# RECLANATION Managing Water in the West

**Categorical Exclusion Checklist** 

## Horse Creek Wood Loading Design Project

KBAO-CEC-2017-009

Prepared by:	Kirk Young Date: 0/9/30/1 Natural Resources Specialist
Concur with Item 6:	
	Gary Scholze Cultural Resource Specialist
Concur with Item 9:	Kristen Hiatt ITA Coordinator, Klamath Basin Area Office
Recommended by:	Kristen Hiatt Environmental Compliance Branch Chief, Klamath Basin Area Office
Reviewed by:	Jennie M. Land Resource Management Division Chief, Klamath Basin Area Office
Approved by:	Jeff Nettleton Area Manager, Klamath Basin Area Office





DATE: 6/2/2017 PROPOSING AGENCY/APPLICANT: Mid Klamath Watershed Council

PROJECT: Horse Creek Wood Loading Design Project

#### **EXCLUSION CATEGORY:**

516 DM 14.5 A.3. – Research activities, such as nondestructive data collection and analysis, monitoring, modeling, laboratory testing, calibration, and testing of instruments or procedures and nonmanipulative field studies.

516 DM 14.5 B.1 – Routine planning investigation activities where the impacts are expected to be localized, such as land classification surveys, topographic surveys, archeological surveys, wildlife studies, economic studies, social studies, and other study activity during any planning, preconstruction, construction, or operation and maintenance phases.

#### NATURE OF ACTION:

The Mid Klamath Watershed Council (MKWC) was selected for Federal funding through the Bureau of Reclamation's (Reclamation) 2016 Klamath Coho Habitat Restoration Grant Program (administered by the National Fish and Wildlife Foundation (NFWF)) and is requesting approval to proceed with its Horse Creek Wood Loading Design Project through issuance of grant funding by NFWF. The purpose of the project is to create a group of restoration plans for the upper half of the three-mile long Horse Creek Valley and to choose one of the designs that will be proposed to funders for future implementation.

**LOCATION:** (See maps in Exhibits A - C)

General: The area of interest is located near the town of Horse Creek, California and along Horse Creek from mile 1.7

to mile 3.1 from its confluence with the Klamath River

**LAT:** 41° 50′ 36.94″ N **LONG:** 123° 2′ 11.54″ W

PLSS: Sections 7 and 8 of T46N, R10W of Mount Diablo Meridian, Siskiyou County, California

COST AUTHORITY NO: RX.001261ME.3000000 7.5 MINUTE QUAD MAP:

17XR0680A3 Hamburg of Siskiyou County, California

#### **DESCRIPTION OF PROPOSED ACTION/COMMENTS:**

The MKWC applied and was selected for funding under Reclamation's 2016 Klamath Coho Habitat Restoration Grant Program (Grant Program) for its Horse Creek Wood Loading Design Project. The Grant Program is funded by Reclamation as part of compliance with the National Marine Fisheries Service's and United States Fish and Wildlife Service's current *Biological Opinions on the Effects of Proposed Klamath Project Operations from May 31, 2013, through March 31, 2023, on Five Federally Listed Threatened and Endangered Species* (2013 BiOp). NFWF, on behalf of Reclamation, would issue the MKWC a total of \$99,428.15 for the purpose of creating a group of restoration plans for the upper half of the three-mile long Horse Creek Valley and choosing one of the designs that will be proposed to funders for future implementation.

Conceptualized designs will address limiting factors for coho survival in the Upper Klamath River Basin, and each will be different based on budget and landowner restrictions. Floodplain grading, wood jam and beaver analogue structure, and off-channel site designs will be prepared. Landowners in this portion of the Horse Creek Valley include seven people or corporations and one County Roads Department. A very critical element of this project is to conduct landowner outreach to determine both who is supportive of a fisheries restoration project and to what extent they are willing to allow removal/re-routing/upgrading of Bar Road, diversions, and buildings within Horse Creek's early 1900s floodplain. Three of the four landowners immediately adjacent to Horse Creek have the MKWC's permission to conduct this design project. In the event that the larger project, which includes Bar Road removal/reroute/upgrade, is not chosen because of unwilling landowners and/or budget restraints, MKWC will develop this larger project option to at least 50% design level and archive the plan so that it will readily be available if/when there is landowner consent.

