

# RECLAMATION

*Managing Water in the West*

## **Finding of No Significant Impact Final Environmental Assessment New Fire Station Grand Coulee Power Office, Washington**



U. S. Department of the Interior  
Bureau of Reclamation  
Pacific Northwest Region  
Grand Coulee Power Office, Washington

**November 2015**

U.S. DEPARTMENT OF THE INTERIOR

PROTECTING AMERICA'S GREAT OUTDOORS AND POWERING OUR FUTURE

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BUREAU OF RECLAMATION

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.

# **FINDING OF NO SIGNIFICANT IMPACT**

## **Construction of a New Fire Station**

**U.S. Department of the Interior  
Bureau of Reclamation  
Grand Coulee Power Office**

**PN FONSI 15-07**

### **Introduction**

The Bureau of Reclamation (Reclamation) has prepared this Finding of No Significant Impact (FONSI) to comply with the Council on Environmental Quality's regulations for implementing the procedural provisions of the National Environmental Policy Act (NEPA). This document briefly describes the proposed action, the alternatives considered, the scoping process, Reclamation's consultation and coordination activities, and Reclamation's finding. The Final Environmental Assessment (EA) fully documents the analyses.

### **Background**

The Bureau of Reclamation announces its environmental findings on the construction of a new Grand Coulee Power Office fire station, to be located in the City of Grand Coulee.

The Grand Coulee Power Office Fire Department (Department) is staffed 24 hours a day, 7 days a week by career Federal Firefighters to protect Federal assets and personnel associated with Grand Coulee Dam and Power Office lands and infrastructure, as well as to provide mutual aid services to neighboring communities and agencies. The Department is currently housed and occupies multiple areas within the John W. Keys III Pump Generating Plant, an industrial facility. These areas are part of the original JKPGP South Tower construction. The JKPGP space being utilized for the Department was originally constructed to support the maintenance of power production and irrigation water pumping units and was never intended to be occupied by a fire department.

## **Alternatives Considered**

The EA analyzed three alternatives for the Fire Station Project: No Action; Alternative A – construction of a new station on Reclamation managed lands, and Alternative B – construction of a new station on lands managed by NPS. NEPA regulations require the action agency to consider a No Action alternative for comparative analysis purposes. Alternative A is the preferred alternative.

### **No Action Alternative**

Under the No Action Alternative, the Grand Coulee Power Office Fire Department would not build a new station and would continue to operate out of the John W. Keys III Pump Generating Plant.

### **Alternative A – Preferred Alternative**

Under the Preferred Alternative, Reclamation would construct a new fire station on lands managed by the Grand Coulee Power Office. The station would be located outside the west Administration/Industrial Area gate, near the intersection of Highway 155 and B Street. The structure would be approximately 21,500 square feet in size and include areas for sleeping, dining, meeting/training, offices, as well as a public reception area. Access to the new station would be from Industrial Road, off of either, B Street or Highway 155.

### **Alternative B**

Under Alternative B, Reclamation would construct a new fire station on lands managed by the National Park Service at Crescent Bay, uphill from the boat launch and adjacent to the ramp access road, as shown. The station would be constructed as in Alternative A with amenities to include areas for sleeping, dining, meeting/training, offices, and a public reception area. Access to the new station would be off Highway 155 at the Crescent Bay boat ramp entrance.

## **Environmental Consequences**

### **Recreation Values and Uses**

Under the Preferred Alternative, direct recreational opportunities would not be affected as the new station would be situated across Highway 155 from Crescent Bay which would not deter existing or provide additional recreational opportunities. During construction projects at GCPO, contractors' workforce typically utilizes area RV Parks during the work week in Grand Coulee, Banks Lake, Lake Roosevelt, and nearby communities. It is assumed that the relatively small increase of users of RV space by this project would not impact the availability of RV or camping sites for tourists.

No significant impacts to recreation are anticipated from the preferred alternative.



## **Traffic**

Under the Preferred Alternative, Reclamation would construct a new fire station near the west gate entrance to the GCPO Industrial Area. The line of sight and safety of vehicles entering SR 155 from the west gate location is greatly increased, over the current station location, as the result of viewing distance to the nearest corner and absence of steep slope. Vehicles which require access to SR 155 for routine or emergency trips (i.e. north to the dam, south to north dam) will not change traffic patterns or the use of SR 155.

No adverse impacts to traffic flow or patterns are anticipated from the preferred alternative.

## **Cultural Resources**

Under the Preferred Alternative, Reclamation would construct a new fire station near the west gate of the Industrial Area. The cultural resources review identified only one historic resource- a non-contributing component of historic archaeological site 45GR2566 (Grand Coulee Dam Railroad) within the project footprint (McFarland et al. 2015). Since the archaeological site lacks integrity and is not a significant cultural resource, there would be no effect to it as part of the proposed project. No other historical resources were identified during the review that would be affected by construction. The addition of the fire station would not alter the setting of the proposed Grand Coulee Dam historic district to the east since it also contains facilities with similar light industrial uses.

Additionally, review of known Traditional Cultural Properties (TCPs) in the vicinity of the project followed by consultation with the Confederated Tribes of the Colville Reservation Tribal Historic Preservation Office (THPO) led to the recommendation that the construction of a firehouse at this location will not have any affect upon TCPs due to the industrial and urban components of Grand Coulee Dam and the surrounding towns.

Based upon the cultural resources review and National Historic Preservation Act consultations with the Washington State Historic Preservation Office and the THPO, Reclamation finds no significant or adverse impacts to archaeological resources, TCPs, or the historic district from the preferred alternative.

## **Indian Trust Assets**

Under the Preferred Alternative, Reclamation would construct a new fire station outside the west gate. The project would not involve actions on trust lands, and it would not reduce the ability of Indians to hunt, fish, and boat in the Colville or Spokane reservations or associated trust lands. The project would not affect the amount of water available in the Columbia River, and therefore, would not affect any water rights that might be claimed by the Colville or Spokane Tribes.

No significant or adverse impacts to Indian Trust Assets are anticipated from the preferred alternative.

## **Indian Sacred Sites**

NHPA consultations with the Colville Confederated Tribes (CCT) resulted in a finding of no impact to Traditional Cultural Properties (TCPs). Stemming from this consultation effort Reclamation determined the project would cause no impacts that would adversely affect the physical integrity of Indian Sacred Sites and that access to, or ceremonial use of, such sites would not be restricted.

## **Environmental Justice**

No adverse natural resource impacts adversely affecting minority and low-income populations were identified. The existing demand for rental housing in the project area is generally considered to be high relative to the currently available supply. During short-term construction projects such as the fire station, workers typically take temporary housing at local RV Parks, motels, local campgrounds, or commute from Spokane or other nearby cities. Construction of a new fire station would not be expected to contribute to the demand of rental housing.

No adverse impacts are anticipated from the preferred alternative.

## **Air Quality and Climate Change**

Under the Preferred Alternative, Reclamation would construct a new fire station on federally owned and mostly disturbed land. In the short term, soil loosened during construction may become airborne as the result of the wind. Proper methods of controlling dust, such as the use of water trucks, will be utilized as necessary to help control airborne particulates during construction. In the long term, parking areas and other impervious surfaces as well as vegetated storm water catchment swales could reduce airborne particulates during windstorms.

The proposed fire station would be built to the Federal Guiding Principles for sustainability that include concepts on energy performance, sustainable and recycled building materials, and sustainable construction methods.

Construction equipment emits exhausts that contain Green House Gases (GHG). Given the short duration of the proposed project, the level of GHG emissions in the project area would be low.

Additionally, staffing levels and the number of fire apparatus are anticipated to remain static for the foreseeable future, resulting in no net increase of vehicle traffic and GHG emissions. Therefore, the action would not be expected to increase the total GHG that would result in a significant effect.

No adverse impacts to air quality or climate change are anticipated from the preferred alternative.

## **Water Quality**

Under the Preferred Alternative, Reclamation would construct a new fire station near the west gate entrance to the GCPO Industrial Area. A new station at this location should have no adverse

effect on Lake Roosevelt or ground water quality as storm-water runoff from the parking lot and the facility would be diverted to storm water catchment swales. The water catchment swales will contain natural grasses and other vegetation that have the ability to utilize storm-water, take up contaminants, and retain sediments from runoff.

No adverse impacts to water quality are anticipated from the preferred alternative.

