Environmental Assessment

for

Stearns Dam Removal

DOI-BLM-OR-P060-1998-0079-EA

U.S. Department of the Interior
Bureau of Land Management
Prineville District
3050 NE Third Street, Prineville OR 97754

May 2013

This Environmental Assessment (EA) considers the environmental consequences of a proposed action or alternatives to the proposed action to determine if there would be potentially significant impacts. Potentially significant effects would preclude issuance of a Finding of No Significant Impact (FONSI) and require preparation of an environmental impact statement. "Significance" is defined by the National Environmental Policy Act (NEPA) and is found in regulation 40 CFR 1508.27. If a FONSI can be issued after this EA, it may be followed by a decision record (with public appeal period) and implementation of the project.

Before including your address, phone number, e-mail address, or other personal identifying information in your comments *on the EA and FONSI, you should be aware that your entire comment – including your personal identifying information – may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.*

In keeping with Bureau of Land Management policy, the Prineville District posts Environmental Assessments, Findings of No Significant Impact, and Decision Records on the district web page under Plans & Projects at http://www.blm.gov/or/districts/prineville/plans/index.php. Individuals desiring a paper copy of such documents will be provided one upon request.

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Chapter 1 Introduction

Introduction

Stearns Dam is an irrigation diversion dam located on the Crooked River 8 miles south of Prineville, Oregon, that is no longer used for diverting irrigation water. The current rock-fill structure with a concrete cap, rock and concrete wingwalls, and concrete headgate structure was constructed in 1934 and replaced an earlier log crib structure that was built in the late 1800s. See maps 1 and 2 in the appendices.

Proposed Action

The prosed action is to remove Stearns Dam. The removal would be accomplished using a variety of methods and mechanized equipment to remove the concrete shell and move or remove rock and sediment. The project would include constructing or reconstructing approximately one mile of fence on the east side of the Crooked River to facilitate livestock management within the riparian area and may include installation of a cattle guard at the adjacent BLM day use recreation area upstream of the dam.

Need

The right of way (ROW) holder no longer uses the dam as the point of diversion for the water right and has requested to relinquish the ROW he holds for the diversion dam. The regulations (43 CFR § 2805.12 and 43 CFR § 2807.19) for ROWs require that the ROW holder remove the structure.

Purpose

The purpose of the proposed action is to comply with the ROW regulations concerning removal of the structure upon relinquishment of the ROW.

Scoping and Issues

An issue is a point of disagreement, debate, or dispute with an action based on an anticipated effect. While many issues may be identified during scoping, only some are analyzed in the EA. The BLM analyzes issues in an EA when analysis is necessary to make a reasoned choice between alternatives, or where analysis is necessary to determine the significance of impacts. To warrant detailed analysis, the issue must also be within the scope of the analysis, be amenable to scientific analysis rather than conjecture, and not have already been decided by law, regulation, or previous decision. Significant effects are those that occur in several contexts (e.g., local and regional) and are intense (e.g., have impacts on public health or unique areas). For more information on significance, see pages 70-74 in the BLM NEPA Handbook H-1790-1 (USDI BLM 2008).

The BLM asked for input on issues to be considered for this project. The issues are addressed below. In many cases, public input on issues led to the incorporation of project design features into the action alternatives.

Issues considered in detail

The following issues were raised by the public, by federal, state or local government agencies, by tribes, or by BLM staff, and are considered in detail in this EA.

How would removal of the irrigation diversion dam affect fish passage and habitat?

How would sediment released during and after removal of the dam affect downstream irrigators?

How would removal of the dam affect recreation activities in the construction zone?

How would removal of the dam affect the visual quality of the scenic by-way?

Chapter 2 Alternatives

This chapter describes a no action alternative that would continue existing management, and two action alternatives. All but the no action alternative would meet, to varying degrees, the purpose and need described in Chapter 1. The alternatives are summarized in Table 1.

Alternative 1, No Action

The ROW holder would retain the ROW (and maintain the dam) and utilize the ROW grant for its intended purpose.

Alternative 2, complete removal of the dam and no active removal of the sediment above the dam

The proposed actions would be implemented between October 1 and November 31 after irrigation season when stream flows are low. Removal of the dam is expected to be implemented in 2013 or 2014.

The engineering design documents titled "Stearns Dam, Deconstruction, Fish passage, and Restoration Plans" describe the specifics for all steps of the project. This complete document is available at the following website; http://www.blm.gov/or/districts/prineville/plans/index.php . The specifications for materials, equipment, mobilization and construction within the design documents are all incorporated as project design features of the proposed actions.

Site preparation begins with implementing the traffic control plan and having erosion control measures in place prior to commencing construction. Implementation actions include: Construct approximately ¼ of a mile access road from highway to northeast edge of the dam; Construct a 25X50 foot staging area at the northeast edges of dam; Remove the dam (both concrete cap and underlying rock. River right wing walls and river left downstream rock bank to remain for bank stability); Salvage fish from pools remaining after dewatering; Use approximately 375 cubic yards of the removed material to fill a portion (160 feet) of the existing diversion channel adjacent to Highway 27 downstream of dam structure (the remainder of removed material, approximately 1350 cubic yards, would be hauled offsite to approved location); Remove approximately 55 cubic yards of concrete, and 85 cubic yards of angular rock; Augment existing riprap along roadway and the existing stream channel interface upstream of the dam with up to 400 cubic yards of class 200 riprap.