The primary activities that will be employed through this Horse Creek Wood Loading Project are:

#### Activity 1. Characterization of Existing Conditions

This task would include: acquisition of a high resolution LiDAR surface model of the project area, total station surveys of key features including Forest Service Bridge 46N60, and topographic and bathymetric surfaces, hydrologic characterization, location of underground utilities and wells, subsurface investigations via monitoring of groundwater monitoring wells, installation and graphing of level logger data, and pebble counts. Much of this time will be spent

capturing surface water elevations and discharge rates throughout the reach during high water events to inform the hydraulic model.

#### Activity 2. Hydraulic Model Development

This task would include preparation of HEC-RAS 1D hydraulic models for existing conditions and proposed alternatives. This task would be an iterative process with sub-tasks described in Activities 1. 3 and 6.

#### Activity 3. Restoration Design Development and Analysis

During this task, floodplain grading, wood jam and beaver analogue structure, and off-channel site designs would be prepared. In addition, schedule of quantities, factor of safety for constructed wood jams and beaver analogue structures, and risk to infrastructure would be evaluated. Restoration designs would focus on providing cost effective treatments to maximize beneficial instream and floodplain habitats while protecting existing infrastructure; including Forest Service Bridge 46N60, Horse Creek Road, and two major irrigation diversions within the project reach. For the design options that involve removal, re- route and or upgrade of Bar Road, Morgan and Rainey Diversions, and buildings in the floodplain, USFWS Engineers and Geomorphologists and NOAA Ecosystems Analysts, would take the lead on the basic plan of where the creek will occupy the valley and the floodplain grading that will be involved to get to these alignments. MKWC Fisheries Co-Directors would be in charge of running these plans by landowners and get their feedback. Even if this larger project is not the one chosen to be implemented because of budget/landowner restrictions, the plan would be archived in an Options Analysis and Basis of Design Report so that it is readily available should conditions change. This task would be an iterative process with sub-tasks described in Activities 2 and 6.

#### Activity 4. Develop Sources and Cost Estimates for Native Construction Materials

During this task, the design team would identify and compile sources and costs for native construction materials including whole tree materials, willow cuttings and clumps, and conifer seedlings.

#### Activity 5. Construction Cost Estimates

During this task, cost estimates for proposed restoration designs including materials, site staking and control surveys, grading and construction, and construction oversight would be developed in consultation with local heavy equipment contractors.

#### Activity 6. Analysis of Alternatives

Elements of this task would include examination of the feasibility and effectiveness of the alternatives developed in the preceding tasks. The alternatives would be evaluated based upon data collection, analysis and professional judgment of the design team. Below is a list describing the different components that may be examined for each alternative:

- Habitat Design (form, function, and composition)
- Constraints due to effects on adjacent public and private lands
- Infrastructure protection requirements (upgrade, re-route, removal)
- Hydrology/ flow patterns/ hydrogeology/ flooding
- Water quality improvement
- Sediment load/removal/storage/transport
- Evaluation of goals attainment
- Expected longevity effectiveness
- Phasing components of the alternatives
- Preliminary cost estimate for each alternative
- Requirements for implementation
- Cost for acquiring additional data if needed
- Graphical analysis of options (plan map, cross-sections, elevations, etc.)
- Risk assessment as it relates to alternative selection and implementation scheduling and methods of phasing.
   The preferred alternative may consist of a single preferred alternative, or a combination of alternatives depending on existing and future constraints. If needed, both short-term and long-term recommendations will be developed.

#### Activity 7. Basis of Design Report Preparation

The final task would synthesize the findings from previous tasks into the Basis of Design Report. Specific activities to be completed in this task include:

- · Develop final maps and figures
- Compile and summarize information developed during previous tasks
- Compile and format report sections
- Circulate a draft report to partners and stakeholders for comment
- Revision of draft document

· Production and submittal of final report

Activity 8. Project Oversight

- Assist Administrative Team in creating contracts and coordinate subcontractors to sign
- Write reports to potential funder(s)
- · Coordinate archiving of Basis of Design Report with Options Analysis

In summary, the proposed project and nature of this request includes modeling, designing, and planning elements for a future implementation effort. An additional cultural and environmental analysis would be required prior to implementing the construction activities that are to be developed as part of this current request and subsequent assessment.

