# RECLAMATION

Managing Water in the West

**Finding of No Significant Impact** 

# Horse Creek Habitat Restoration Project – Reconnaissance and Design

Siskiyou County, California

2019-FONSI-003

Prepared by:	Kilk Juny FOR Date: 8/29/2019	_
	Yvonne Bernal, Natural Resource Specialist Denver Technical Service Center	
	Mik 1/2019 Date: 8/39/2019	
	Kirk Young, Natural Resource Specialist Klamath Basin Area Office	
Concur:	Date: 9/3/2019	
804	Kristen Hiatt, Environmental Compliance Branch Chief Klamath Basin Area Office	
Concur:	Date: 9/3/2019	
	Jennie M. Land, Resource Management Division Chief Klamath Basin Area Office	
Approved by:	Juffey Mouleson Date: 9/3/19	
	Jeff Nettleton, Area Manager Klamath Basin Area Office	

## **Background**

The Bureau of Reclamation (Reclamation) has completed an Environmental Assessment (EA) for the *Horse Creek Habitat Restoration Project—Reconnaissance and Design* (Project) and is issuing a Finding of No Significant Impact (FONSI). This FONSI and attached EA are in accordance with the National Environmental Policy Act (NEPA) (42 United States Code (USC) §4321 et seq.), the Council on Environmental Quality Regulations for implementing the Procedural Provisions of NEPA (40 Code of Federal Regulations (CFR) Parts 1500-1508), and the Department of the Interior regulations for the Implementation of the NEPA (43 CFR Part 46).

The Project site is located in northwestern California west of Interstate 5. It lies along a 1.5-mile reach of Horse Creek, a tributary to the Upper Klamath River at River Mile 147, in Siskiyou County (map in Appendix A of attached EA).

This Project is only for issuing grant funds which will be administered through the National Fish and Wildlife Foundation (NFWF) to the Mid-Klamath Watershed Council (MKWC) as part of the Klamath River Coho Restoration Grant Program (Grant Program) authorized by the Fish and Wildlife Coordination Act (16 USC 661 et seq.) as amended. The funding associated with the Project will be used to complete 100 percent engineering designs for the removal of the Middle Creek culvert on Bar Road, improve Horse Creek's floodplain connectivity and off-channel habitats, and design summer and winter habitats through the addition of wooded structures. There will be no ground disturbing activities.

The Project is needed to ensure Reclamation remains in compliance with the conservation measures identified in the National Marine Fisheries Service (NMFS), *Endangered Species Act Section* 7(a)(2) *Biological Opinion, and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Response for Klamath Project Operations from April 1, 2019 through March 31, 2024* (NMFS 2019 BiOp) which serve to minimize the adverse effects associated with the continued operation of the Klamath Project. Additional NEPA and other applicable environmental compliance may be required if the design plan is implemented, however, implementation of the developed designs is outside the scope of the EA and this FONSI.

## **Alternatives Including the Proposed Action**

#### **No Action Alternative:**

Under the No Action Alternative, Reclamation would not provide funding in the amount of \$131,541.15 for NFWF to administer to MKWC under the Grant Program for the design of the Project. Horse Creek and the surrounding proposed Project areas would not change from existing conditions, the purpose of the Project would not be met, and Reclamation would not be in compliance with the conservation measures outlined in the NMFS 2019 BiOp.

#### **Proposed Action Alternative:**

Under the Proposed Action Alternative, Reclamation would provide funding in the amount of \$131,541.15 to NFWF to administer to MKWC under the Grant Program. MKWC would use the funding to develop 100 percent engineering designs for fisheries habitat restoration along 1.5 miles of Horse Creek in Siskiyou County. Tasks that would be funded include MKWC and their partners driving to and walking around the proposed Project site (up to 20 site visits), surveying the site, measuring water surface elevations, communicating with private landowners and stakeholders, and office work using hydraulic modeling and drafting software. No ground disturbing activities would take place. Implementation of the designs would not be funded with Reclamation or NFWF funds under the Grant Program. Implementation of the developed designs are outside the scope of this EA and would commence after all NFWF grant administration and environmental compliance requirements have been completed.

## **Coordination and Consultation**

On June 28, 2019, Reclamation posted the draft EA for public review at <a href="https://www.usbr.gov/mp/nepa/nepa\_project\_details.php?Project\_ID=39061">https://www.usbr.gov/mp/nepa/nepa\_project\_details.php?Project\_ID=39061</a> and invited public comments by July 12, 2019. No comments were received. The following agencies and entities were consulted during development of the attached EA:

- U.S. Fish and Wildlife Service, Conor Shea and Jon Grunbaum
- California Department of Fish Wildlife
- MKWC: Will Harling, Charles Wickman, Mitzi Wickman, Tony Dennis
- E&S Engineers and Surveyors, Inc.
- Fiori Geosciences
- GS Black, Inc.
- EB Development Corp.
- Lawrence, Carol and Dennis, Morgan Herman

## **Findings**

Based on the analysis described in the attached EA, Reclamation finds that the Proposed Action Alternative is not a major Federal action that will significantly affect the quality of the human environment, and, consequently, an Environmental Impact Statement is not required. The attached EA describes the existing environmental resources in the Proposed Action area and evaluates the effects of the No Action and Proposed Action Alternatives on the specified resources. That analysis is provided in the attached EA, and a summary of the analysis is provided below hereby incorporated by reference.