Site restoration actions include seeding all disturbed areas that were vegetated prior to the project implementation. Disturbed areas would be broadcast seeded with species native to the area and covered with sterile straw and planted with native shrubs and trees. The site would be monitored for five years and supplemented as needed to ensure positive vegetation recovery. The Crooked River Watershed Council (CRWC) will be the lead for this work.

Site monitoring activities would include fish use and passage. Photo point monitoring would be conducted for six years and physical channel parameters measured every other year for six years. This monitoring would be completed by the CRWC.

Downstream sediment depositions at the Quail Valley Ranch (QVR) and Ochoco Irrigation District (OID) irrigation points of diversion would be monitored annually for three years to determine whether sediment has accumulated that would block irrigation intakes. The time period of three years is adequate for distribution of the bulk of

mobile sediment from the reservoir area. In order to monitor the potential changes in sediment accumulation at the diversion locations, river cross-sections have been established with survey control points at each diversion site that can be repeated each year to determine changes. If monitoring indicates that sediment is passing beyond the OID point of diversion additional monitoring points will be established further downstream.

Project design features are included with respect to the QVR and OID diversions which consist of two parts: prevention and mitigation. First, measures would be taken prior to mobilization of sediment that would help reduce potential sediment deposition. These measures would consist of installing concrete blocks that can easily be placed in the river and removed at a later date. Second, depositions of sediment that interfere with diversion operations would be removed. The sediment would be hauled offsite to an approved location within 5 miles of the project site on private property owned by OID. It is anticipated (West 2008) that the sediment amounts would be less than 100 cubic yards at each of the two diversion points. The watershed council has been in contact with various contractors that can be readily available to provide long-arm track hoes and other necessary machinery to clean out sediment accumulations.

Implementation of Alternative 2 would include construction or reconstruction of a one mile livestock management fence on the west edge of the road right of way (Map 1). A cattle guard would be installed as part of the fence at the recreation access point approximately 0.2 of a mile south of the Stearns Dam site.

No heavy construction activity would occur between March 15 and August 15 to protect a nearby prairie falcon nest. All equipment and materials used on the site would be inspected for, and cleaned of, noxious weeds prior to entering the site.

A temporary vehicle traffic control plan would be implemented during the project activities. The plan would be consistent with current Oregon Department of Transportation (ODOT) guidelines outlined in the Oregon Temporary Traffic Control Handbook. The plan would include the installation of traffic control signs on Highway 27 in both north and south directions of the project area. Traffic on Highway 27 would be delayed for up to 30 minutes during portions of the proposed actions. During the delays flaggers would be onsite to control vehicle traffic. The public would be notified in advance by newspaper and radio announcements of any expected delays. Traffic reader boards would be placed at Prineville and Bowman dam. Traffic delays and construction notice would be updated on ODOT's Tripcheck website.

Barriers and signs would be placed at the demolition site and staging areas excluding pedestrian activities during the implementation period.

Additional project design features are incorporated from the engineering design documents referenced above.

Alternative 3, complete removal of the dam and active removal of a portion of the sediment upstream of the dam

All actions are the same as Alternative 2 but include the following additional actions:

In order to minimize the potential for sediment stored behind the dam to move downstream and cause impacts to QVR and OID diversions, a portion of the stored reservoir sediment could be removed prior to full removal of the dam. It is estimated (West 2008) that the one mile river reach downstream of Stearns Dam can accommodate approximately 7,000 to 10,000 cubic yards of material. Therefore, the balance of approximately 3,000 to 6,000 cubic yards of the 13,000 cubic yards of reservoir sediment that would not be stored in-channel immediately downstream, would be removed using a track hoe and dump trucks. The excavation would occur after the dam is breached, the sediment is exposed, and as soon as moisture conditions would allow for equipment access.

Sediment removed would be hauled offsite to an approved location within 5 miles of the project site on private property owned by OID.

Summary of Alternatives Table 1

Action	Alternative 1	Alternative 2	Alternative 3
Remove Dam	No	Yes	Yes
Remove sediment behind Dam	No	No	3000-6000 cubic yards
Remove sediment at diversions	No	0-200 cubic yards	0-200 cubic yards
Fence Construction	No	1 mile	1 mile

Alternatives considered but eliminated from detailed analysis

Partially breaching the dam to allow for fish passage was considered. This alternative did not meet the purpose of the proposed action as it does not comply with the ROW regulations concerning removal of the structure upon relinquishment. For this reason this alternative was not considered in detail.