#### **Water Resources**

Impacts to waters of the United States have been considered and are not expected as a result of the proposed action. This determination was made as the proposed action includes only nondestructive data collection, monitoring, modeling, planning, and development of engineering design options that would be constructed at a later time.

#### **Indian Trust Assets Compliance**

Indian Trust Assets (ITAs) are legal interests in property or rights held in trust by the United States for Indian Tribes or individuals. Reclamation considered impacts to ITAs by consulting with the Mid-Pacific Indian Trust Coordinator, Kristen Hiatt, who made the following determination on June 8, 2017: "Based on the nature of the planned work it does not appear to be in an area that will impact Indian hunting or fishing resources or water rights nor is the proposed activity on actual Indian lands. It is reasonable to assume that the proposed action will not have any impacts on ITAs" (Exhibit D).

#### **Biological Resources**

A list of Federally Listed, Proposed, and Candidate species that may occur within Siskiyou County, California is attached (Exhibit E). The potential impacts to all species included on the list, as a result of the proposed project, have been considered. It has been determined that the proposed activities are not expected to have any effect on any of the species or their habitats. This decision is based on analysis of current information on the potential effects of the action, known existing populations, and habitat requirements for the species. Furthermore, this proposed restoration activity is consistent with the type of actions that were analyzed in the National Marine Fisheries Service's and United States Fish and Wildlife Service's 2013 BiOp.

#### **Cultural Resources**

Reclamation's Mid-Pacific Region Cultural Resources Branch reviewed the proposed project under Section 106 of the National Historic Preservation Act (NHPA; Public Law 95-515). In a memorandum dated June 6, 2017 (Exhibit F), Mid-Pacific Archaeologist, Gary Scholze, stated that this proposed project "is the type of undertaking that does not have the potential to cause effects on historic properties, should such properties be present, pursuant to 36 CFR 800.3(a)(1)." At this time, Reclamation has no further obligations under Section 106 of the NHPA; however, should the proposed action change, additional review, which may include consultation with the State Historic Preservation Officer, may be required.

EVALUATION OF CRITERIA FOR CATEGORICAL EXCLUSION			Yes	Uncertain
1.	This action or group of actions would have a significant effect on the quality of the human environment. (40 CFR 1502.3)	Х		
2.	This action or group of actions would have highly controversial environmental effects or involve unresolved conflicts concerning alternative uses of available resources. (NEPA Section 102(2)(E))	х		
EVALU	EVALUATION OF EXCEPTIONS TO ACTIONS WITHIN CATEGORICAL EXCLUSION			
1.	This action would have significant adverse effects on public health and safety.	х		
2.	This action would have significant impacts on such natural resources and unique geographical characteristics such as historic or cultural resources; park, recreation or refuge lands; wilderness areas; wild or scenic rivers, national natural landmarks; sole or principal drinking aquifers; prime farmlands; wetlands (EO 11990); floodplains (EO 11988 as amended by Executive Order 13690 on 1/29/15)); national monuments; migratory birds (EO 13186); and other ecologically significant or critical areas.	x		
3.	This action will have highly uncertain and potentially significant environmental effects or involve unique or unknown environmental risks.	Х		

4.	This action will establish a precedent for future action or represent a decision in principle about future actions without potentially significant environmental effects.	х			
5.	This action has a direct relationship to other actions with individually insignificant, but cumulatively significant environmental effects.	Х			
6.	This action will have significant impacts on properties listed or eligible for listing in the in the National Register of Historic Places (National Register) as determined by either the bureau or office. (This determination must be made or coordinated with a Reclamation archeologist)	х			
7.	This action will 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.	Х			
8.	This action threatens to violate Federal, State, local or Tribal law or requirements imposed for protection of the human environment.	Х			
9.	This action will affect ITAs. (This determination must be completed and documented by, or in coordination with, the designated regional ITA coordinator; Policy Memorandum dated 12/15/1993)	Х			
10.	This action will 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. (EO 13007)	х			
11.	This action will have a disproportionately high and adverse effect on low income or minority populations. (EO 12898)	х			
12.	This action will contribute to the introduction, continued existence, or spread of noxious weeds or non-native 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 EO 13112)	Х			
	Mid-Pacific Region Cultural Resource Specialist concurred with Item 6.  ITA Coordinator concurred with Item 9.				
<ul> <li>NEPA Action Recommended</li> <li></li></ul>					

Exhibit A. Google Earth Image of Horse Creek Wood Loading Design Project Site.