### **Threatened and Endangered Species**

Two threatened and endangered species, Bull Trout and Columbia Basin DPS Pygmy Rabbit, could potentially be located in the area around the project extent. Reclamation examined the potential effects the Preferred Alternative would have on water quality, hydrology, and terrestrial habitat. Hydrology and water quality analyses, combined with the location of the Preferred Alternative being some distance from Lake Roosevelt determined that bull trout habitat would not be affected by the action. Additionally, the project site has been previously disturbed, contains fill material as well as bedrock outcrops and underground utilities and is not conducive to Columbia Basin pygmy rabbit habitat.

No adverse or significant impacts to threatened and endangered species are anticipated from the preferred alternative.

### **Soils**

Under Alternative A, Reclamation would construct a new fire station near the west gate of the Industrial area. On-site soils consist of a mix of fill and natural deposited sediments. Care would be taken to minimize soil erosion during construction. Standard construction practices such as the use of water trucks and erosion fencing, when necessary, would be implemented to decrease erosion as the result of wind, equipment and truck traffic, and precipitation events.

No adverse or significant impacts to soils are anticipated from the preferred alternative.

### **Fisheries**

Under the preferred alternative, no quantifiable effects to the fisheries in Lake Roosevelt are expected.

### **Socioeconomic Conditions**

Reclamation is assuming that the workforce who would be utilized for the construction of a new fire station will be temporary and from outside the immediate area. This analysis also assumes that the various contractors' workforce would spend a portion of their wages in the area, at local businesses, during the construction period.

Under the preferred alternative, no adverse impacts to local socioeconomic conditions are anticipated.

## **Visual Quality**

Under the Preferred Alternative, Reclamation would construct a new fire station near the west gate of the GCPO Industrial Area. Because a new station would become the focal point as visitors and others travel north on SR 155 towards the dam, detail would be given to construct a station which is architecturally appealing and fits into the theme of the dam and other industrial structures.

No adverse impacts to the visual quality of the view shed are anticipated by the preferred alternative.

## **Vegetation**

Natural vegetation is limited in the project area, as non-native species continue to compete with native plants. Existing vegetation will be disturbed and/or removed during ground preparation and construction. New water catchment swales will contain natural grasses and other vegetation to utilize storm-water runoff, take up contaminants, and retain sediments from runoff. Additionally, final landscape design will be re-vegetated.

No significant impacts to native vegetation are anticipated by the preferred alternative.

## **Wildlife**

Limited numbers of wildlife species utilize the area near the west gate. The landscape has been previously disturbed by grading, installation of sewer lines, and other utilities. Wildlife are primarily transitory, accustomed to noise from industrial machinery, humans, and no resident populations have been documented.

No adverse or significant impacts to wildlife are anticipated from the preferred alternative.

## **Consultation and Coordination**

### **National Historic Preservation Act**

Congress enacted the National Historic Preservation Act (NHPA) in 1966. Section 106 of the NHPA requires Federal agencies to consider project-related impacts to historic properties, which includes prehistoric and historic-period archeological sites, traditional cultural properties, and elements of the built environment. Federal regulations (36 CFR 800) define the process for implementing the NHPA, which includes consultation with the State Historic Preservation Officer (SHPO), affected Tribes, and the Advisory Council on Historic Preservation (ACHP) about Federal findings regarding project effects (36 CFR 800.4 [a][4]).

Reclamation engaged in consultation with the SHPO regarding the project Area of Potential Effect, level of effort, and recommended effects. Reclamation provided the agency with the completed NHPA Section 106 cultural resources review for the Project. SHPO responded with their concurrence of a finding of No Historic Properties Affected for any of the

alternatives (36 CFR 800.5 [d] [1]). The consultation letters between Reclamation and SHPO are provided in the Final EA document as Appendix D. This will conclude consultation under the National Historic Preservation Act.

### **Endangered Species Act (1973) Section 7 Consultation**

The Endangered Species Act (ESA) requires all Federal agencies ensure that their actions do not jeopardize the continued existence of listed species, or destroy or adversely modify their critical habitat. As part of the ESA's Section 7 process, an agency must request information from the U.S. Fish and Wildlife Service (USFWS) and National Oceanic and Atmospheric Administration Fisheries Service (NOAA Fisheries) on whether any threatened and endangered species occur within or near the action area. The agency then must evaluate impacts to those species. If the action may affect any listed species, the agency must consult with the USFWS or NOAA Fisheries. Reclamation obtained listed species information from NOAA Fisheries and the USFWS. Reclamation determined the preferred alternative would have no effect on listed species; therefore, neither NOAA Fisheries nor USFWS were consulted.

### **Tribal Coordination and Consultation**

Reclamation engaged the CCT during public scoping. At that time, the CCT Tribal Historic Preservation Office (THPO) responded through an email. In the response, the THPO provided some recommendations of methods and expectations for the cultural resources review process and requested involvement in review of the design process for Alternative B due to the visual exposure of the proposed fire station along Lake Roosevelt (Appendix B in Final EA). Reclamation incorporated the THPO's recommendations for the fieldwork methods and expectations into the Scope of Work for the cultural resources review process.

Reclamation again engaged in consultation with the CCT THPO regarding project effects once Reclamation's cultural resources review was complete. Reclamation provided the cultural resources review document to the THPO who sent a return email agreeing with Reclamation's finding of no adverse effects to historic properties for any of the alternatives (36 CFR 800.5 [d] [1]). In the email the THPO agreed that the Contractor's research regarding Properties of Traditional Religious and Cultural Importance to Indian Tribes presented in the cultural resources review document (McFarland et al 2015) was acceptable.

### **Public Involvement**

Reclamation held a public scoping period from May 19 to June 19, 2014. The agency provided a news release to local-area media that announced Reclamation's intent to prepare an EA and requested public comment during the 30-day scoping period. The agency also sent letters to the Colville Confederated Tribes (CCT) and the Spokane Tribe of Indians (STI) to inform them of the proposed alternatives and to solicit comments or concerns they may have on the alternatives and possible impacts that Reclamation should examine. Additionally, the agency sent similar letters to United States Senators and Representatives,

Washington State Representatives, Federal agencies, and local County officials. Three responses to the news release and the scoping letter were received during the scoping comment period. The scoping comments are included in Appendix B of the Final EA.

A public review period for the Draft EA was held from September 8 to October 9, 2015. The Draft EA was mailed to Federal, state, local agencies, elected officials, Indian tribes, and interest groups for comments. Reclamation received one comment on the Draft EA. The comment letter and Reclamation's response are included in Appendix C of the Final EA.

## Finding

Based on a thorough review of the comments received and analysis of the environmental impacts, as presented in the Final EA and this FONSI, Reclamation has concluded that the Preferred Alternative will have no significant effect on the human environment or natural and cultural resources. Reclamation, therefore, concludes that preparation of an Environmental Impact Statement is not required, and that this FONSI satisfies the requirements of NEPA.

## Decision

Reclamation will move forward implementing the Preferred Alternative and construct a new fire station near the west gate entrance to the Industrial Area at Grand Coulee Power Office.

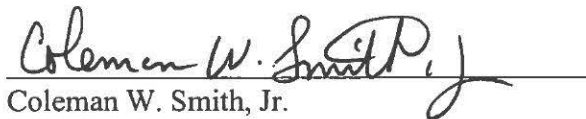
## Recommended:



Lon Ottosen  
Natural Resources Specialist  
Grand Coulee, Washington

11/13/15  
Date

## Approved:



Coleman W. Smith, Jr.  
Power Manager  
Grand Coulee, Washington

23 Nov 2015  
Date

# RECLAMATION

*Managing Water in the West*

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Final Environmental Assessment  
New Fire Station  
Grand Coulee Power Office, Washington**



U. S. Department of the Interior  
Bureau of Reclamation  
Pacific Northwest Region  
Grand Coulee Power Office, Washington

**November 2015**





# Acronyms and Abbreviations

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ACHP	Advisory Council on Historic Preservation
CBP	Columbia Basin Project
Colville Confederated Tribes or CCT	Confederated Tribes of the Colville Reservation
DO	dissolved oxygen
DPS	Distinct Population Segments
EA	Environmental Assessment
Ecology	State of Washington Department of Ecology
EIS	Environmental Impact Statement
EMS	Emergency Medical Services
ESA	Endangered Species Act
Fire Department	Grand Coulee Power Office Fire Department
FONSI	Finding of No Significant Impact
GCPO	Grand Coulee Power Office
GHG	greenhouse gases
IA	Industrial Area
ITAs	Indian Trust Assets
JKPGP	John W. Keys III Pump Generating Plant
NEPA	National Environmental Policy Act

