Categorical Exclusion Determination and Decision Record
for
Gold Hill Irrigation District (GHID)
Diversion Structure Improvement

DOI-BLM-OR-M050-2014-0006-CX

Description of Proposed Action

WaterWatch of Oregon and the Gold Hill Irrigation District (GHID) propose to improve the water intake system, dam, and canal for the Gold Hill irrigation diversion off the Rogue River near Gold Hill, Oregon.

The project is partially on BLM-managed land in Township 36 South, Range 3 West, Section 11, SE ¼ of the NW ¼, beginning at river mile 122.5 just upstream of Nugget Falls of the Rogue River.

The existing dam structure that diverts water to the GHID diversion is currently ranked as the highest priority fish passage barrier on the Rogue River by the Rogue Basin Fish Access Team. The current system has "false attraction flow" caused by spill from the canal at the existing headgate and predation hazards created by the long distance between the diversion canal inlet and the fish screen. The spill from the canal at the existing headgate also traps fish. The diversion structure is also a safety concern for recreationists accessing the river at this location.

Existing Condition

The GHID diversion dam is an 850-foot-long concrete dam that extends 100 feet into the channel on the south side of the Rogue River and then runs approximately 500 ft upstream before terminating at a bedrock island (Figure 1). The concrete dam was cast in place directly on top of existing bedrock outcrops. Water is routed along the south side of the Rogue River by the diversion dam to the open canal diversion system. The canal contains a spillway and headgate control structure approximately 875 ft downstream from the diversion point with a rotary drum fish screen located 275 ft downstream of the headgate structure (see Figures 2 and 3). From the north side of the Rogue River, the diversion structure consists of a 150-ft-long concrete rubble and boulder weir with a 100-foot-wide notch for boater and fish passage in the middle of the river.

The Nugget Falls area is a popular recreation site for anglers, rafters, photographers, kayakers and other river-related recreationists. Current access to the Rogue River at Nugget Falls involves a precarious crossing over the open irrigation canal at the spillway and headgate.

Currently, water is diverted from the Rogue River all year and flows down the existing canal to the headgate structure. During irrigation season, the water is controlled at the headgate structure with a portion of the flow allowed to go down the canal to the fish screen and the excess flow returned to the Rogue River over a rudimentary channel that is clogged with debris. During nonirrigation times, all of the flow in the diversion canal is returned to the Rogue River via this channel. The approved water right is 16.13 cubic feet per second based on the water rights issued by the Oregon Water Resources Department and an additional 3 to 4 cubic feet per second is needed for fish bypass flows.

Proposal

The Gold Hill Irrigation District would modify the existing diversion system to improve flow control at the diversion point to meet current fish passage criteria of the National Oceanic and Atmospheric Administration, to eliminate the harmful spill at the existing headgate, and improve safety (see attached design package from River Design Group, Inc).

The current diversion dam diverts substantially more water than allowed by the approved water right; therefore, a new headgate structure would be installed at the upstream inlet of the diversion canal to control water diversion. The structure would incorporate an adequately sized bar screen to allow adult fish passage while minimizing debris accumulation in the fish screens. With diversion rates controlled by the new headgate, the existing concrete headgate structure would be abandoned. The portion of the headgate within the existing canal will be covered with gravel and earthen material, and left for historical purposes. A 36-inch diameter smooth pipe would be installed in the canal for approximately 1,100 feet to reduce flow losses from the existing canal system, reduce predation on fish, eliminate a safety hazard, and prevent recreational use of the canal. This pipe will be covered with gravel and earthen material once installed.

The existing main stem diversion dam would remain in place to ensure adequate water depth entering the diversion system. Modifications are proposed at the dam near the inlet structure to promote fish passage, maintain sediment continuity, and control flow into the diversion system.

Installation of control structures (gates) would allow the water to be shut off during the winter. Juvenile and adult fish could continue to pass through the dam structure, during the irrigation season.

With the new headgate structure up at the diversion point, the canal would be completely closed off during the off-season so no fish will enter the canal during that period.

Construction Details

Bulk bags and sand bags would isolate the active river flow during construction activities. Fish would be salvaged in the canal during implementation. Floating silt curtains would trap silt and sediment from leaving the work area and entering the river.

The 1,100 ft of pipe would be anchored with boulders, compacted earthen backfill, and re-contoured to match the surrounding ground level. Two concrete manholes would be added to the pipe for maintenance access.