This FONSI is based on the following:

#### 1. Cultural Resources

Reclamation determined that this is the type of action that does not have the potential to cause effects on historic properties, should such properties be present, pursuant to 36 CFR § 800.3(a)(l). The no effect determination is documented in Appendix B of the attached EA.

#### 2. Indian Trust Resources

As indicated in Appendix C of the EA, the nearest Indian Trust Asset (ITA) to the proposed activity is the 50F S29099 Public Doman Allotment about 4.39 miles to the southwest of the Project site. On June 19, 2019, the Indian Trust Assets (ITAs) coordinator stated "Based on the nature (design/administration only) and location of the planned work, it does not appear to be in an area that will impact Indian hunting or fishing resources or water rights. It is reasonable to assume that the Proposed Action will not have any impact on ITAs.

#### 3. Indian Sacred Sites

The Proposed Action Alternative is administrative in nature and is also not located on Federal lands and therefore would not affect access to or use of Indian sacred sites.

#### 4. Environmental Justice

Reclamation has not identified any adverse human health or environmental effects on any population that may result from implementing the Proposed Action Alternative which is administrative in nature.

#### 5. Air Quality

The project area is not in a non-attainment designation. Emissions emitted as a result of implementing the Proposed Action would be immeasurable and negligible due to the size and scope of the project. The Proposed Action would not conflict with or obstruct the implementation of the air quality management plan of Siskiyou County.

#### 6. Recreation

Due to the administrative nature of the Proposed Action Alternative and that the Project is entirely on private land which is not open to recreational use by the public. Therefore, no impacts to recreational use are anticipated from implementing the Proposed Action Alternative.

#### 7. Noise and Traffic

There would not be any quantifiable increases to the ambient noise levels or traffic from the approximate 20 site visits to the Project site locations needed for reconnaissance for the design/administration tasks associated with the Proposed Action Alternative.

#### 8. Water Resources

Due to the administrative nature of the Proposed Action Alternative to only design habitat restoration elements of Horse Creek, no construction or in-water work would occur. Approximately 20 proposed site visits would occur by MKWC or their partners. Under the Proposed Action Alternative, it is anticipated that the only potential disturbance to Horse Creek would be light and occasional foot traffic by MKWC or their partners as they evaluate

the Proposed Action site location. Impacts to water resources due to this site surveillance would be short-term, and negligible.

#### 9. Biological Resources

- a. Vegetation—Implementation of the Proposed Action Alternative would result in temporary and negligible impacts to vegetation from approximately 20 on-foot, nonground disturbing site surveys. No permanent disruption or changes to existing vegetation would occur under the Proposed Action Alternative.
- b. Wildlife—Implementation of the Proposed Action Alternative would result in temporary and negligible impacts to wildlife as MKWC and its partners may temporarily displace wildlife while conducting approximately 20 non-ground disturbing site surveys. No permanent disturbances would occur under the Proposed Action Alternative.
- c. Threatened or Endangered Species—This Project is for planning and is administrative in nature. It is anticipated to contribute to restoring coho salmon habitat in the Klamath River. This proposed planning activity and other similar projects funded under Klamath River Restoration Program were considered in NMFS 2019 BiOp.
- d. Essential Fish Habitat (EFH)— This project is a planning and design project, would have no impact on EFH, and is consistent with the EFH conservation measures outlined on page 80-8 pf the NMFS 2019 BiOp.

#### **10. Cumulative Impacts**

Due to the administrative (design/planning) nature of the Proposed Action Alternative, no cumulative effects will occur.



## **Environmental Assessment**

# Horse Creek Habitat Restoration Project – Reconnaissance and Design

Siskiyou County, California

2019-EA-003





## **Mission Statements**

The mission of the Department of the Interior is to protect and manage the Nation's natural resources and cultural heritage; provide scientific and other information about those resources; and honor its trust responsibilities or special commitments to American Indians, Alaska Natives, and affiliated island communities.

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

## **Contents**

		Page
I ist of A	Acronyms and Abbreviations	iv
	uction and Background	
1.1	Back ground	
1.2	Location	
1.3	Need for the Proposal	
1.4	Authority	
	atives	
2.1	Alternative 1 – No Action	
2.2	Alternative 2 – Proposed Action	
	red Environment and Environmental Consequences	
	esources Not Analyzed in Detail	
	1. Cultural Resources.	
	2. Indian Trust Resources	
	3. Indian Sacred Sites	
	4. Environmental Justice	
	5. Air Quality	
	6. Recreation	
	7. Noise and Traffic	
	esources Analyzed in Detail	
	1. Affected Environment – Water Resources	
	2. Affected Environment – Biological Resources	
	2.1. Vegetation	
	2.2. Wildlife	
3.2.	2.3. Threatened and Endangered Species	6
	umulative Impact Analysis	
	1 Reasonably Foreseeable Future Actions and Cumulative Impacts	
	ltation and Coordination	
5 Refere	nces Cited	8
Appendi	ces	9
Apper	ndix A: Maps/Pictures	10
Apper	ndix B: Cultural Resources	13
Apper	ndix C: Indian Trust Assets	14
Appei	ndix D: Endangered Species Potentially Present in Action Area	17
Figures		
_	ty map	1