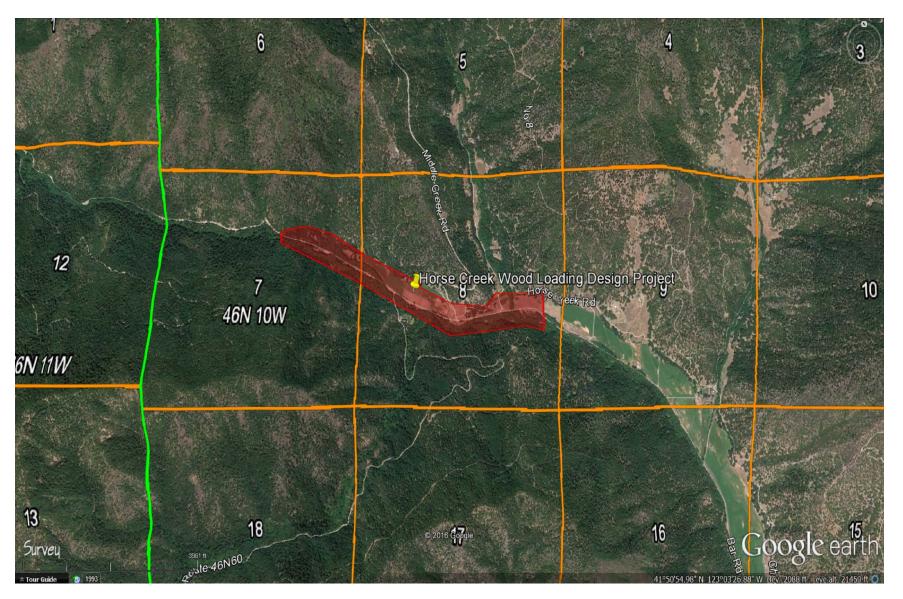
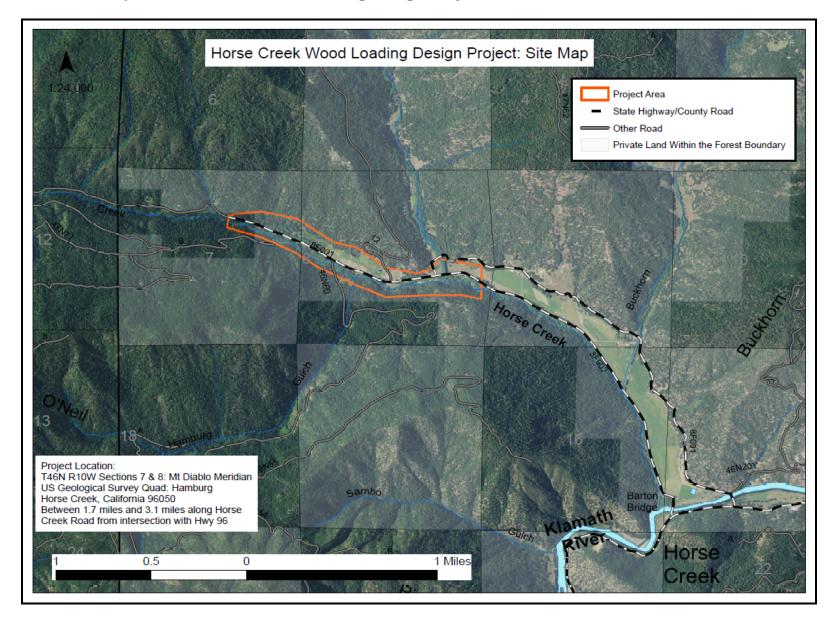
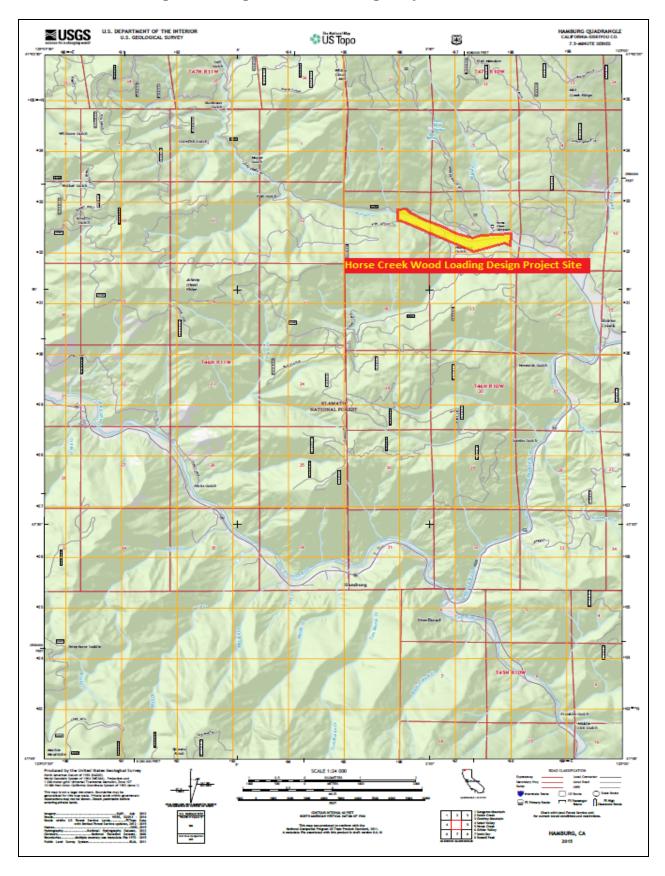