Conformance

The proposed action is consistent with the Upper Deschutes Record of Decision and Resource Management Plan 2005 (UDRMP). Objective TU -1; Provide new or modified rights-of-way for transportation/utility corridors and communication/energy sites to meet expected demands and minimize environmental impacts. UDRMP, page 135. Objective VR - 1: Manage all BLM administered lands in the planning area to meet the following Visual Resource Management (VRM) Classes: VRM Class 2 areas – Retain the existing character of landscapes. Manage landscapes seen from high use travel routes, recreation destinations, special management areas, or that provide a visual backdrop to communities for low levels of change to the characteristic landscape. In these areas, management activities may be seen but should not attract the attention of the casual observer. Changes should repeat the basic elements of form, line, color, texture, and scale found in the predominant natural features of the landscape. Guidelines: Identify and rehabilitate negative visual elements on public lands within the immediate foreground (0 to 1/4 mile) corridor of travel routes through special areas (ACECs, RNAs, Wild and Scenic River Corridors, WSAs) and along designated scenic or backcountry byways, trails, and major travel routes through the planning area. UDRMP page 101.

The proposed actions are also consistent with 43 CFR § 2805.12 and 2807.19 which are regulations that pertain to the termination of a ROW. Those regulations state that upon termination of a ROW the associated facilities must be removed.

Chapter 3 Affected Environment and Environmental Effects

Introduction

The affected environment describes the present condition and trend of issue-related elements of the human environment that may be affected by implementing the proposed action or an alternative. It describes past and ongoing actions that contribute to present conditions, and provides a baseline for analyzing cumulative effects.

The effects are the known and predicted effects from implementation of the actions, limited to the identified issues. Direct effects are those caused by the action and occurring at the same time and place. Indirect effects are those caused by the action but occurring later or in a different location. Cumulative effects result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions. The cumulative effects analysis includes other BLM actions, other Federal actions, and non-Federal (including private) actions. Reasonably foreseeable future actions are those for which there are existing decisions, funding, formal proposals, or which are highly probable, based on known opportunities or trends.

The watershed above Stearns Dam is a mixture of rangeland and forested parcels managed for livestock, farming, timber production, recreation (camping), and small, rural residential parcels. Map 2 in the appendix shows the project in relation to the issues to be analyzed.

Fish passage and habitat

A variety of fish species currently occupy the Crooked River, including redband trout which are the primary native game fish in the vicinity of Stearns Dam, and mountain whitefish. These native species migrate locally based on habitat conditions. Chinook salmon and summer steelhead (experimental population) were reintroduced above the Pelton/Roundbutte Hydroelectric Project in 2009 with the first adults returning from the ocean in 2012. These anadromous migratory fish currently have the ability to reach Stearns Dam.

All reaches of the mainstem are managed for native redband trout, with some hatchery rainbow trout emigrating from Prineville Reservoir.

Stearns Dam is an artificial barrier to fish migration on the Lower Crooked River, and is currently isolating a 13-mile reach of prime fish habitat from Stearns Dam upstream to Bowman Dam. The current dam is not necessarily a barrier due to its height, but due to its shape that includes a 30 foot concrete apron that prevents fish from moving over the dam. Upstream water temperature is cooler than downstream and the barrier limits fish from moving back upstream to better seasonal habitat, spawning and rearing habitat, and prevents genetic flow upstream.

The indicator used for analysis of effects to fish passage and habitat is passage or no passage and miles of habitat available.

Alternative 1

The analysis area includes the Crooked River from Bowman Dam downstream to Stearns Dam (13 miles of fish habitat), and downstream from Stearns Dam to Pelton Dam on Lake Billy Chinook (another 55+ miles). Fish can travel over Stearns Dam only in the downstream direction. Habitat upstream of Stearns Dam would continue to be unavailable to upstream migrating species.

Alternative 2

The dam would be removed and fish passage would be available in both directions. An additional 13 miles of habitat would become available to migrating species.

Alternative 3

Same as Alternative 2.

Cumulative Effects

Another action that has affected the amount of available fish habitat in the Crooked River is the passage of fish through and around Pelton/Round Butte (PRB) Dams which began in 2009. Prior to that action, none of the project area was available to salmon and steelhead since they could not get upstream past the PRB dam complex. The cumulative effect of that action combined with the current proposed action would be that salmon and steelhead would have 70+ miles of available habitat on the Crooked River. More information regarding fish passage over PRB complex is available at the Deschutes passage website at; http://www.deschutespassage.com/.

Downstream irrigators

Instead of a delta formation of sediment deposits typical of many reservoirs, Stearns Dam is more characteristic of a grade control structure; creating several deposition areas in the reach of the Crooked River it influences. The reservoir reach contains three distinct depositional areas and several areas of scour. Approximately 10,000 to 13,000 cubic yards of sediment has deposited behind Stearns Dam (WEST 2008). The sediment is composed primarily of gravels and sands, with small fractions of silt and cobble. There are no known significant sources of sediment contamination in the watershed (River Design Group 2012).

The sediment behind the dam is primarily made up of gravels and sand that have accumulated since the dam was constructed. The channel above and below the dam is a transport reach where sediment is being deposited and eroded continuously during winter months of high seasonal flow. A large sediment wedge has formed upstream of the dam. A seismic refraction study completed in October 2006 provides additional detail on the depth to bedrock at and above the dam (West 2008).