## **List of Acronyms and Abbreviations**

Acronym/Abbreviation Definition

APE Area of potential effects

CDFW California Department of Fish and Wildlife

CFR Code of Federal Regulations
EA Environmental assessment

ITA Indian Trust Asset

MKWC Mid-Klamath Watershed Council

NAAQS
National Ambient Air Quality Standards
NEPA
National Environmental Policy Act
NHPA
National Historic Preservation Act

NOAA National Oceanic and Atmospheric Administration NPDES National Pollutant Discharge Elimination System

NRHP National Register of Historic Places

NWP Nationwide Permit PM Particulate matter

Klamath Project Klamath Reclamation Project

Reclamation Bureau of Reclamation

SONCC Southern Oregon/Northern California Coast

SIP State Implementation Plan

U.S.C. United States Code

USFS United States Forest Service

USFWS United States Fish and Wildlife Service

UKL Upper Klamath Lake

USACE U.S. Army Corps of Engineers

USEPA U.S. Environmental Protection Agency

USFWS U.S. Fish and Wildlife Service

## 1 Introduction and Background

## 1.1 Background

This Environmental Assessment (EA) has been prepared to examine the potential direct, indirect, and cumulative effects to the affected environment that may result from the Bureau of Reclamation (Reclamation) providing funding through the Klamath River Coho Restoration Grant Program (Grant Program) for the National Fish and Wildlife Foundation (NFWF) to administer to the Mid-Klamath Watershed Council (MKWC) for their Horse Creek Habitat Supplemental Design Restoration Project (Project). The Grant Program was proposed by Reclamation as a conservation measure to address the impacts from operation of the Klamath Project and was included by the National Marine Fisheries Services (NMFS) in their Endangered Species Act Section 7(a)(2) Biological Opinion, and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Response for Klamath Project Operations from April 1, 2019 through March 31, 2024 (2019 BiOp). The proposed Project is intended to design the removal of existing fish passage barriers and provide enhanced fish habitat in the Horse Creek of Siskiyou County, California.

The proposed Project meets the Grant Program's goals and objects of designing a project that 1) removes and addresses existing fish passage barriers including small dams, fords and culverts to create permanent access to spawning and rearing habitat for over summering and overwintering coho salmon. MKWC is designing plans to increase the quality and quantity of low velocity rearing habitats by improving floodplain connectivity and off-channel habitats, increasing the complexity, frequency and depth of pools, and improve the quantity of water at summer base flow.

This EA was prepared in accordance with the National Environmental Policy Act (NEPA; 42 United States Code (USC) §4321 et seq.), implementing regulations of the Council on Environmental Quality (40 Code of Federal Regulations (CFR) Parts 1500-1508), and the Department of the Interior (DOI; 43 CFR Part 46). If there are no significant environmental impacts identified as a result of the analysis in this EA, a Finding of No Significant Impact can be signed to complete the NEPA compliance process.

#### 1.2 Location

The proposed Project would be located along a 1.5-mile reach of Horse Creek, a tributary to the Upper Klamath River at River Mile 147, in Siskiyou County, California (Figure 1). The reach along Horse Creek is between 1.6 and 3.0 miles from the confluence of Horse Creek with the Klamath River. The reach extends from 1,500 feet downstream of the confluence with Middle Creek to the upstream end of the Horse Creek Valley. This upper half of Horse Creek Valley ranges in width from 400 to 600 feet wide, with the Project footprint totaling 85 acres. The nearest town is Horse Creek, California. The Public Land Survey System description is: Township 46N Range 10W, Sections 7 and 8, Mt Diablo Meridian. The downstream end of the Project reach has a latitude 41.841622 and longitude -123.022146. The Project would be located on three parcels of private land and the landowners (see Appendix A for Project location maps) have agreed to provide access for the proposed Project.

### 1.3 Need for the Proposal

The purpose of the proposed Project is to complete 100 percent designs for the removal of the Middle Creek culvert on Bar Road, improve Horse Creek's floodplain connectivity and off-channel habitats, and design summer and winter habitats through the addition of wooded structures. The Project is needed to ensure Reclamation remains in compliance with the conservation measures identified in the 2019 BiOp which serve to minimize the adverse effects associated with the continued operation of the Klamath Project.

## 1.4 Authority

Through its delegated authority under the Fish and Wildlife Coordination Act (16 USC 661 et seq.) as amended, Reclamation is authorized to provide funding assistance for the improvement of fish and wildlife habitat affected by Reclamation's water resource development.

## 2 Alternatives

This EA considers two alternatives; the No Action Alternative and the Proposed Action Alternative. The No Action Alternative reflects conditions without the Proposed Action Alternative and serves as a basis of comparison for determining potential effects to the human environment as a result of implementing the Proposed Action.

#### 2.1 Alternative 1 – No Action

Under the No Action Alternative, Reclamation would not provide funding in the amount of \$131,541.15 for NFWF to administer to MKWC under the Grant Program for the design of the Project. Horse Creek and the surrounding proposed Project areas would not change from existing conditions.