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NFPA	National Fire Protection Association
NHPA	National Historic Preservation Act
NOAA Fisheries	NOAA's National Marine Fisheries Service
NPS	National Park Service
PCBs	polychlorinated biphenyls
Reclamation	U.S. Bureau of Reclamation
Recreation Area	Lake Roosevelt National Recreation Area
RV	recreational vehicle
SHPO	State Historic Preservation Office
SR	State Route
TMDL	Total Maximum Daily Loads
TPP	Third Power Plant
USFWS	U.S. Fish and Wildlife Service

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# **Chapter 1 INTRODUCTION**

## **1.1 Background**

The Columbia Basin Project (CBP) began with fund allocation for Grand Coulee Dam pursuant to the National Industrial Recovery Act of June 16, 1933. Grand Coulee Dam and the John W. Keys III Pump-Generating Plant (JKPGP) are on the mainstem of the Columbia River about 90 miles west of Spokane, Washington. Construction of the original dam started in 1933 and was completed in 1942.

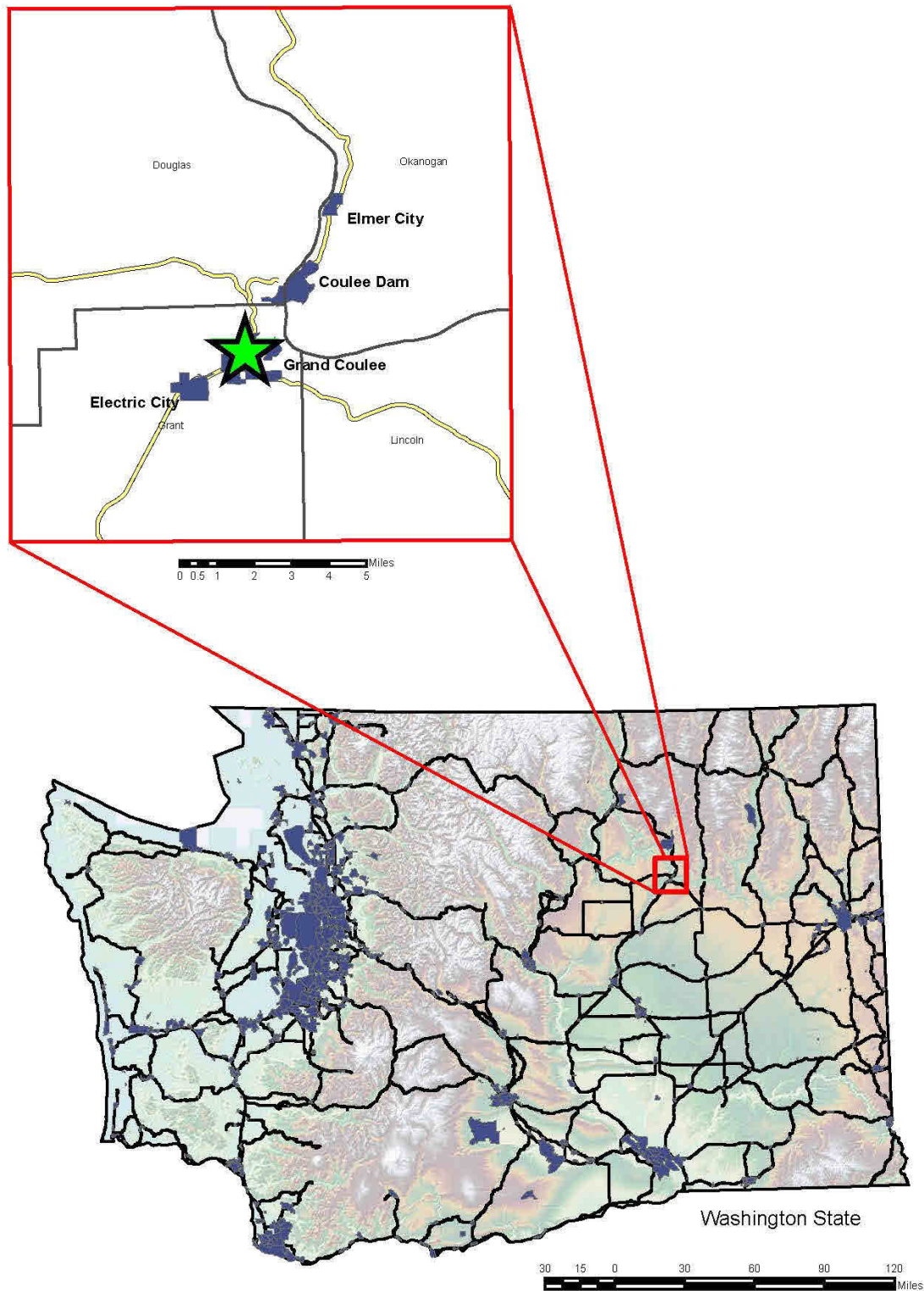
The Grand Coulee Power Office Fire Department (Fire Department) is staffed 24 hours a day, 7 days a week by career Federal Firefighters to protect Federal assets and personnel associated with Grand Coulee Dam and Power Office lands and infrastructure, as well as to provide mutual aid services to neighboring communities and agencies. The Fire Department is currently housed and occupies multiple areas within the JKPGP, an industrial facility. These areas are part of the original JKPGP South Tower construction. The JKPGP space being utilized for the Fire Department was originally constructed to support the maintenance of power production and irrigation water pumping units and was never intended to be occupied by a fire department.

This environmental assessment (EA) analyzes for potential environmental impacts, which could occur as the result from the construction of a new fire station for Grand Coulee Power Office (GCPO) in northeastern Washington (see Figure 1-1 for location map).

Upon completion of this EA and associated consultation and coordination activities, the GCPO Manager will determine whether a Finding of No Significant Impact (FONSI) or a Notice of Intent to prepare an Environmental Impact Statement (EIS) is required for this project.

## **1.2 Purpose and Need for the Action**

The purpose of constructing a new fire station is to relocate the Fire Department to an independent centrally located station. Currently, the Fire Department is housed in the JKPGP. The need to relocate the Fire Department is four-fold: 1) the JKPGP modernization will displace the Fire Department indefinitely and a station will be needed, 2) in order to ensure reliable protection for all Reclamation facilities and lands, Reclamation has determined the Fire Department's station needs to be located independent of critical infrastructure, 3) a centrally located station will lessen response time to Reclamation facilities and structures and enable the Fire Department to better provide mutual aid to other agencies and the surrounding communities, and 4) in a recent study Reclamation determined that housing a fire department within a facility it is tasked to protect is a high risk situation. A specific finding was made noting that the Fire Department's location should be analyzed and an independent fire station would be a more preferred option.



## Proposed Project Location

Figure 1-1. Location map.



The JKPGP Modernization Project is funded and scheduled to begin in the fall of 2016. Due to space restrictions and requirements for this major capital improvement project, the Fire Department must vacate their space in the JKPGP by October 2016. A new facility is needed to meet project needs, National Fire Protection Association (NFPA) Emergency Response times, and ensure a safe/reliable facility exists to support the Fire Department in their mission of emergency support.

The GCPO is a National Critical Infrastructure hydroelectric facility and must have reliable emergency response capabilities to ensure that the interruption to power generation is minimized during an emergency incident. Just as important, employee safety is paramount. Emergency rescue, recovery, and medical care for injured employees and facility fire suppression are vital duties fulfilled by the Fire Department.

Centrally locating the GCPO emergency response resources will better allow emergency response resources to meet NFPA requirement standards. Those standards include arrival of a department's fire suppression resources and/or Emergency Medical Services (EMS) to provide a first responder with Automate External Defibrillator (AED) to arrive within a 240-second travel time to 90 percent of incidents.

## **1.3 Location and General Description of Affected Area**

Grand Coulee Dam is located on the mainstem of the Columbia River approximately 90 miles west of Spokane in north-central Washington. The proposed fire station would be located in the City of Grand Coulee on or adjacent to GCPO lands and centrally located to Power Office infrastructure.

