMILY (COMMON)	GLOBAL RANK	STATE RANK	USFWS	USFS	BLM	FWP SWAP	% OF GLOBAL BREEDING RANGE IN MT	% OF MT THAT IS BREEDING RANGE	HABITAT
<i>Ardea herodias</i> Great Blue Heron	Ardeidae Bitterns / Egrets / Herons / Night-Herons	G5	S3				SGCN3	3%	100%	Riparian forest
Species Occurrences verified in these Counties: Beaverhead, Big Horn, Blaine, Broadwater, Carbon, Carter, Cascade, Chouteau, Custer, Dawson, Deer Lodge, Fallon, Fergus, Flathead, Gallatin, Garfield, Glacier, Golden Valley, Granite, Harding, Hill, Jefferson, Judith Basin, Lake, Lewis and Clark, Liberty, Lincoln, Madison, McCone, McKenzie, Meagher, Mineral, Missoula, Musselshell, Park, Petroleum, Phillips, Pondera, Powder River, Powell, Prairie, Ravalli, Richland, Roosevelt, Rosebud, Sanders, Sheridan, Silver Bow, Stillwater, Sweet Grass, Teton, Treasure, Valley, Wheatland, Wibaux, Yellowstone State Rank Reason: Small breeding population size, evidence of recent declines, and declining regeneration of riparian cottonwood forests due to altered hydrology and grazing.										
FISH (ACTINOPTERYGII)										4 SPECIES
										TOWNSHIP = 033N014E (based on mapped Species Occurrences)
SCIENTIFIC NAME COMMON NAME TAXA SORT	FAMILY (SCIENTIFIC) FAMILY (COMMON)	GLOBAL RANK	STATE RANK	USFWS	USFS	BLM	FWP SWAP	% OF GLOBAL BREEDING RANGE IN MT	% OF MT THAT IS BREEDING RANGE	HABITAT
<i>Chrosomus eos</i> Northern Redbelly Dace	Cyprinidae Minnows	G5	S3				SGCN3	4%	27%	Small prairie rivers
Species Occurrences verified in these Counties: Blaine, Cascade, Chouteau, Daniels, Dawson, Fergus, Garfield, Golden Valley, Hill, Judith Basin, Lewis and Clark, McCone, Meagher, Musselshell, Petroleum, Phillips, Pondera, Richland, Roosevelt, Sheridan, Stillwater, Sweet Grass, Teton, Toole, Valley, Wheatland, Wibaux										
<i>Etheostoma exile</i> Iowa Darter	Percidae Perches	G5	S3				SGCN3	1%	9%	Small prairie rivers
Species Occurrences verified in these Counties: Blaine, Carter, Chouteau, Daniels, Dawson, Fallon, Fergus, Garfield, Hill, Liberty, McCone, Petroleum, Phillips, Powder River, Richland, Roosevelt, Sheridan, Valley, Wibaux										
<i>Margariscus margarita</i> Pearl Dace	Cyprinidae Minnows	G5	S2			SENSITIVE	SGCN2	1%	1%	Small prairie streams
Species Occurrences verified in these Counties: Blaine, Daniels, Hill, McCone, Phillips, Richland, Roosevelt, Sheridan, Valley State Rank Reason: Pearl Dace are not abundant when they are collected at the relatively few sites in cool, small streams and ponds they are known to inhabit. This factor, as well as introduced Northern Pike invasions into their small prairie streams, has caused them to be designated as a Montana Species of Special Concern vulnerable to extinction in the state.										
<i>Sander canadensis</i> Sauger	Percidae Perches	G5	S2			SENSITIVE	SGCN2	1%	15%	Large prairie rivers
Species Occurrences verified in these Counties: Big Horn, Blaine, Carbon, Carter, Cascade, Chouteau, Custer, Dawson, Fallon, Fergus, Garfield, Hill, Liberty, McCone, Musselshell, Petroleum, Phillips, Powder River, Prairie, Richland, Roosevelt, Rosebud, Stillwater, Teton, Treasure, Valley, Wibaux, Yellowstone										

Determination: Only minor disturbances to the existing ground are proposed. It is unlikely that the proposed project will impact migratory patterns, breeding, or pose a habitat threat to the species of concern. This project has fulfilled all necessary requirements laid forth by the Montana Sage Grouse Habitat Conservation Program.

Wetlands-According to the U.S. Fish and Wildlife Service National Wetlands Inventory, there are no wetlands within half a mile of Fresno Dam and the proposed location for construction.

Determination: No impacts to wetlands are expected.

Ponds-No alterations to the existing Fresno Reservoir have been proposed.

Determination: Assessment not applicable.

GEOLOGY/SOIL QUALITY, STABILITY, AND MOISTURE-Underlying the proposed construction location for a transformer and powerhouse is Hillon loam as identified by the Natural Resources Conservation Service.

Determination: It is unlikely that the proposed project will result in an increase of saline seep or further degrade soil quality.

VEGETATION COVER, QUANTITY, AND QUALITY/NOXIOUS WEEDS-Because the structures already exist and no land-use changes are proposed, there will be no impact.

Determination: It is the responsibility of the dam operator to ensure noxious weeds do not become out of control.

AIR QUALITY-The proposed project is to generate electricity using water, potential energy, and turbines. No pumps or emission producing equipment are proposed.

Determination: No deterioration of air quality or adverse effects on vegetation due to an increase in air pollutants is expected.

HISTORICAL AND ARHEOLOGICAL SITES-The proposed project lies on Federal land. However, most of the changes are to existing Fresno Dam structures and no impact is expected.

Determination: No assessment of unique archeological or historic sites has been performed.

DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY

-No additional impacts on other environmental resources were identified.

HUMAN ENVIRONMENT

LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS -Currently, no environmental plans or goals have been identified in the area.

ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES

-Recreational land is situated adjacent to the proposed project area. Recreational and wilderness activities will not be affected by the project, because most of the changes are to the existing dam with the exception of two small structures which will be constructed in an area already restricted to public access.

HUMAN HEALTH -Human health will not be affected by the project.

PRIVATE PROPERTY -Adverse effect on private property rights is anticipated from this development.

Yes ___ No x

OTHER HUMAN ENVIRONMENTAL ISSUES -

Impacts on:

- (a) *Cultural uniqueness and diversity?* No significant impact.
- (b) *Local and state tax base and tax revenues?* No significant impact.
- (c) *Existing land uses?* No significant impact.
- (d) *Quantity and distribution of employment?* No significant impact.
- (e) *Distribution and density of population and housing?* No significant impact.
- (f) *Demands for government services?* No significant impact.
- (g) *Industrial and commercial activity?* No significant impact.
- (h) *Utilities?* No significant impact.

- (i) Transportation? No significant impact.
- (j) Safety? No significant impact.
- (k) Other appropriate social and economic circumstances? No significant impact.

2. *Secondary and cumulative impacts on the physical environment and human population:*

Secondary impacts: No secondary impacts have been identified.

Cumulative impacts: No cumulative impacts have been identified.

3. *Describe any mitigation/stipulation measures:* None.

4. *Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider:*

No action alternative: The applicant would not be able to develop the project as proposed.

Alternative one: Approve the application if the applicant proves the statutory criterion has been met.

Part III. Conclusion

1. *Preferred alternative:* Alternative one.

2. *Comments and Responses:* None to date.

3. *Finding:*

Yes ___ *No* *x* *Based on the significance criteria evaluated in this Environmental Assessment, is an EIS required?*

An Environmental Assessment is the appropriate level of assessment for the proposed action because no significant impacts have been identified.

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Date: October 6, 2016