A portion of the stream bedrock (3 cubic yards) would be broken up to provide better channel definition and improve fish passage below the spillway.

Bolted screens would be installed over the exposed portions of the diversion structure to prevent pedestrian accidents and vandalism.

An excavator would be used to perform the earth moving portion of the project and a concrete pump would be used to transfer the ready mix concrete. The diversion dam would be accessed, for construction purposes, by crossing over the irrigation canal with a temporary bridge.

Construction is anticipated to begin mid-August and would be completed by mid-October of 2014. GHID would pursue a permit extension to operate beyond the June 15-September 15 Oregon Department of Fish and Wildlife In-Water Work period.

Project Design Features

- All operations will be in compliance with fire season restrictions and regulations identified by the Oregon Department of Forestry.
- Prior to project implementation, BLM will have a signed concurrence letter from the State Historic Preservation Office regarding the proposed methods of mitigation.
- The BLM shall be notified at least 14 days before ground-disturbing activities begin and upon completion of ground-disturbing activities.
- A news release and onsite signage will inform users that a portion of the area on BLM managed land is temporarily closed for 4-6 weeks to prevent users from encountering potential dangers from equipment and operations. The area may be fenced as part of the temporary closure.
- A watch person for security purposes may be allowed on BLM managed land as needed. A portable toilet will not be allowed within 150ft of the bank of the Rogue River. Disposal of human waste and gray water must be hauled offsite for proper sewage disposal. Removal of fencing, camping, facilities, and trash from the security site and construction area will be completed within 24 hours after construction completion.
- Work will stop and the Medford District Manager will be notified within 12 hours if an archaeological site is discovered during the project.
- Project timing would be dependent on weather, coordination with GHID on water withdrawals, and the receipt of all the necessary permits and approvals.
- Only equipment visually inspected for weeds by a qualified BLM specialist will be allowed to operate within the project area, or in the immediate vicinity of the project area. All subsequent move-ins of equipment will be treated the same as the initial move-in.
- All heavy equipment, including the undercarriages, will be pressure washed before initial move-in and prior to all subsequent move-ins into the project area to remove soil and plant parts to prevent the spread of invasive and noxious weeds. Cleaning shall be defined as removal of dirt, grease, plant parts, and material that may carry noxious weed seeds and parts onto BLM lands.
- All areas where, in the course of the project, soil is exposed will be mulched and seeded. The type, quality, and quantity of materials used shall be approved by the BLM Authorized Officer (see attached plant species listed).
- No re-fueling of heavy equipment would occur within 150 ft of the bankfull width of streams.
- Contractors must prepare a Spill Prevention, Control, and Countermeasure Plan for all hazardous substances to be used in the contract area, as directed by the Authorized Officer. Such plan shall include identification of Purchaser's representatives responsible for supervising initial containment action for releases and subsequent cleanup. Such plans must comply with the State of Oregon DEQ OAR 340-142, Oil and Hazardous Materials Emergency Response Requirements.
- Fuel (oil, diesel) shall not be stored within 330 ft of the bankfull width of the Rogue River.
- Temporary sediment control measures (e.g., check dams, silt fencing, bark bags, filter strips and mulch) will be used along the ordinary high water line to contain sediment from construction areas. Remove any accumulated sediment and control measures when work is complete.
- Excavated material will be placed back into the trench and properly compacted. Excess material will be removed to a BLM approved location.

- Excess excavated material would only be placed in locations where it cannot enter streams or other water bodies.
- Boulders will be placed around the existing parking area to prevent vehicles from driving across the irrigation diversion structure or accessing the river. A gate will be installed on the route to the headgate to limit vehicle access for administrative or private landowner purposes.

Plan Conformance Review

This proposal is in conformance with objectives, land use allocations, and management direction of the 1995 *Medford District Record of Decision and Resource Management Plan* (ROD/RMP) and any plan amendments in effect at the time this document is published.

This project also conforms with the 1994 *Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl* (Northwest Forest Plan).

The Proposed Action is consistent with the direction given for the management of public lands in the Medford District including the Oregon and California Lands Act of 1937, Federal Land Policy and Management Act of 1976, Endangered Species Act of 1973, Clean Water Act of 1987, Safe Drinking Water Act of 1974 (as amended 1986 and 1996), Clean Air Act of 1990 (as amended), and Archaeological Resources Protection Act of 1979.