## **1.4 Authority**

The CBP began with fund allocation for Grand Coulee Dam pursuant to the National Industrial Recovery Act of June 16, 1933. Grand Coulee pump storage plant authorization is provided by the Acts of August 30, 1935, the Columbia Basin Project Act of March 10, 1943, and by the Secretary of the Interior's approval and submittal of feasibility reports to the President and Congress in House Document 172 in 1945 and in a 1949 report, both pursuant to Sec. 9(a) of the Reclamation Project Act of 1939.

## 1.5 Scoping and Issues

A public scoping period was held from May 19 to June 19, 2014. A news release was provided to local area media announcing Reclamation's intent to prepare an EA and requesting public comment during the 30-day scoping period. Letters were sent to the Confederated Tribes of the Colville Reservation (also known as the Colville Confederated Tribes or CCT) and the Spokane Tribe of Indians to inform them of the proposed alternatives and to solicit comments or concerns they may have on the alternatives. Additionally, similar letters were sent to Members of Congress, Federal and state agencies, local city and county officials, and local organizations (Appendix A).

Three responses to the news release and the scoping letter were received during the scoping comment period. The scoping comments are included in Appendix B and summarized below:

- Concerns were expressed that architecture of a new structure reflect the recreational nature of one alternative location or if visible from the highway an attractive facility be built.
- Concerns were expressed that the view-scape of Crescent Bay be preserved.
- It was suggested that design features should include additional resources and amenities for the community and tourists, such as a rest area, kiosk for information, ambulance facility, and observation deck.
- Concerns were expressed about possible cultural and/or historical resources present at the proposed locations.
- Concerns were expressed about the design and aesthetics of a new structure at the Crescent Bay location.
- Concerns were expressed regarding access roads, lighting, and signage for visitors to Crescent Bay.

The EA team also identified associated issues and impacts to be considered and addressed through project design, assessment, and implementation. The issues of concern addressed in this EA include the possible effects of alternatives on cultural resources, soils, social and economic conditions, traffic, vegetation, wildlife, listed species, air quality, visual quality, water quality, environmental justice, and recreation.

A public review period was held from September 8 to October 9, 2015. The Draft EA was mailed to Federal, state, local agencies, elected officials, Indian tribes, and interest groups for comments. Reclamation received one comment. The comment letter is summarized below and included along with Reclamation's response in Appendix C of this Final EA.

- Concerns were expressed that architecture of a new structure reflect the recreational nature of one alternative location or if visible from the highway an attractive facility be built.
- Concerns were expressed that the view-scape of Crescent Bay be preserved.
- It was suggested that design features should include additional resources and amenities for the community and tourists, such as a rest area, kiosk for information, ambulance facility, and observation deck.
- Concerns were expressed about the design and aesthetics of a new structure at the Crescent Bay location.

## **1.6 Regulatory Compliance**

Various laws, Executive Orders, and Secretarial Orders apply to the proposed action and are summarized below. The legal and regulatory environment within which the Federal activity would be conducted depends on which alternative is implemented.

### **1.6.1 National Environmental Policy Act**

NEPA requires that the action agency use a public disclosure process to determine whether or not there are any environmental impacts associated with proposed Federal actions. If there are no significant environmental impacts, a FONSI can be signed to complete the NEPA compliance.

### **1.6.2 Endangered Species Act (1973)**

The Endangered Species Act (ESA) requires all Federal agencies ensure that their actions do not jeopardize the continued existence of listed species, destroy, or adversely modify their critical habitat. As part of the ESA's Section 7 process, an agency must request information from the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NOAA Fisheries) on whether any threatened and endangered species occur within or near the action area. The agency then must evaluate impacts to those species. If the action may affect any listed species, the agency must consult with the USFWS or NOAA Fisheries.

### **1.6.3 National Historic Preservation Act of 1966**

Section 106 of the National Historic Preservation Act (NHPA), as amended, requires that Federal agencies consider the effects that their projects have on properties eligible for or on the National Register of Historic Places. The 36 CFR 800 regulations provide procedures that Federal agencies must follow to comply with the NHPA. For any undertaking, Federal agencies must determine if there are properties of National Register quality in the project area, the effects of the

project on those properties, and the appropriate mitigation for adverse effects. In making these determinations, Federal agencies are required to consult with the State Historic Preservation Office (SHPO), Native American tribes with a traditional or culturally significant religious interest in the study area, the interested public, and in certain cases, the Advisory Council on Historic Preservation (ACHP).

### **1.6.4 Executive Order 13007: Indian Sacred Sites**

Executive Order 13007, dated May 24, 1996, instructs Federal agencies to promote accommodation of access to and protect the physical integrity of American Indian sacred sites. A “sacred site” is a specific, discrete, and narrowly delineated location on Federal land. An Indian tribe or an Indian individual determined to be an appropriately authoritative representative of an Indian religion must identify a site as sacred by virtue of its established religious significance to, or ceremonial use by, an Indian religion. However, this is if the tribe or authoritative representative has informed the agency of the existence of such a site.

### **1.6.5 Secretarial Order 3175: Department Responsibilities for Indian Trust Assets**

Indian Trust Assets (ITAs) are legal interests in property held in trust by the United States (with the Secretary of the Interior acting as trustee) for Indian tribes or Indian individuals. Examples of ITAs are lands, minerals, hunting and fishing rights, and water rights. In many cases, ITAs are on-reservation; however, they may also be found off-reservation.

The United States has an Indian trust responsibility to protect and maintain rights reserved by or granted to Indian tribes or Indian individuals by treaties, statutes, and executive orders. These rights are sometimes further interpreted through court decisions and regulations. This trust responsibility requires that officials from federal agencies, including Reclamation, take all actions reasonably necessary to protect ITAs when administering programs under their control.

### **1.6.6 Executive Order 12898: Environmental Justice**

Executive Order 12898, dated February 11, 1994, instructs Federal agencies, to the greatest extent practicable and permitted by law, make achieving environmental justice part of its mission by addressing, as appropriate, disproportionately high and adverse human health or environmental effects on minority populations and low income populations. Environmental justice means the fair treatment of people of all races, income, and cultures with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Fair treatment implies that no person or group of people should shoulder a disproportionate share of negative environmental impacts resulting from the execution of environmental programs.

## Chapter 2 ALTERNATIVES

### 2.1 Introduction

This chapter presents the three alternatives being considered for the construction of a new fire station.

- No Action Alternative
- Alternative A
- Alternative B

Alternatives A and B were developed through discussions with key GCPO Fire Department personnel, engineers, and the project management team. The group chose several locations as possible sites to construct a new station. Representatives of the NEPA team, Fire Department, and project management team worked through a decision matrix (Table 2-1) to narrow the choices for location to only those that best meets the Fire Department's criteria. Criteria for the location of the new station include 1) it must be centrally located to serve GCPO lands and infrastructure as well as mutual aid agreements, 2) interaction with pedestrians should be minimal, 3) the station should be independent of critical infrastructure, 4) ingress/egress from the station should be efficient and have limited restriction, 5) the station should be constructed to National Fire Protection Association standards, and 6) the new station should comply with Reclamation sustainability standards.

The decision matrix (Table 2-1) was designed to determine the most appropriate location for a new station based on the criteria above. The team assigned weights to each factor based on the importance of them to the final decision. For example, the station must be independent of critical infrastructure and therefore received the highest priority designation of 5. Conversely, sustainability standards would be followed for construction of a station built at any location; therefore, it received the lowest weight of 1.

Scores were assigned to each location based on how closely the sites met the criteria. Scores ranged from zero (not satisfying) to three (fully satisfies criteria). Once the matrix was complete, calculations of the weights and scores were made to determine the top two alternative locations as shown in Table 2-1.