Exhibit B. Site Map of Horse Creek Wood Loading Design Project.



**Exhibit C. Hamburg Quadrangle Demonstrating Project Site.** 



#### **Exhibit D. Coordination and Collaboration Regarding Indian Trust Assets.**

#### Indian Trust Assets Request Form (MP Region)

Submit your request to your office's ITA designee or to MP-400, attention Deputy Regional Resources Manager.

Date: 6/7/2017

Requested by (office/program)	Kirk Young, Natural Resource Specialist, KBAO
Fund	17XR0680A3
WBS	RX.001261ME.3000000
Fund Cost Center	25320000
Region # (if other than MP)	
Project Name	Horse Creek Wood Loading Design Project
CEC or EA Number	KBAO-CEC-2017-009
	The Mid Klamath Watershed Council (MKWC) applied and was selected for funding under Reclamation's 2016 Klamath Coho Habitat Restoration Grant Program (Grant Program) for its Horse Creek Wood Loading Design Project. The Grant Program is funded by Reclamation as part of compliance with the current 2013 Biological Opinion for operation of the Klamath Project. NFWF, on behalf of Reclamation, would issue the MKWC a total of \$99,428.15 for the purpose of creating a group of restoration plans for the upper half of the three-mile long Horse Creek Valley and choosing one of the designs that will be proposed to funders for future implementation.  Conceptualized designs would address limiting factors for coho survival in the
Project Description (attach additional sheets if needed and include photos if appropriate)	Upper Klamath River Basin, and each will be different based on budget and landowner restrictions. Floodplain grading, wood jam and beaver analogue structure, and off-channel site designs would be prepared. Landowners in this portion of the Horse Creek Valley include seven people or corporations and one County Roads Department. A very critical element of this project is to conduct landowner outreach to determine both who is supportive of a fisheries restoration project and to what extent they are willing to allow removal/re-routing/upgrading of Bar Road, diversions, and buildings within Horse Creek's early 1900s floodplain. Three of the four landowners immediately adjacent to Horse Creek have the MKWC's permission to conduct this design project. In the event that the larger project, which includes Bar Road removal/reroute/upgrade, is not chosen because of unwilling landowners and/or budget restraints, MKWC would develop this larger project option to at least 50% design level and archive the plan so that it would be readily available if/when there is landowner consent.
	The primary activities that would be employed through this Horse Creek Wood Loading Project are:  Activity 1. Characterization of Existing Conditions This task would include: acquisition of a high resolution LiDAR surface model of
	the project area, total station surveys of key features including Forest Service Bridge 46N60, and topographic and bathymetric surfaces, hydrologic characterization, location of underground utilities and wells, subsurface