## 2.2 Alternative 2 – Proposed Action

Under the Proposed Action Alternative, Reclamation would provide funding in the amount of \$131,541.15 to NFWF to administer to MKWC under the Grant Program. MKWC would utilize the funding to develop 100 percent engineering designs for fisheries habitat restoration along 1.5 miles of Horse Creek in Siskiyou County.

Tasks that would be funded include MKWC and their partners driving to and walking around the proposed Project site (up to 20 site visits), surveying the site, measuring water surface elevations, communicating with private landowners and stakeholders, and office work using hydraulic modeling and drafting software. No ground disturbing activities would take place as the proposed tasks are for design and would be administrative in nature. Implementation of the funded design effort would not be funded with Reclamation or NFWF funds under the Grant Program and would require MKWC to privately fund or seek other financial partners to implement the developed designs. Implementation of the developed designs are outside the scope of this EA.

Project components or elements that would be designed (but not implemented) include: 1) reroute or removal of infrastructure that currently impedes fish passage and floodplain connectivity (removal of the Middle Creek culvert on Bar Road; 2) installation of large woody debris and rocks for creating and improving spawning and rearing habitat; and 3) large-scale floodplain grading for overwintering habitat and improving chances for wood structure retention.

Design tasks would be performed by MKWC, in partnership with entities like the U.S. Fish Wildlife Services and/or consulting engineering firms. Tasks under the Proposed Action Alternative would commence after all NFWF grant administration and environmental compliance requirements have been completed.

# 3 Affected Environment and Environmental Consequences

This chapter describes the affected environment and evaluates the environmental consequences that could result from the No Action and Proposed Action alternatives. The No Action Alternative describes the conditions most likely to occur if the Proposed Action were not implemented and provides the basis for comparison to describe the environmental consequences of implementing the Proposed Action Alternative

## 3.1 Resources Not Analyzed in Detail

Impacts on the following resources were considered and found to be minor, or absent due to the nature of the Proposed Action. Brief explanations for their elimination from further consideration are provided below:

#### 3.1.1. Cultural Resources

"Cultural Resources" is a broad term that applies to prehistoric, historic, and architectural resources, as well as to traditional cultural properties. Cultural resources can include both archaeological sites, which contain evidence of past human use, and the built environment, which consists of structures such as buildings, roadways, dams, and canals. The National Historic Preservation Act (NHPA) of 1966, as amended, is the primary Federal legislation that outlines the Federal government's responsibilities related to cultural resources. Section 106 of the NHPA requires the Federal government to take into consideration the effects of its undertakings on historic properties. Historic properties are, by definition, cultural resources that are included in, or eligible for inclusion in, the National Register of Historic Places (National Register). The evaluation criteria for National Register eligibility are outlined at 36 CFR Part 60.4.

Compliance with Section 106 of the NHPA follows a process outlined at 36 CFR Part 800. This process includes determining the area of potential effects (APE) for an undertaking, consulting with Indian tribes and other interested parties, identifying if historic properties are present within the APE, assessing the effects the undertaking would have on historic properties, and resolving any adverse effects to historic properties before an undertaking is implemented. The Section 106 process also requires consultation with the State Historic Preservation Officer (SHPO), or Tribal Historic Preservation Officer (THPO) where

applicable, to seek concurrence with the finding of effect for the undertaking.

Reclamation determined that this is the type of action that does not have the potential to cause effects on historic properties, should such properties be present, pursuant to 36 CFR § 800.3(a)(l). The no effect determination is documented in Appendix B.

#### 3.1.2. Indian Trust Resources

Indian Trust Assets (ITAs) are legal interests in assets that are held in trust by the United States for Federally recognized Indian tribes or individuals. As shown in Appendix C, the nearest ITA to the proposed activity is the 50F S29099 Public Doman Allotment about 4.39 miles to the south-west of the Project site. On June 19, 2019, the ITA coordinator stated: Based on the nature (design/administration only) and location of the planned work, it does not appear to be in an area that will impact Indian hunting or fishing resources or water rights. It is reasonable to assume that the Proposed Action will not have any impact on ITAs.

#### 3.1.3. Indian Sacred Sites

Executive Order 13007 (May 24, 1996) requires that Federal agencies accommodate access to and ceremonial use of Indian sacred sites by Indian religious practitioners and avoid adversely affecting the physical integrity of such sacred sites. The Proposed Action Alternative is administrative in nature but is also not located on Federal lands and therefore would not affect access to or use of Indian sacred sites.

#### 3.1.4. Environmental Justice

Executive Order 12898 requires each Federal agency to identify and address disproportionately high and adverse human health or environmental effects, including social and economic effects of its programs, policies, and activities on minority populations and low-income populations. Reclamation has considered this and has not identified adverse human health or environmental effects on any population that may result from implementing the Proposed Action Alternative which is administrative in nature.

#### 3.1.5. Air Quality

Under the Federal Clean Air Act, the United States Environmental Protection Agency sets the National Ambient Air Quality Standards (NAAQS) for the permissible concentration of pollutants in the air. These standards apply to six criteria pollutants: carbon monoxide (CO), lead, nitrogen oxides (NOx), particulate matter (PM), ozone, and sulfur oxides (SOx). For Siskiyou County, carbon dioxide, hydrogen sulfide, and visibility reducing particles are 'unclassified' and all other listed pollutants are in attainment status. Based on state monitoring data (California Air Resources Board, 2018), 97 percent of days have good air quality. Attainment relative to California air quality standards is determined by the California Air Resources Board (CARB). Due to the nature of the Proposed Action Alternative, no impacts to Air Quality will occur due to the administrative nature of the Proposed Action Alternative.