Table 2-1. Decision Matrix

Decision Factors	Criteria	Construction	Crescent Bay	West Gate	Model Dam	Admin-Security	Admin-Warehouse
	Wt.	1	2	3	4	5	6
Independent station	5.0	3	3	3	2	0	1
Centrally located	4.0	0	3	3	3	0	2
NFPA Standards	1.0	3	3	3	3	3	3
Sustainability Standards	1.0	3	3	3	3	3	3
Minimize Pedestrian Conflict	3.0	1	2	3	2	0	0
Ingress/Egress	4.0	2	3	3	3	1	1
Weighted Scores		32.0	51.0	54.0	46.0	10.0	23.0

Weighting : 1 = lowest priority, 5 = highest priority

Scoring : 0 = Does not satisfy, 1 = Partly satisfies, 2 = Substantially satisfies, 3 = Fully satisfies

Criteria	Definition
Independent station	Construct a station independent of critical infrastructure associated with Grand Coulee Dam
Centrally located	Construct a centrally located station to best meet the requirement that the first engine company arrives within four minutes to 90 percent of incidents.
NFPA Standards	Construct a station to National Fire Protection Association Standards
Sustainability Standards	Construct a station to comply with Reclamation sustainability standards
Minimize Pedestrian Conflict	Construct a station in a location that minimize pedestrian interaction and conflict
Ingress/Egress	Construct a station in a location which provides for safe and efficient ingress and egress

## **2.2 No Action Alternative**

Under the No Action Alternative, the GCPO Fire Department would not build a new station and would continue to operate out of the JKPGP.

## **2.3 Alternative A – Preferred Alternative**

Under the Preferred Alternative, Reclamation would construct a new fire station on lands managed by the GCPO. As illustrated in Figure 2-1, the station would be located outside the west Administration/Industrial Area gate, near the intersection of Highway 155 and B Street. The structure would be approximately 21,500 square feet in size and include areas for sleeping, dining, meeting/training, offices, as well as a public reception area. Access to the new station would be from Industrial Road, off either, B Street or Highway 155.

## **2.4 Alternative B**

Under Alternative B, Reclamation would construct a new fire station on lands managed by the National Park Service at Crescent Bay, uphill from the boat launch and adjacent to the ramp access road, as shown in Figure 2-1. The station would be constructed as in Alternative A with amenities to include areas for sleeping, dining, meeting/training, offices, and a public reception area. Access to the new station would be off Highway 155 at the Crescent Bay boat ramp entrance.



**Figure 2-1. Locations for Proposed New Fire Station**



## **Chapter 3 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES**

This chapter describes existing physical, biological, natural, social, and cultural resources that could be affected and identifies any potential impacts, beneficial or adverse, to those resources that could result from each of the three alternatives.

The No Action Alternative describes the conditions of the resources being examined if no action is taken and provides the basis to compare the two action alternatives (Alternatives A and B).

The resources analyzed and addressed in this EA include the possible effects of the proposed action and alternatives on cultural resources, soils, vegetation, wildlife, listed species, water quality, recreation, visual quality, air quality, social and economic conditions, and traffic.

### **3.1 Recreation Values and Uses**

This section examines potential effects the alternatives may have on current recreational uses and future opportunities. While some recreational uses could be diminished, other opportunities may be enhanced by the proposed project.

#### **3.1.1 Affected Environment**

The purpose of this analysis is to describe the potential effects to the recreational values and opportunities as the result of the construction of the proposed new fire station. The two locations being examined in this EA are located near Crescent Bay on Lake Roosevelt. While the location of the Preferred Alternative is on Reclamation managed property across Highway 155 from Crescent Bay, the site for Alternative B is within the Lake Roosevelt National Recreation Area (Recreation Area), adjacent to day use areas and boat ramp, and managed by the National Park Service (NPS). Recreational opportunities at Crescent Bay include fishing, picnics, hiking, and boat launch. Additionally, Crescent Lake, within the Recreation Area, is used by fishermen, canoeists, and for other shoreline activities. In the 2009 Lake Roosevelt Shoreline Management Plan, NPS proposes new facilities to include a marina, interpretive/education center, and walking trails (NPS 2009). Camping and recreational opportunities at nearby Spring Canyon include 87 campsites, seasonal potable water, recreational vehicle (RV) dump station, swim beach, and boat ramp.

#### **3.1.2 Environmental Consequences**

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

Under the No Action Alternative, Reclamation would not construct a new fire station and recreational uses and opportunities would remain as they currently are; although, the NPS may choose to alter recreational uses of Crescent Bay at a later date.

#### **Alternative A - Preferred Alternative**

Under Alternative A, Reclamation would construct a new fire station on Federal lands managed by GCPO. Direct recreational opportunities would not be affected, as the new station would be situated across Highway 155 from Crescent Bay, which would not deter existing or provide additional recreational opportunities.

During construction projects at GCPO, contractors' workforce typically utilizes area RV parks during the workweek in Grand Coulee. The area has a number of full-service RV utility sites and formal tent sites, which provide camping opportunities for tourists and workers alike. Short and longer-term spaces are at Coulee City Community Park, Coulee Playland, Sunbanks Resort, Grand Coulee RV Park, King's Court, and Lakeview Terrace. Other camping and RV sites are available at Spring Canyon Campground on Lake Roosevelt and Steamboat Rock at nearby Banks Lake. It is assumed that the relatively small increase of users by this project would not affect the availability of RV or camping sites for tourists.

#### **Alternative B**

Under Alternative B, Reclamation would construct a new fire station on land managed by the NPS and within the Recreation Area. The station would be constructed up slope from the boat ramp and adjacent to the entry road. Minor road realignments would be necessary to accommodate emergency vehicles ingress and egress. Access to the boat launch could be temporarily interrupted during construction activities, however, nearby Spring Canyon offers boat launch facilities. Additionally, other roads within the Crescent Bay use area may be closed for public safety and more efficient traffic flow. Emergency response to incidents at the boat launch or day use area would be shortened, as the new station would house full time staff and fire/utility vehicles.

Over time, and in conjunction with the NPS, amenities to enhance the recreational users experience may be added. These additions may include a fish cleaning station, information kiosk, and restroom facilities. Additional NPS facilities and/or improvements may require re-evaluation of recreational uses, existing and realigned roads, as well as possible warning lights and pedestrian walkways.

#### **Cumulative Effects**

Other projects identified in the Grand Coulee area include the Third Power Plant (TPP) overhaul and JKPGP modernization. Contract workers typically utilize RV parks, motels, local campgrounds, or commute from Spokane or other nearby cities during the construction period.

Given varying and dispersed construction schedules and the number of local campgrounds and RV park/facilities, the increase of workers is not expected to affect the availability of camping, RV, or other recreational facilities. Available facilities in the Grand Coulee area include Coulee City Community Park, Coulee Playland, Sunbanks Resort, Grand Coulee RV Park, King's Court, and Lakeview Terrace. Other camping and RV sites are available at Spring Canyon Campground on Lake Roosevelt and Steamboat Rock at nearby Banks Lake.

Under Alternative B, the NPS initially had plans to potentially construct a marina, visitor center, and campground in the Crescent Bay area (NPS 2009). However, in the distant, yet foreseeable future, NPS would most likely limit development to a new day use area and improvements near Crescent Lake (Edwards 2015a). If, and when, NPS makes improvements, traffic counts and use patterns would need to be analyzed to determine if warning lights, wider roads, or road realignments are necessary.

## 3.2 Traffic

Grand Coulee Dam is located on the Columbia River within the City of Grand Coulee and south of the Town of Coulee Dam in Grant County in north-central Washington State, approximately 90 miles west of Spokane and 230 miles east of Seattle. Access to and from the Grand Coulee Dam area is provided by US Highway 2, and Washington State Route (SR) 17, 21, 155, 174, and 283/28 as shown in Figure 3-1.

### 3.2.1 Affected Environment

There are three roads of concern (SR 155, Crescent Bay access, Industrial Rd/B Street) in examining the effects the proposed project has on traffic. The most traveled road is SR 155, a paved, generally 2-lane, minor arterial road. It is the main north-south route through the Grand Coulee Dam area. From its intersection with SR 174 in west Grand Coulee, the highway heads northeast, through town, past Grand Coulee Dam, JKPGP (which currently houses the Fire Department), and the Grand Coulee Dam Visitor Center. SR 155 provides three travel lanes in the vicinity of the Visitor Center and extending uphill beyond the dam crest and JKPGP, with the added third lane provided for southbound travel through the grade ascent. Secondly, the access road to Crescent Bay is located approximately 1 mile northwest of the SR 174 intersection on SR 155 and leads to the day-use recreation areas and the boat launch. The access road is for the most part two lanes of unmarked gravel surface. Currently, the road is maintained and managed by the NPS. The third road in this assessment is “Industrial Road” which connects B Street in Grand Coulee to SR 155 and is the street to the west entrance to GCPOs Industrial Area.