There are two points of diversion for irrigation water withdrawal within 1.3 miles downstream of Stearns Dam (the QVR diversion is 1.1 miles downstream and OID diversion is 1.3 miles downstream). The next downstream diversion is the People's Irrigation District (PID) which is eight miles downstream of Stearns Dam. Sediment depositions at the diversion points can reduce the ability to divert water into the canals. Sediment depositions are not currently an issue that requires maintenance at these points of diversion.

The indicator used for analysis of effects to downstream irrigators is cubic yards of sediment deposited at the points of diversion and is analyzed below.

Alternative 1

There would be no effects related to the movement of the stored sediments on irrigation since the dam would not be removed or sediments disturbed.

Alternative 2

The River Design Group completed a Sediment Evaluation Study (2013), which is the basis for the following analysis. It is expected that it could take anywhere from days to years for natural processes to fully evacuate the 10,000 to 13,000 cubic yards of sediment stored behind the structure, depending on subsequent flows. Sediment would likely be distributed downstream through the process of dispersion, where the mobilized particles are deposited relatively evenly in downstream reaches, as opposed to moving downstream as a solid pulse of sediment. Areas most likely to experience the most deposition are located within the first mile downstream of the dam (where there are no points of diversion), and again approximately 5 – 7 miles downstream of the dam (again, where there are no points of diversion). These areas have been modeled and found to experience the least

amount of shear stress and thus would be expected to experience the greatest amount of deposition. Sediment would be expected to be mobilized during high flows that generally occur between the beginning of March through the end of May. All of the sediment stored behind Stearns Dam would eventually make it downstream or until it encounters the next major barrier.

It is anticipated that the QVR diversion (1.1 miles downstream of Stearns Dam) and OID diversion (1.3 miles downstream of Stearns Dam) would see some deposition of transported sediment consisting of small gravels and sand. The models cannot predict the exact amounts of deposition but it is anticipated (West 2008) that the sediment amounts would be less than 100 cubic yards at each of the two diversion points, hence the proposed actions include efforts to remove depositions that would interfere with the diversion points. No sediments deposits are expected to reach PID but if sediment deposits occur that would interfere with the diversion point they would also be removed. The monitoring and sediment removal actions would continue for 3 years following removal of the dam.

Alternative 3

Approximately 3,000 to 6,000 cubic yards of the 13,000 cubic yards of the stored sediment would be removed. The remaining 7,000 to 10,000 cubic yards of stored sediment is expected to move downstream as described in Alternative 2. The exact amount of deposition at points of diversions is expected to be less than Alternative 2 and would be removed if they interfere with the diversion.

Cumulative effects

There are no other present or anticipated future actions that would have an effect on downstream irrigators.

Recreation

The Chimney Rock segment of the Lower Crooked Wild and Scenic River is increasingly popular for all kinds of recreationists. Thousands of people visit each year to enjoy the incredible fishing, camping, and scenic views. The area provides camping, fishing, hiking, and driving, or bicycling on the Crooked River Backcountry Byway. Highway 27 along the Crooked River from Prineville to Bowman Dam is 22 miles in length, with 8 miles of public riverfront access within this stretch.

The Stearns Dam area is commonly used by recreationists for fishing and waterfowl hunting. The proposed actions and staging would occur on about 1/3 mile of river frontage.

The indicator used for analysis of effects to recreation is the size of area where recreation activities would be limited.

Alternative 1

No effects.

Alternative 2

During the October 1 to November 31 implementation period recreation use would be limited on about 1/3 mile of the 8 miles of public river frontage. The presence of heavy equipment and human activity associated with the demolition actions would preclude recreational activities. The staging areas and the dam demolition site would be signed and or fenced to preclude public entry. Noise impacts (operation of heavy equipment to remove the dam and rehabilitate the area) during project implementation to people recreating outside of the immediate project

area (within a mile) would be limited to day light hours. Noise outside of a mile in the project area is expected to blend in with background noises of the highway and river.

Alternative 3

Same as Alternative 2.

Scenic Byway

The Crooked River National Back Country Byway runs for approximately 45 miles along State Highway 27 and is initially located in a wide, expansive river canyon near Prineville. Further south, at the project site, the canyon begins to noticeably narrow and change from a rural, agricultural setting to a rugged, narrow canyon with high basalt cliffs. The project is located in a relatively deep and narrow section of canyon. The Canyon opens back up into a rural setting further south for a few miles, and then narrows back down into a deep canyon at the start of the federally designated Wild and Scenic River corridor.

The existing dam is a concrete structure, 80 feet long, 150 feet wide, and 6 feet high (see Figure 1). It creates a moderate level of contrast due to the geometric form of the concrete box and strong horizontal line formed by the top of the dam as the water flows over it. The dam creates an additional contrast in the water body by creation of a flat water pool above the dam, and a uniform ramp of whitewater/riffles across the face of the dam. This contrast is not as apparent as the structural contrast of the concrete features, because still water and riffles are present at locations throughout the river corridor. The regular, almost geometric nature of the riffles across the dam face does increase the contrast with the characteristic landscape. A complete visual contrast rating is available at the BLM office in Prineville.