#### 3.1.6. Recreation

Due to the administrative nature of the Proposed Action Alternative and that the Project is entirely on private land which is not open to recreational use by the public. Therefore, no impacts to recreational use are anticipated from implementing the Proposed Action Alternative.

#### 3.1.7. Noise and Traffic

There would not be any quantifiable increases to the ambient noise levels or traffic from the approximate 20 site visits to the Project site locations needed for reconnaissance for the design/administration tasks associated with the Proposed Action Alternative.

### 3.2 Resources Analyzed in Detail

#### 3.2.1. Affected Environment – Water Resources

Water resources within the Proposed Action Alternative's Action Area include the mainstem Horse Creek, a tributary to the Klamath River and protected water body under the Federal Clean Water Act (33 U.S.C. §1251 et seq.).

#### **Environmental Consequences**

#### No Action Alternative

Under the No Action Alternative, no impacts to water resources would occur.

#### Proposed Action Alternative

Due to the administrative nature of the Proposed Action Alternative to only design habitat restoration elements of Horse Creek, no construction or in-water work would occur. Approximately 20 proposed site visits would occur by MKWC or their partners for the purpose of site reconnaissance to assist with habitat design efforts. Under the Proposed Action Alternative, it is anticipated that the only potential disturbance to Horse Creek would be light and occasional foot traffic by MKWC or their partners as they evaluate the Proposed Action site location. Impacts to water resources due to this site surveillance would be short-term, and negligible.

#### 3.2.2. Affected Environment – Biological Resources

Both field survey and a literature search were conducted to identify vegetation and wildlife, endangered or threatened species or critical habitat with the Proposed Action's proposed location.

#### 3.2.2.1. Vegetation

Siskiyou County as a whole, is covered with forest vegetation (approximately 66 percent), grassland (12 percent), cropland (2 percent) and water (less than 1 percent). The maximum 85-acre action area of the Proposed Action Alternative would be predominately cropland or other disturbed vegetation (NASA MODIS 2006) and is located within a ponderosa pine association managed by the Klamath National Forest.

#### Environmental Consequences

#### No Action Alternative

Under the No Action Alternative, no impacts to vegetative resources would occur and Horse Creek would remain in its current condition.

#### **Proposed Action Alternative**

Implementation of the Proposed Action Alternative would result in temporary and negligible impacts as MKWC and its partners would conduct approximately 20 on-foot, non-ground disturbing site surveys. No permanent disruption or changes to existing vegetation would occur under the Proposed Action Alternative.

#### 3.2.2.2. Wildlife

A variety of aquatic and upland terrestrial species of wildlife are known to be present in the project area, primarily small mammals and birds.

#### No Action Alternative

Under the No Action Alternative, no impacts to vegetative resources would occur and Horse Creek would remain in its current condition.

#### **Proposed Action Alternative**

Implementation of the Proposed Action Alternative would result in temporary and negligible impacts to wildlife as MKWC and its partners would temporarily displace wildlife while conducting approximately 20 non-ground disturbing site surveys. No permanent disturbances would occur under the Proposed Action Alternative, and wildlife would seemingly be able to repopulate the area once MKWC concludes their site reconnaissance.

#### 3.2.2.3. Threatened and Endangered Species

The Endangered Species Act (ESA) (16 U.S.C. §1531 et seq.) prohibits the unauthorized take of threatened or endangered species and requires Federal agencies to consult with the U.S. Fish and Wildlife Service and NMFS if a proposed grant or activity has the potential to adversely affect listed species or adversely modify critical habitat. Species that may be present within the Proposed Action Alternative's action area are listed in Appendix D.

#### No Action Alternative

Under the No Action Alternative, no negligible impacts to vegetative resources would occur and Horse Creek would remain in its current condition. There would be no designs developed for the proposed Project area and, consequently, there would be no potential change or potential benefits experienced related to biological resources from current conditions under the No Action Alternative.

#### Proposed Action Alternative

The Proposed Action Alternative would be planned consistent with the California Department of Fish and Wildlife's (CDFW) Restoration Manual (Flosi et al. 2010) to maximize the benefits of the project while minimizing effects to salmonids. This planning is for the purpose of restoring degraded salmonid habitat and is intended to provide additional habitat for coho salmon. This Project is anticipated to contribute to the planning of restoring coho habitat in the Klamath River, leading to longer term beneficial effects on ESA-listed species. For ESA compliance and consultation, the Proposed Action Alternative was considered in the NMFS 2019 BiOp which concluded a finding of no jeopardy to coho salmon for actions such as the Proposed Action Alternative.

#### 3.2.2.4. Essential Fish Habitat

Essential Fish Habitat (EFH) is designated for commercially fished species under the Magnuson-Stevens Act. The Magnuson-Stevens Act requires Federal fishery management plans, developed by NMFS and the Pacific Southwest Fisheries Management Council, to describe the habitat essential to the fish being managed and to describe threats to that habitat from both fishing and non-fishing activities. Pursuant to section 305(b) of the Magnuson-Stevens Act (16 U.S.C. 1855(b)), Federal agencies are required to consult with NMFS on actions that may adversely affect EFH for species managed under the Pacific Coast Salmon Fishery Management Plan. This section also requires NMFS to recommend measures that can

be taken by the action agency to conserve EFH.