Access to Grand Coulee Dam is provided by Reclamation roads via SR 155. Traffic volume data for SR 155 and SR 174 are shown in Table 3-1.

**Table 3-1. State Route Traffic Counts**

State Route	Milepost	Location	2009	2010	2011	2012	2013
155	25.73	Entering Grand Coulee off 174		5700	5100	5200	5300
174	21.51	South side intersection of 155 & 174		3000	3000	3000	2900

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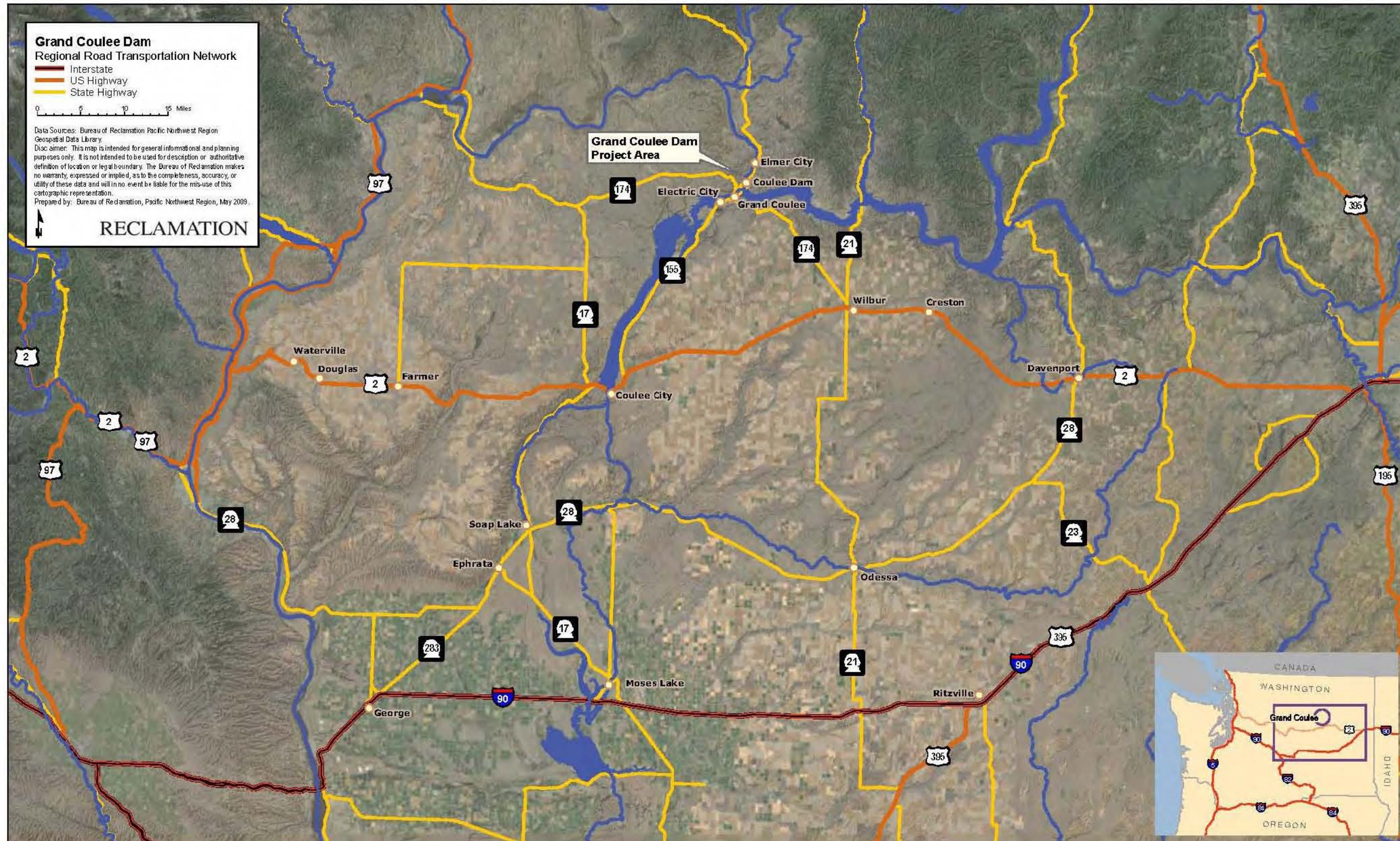


Figure 3-1. Transportation route to Grand Coulee Dam.





Currently, the Fire Department enters and exits onto SR 155 from its station in the JKPGP and has three utility vehicles and three fire apparatus in the GCPO fleet. In addition to emergency trips, the Fire Department makes routine and non-routine trips to check, inspect, and maintain firefighting and fire suppression equipment. Each utility vehicle makes two trips out of the station per day or thirty non-emergency round trips per week. Individual fire trucks routinely leave the station one time each per week or three total trips for all apparatus per week (McCleary 2014). All trips, especially during daylight hours, position the department to interact with north and southbound SR 155 traffic as well as to cross a pedestrian walkway. Private and other government vehicles also utilize the area to access the top of the dam, JKPGP, and employee/government parking areas. Emergency and routine/non-routine trips are given in Table 3-2.

**Table 3-2. GCPO Vehicle Trip Counts**

Number of Vehicles	Trips per Week/Vehicle	Total Trips per Year	Emergency Responses	Vehicle Trips on SR 155
Fire Truck - 3	1	156		156
Utility - 3	2	1560		1560
Total		1716	100	1816

Emergency responses account for an average of 100 trips per year and enter SR 155 at the top of the dam, outside the JKPGP. Once on the roadway the vehicles respond to various areas of GCPO lands and facilities or mutual aid within the Coulee Dam/Grand Coulee area.

Approximately half, or 780, of non-emergency trips are made to the Administration/Industrial Area. From their current location, Fire Department vehicles enter SR 155 outside the JKPGP and turning south and travel uphill to their destination, entering the Administration area through the East Gate.

Traffic counts, as collected by the NPS, for Crescent Bay and Spring Canyon access roads, are provided in Table 3-3. Counts for Spring Canyon Campground road were included to provide data on access to other nearby NPS recreational opportunities with boat ramps. Both road counts reflect only traffic leading into the recreational areas. The Crescent Bay counter is near the entrance off SR 155 and does not differentiate if vehicles travel to Crescent Lake or the Crescent Bay boat ramp area after entering the Recreation Area.

The NPS data shows Spring Canyon to be the more popular of the two access points to Lake Roosevelt. There are several reasons why Crescent Bay is not used as much. Crescent Bay and Crescent Lake are day use areas, primarily used for launching boats, fishing, picnics, or canoeing on Crescent Lake, while Spring Canyon includes overnight camping, a park, and a popular swim beach. Additionally, the boat launch at Spring Canyon extends down to elevation 1222 feet (NPS 2015a), the lowest on Lake Roosevelt.

Spring Canyon's low boat launch elevation helps explain some of the fluctuation in traffic counts from year-to-year. Higher traffic years correlate to some degree with low reservoir levels. Lake Roosevelt was drawn down 1217 feet in the spring of 2011 (Reclamation 2015). Traffic counts at Spring Canyon for that year were 62,565, while vehicle numbers in 2013 totaled 20,629 (NPS 2015b) and the draw down elevation was 1254 feet (Reclamation 2015).

**Table 3-3. National Park Service Traffic Counts**

Location	2013	2012	2011	2010
Crescent Bay	12,862 <sup>1</sup>	8,054	8,371	9,309
Spring Canyon	20,629	91,424 <sup>2</sup>	62,565	40,018

The third road in this assessment is "Industrial Road" which connects B Street in Grand Coulee to SR 155 and leads to the west entrance of GCPO's Administration/Industrial Area. From SR 174, B Street runs north through a three block, sparsely populated portion of the City of Grand Coulee. Observations of B Street and Industrial Road indicate that, although the street is utilized, traffic is light with a number of vehicles travelling towards SR 155 continue straight towards GCPO's west gate rather than turning east to the highway. Similarly, traffic leaving the Industrial Area, often continues west up B Street towards the Feeder Canal or to SR 174, rather than turning south to SR 155.

### **3.2.2 Environmental Consequences**

#### **No Action Alternative**

Under the No Action Alternative, the Fire Department would remain in the JKPGP and Fire Department traffic patterns would remain as they currently are.