The indicator used for analysis of effects to the scenic byway is the amount of visual contrast.

Figure 01 – View southeast across dam from State Hwy 27

Alternative 1

The existing project creates a moderate visual contrast. The concrete structure on the east side of the river creates the most visual contrast.

Alternative 2

The removal of the concrete structure would reduce the visual contrast, improving scenic quality. The re-vegetation of disturbed areas would further decrease visual contrast.

Alternative 3

Same as Alternative 2.

Summary of effects

Table 2. Summary of effects.

Issues	**Indicators**	**Alt 1** (existing situation)	**Alt 2**	**Alt 3**
Effect on **amount of fish habitat**	Miles of available habitat	57	70	70
Effect on **downstream irrigators**	Cubic yards of sediment	0	Up to 200 cubic yards total for both QVR and OID. O cubic yards for PID	Up to 200 cubic yards total for both QVR and OID. O cubic yards for PID
Effect on **recreation access**	Miles of river available for public access during implementation activities	8	7.7	7.7
Effect on **Scenic Byway**	Amount of visual contrast	Moderate	Low	Low

Issues considered but eliminated from detailed analysis

While a number of other issues were raised during the scoping period, not all of them warranted detailed analysis to make a reasoned choice between alternatives or to determine the significance of impacts.

How would dam removal activities affect vehicle traffic on State Highway 27? State Highway 27 is immediately adjacent to the project site. Traffic on the road is for residential access, recreation access, and thru traffic. Data from the Oregon Department of Transportation in 2011 states that annual average daily traffic volume on State Highway 27 near Stearns Dam is 90 to 100 vehicle per day (http://highway.odot.state.or.us/cf/highwayreports/traffic_report_new.cfm). There are four to five residences within four miles south of the project site that use the highway to access the city of Prineville. The Lower Crooked Wild and Scenic River Chimney Rock Segment is approximately four miles south of the project site. This year round recreation area has nine developed campgrounds, two day use areas, and one trailhead. Thru traffic uses the

highway to travel from Prineville to Bowman Dam and Prineville Reservoir and to areas south. Traffic traveling from Prineville to State Highway 20 generally use George Millican road several miles west due to faster travel times. A traffic control plan is included as part of the proposed action that would limit delays to less than 30 minutes; therefore this issue will not be discussed further in this analysis.

What would be the effect of removing the dam on potential erosion adjacent to Highway 27*?* The design of the proposed action incorporates features to protect the integrity of the highway. The existing riprap along the highway would be augmented as needed for bank stabilization. As a result of the project design features being part of the proposed action, there would not be measurable effects from erosion on the highway; therefore, this issue will not be discussed further in this analysis.

What would be the effect of removing the dam on historical structures*?* Section 106 compliance for the proposed Stearns Dam removal was completed in consultation with the Oregon State Historic Preservation Office on December 31, 2012. The dam was identified as a historic site and evaluated to the National Register of Historic Places (NRHP). The dam did not meet the criteria and was determined not eligible to the NRHP. There are no other structures listed as or eligible for listing as historic within the project area. Based on this information the proposed project would have no effect on historical structures and the issue will not be discussed further in this analysis.

What would be the effect of removing the dam on the potential spread or introduction of noxious weeds? Project design features incorporated in the project proposal require that all equipment and materials used on the site would be inspected for and cleaned of noxious weeds prior to entering the site. Project design features also include restoration of all disturbed sites by seeding. As a result of the project design features being part of the proposed action, there would be no detectable change in the amount or spread of weeds. Therefore this issue will not be discussed further in this analysis.

How would dam removal activities affect wildlife? There is no threatened or endangered species or critical habitat in or around the project area. Resident and migratory birds were considered and would be unaffected by the proposed project because implementation would occur outside of breeding season and the shift in habitat from ponded water to moving water would occur in an area too small (approximately 500' long and 150' wide) to produce measurable effects and ponded water is not limited in the area. Fence design would incorporate mitigations for wildlife including 4 strands with the top and bottom smooth wire and distances for each wire from the ground would be as follows: 16 inches, 22 inches, 28 inches and 40 inches. There would not be any effects from the proposed action, therefore effects to wildlife will not be discussed further in this analysis.

What would be the effect of removing the dam on livestock management in the riparian area? As part of the project proposal a fence would be constructed or reconstructed that would serve the same barrier function that the dam currently serves to control livestock movement in the project area. This would mean livestock management in the riparian area would be unaffected, and livestock use would remain controlled. There would be no effects to livestock management and no effects on riparian vegetation. The issue is therefore not discussed further in this analysis.

How would fish populations be affected by removing the dam and drawing down the pond upstream of the dam? The reservoir pool would be drawn down incrementally and fish salvage would be completed within a 24 hour timeframe, such that only a few dozen small fish would die during drawdown. For further details see the Lower Crooked River Stearns Dam Removal Project, Fish Passage and Salvage Plan for Dam Removal, River Design Group, January 2013. Therefore, this issue will not be discussed further in this analysis.