#### No Action Alternative

Under the No Action Alternative, no impacts to EFH would occur as there would be no change to the existing human environment.

#### **Proposed Action Alternative**

Actions similar to the Proposed Action Alternative described in this EA were analyzed in the NMFS 2019 BiOp which included an EFH analysis. On March 29, 2019, NMFS concluded that Reclamation's Proposed Action Alternative would adversely affect coho salmon and Chinook salmon EFH. The identified EFH conservation recommendations found on page 80-81 of the NMFS 2019 BiOp would be carried out as part of this proposal and therefore would protect, by avoiding or minimizing adverse effects in the mainstem Klamath River and tributaries designated as EFH for Pacific Coast salmon.

## 3.3 Cumulative Impact Analysis

Cumulative impacts are those impacts resulting from the incremental impact of an action when added to other past, present, and reasonably foreseeable future actions. Past or ongoing actions led to the status of resources described above. A search was made for all reasonably foreseeable future actions that might cumulatively affect the same resources as the Proposed Action, especially the same listed species or habitat as the Proposed Action.

#### 3.3.1 Reasonably Foreseeable Future Actions and Cumulative Impacts

The Klamath National Forest schedule of proposed actions was checked, and no land or water-based activities were identified that would affect the same resources as the Proposed Action. Likewise, no reasonably foreseeable actions were identified from the county. Because there are no reasonably foreseeable actions that would create an additive or incremental effect with those of the Proposed Action, there would be no cumulative effects.

## 4 Consultation and Coordination

All persons, agencies, and organizations consulted for purposes of this EA.

- USFWS, Conor Shea and Jon Grunbaum
- CDFW
- MKWC: Will Harling, Charles Wickman, Mitzi Wickman, Tony Dennis
- E&S Engineers and Surveyors, Inc.
- Fiori Geosciences
- GS Black, Inc.
- EB Development Corp.
- Lawrence, Carol and Dennis, Morgan Herman

## 5 References Cited

California Air Resources Board. 2018. *iADAM: Air Quality Data Statistics*. Accessed on line at: https://www.arb.ca.gov/adam.

Flosi, G., S. Downie, M. Bird, R. Coey, B. Collins. 2010. *California Salmonid Stream Habitat Restoration Manual, Part I, Salmon and Steelhead Habitat Restoration in California*. Accessed on line at: file:///C:/Users/I5-

 $2400/AppData/Local/Packages/Microsoft.MicrosoftEdge\_8 we kyb3d8bbwe/TempState/Downloads/FRGP\_Manual\_PART\_I\%20(1).pdf.$ 

National Atmospheric and Science Administration (NASA). 2006. *MODIS Land Cover Type*, *Yearly L3 Global 1km MOD 12Q1*. Accessed on line at: file:///C:/Users/I5-2400/AppData/Local/Packages/Microsoft.MicrosoftEdge\_8wekyb3d8bbwe/TempState/Downloads/landuse%20(1).pdf.

National Marine Fisheries Service (NMFS) 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 (2019 BiOp).

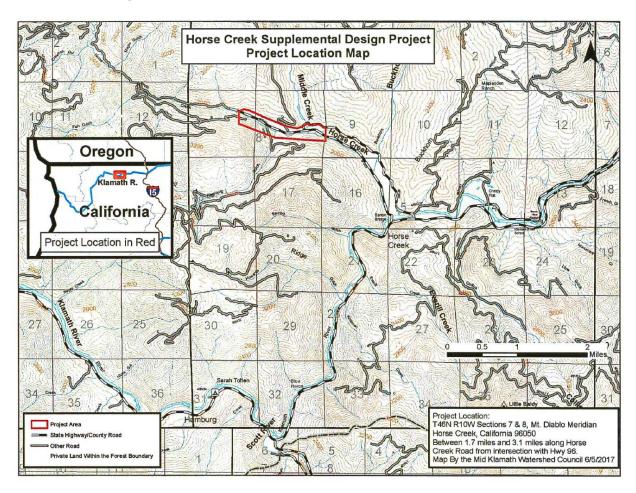
National Marine Fisheries Service (NMFS), West Coast Region. 2014. *Southern Oregon, Northern California Coast Coho Salmon Recovery Plan.* Accessed on line at: file:///C:/Users/I5-2400/Desktop/sonccfinal ch34 upperklamathriver.pdf.

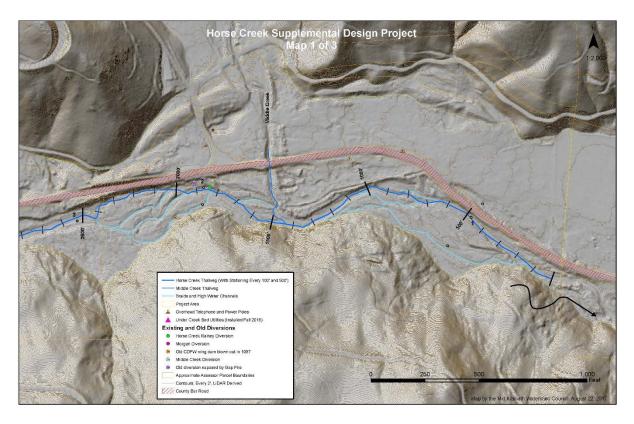
Natural Resources Conservation Service. 2018. Web Soil Survey. Klamath National Forest Area, Parts of Siskiyou County, California and Jackson County, Oregon (CA702). Accessed on line at: https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx.