#### **Alternative A - Preferred Alternative**

Under Alternative A, Reclamation would construct a new fire station near the west gate entrance to the GCPO Industrial Area. The line of sight and safety of vehicles entering SR 155 from the west gate location is greatly increased as the result of viewing distance to the nearest corner and absence of steep slope. Vehicles that require access to SR 155 for routine or emergency trips (i.e. north to the dam, south to north dam) will not change traffic patterns or the use of SR 155.

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<sup>1</sup> During a six-month period of 2013, Foss Maritime and the Washington State Department of Transportation utilized the Crescent Bay use area to construct and launch the new Keller Ferry. The project accounts for the abnormally high traffic counts during that year (Edwards 2015a).

<sup>2</sup> The National Park Service noted traffic counters were recording multiple counts during the fall of 2012 accounting extremely high counts (Edwards 2015a).



However, nearly half of non-emergency trips, or approximately 780 per year, are to the Administration/Industrial Area (McCleary 2014). Because of the location of the proposed station and its proximity to the west gate, vehicles travelling to the Industrial Area would not find it necessary to enter or travel on SR 155 for approximately 50 percent of non-emergency trips. Under this Alternative, the Fire Department's interaction with highway traffic would be greatly reduced.

Given the streets light usage, Fire Department vehicles interaction with B Street and Industrial Road traffic would be minimal. Line of sight from B Street to the location of the proposed station is direct and approaching vehicle or pedestrian traffic would be easily alerted to vehicles entering the roadway.

### **Alternative B**

Under Alternative B, Reclamation would construct a new fire station in the Crescent Bay day-use area, on land managed by the NPS. The line of sight and safety of vehicles entering SR 155 from the Crescent Bay location is greatly increased as the result of viewing distance to the nearest corner and absence of steep slope. Vehicles that require access to SR 155 for routine or emergency trips (i.e. north to the dam, south to north dam) will access the highway at a different location than the present but will not change traffic patterns or the use of SR 155. The station would be constructed up slope from the boat ramp and adjacent to the entry road. Minor road realignments of the Crescent Bay access road would be necessary to accommodate emergency vehicles ingress and egress. As the station would be constructed on the opposite side of SR 155, Alternative B would not affect traffic from B Street and/or the Industrial Area.

### **Cumulative Effects**

Other projects identified in the Grand Coulee area include the TPP overhaul and JKPGP modernization. Construction traffic generated by the Preferred Alternative would add to that generated by the TPP and the JKPGP projects. However, the combined peak increase as the result of the TPP and JKPGP projects is expected to be about 2.6 percent in the average daily two-way traffic on SR 155 (Reclamation 2010). As the result of the new station construction site being approximately 1 mile from the closest other construction project, the addition of contract workers for the Preferred Alternative is not expected to add a significant number of vehicles to the cumulative traffic. There would be a negligible effect upon traffic in the area when compared with existing traffic levels and highway capacity in the area. No cumulative effects related to traffic are anticipated as a result of the Preferred Alternative.

Under Alternative B, the NPS initially had plans to potentially construct a marina, visitor center, and campground in the Crescent Bay area (NPS 2009). However, in the distant, yet foreseeable future, NPS would most likely limit development to a new day use area and improvements near Crescent Lake (Edwards 2015a). If, and when, NPS makes improvements, traffic counts and use patterns would need to be analyzed to determine if warning lights, wider roads, or road realignments are necessary to accommodate the increase in traffic.

## **3.3 Cultural Resources**

### **3.3.1 Existing Environment**

This discussion of cultural resources and the affected environment of the project are divided into pre-contact archaeological resources, post contact archaeological resources, properties of traditional religious and cultural importance to American Indian Tribes, and standing structures.

#### **Pre-Contact Archaeological Resources**

Pre-contact archaeological resources are archaeological sites, features, artifacts, and other traces of human behavior that pre-date European contact with aboriginal Native American populations. For the project, archaeological resources that pre-date 1800A.D. are considered pre-contact.

Archaeologists have been conducting work in the vicinity of Grand Coulee Dam since the 1930s and 1940s when they produced professional archaeological reports in preparation for dam construction prior to the rise of Lake Roosevelt from the Columbia River. Other investigations followed with the construction of the TPP and forebay dam in the 1960s and 1970s. This second era of construction resulted in a lowering of the pool level of Lake Roosevelt that exposed hundreds of archaeological sites. Since the 1990s, Reclamation has worked with partner agencies in the Federal Columbia River Power System to address cultural resources associated with operations and maintenance of Grand Coulee Dam.

Pre-contact archaeological resources reported along Lake Rufus Woods (downstream) and Lake Roosevelt (upstream) include a wide range of features and artifacts; both in style and in age. The culture area is generally designated as part of the Columbia Plateau (Ames et al. 1998). Further definition of regional chronologies places the project in the Mid-Columbia River Region Sequence (Galm 1998) and refined local chronologies have been presented for areas both immediately downstream of Grand Coulee Dam and upstream of the confluence of the Columbia and Spokane Rivers (Campbell 1985; Pouley 2010). Archaeological materials dating to at least 12,000 years before present are reported from near Wenatchee and a range of sites, artifacts, and features with similar ranges of antiquity (10,000 years ago to 1800 A.D.) are present in great frequency along Lake Roosevelt, Lake Rufus Woods, Banks Lake, and the Grand Coulee. Local sites reported in both professional and amateur literature include rockshelters, pictographs, stacked stone cairns, pithouse sites, burials, large villages, resource gathering locales, midden deposits, and lithic scatters.

The Section 106 cultural resources review conducted for this project identified 15 archaeological and historical surveys conducted within 500 meters of the project from 1998 to 2015 (McFarland et al. 2015). One additional survey by the NPS, by Retzer (2012), is not present on the Washington State Information System for Architectural and Archaeological Records Data online database. The records search also indicates that previous surveys identified nine pre-contact archaeological sites within 1 mile of the project area. The project areas were surveyed for

archaeological sites in 2011, 2012, and in May 2015, and no pre-contact archaeological sites were identified (Berryman, Henderson, and Mueller 2011; Retzer 2012; McFarland et al. 2015).

The extensive disturbance produced, as a result of dam construction between 1933 and 1942, is the prime factor in the lack of any pre-contact archaeological sites in the immediate vicinity of Grand Coulee Dam. The landform and cultural conditions support the Washington State Department of Archaeology and Historic Preservation Predictive Model delineating the majority of the Dam vicinity as “High” or “Very High” probability for the presence of archaeological sites. The actual conditions affected by the massive historic construction, show that there is little or no potential for archaeological resources at either of the proposed project locations (McFarland et al. 2015). The areas have suffered from landslides and episodes of cutting and filling associated with construction of Grand Coulee Dam (Berryman, Henderson, and Mueller 2011; Moreno and Curti 2011; Retzer 2012; McFarland et al. 2015).

### **Post-Contact Archaeological Resources**

The year 1800 A.D. is considered the beginning of the post-contact period; however, there is little doubt that local indigenous people felt the effects of trade and exploration at least 100 years earlier. Captain Robert Gray is credited as the first Euromerican to report the discovery of the Columbia River in May 1792. Soon after, David Thompson founded the Spokane House on the Spokane River for the North West Company in 1810. This fur trading post was moved to Kettle Falls and renamed Fort Colville a decade later after a merger with the Hudson Bay Company. For the next quarter of a century, the primary economic driver in the region was the fur trade.

By the 1840s, trapping was declining in the region and with Britain’s removal of itself from the areas south of the 49<sup>th</sup> parallel in 1946 the boom was over. This began the shift toward agriculture in the region and by 1900, a majority of the cultivatable acres in the Columbia River Valley had been planted with orchards. Small agricultural communities sprung up with the orchards and soon locals desired to develop farming onto adjacent arid farmlands in the upland areas. This desire led to the push to develop large irrigation projects like Grand Coulee Dam.

Coinciding with the push from the fur trade to agriculture was the enforcement of treaties on many of the Eastern Washington tribes. In 1855, Washington Territory Governor Isaac I. Stevens used one such treaty to force tribes to give up their lands along the Big Bend of the Columbia River. A Colville Reservation was created by Executive Order in 1872 but immediately redrawn to exclude the fertile Colville Valley for the benefit of the non-native farmers. Other Interior Salish tribes were stripped of their own reservations in 1883 and subsequently moved onto the Colville Reservation. By 1885, the surviving members of the Chief Joseph Band of Nez Perce also joined the other tribes on the Colville Reservation. The tribes were forced to cede the North Half of the reservation after gold was discovered there in 1892 and another third of the land in the South Half of the remaining reservation was lost to members after the reservation was opened to non-Indian settlement.