Chapter 4 Public and other involvement

Tribes, individuals, organizations, or agencies consulted

The BLM first requested input on this project in June of 2012 by sending scoping letters to over 200 individuals, groups, local and state governments, and Indian tribes. Comments from this scoping period were considered in the design of alternatives. Most commenters were in support of the removal of the dam especially with respect to the result of improving fish habitat.

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River Design Group
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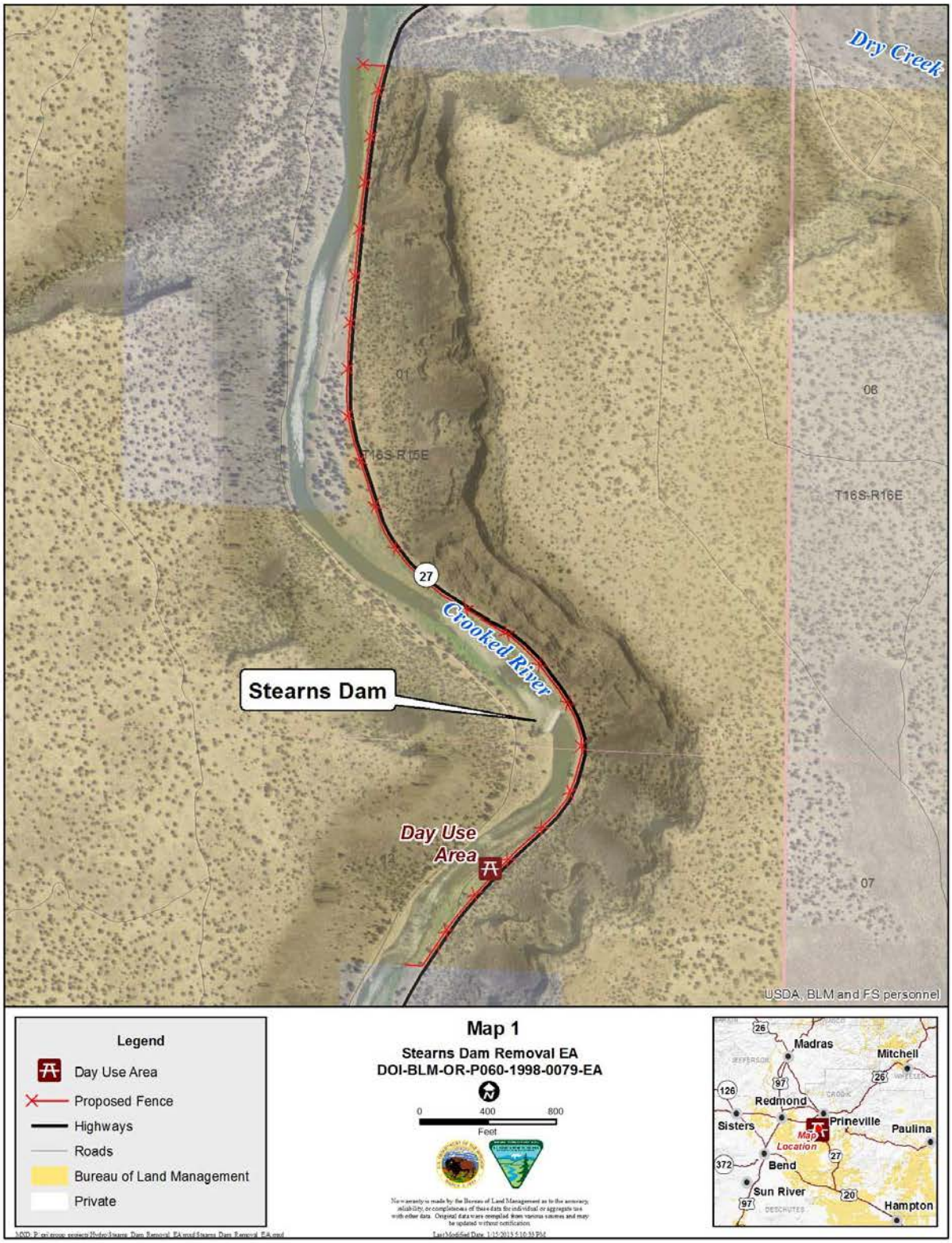
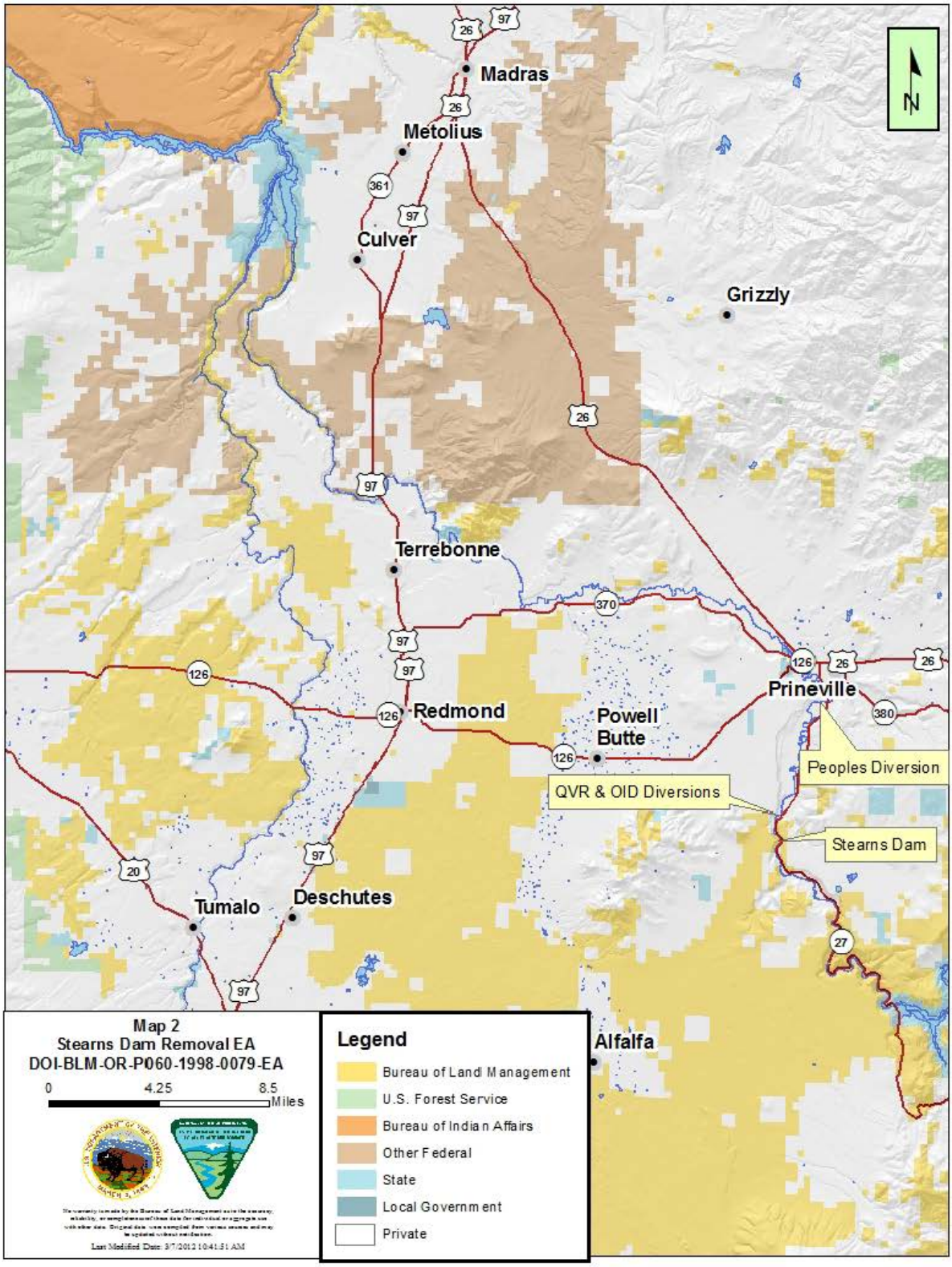
Oregon Department of Fish and Wildlife
Quail Valley Ranch