This proposal is consistent with management direction in the Medford District 1995 ROD/RMP (p. 49) that directs the BLM to "Design and implement fish habitat restoration and enhancement activities in a manner that contributes to attainment of Aquatic Conservation Strategy and riparian reserve objectives."

Categorical Exclusion Determination

This Proposed Action qualifies as a categorical exclusion as provided in United States Department of the Interior Departmental Manual 516 DM 11.9 A (7) and J (8). This section allows for "installation of devices on existing facilities to protect animal life . . ." and "installation of minor devices to protect human life . . .", respectively.

Before any action described in the list of categorical exclusions may be used, the "extraordinary circumstances," included in the Code of Federal Regulations (CFR) at 43 CFR 46.205(c) must be reviewed for applicability. After review, the BLM determined no extraordinary circumstances exist that would cause the proposed action to have a significant environmental effect. The action will not require additional analysis.

NEPA Categorical Exclusion Review

The Code of Federal Regulations at 43 CFR 46.205(c) requires that "any action that is normally categorically excluded must be evaluated to determine whether it meets any of the extraordinary circumstances in section 46.215" (listed below). Additional analysis and environmental documents must be completed for any normally categorically excluded action which may:

Butte Falls Resource Area CX Extraordinary Circumstances Documentation

1. *Have significant impacts on public health or safety.*
   ☐ Yes ☒ No
   Initial MJC Remarks:

2. *Have significant impacts on such natural resources and unique geographic characteristics as historic or cultural resources; park, recreation, or refuge lands; wilderness areas; wild or scenic rivers; national natural landmarks; sole or principal drinking water aquifers; prime farmlands; wetlands (Executive Order 11990); floodplains (Executive Order 11988); national monuments; migratory birds; and other ecologically significant or critical areas.*
   ☐ Yes ☒ No
   Initial MJC Remarks:

3. *Have highly controversial environmental effects or involve unresolved conflicts concerning alternative uses of available resources [NEPA Section 102(2)(E)].*
   ☐ Yes ☒ No
   Initial MJC Remarks:

4. *Have highly uncertain and potentially significant environmental effects or involve unique or unknown environmental risks.*
   ☐ Yes ☒ No
   Initial MJC Remarks:

5. *Establish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects.*
   ☐ Yes ☒ No
   Initial MJC Remarks:

6. *Have a direct relationship to other actions with individually insignificant but cumulatively significant environmental effects.*
   ☐ Yes ☒ No
   Initial SLS Remarks:

7. *Have significant impacts on properties listed, or eligible for listing, on the National Register of Historic Places as determined by the bureau.*
   ☐ Yes ☒ No
   Initial [signature] Remarks:

8. *Have significant impacts on species listed, or proposed to be listed, on the List of Endangered or Threatened Species, or have significant impacts on designated Critical Habitat for these species.*

Plants	☐ Yes	☒ No	Initial MW	Remarks:
Animals	☐ Yes	☒ No	Initial D.R.	Remarks:
Fish	☐ Yes	☒ No BH3	Initial BH3	Remarks:

9. *Violate a Federal law, or a State, local, or tribal law or requirement imposed for the protection of the environment.*

☐ Yes ☒ No
Initial MJC Remarks:

10. *Have a disproportionately high and adverse effect on low income or minority populations (Executive Order 12898).*

☐ Yes ☒ No
Initial MJC Remarks:

11. *Limit access to and ceremonial use of Indian sacred sites on Federal lands by Indian religious practitioners or significantly adversely affect the physical integrity of such sacred sites (Executive Order 13007).*

☐ Yes ☒ No
Initial DR Remarks:

12. *Contribute to the introduction, continued existence, or spread of noxious weeds or nonnative invasive species known to occur in the area or actions that may promote the introduction, growth, or expansion of the range of such species (Federal Noxious Weed Control Act and Executive Order 13112).*

☐ Yes ☒ No with implementation of PDFs
Initial MW Remarks:

Categorical Exclusion Reviewers:

Name	Title	Date	Initials
Michelle Calvert	NEPA Coordinator	4/16/14	MJC
Marcia Wineteer	Botanist	4/15/14	mw
Dave Roelofs	Wildlife Biologist	3/27/14	D.R.
Baker Holden	Fisheries Biologist	3/27/14	BHB
Shawn Simpson	Hydrologist	4/14/14	SLS
Amy Meredith	Soil Scientist	3/24/14	ACM
Al Mason	Fire/Fuels Specialist	3/31/14	APM
Lisa Rice	Archaeologist	4/15/14	LJR
Jeff Brown	Engineer	4/16/14	JB
Trish Lindaman	Outdoor Recreation Planner	3/24/14	TL

Decision

It is my decision to authorize the Gold Hill Irrigation District Diversion Structure Improvement as described in the Proposed Action and including the Project Design Features.