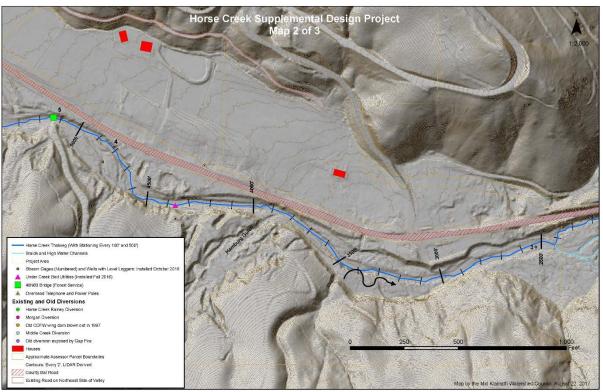
- U.S. Department of Commerce. Census Bureau, American Community Survey Office. 2017. *American Community Survey*. Washington D.C. Accessed on line at: https://www.census.gov/programs-surveys/acs/.
- U.S. Environmental Protection Agency. 2016. *Climate Change—Basic Information*. Accessed on line at: http://www.epa.gov/climatechange/basicinfo.html.
- U.S. Fish and Wildlife Service. 2015. *Information Resources: Listed, Proposed and Candidate Species Lists, California*.

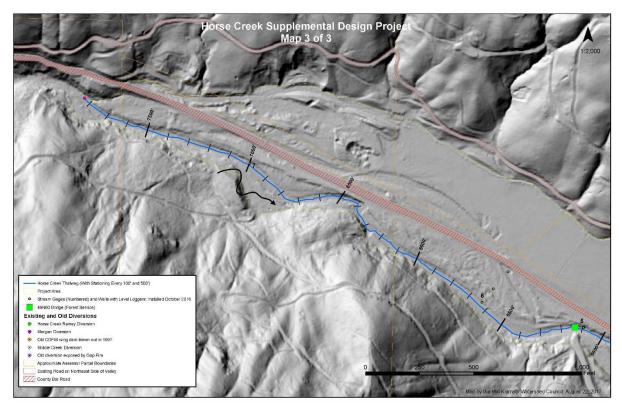
## **Appendices**

# **Appendix A: Horse Creek Supplemental Design Project Location Maps/Pictures.**











# Appendix B: Reclamation Cultural Resources Coordination and Consultation.

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

MP-153 Tracking Number: 19-KBAO-047

Project Name: Horse Creek Habitat Restoration Design Project

NEPA Document: 2019-EA-003

NEPA Contact: Amanda Babcock, Natural Resource Specialist

MP 153 Cultural Resources Reviewer: BranDee Bruce, Architectural Historian

Date: June 20, 2019

Reclamation proposes to issue grant funding through the Reclamation Klamath River Coho Habitat Restoration Grant Program and provide approval to the National Fish and Wildlife Foundation to release the funding to the grantee/applicant, the Mid Klamath Watershed Council (MKWC). The proposed MKWC project will develop a 100% fisheries restoration design for a 1.5-mile section of Horse Creek, a tributary to the Upper Klamath River, in Siskiyou County, California. The resulting design will be used for a future implementation project with the goal of increasing the number of spawning adult coho salmon in the Klamath Basin. Tasks that will occur with this funding include driving to and walking around the site, surveying the site, measuring water surface elevations, communicating with private landowners and stakeholders, and office work using hydraulic modeling and drafting software. No ground disturbing activities or mechanical restoration actions would take place during this design project.

Reclamation determined the proposed action constitutes a Federal undertaking, as defined at 36 CFR § 800.16(y), that has no potential to cause effects to historic properties, should such properties be present, pursuant to Title 54 U.S.C. § 306108, commonly known as Section 106 of the National Historic Preservation Act (NHPA). As such, Reclamation has no further obligations under Section 106 of the NHPA. I have reviewed the draft EA titled *Horse Creek Habitat Restoration Project Siskiyou County, California, 2019-EA-003*, dated June 2019, and concur that the proposed action will not have significant impacts on properties listed or eligible for listing in the in the National Register of Historic Places.

This document is intended to convey the completion of the NHPA Section 106 process for this undertaking. Please retain a copy in the administrative record for this action. Should changes be made to this project, additional NHPA Section 106 review, possibly including consultation with the State Historic Preservation Officer, may be necessary. Thank you for providing the opportunity to comment.