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investigations via monitoring of groundwater monitoring wells, installation and graphing of level logger data, and pebble counts. Much of this time would be spent capturing surface water elevations and discharge rates throughout the reach during high water events to inform the hydraulic model.

#### Activity 2. Hydraulic Model Development

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### Project Description (continued)

Activity 4. Develop Sources and Cost Estimates for Native Construction Materials During this task, the design team would identify and compile sources and costs for native construction materials including whole tree materials, willow cuttings and clumps, and conifer seedlings.

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Activity 7. Basis of Design Report Preparation The final task would synthesize the findings from previous tasks into the Basis of Design Report. Specific activities to be completed in this task include: · Develop final maps and figures Compile and summarize information developed during previous tasks Compile and format report sections Circulate a draft report to partners and stakeholders for comment Revision of draft document Production and submittal of final report **Project Description** Activity 8. Project Oversight (continued) Assist Administrative Team in creating contracts and coordinate subcontractors to sign Write reports to funder Coordinate archiving of Basis of Design Report with Options Analysis In summary, the proposed project and nature of this request includes modeling, designing, and planning elements for a future implementation effort. An additional cultural and environmental analysis would be required prior to implementing the construction activities that are to be developed as part of this current request. \*Project Location General: The area of interest is located near the town of Horse Creek, California (Township, Range, and along Horse Creek from mile 1.7 to mile 3.1 from its confluence with the Klamath River. See maps in Exhibits B and C. Section, e.g., T12 R5E S10, or LAT: 41° 50′ 36.94″ N Lat/Long cords, LONG: 123° 2' 11.54" W DD-MM-SS or PLSS: Sections 7 and 8 of T46N, R10W of Mount Diablo Meridian, Siskiyou decimal degrees). County, California Include map(s)

8, Kirk Young 6/7/3017
Signature Printed name of preparer Date

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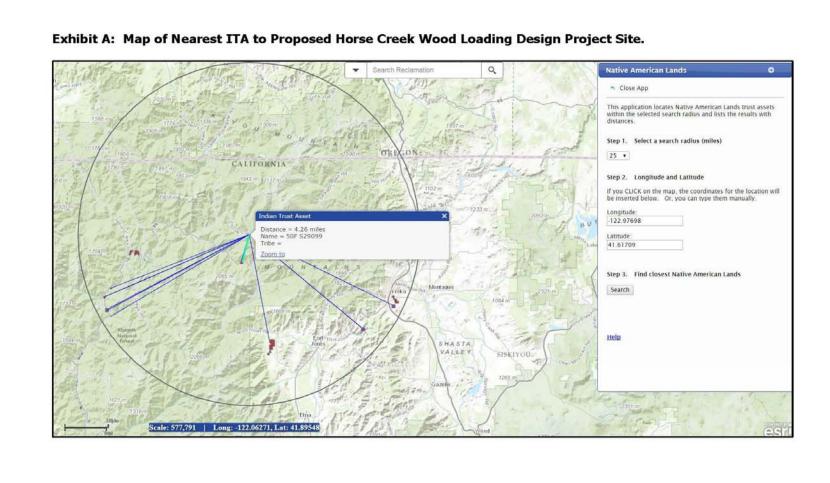
#### ITA Determination:

The closest ITA to the proposed <u>Horse Creek Wood Loading</u>
<u>Design Project</u> activity is the <u>50F S29099 Public Domain</u>
<u>Allotment</u> about <u>4.26</u> miles to the south-southwest of the nearest project site (see attached image in Exhibit A).