Appendix 1 Maps




Madras
Metolius
Culver
Grizzly
Terrebonne
Redmond
Powell Butte
Prineville
Peoples Diversion
QVR & OID Diversions
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Tumalo
Deschutes
Alfalfa
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Map 2
Stearns Dam Removal EA
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8.5
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Legend
Bureau of Land Management
U.S. Forest Service
Bureau of Indian Affairs
Other Federal
State
Local Government
Private

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Finding of No Significant Impact
Stearns Dam Removal
DOI-BLM-OR-P060 -1998-0079-EA

US Department of the Interior, Bureau of Land Management
Prineville Field Office, Oregon

Introduction

The Bureau of Land Management (BLM) has completed an Environmental Assessment (EA No. DOI-BLM-OR-P060-1998-0079-EA) that analyzes the effects of two action alternatives to remove Stearns Dam on the Crooked River on BLM lands south of Prineville, Oregon. The right of way (ROW) holder no longer uses the dam as the point of diversion for the water right and has requested to relinquish the ROW he holds for the diversion dam. The regulations (43 CFR § 2805.12 and 43 CFR § 2807.19) for ROWs require that the ROW holder remove the structure.

The prosed action is to remove Stearns Dam. The removal would be accomplished using a variety of methods and mechanized equipment to remove the concrete shell and move or remove rock and sediment. The project would include constructing or reconstructing approximately one mile of fence on the east side of the Crooked River to facilitate livestock management within the riparian area and may include installation of a cattle guard at the adjacent BLM day use recreation area upstream of the dam. The EA is incorporated by reference in this Finding of No Significant Impact (FONSI).

The Council on Environmental Quality (CEQ) regulations state that the significance of impacts must be determined in terms of both context and intensity (40 CFR 1508.27).

Context

The Proposed Action would occur in the Crooked River watershed and would have local impacts on affected interests, lands, and resources similar to and within the scope of those described and considered in the Upper Deschutes Proposed Resource Management Plan/Final Environmental Impact Statement (Upper Deschutes Proposed RMP/FEIS) January 2005, and the Brothers / La Pine Proposed RMP/FEIS, September 1988. The actions described represent anticipated program implementation within the scope and context of the RMPs. The removal of the water diversion dam would not have international, national, regional, or state-wide importance not previously considered in the NEPA analysis for these RMPs.