Decision and Rationale

The Proposed Action has been reviewed by Butte Falls Resource Area staff and appropriate Project Design Features, as specified above, will be incorporated into the proposal. Based on the attached NEPA (National Environmental Policy Act) Categorical Exclusion Review, I have determined the Proposed Action involves no significant impact to the human environment and no further environmental analysis is required.

Karla D. Norris 4/16/14

Karla Norris Date
Acting Field Manager
Butte Falls Resource Area

Administrative Review or Appeal Opportunities

Notice of the general public land decision to be made on the action described in this categorical exclusion will be posted on the Medford District Web site. The action is subject to protest under 43 CFR 4.450-2. A written protest electronically transmitted (e.g., email, facsimile, or social media) will not be accepted as a protest. A written protest must be on paper hand delivered or mailed to Medford District BLM, 3040 Biddle Road, Medford, Oregon 97504. A decision in response to a protest is subject to appeal to the Interior Board of Land Appeals under 43 CFR part 4.

Figure 1. Left portion of concrete diversion dam structure (view looking downstream)

Figure 2. View of concrete headgate structure.

Figure 3. View of canal with fish screen structure.

Planting List for Gold Hill Irrigation Ditch Project				
T36S-R3W-S11				
March 5, 2014				
COMMON NAME	**SCIENTIFIC NAME**	**HABIT**	**LOCATION**	**NOTES**
Camas	Camassia leichtlinii or quamash	forb	flood plain	
Lupine	Lupinus latifolia	forb	all	
Mugwort	Artemesia douglasiana	forb	all, especially flood plain	
Peavine	Lathyrus polyphyllus	forb	all	make sure this is the native, not the noxious weed, Lathyrus latifolius, perennial sweetpea
Rushes	Juncus spp.	forb	flood plain	species native to Rogue River
Sedges	Carex spp.	forb	flood plain	species native to Rogue River
Blue wildrye	Elymus glaucus	grass	all	
California brome	Bromus carinatus	grass	all	
California fescue	Festuca californica	grass	all	
June grass	Koeleria macrantha	grass	all	
Lemmon's needlegrass	Achnatherum lemmonii	grass	all	
One-sided bluegrass	Poa secunda	grass	all	
Onion grass	Melica hardfordii	grass	all	
Roemer's fescue	Festuca roemeri	grass	all	
Slender hairgrass	Deschampsia elongata	grass	all, especially flood plain	
Tufted hairgrass	Deschampsia cespitosa	grass	all, especially flood plain	
Antelope bitterbrush	Purshia tridentata	shrub	all	
Black hawthorn	Crataegus douglasii	shrub	all, especially flood plain	
Deerbrush	Ceanothus integerrimus	shrub	all	
Hazelnut	Corylus cornuta ssp. californica	shrub	berm	
Indian plum	Oemleria cerasiformis	shrub	all	
Klamath plum	Prunus subcordata	shrub	all	
Service berry	Amelanchier alnifolia	shrub	all	
Skunkbush	Rhus trilobata	shrub	berm	
Snowberry	Symphoricarpos albus	shrub	all	
Tall Oregon grape	Berberis (Mahonia) piperiana or aquifolium	shrub	all	
Willow	Salix sp.	shrub	flood plain	
Wood rose	Rosa gymnocarpa	shrub	all	
Douglas spiraea	Spiraea douglasii	small tree	flood plain	
Mock orange	Philadelphus lewisii	small tree	berm	
Ninebark	Physocarpus capitatus	small tree	berm, flood plain	
Red osier dogwood	Cornus sericea	small tree	berm	
Oregon ash	Fraxinus latifolia	tree	berm, flood plain	
Red alder	Alnus rubra	tree	berm, flood plain	
White alder	Alnus rhombifolia	tree	berm, flood plain	
Hairy honeysuckle	Lonicera hispidula	vine	all	
Orange honeysuckle	Lonicera ciliosa	vine	all	