Based on the nature of the planned work it <u>does not</u> appear to be in an area that will impact Indian hunting or fishing resources or water rights nor is the proposed activity on actual Indian lands. It is reasonable to assume that the proposed action <u>will not</u> have any impacts on ITAs.

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Indian Trust Assets Request Form 2015 (04-13-2015).docx



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## Exhibit E. Federally Listed Endangered, Threatened, and Candidate Species that may occur within Siskiyou County and the Proposed Project Location.



#### United States Department of the Interior

FISH AND WILDLIFE SERVICE Klamath Falls Fish and Wildlife Office 1936 California Avenue, Klamath Falls, Oregon 97601 (541) 885-8481 FAX (541)885-7837 kfalls@fws.gov



#### LISTED, PROPOSED, AND CANDIDATE SPECIES THAT MAY OCCUR IN SISKIYOU COUNTY, CALIFORNIA

Status:	Endar	gered
Diams.	Liluai	120100

Phylum	Common Name	Scientific Name	Critical Habitat
Fish	Lost River sucker	Deltistes luxatus	Designated
Fish	Shortnose sucker	Chasmistes brevirostris	Designated
Mamma1	Gray wolf	Canis lupus	150
Invertebrate	Shasta crayfish	Pacifistacus fortis	
Plant	Yreka phlox	Phlox hirsute	
Plant	Greene's tuctoria	Tuctoria greenei	Designated
Plant	Gentner's fritillary	Fritillaria gentneri	Designated

#### Status: Threatened

Phylum	Common Name	Scientific Name	Critical Habitat
Bird	Northern spotted owl	Strix occidentalis caurina	Designated
Bird	Yellow-billed cuckoo (Western DPS)	Coccyzus americanus occidentalis	Proposed
Amphibian	California red-legged frog	Rana aurora draytonii	Designated
Amphibian	Oregon spotted frog	Rana pretiosa	
Plant	Slender Orcutt grass	Orcuttia tenuis	Designated

#### Status: Proposed

Phylum	Common Name	Scientific Name	Critical Habitat
Mammal	Wolverine	Gulo gulo luscus	1077 1000 1711 1

#### Status: Candidate

Phylum	Common Name	Scientific Name	-
Plant	Whitebark Pine	Pinus albicaulis	

Updated April 19, 2017

## Exhibit F. Correspondence and Concurrence Regarding Consultation on Section 106 of the National Historic Preservation Act.

#### CULTURAL RESOURCES COMPLIANCE Division of Environmental Affairs Cultural Resources Branch (MP-153)

MP-153 Tracking Number: 17-KBAO-179

Project Name: Horse Creek Wood Loading Design Planning Project

NEPA Document: KBAO-CEC-2017-009

NEPA Contact: Kirk Young, Natural Resources Specialist

MP-153 Cultural Resources Reviewer: Gary Scholze, Archaeologist

Date: June 6, 2017

Reclamation proposes to issue funding through the Reclamation Klamath Coho Habitat Restoration Grant Program and provide approval to the National Fish and Wildlife Foundation to release the funding to the grantee, Mid-Klamath Watershed Council. The purpose of the project is to create a group of restoration plans for the upper half of the three-mile long Horse Creek Valley and choose one of the designs to propose to funders for future implementation. An additional cultural and environmental analysis would be required prior to implementing the construction activities that are to be developed for this planning project. These actions are strictly for planning purposes and consist of nondestructive project planning activities.

Reclamation determined that the proposed action is the type of undertaking that does not have the potential to cause effects on historic properties, should such properties be present, pursuant to 36 CFR § 800.3(a)(1). As such, Reclamation has no further obligations under 54 U.S.C. § 306108, commonly known as Section 106 of the National Historic Preservation Act (NHPA). Based on analysis of the project activities, I concur with Item 6 in the CEC that the proposed action for this project would have no significant impacts on properties listed, or eligible for listing on the National Register of Historic Places.

This document conveys the completion of the cultural resources review and NHPA Section 106 process for this undertaking. The proposed action would have no impacts on cultural resources. Please retain a copy of this document with the administrative record for the proposed action. Should the proposed action change or implementation of any of the planning activities, additional review under Section 106, possibly including consultation with the State Historic Preservation Officer, may be required.