# Appendix C: Reclamation Indian Trust Assets Coordination and Consultation.

## 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:** 1/3/19

Requested by (office/program)	Amanda Babcock, Natural Resource Specialist Student Trainee, Klamath Basin Area Office
Fund	19XR0680A3
WBS	RX.001261ME.3000000
Fund Cost Center	25320000
Region # (if other than MP)	
Project Name	Horse Creek Supplemental Design Project
CEC or EA Number	2019-EA-003
	The purpose of the proposed project is to develop a 100% fisheries restoration design for a 1.5-mile section of Horse Creek, a tributary to the Klamath River, in Siskiyou County, California. The resulting design would be used for a future implementation project with the goal of increasing the number of spawning adult coho salmon in the Klamath Basin. Once implemented, the project would improve habitat conditions and increase the survival of juvenile coho during the critical rearing periods of summer and winter, improving the smolt production of Horse Creek and promoting recovery of a core population of Southern Oregon Northern California Coast (SONCC) coho salmon. The proposed project is needed as a step to restore natural channel form and function, improve habitat conditions, increase carrying capacity, and improve the health of juvenile coho salmon in the Horse Creek watershed, which would increase contribution of healthy coho to the Klamath River SONCC coho population.  Several restoration actions would be considered and developed, including re-routing and removal of infrastructure that currently impedes fish passage and floodplain connectivity, large woody debris and rock installation for creating and improving spawning and rearing habitat, and large-scale floodplain grading for overwintering habitat and improving chances for wood structure retention. These restoration actions are aimed at addressing the current channelization and diking problem in the lower Horse Creek drainage with the intent of

increasing the number of spawning adult coho salmon in the Klamath Basin. By removing barriers to fish passage and adding large wood structures, the MKWC would be creating and/or enhancing critical rearing and spawning habitats for coho salmon. Tasks that would occur would be driving to and walking around the site, surveying the site, measuring water surface elevations, communicating with private landowners and stakeholders, and office work using hydraulic modeling and drafting software. No ground disturbing activities would take place during this design project.

Under the proposed action, Reclamation would provide funding in the amount of \$131,541.15 to NFWF to administer a Klamath River Coho Restoration Grant to the MKWC for the purpose of designing a fisheries restoration project on 1.5 miles of Horse Creek with the intent of restoring channel structure and complexity to a watershed that has suffered impacts of past land use practices yet is situated to offer coho salmon habitat potential. Increased channel structure and complexity can lead to improved floodplain connectivity and function, thus boosting the chances that individual coho salmon can survive and grow there. Better survival and growth rates means higher likelihood that the SONCC evolutionary significant unit of coho salmon can rebound to viable population levels.

\*Project Location (Township, Range, Section, e.g., T12 R5E S10, or Lat/Long cords, DD-MM-SS or decimal degrees). Include map(s)

General: The proposed project is located on a 1.5-mile reach of Horse Creek, a tributary to the Upper Klamath River at River Mile 147. The reach along Horse Creek is between 1.6 and 3.0 miles from the confluence with the Klamath River and extends from 1,500 feet downstream of the confluence with Middle Creek to the upstream end of the Horse Creek Valley, encompassing approximately 85 acres. The proposed project is on private land in Horse Creek, California.

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

Latitude of Downstream End: 41° 50′ 30″ N Longitude of Downstream End: 123° 1′ 20″ W

\*See maps in Exhibits A, B, and C.
\*XY coordinates are approximations.

Signature

Printed name of preparer

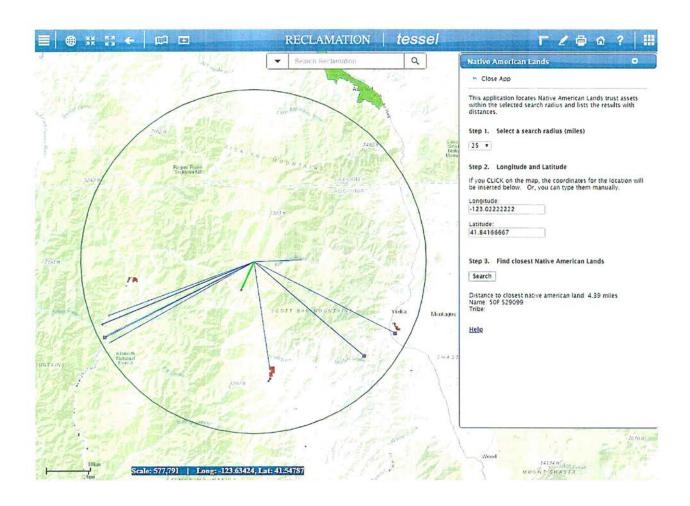
Date

#### **ITA Determination:**

The closest ITA to the proposed <u>Horse Creek Supplemental Design Project</u> activity is the <u>50F S29099 Public Domain Allotment</u> about 4.39 miles to the south-west of the project site (see attached image in Exhibit A).

Based on the nature and location 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. It is reasonable to assume that the proposed action <u>will not</u> have any adverse impacts on ITAs.

Kristen L. Hiatt 6/19/19
Signature Printed name of approver Date



# Appendix D: Endangered, Threatened, Proposed, and Candidate Species that May Occur in Siskiyou County, California.



## 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: Endangered

Status: Endangered			
Phylum	Common Name	Scientific Name	Critical Habitat
Fish	Lost River sucker	Deltistes luxatus	Designated
Fish	Shortnose sucker	Chasmistes brevirostris	Designated
Mammal	Gray wolf	Canis lupus	
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	

#### Status: Candidate

Phylum	Common Name	Scientific Name	
Plant	Whitebark Pine	Pinus albicaulis	

Updated December 14, 2017