Intensity

We have considered the potential intensity and severity of the impacts anticipated from implementation of a Decision on this EA relative to each of the ten areas suggested for consideration by the CEQ. With regard to each:

1. **Would any of the alternatives have significant beneficial or adverse impacts (40 CFR 1508.27(b)(I)? No.**

   Rationale: The proposed action would impact resources as described in the EA. Mitigations to reduce impacts to the ground were incorporated in the design of the proposed action. These project design features are outlined in Chapter 2 of the EA. None of the environmental effects discussed in detail in the EA are considered significant, nor do the effects exceed those described in the Upper Deschutes RMP/EIS or Brothers / La Pine RMP/EIS.

2. **Would any of the alternatives have significant adverse impacts on public health and safety (40 CFR 1508.27(b)(2)? No.**

   Rationale: The removal of Stearns Dam will eliminate a potential hazard for the public who use the river for water based recreation. There are no known adverse impacts on public health and safety.

3. **Would any of the alternatives have significant adverse impacts on unique geographic characteristics (cultural or historic resources, park lands, prime and unique farmlands, wetlands, wild and scenic rivers, designated wilderness or wilderness study areas, or ecologically critical areas (ACECs, RNAs, significant caves)) (40 CFR 1508.27(b)(3)? No.**

   Rationale: In accordance with Section 106 of NHPA (1966, as amended), BLM intensively surveyed the area of potential affect for archaeological properties. Stearns Dam was recorded as a historic site and determined not eligible to the National Register of Historic Properties (NRHP). For these reasons, the proposed removal of the dam would have no effect to cultural resources. The project design features are outlined in Chapter 2 of the EA and include complete restoration actions for disturbed vegetation in the riparian area/wetlands. There are no effects on park lands, prime farm lands, wild and scenic rivers, or ecologically critical areas.

4. **Would any of the alternatives have highly controversial effects (40 CFR 1508.27(b)(4)? No.**

   Rationale: There are no effects which are expected to be highly controversial.

5. **Would any of the alternatives have highly uncertain effects or involve unique or unknown risks (40 CFR 1508.27(b)(5)? No.**

   Rationale: There are no unique or unknown risks. The BLM has implemented similar actions in similar areas. The environmental effects are fully analyzed in the EA. There are no predicted effects on the environment that are considered to be highly uncertain or involve unique or unknown risks.

6. **Would any of the alternatives establish a precedent for future actions with significant impacts (40 CFR 1508.27(b)(6)? No.**

   Rationale: Similar restoration projects have occurred numerous times for many years throughout BLM. There is no evidence that this action has potentially significant environmental effects. This management activity does not commit the BLM to pursuing further actions, and as such would not establish a precedent or decision for future actions with potentially significant environmental effects.

7. **Are any of the alternatives related to other actions with potentially significant cumulative impacts (40 CFR 1508.27(b)(7)? No.**

   Rationale: The actions considered in the proposed action were considered by the interdisciplinary team within the context of past, present, and reasonably foreseeable future actions. Significant cumulative effects are not predicted. An analysis of the effects of the proposed action is described in the EA.

8. **Would any of the alternatives have significant adverse impacts on scientific, cultural, or historic resources, including those listed or eligible for listing on the National Register of Historic Resources (40 CFR 1508.27(b)(8)? No.**

   Rationale: The project will not adversely affect scientific, cultural, or historic resources, including those eligible for listing in the National Register of Historic Places. An analysis of the effects of alternatives is described in the EA.

9. **Would any of the alternatives have significant adverse impacts on threatened or endangered species or their critical habitat (40 CFR l508.27(b)(9)? No.**

   Rationale: There is no threatened or endangered species or critical habitat in or around the project area. Resident and migratory birds were considered and would be unaffected by the proposed project because implementation would occur outside of breeding season. The proposed removal of the dam would benefit summer steelhead an experimental population.

10. **Would any of the alternatives have effects that threaten to violate federal, state, or local law or requirements imposed for the protection of the environment (40 CFR l508.27(b)(lO)? No.**

    Rationale: The project does not violate any known Federal, State, Local or Tribal law or requirement imposed for the protection of the environment. State, local, and tribal interests were given the opportunity to participate in the environmental analysis process.

Finding

On the basis of the information contained in the EA, the consideration of intensity factors described above, all other information available to me, it is my determination that: (1) implementation of the alternatives would not have significant environmental impacts beyond those already addressed in the Upper Deschutes Resource Management Plan (ROD/EIS September 2005); (2) the alternatives are in conformance with the Upper Deschutes Resource Management Plan; and (3) neither alternative would constitute a major federal action having a significant effect on the human environment. Therefore, an EIS or a supplement to the existing EIS is not necessary and will not be prepared.

An <u>unsigned</u> FONSI is issued during the EA comment period.
The FONSI will be signed after the EA comment period and issued with the Decision Record.

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Molly M. Brown Date
Field Manager, Deschutes Resource Area