One more change that would affect all lives along the Mid-Columbia was soon to follow. The construction of Grand Coulee Dam began with preparations in 1933 and officially commenced with massive periods of construction between 1934 and 1935 for the low dam, 1935 to 1949 for the high dam and associated power plants, and the later construction of the forebay dam and TPP from 1966 to 1978. Grand Coulee Dam was constructed with the intention of providing flood control along the Columbia River, to provide irrigation water for the Columbia Plateau, and to produce hydroelectric power. Construction of the dam led to the development of the local towns. Grand Coulee Dam also led to changes in the lives of the people making livings in the orchard communities and to native populations living along the Columbia River as the waters rose behind the dam and transformed the Columbia River into the massive storage pool now called Lake Roosevelt.

The Section 106 cultural resources review conducted for the Project identified 15 archaeological and historical surveys conducted within 500 meters of the project from 1998 to 2015 (McFarland et al. 2015). The records search also indicates that previous surveys identified five post-contact archaeological sites within 1 mile of the project area (McFarland et al. 2015). One of these post-contact archaeological sites, 45GR2559 - the Grand Coulee Dam construction Railroad grade, was identified within the footprint of Alternative A during the archaeological fieldwork for the current project (McFarland et al. 2015).

The Grand Coulee Dam construction railroad (45GR2559) was built in the 1930s as a means to transport important building components to the Grand Coulee Dam site. This stretch is 3.3 miles long running from Electric City to the base of the dam in Coulee Dam. It parallels the modern highway, SR 155, for most of the stretch but breaks away from the modern extension of SR155 and follows the original path of the highway into the Industrial Area. The railroad was dismantled in the 1950s after other portions were realigned south of Electric City when Reclamation began construction of North Dam to create Banks Lake for storage of Columbia Basin irrigation water diverted from Lake Roosevelt (Berryman, Henderson, and Mueller 2011). Hess (2010), who first recorded the site as a historical resource, noted eight identifiable features consisting of rock cuts, covered over rails, and existing grade along the 3.3-mile stretch. The railroad has not been evaluated for eligibility but it is heavily degraded in most areas. Within the Alternative A parcel, there are no existing features and the site lacks integrity because the rails, bed, and ties have been removed (McFarland et al. 2015).

No other post-contact archaeological sites have been recorded in either Alternative A or Alternative B (Berryman, Henderson, and Mueller 2011; Retzer 2012; McFarland et al. 2015). McFarland et al. (2015) describes the presence of stacked rock walls, potentially associated with workers' camps from dam construction, visible on landforms surrounding Alternative A. Construction of the fire station will not affect these features and therefore, were not further evaluated.

## Properties of Traditional Religious and Cultural Importance to Indian Tribes

The proposed project lies within the traditional territory of the Nespelem Tribe. The Nespelem Tribe is one of the 12 federally recognized tribes who have incorporated as the CCT. Other tribes who are part of the confederation and whose lands closely relate to the project area are the Sanpoil Tribe and the Moses-Columbia Tribe. Their traditional territories lie to the east and south of the project.

Reclamation reviewed various cultural resources studies and other records in the Washington State Information System for Architectural and Archaeological Records Data online database within a 1-mile radius of the project alternatives (Moreno and Curti 2011; McFarland et al. 2015). The literature review indicates that members of the tribes traditionally occupying this area exploited root crops along the wetlands of the Columbia and from the rocky slopes on higher hills along the river channel. Stacked rock cairns and rock art panels in the hills and rocky slopes around the project mark places where tribal members sought (and still seek) spiritual power (George, Shannon, and Moura 2003). Local landforms have Salish place-names and are associated with stories and legends that remain important to the cultural continuity of the local tribes. The cultural resources reviews for this project and another for the JKPGP also discuss a traditional fishing site and village area within 1 mile of the project area. The area in which these places were located is below considerable fill and water as a result of Dam construction (Moreno and Curti 2011; McFarland et al. 2015).

The construction of the dam and the continued modification of local landforms at the dam and the surrounding towns have made it unlikely that the new project would affect any of these sites. Any of the properties that were once present in either proposed alternative would already be affected by dam construction.

## Standing Structures

Reclamation considers Grand Coulee Dam to be a historic property along with other associated Reclamation structures in the project area. In 2006, Reclamation entered into a Memorandum of Agreement (MOA) (Agreement No. 1425-06-MA-1G-7047) with the Washington SHPO to resolve adverse effects of a life safety modification project to structures in the Grand Coulee Dam Complex. As part of the MOA, SHPO concurred with Reclamation's determination that:

*"...the dam, power plants, pumping plants, industrial area, and associated facilities are eligible to the National Register of Historic Places. The Complex includes facilities associated with construction of the Third Power Plant and forebay dam, which Reclamation has determined are contributing elements although they are not yet 50 years old. Five buildings in the Grand Coulee Industrial Area that are eligible to the National Register and have the potential to be affected by this undertaking are Warehouse 3, Warehouse A and B, the Machine Shop and the Assembly Shop."*

The properties mentioned in the 2006 MOA provide the starting point for a proposed Grand Coulee Dam Historic District. At this time, Reclamation has prepared a draft National Register of Historic Places nomination that defines the historic district and further specifies its significant areas, historic themes, periods of significance, contributing properties, and boundaries (Hartmans 2014). Until the nomination process is complete and signed by the Keeper of the National Register on behalf of the Secretary of the Interior, Reclamation continues to consider the dam, the three power plants, the pumping plant, and the five buildings in the Industrial Area to be the structures of the Grand Coulee Dam eligible for the National Register based upon the determination set forth by the 2006 MOA. Reclamation has also recently accepted the draft final version of a comprehensive Historic American Engineering Record for Grand Coulee Dam that helps define the integrity and significance of the various buildings and structures associated with the project (Hess-Roisse 2014).

The following excerpt from the Historic American Engineering Record report for the dam complex concisely describes the history of the Industrial Area (Hess-Roisse 2014).

*During the project's initial construction, this plateau southwest of the dam held the Vista Storage Yard. The construction rail line from the mainline at Odair passed through here, with the area's primary public SR paralleling the tracks. The site began its transformation into the Industrial Area in 1942, in the shadow of World War II, with the erection of the Assembly Building. Also called the Utility Building, its primary function was to facilitate the assembly of powerplant units and other heavy equipment, with a secondary function of providing storage space. It was soon joined by buildings with similar functions, becoming the center of maintenance for the project. It also became the administrative center in conjunction with the construction of the Third Powerplant in the 1970s.*

The Section 106 cultural resources review for the Project identified no standing structures in the footprint of either alternative (McFarland et al. 2015). Both alternatives are visible from the Industrial Area of Grand Coulee Dam but Hartmans' nomination notes the "areas southeast of the Industrial Area were not included as these areas do not yield pertinent and significant resources to define the focus of the nomination" (Hartmans 2014). Both alternatives are located outside the boundary of the historic district. Alternative A is visible only to the Industrial Area through the gap in the rock outcropping that is now Industrial Way (also the former construction railroad grade). Alternative B is separated from the Industrial Area by SR 155. Modern buildings, a fence, a landscape berm, and a row of trees (McFarland et al. 2015) restrict the view of Alternative B from the Industrial Area. Neither Alternative A nor Alternative B would result in adverse effects to historic properties based on the visual analysis (McFarland et al. 2015).

### **3.3.2 Environmental Consequences**

#### **Impact Indicators/Methods for Evaluating Impacts**

For this EA, Reclamation relied on the regulations that implement the NHPA (36 CFR Part 800) to help determine if identified cultural resources should be considered significant. The next step was to determine if the effects of the undertaking on any identified resources should be considered significant and negative. Part of the process was preparation of a cultural resources review document produced by CH2M Hill under contract to Reclamation (McFarland et al. 2015). The study made recommendations to Reclamation that there would be no adverse effect to any significant historical resources for any of the alternatives.

#### **No Action Alternative**

Under the No Action Alternative, the Fire Department would not build a new station and would continue to operate out of the JKPGP. Current conditions would not change. There would be no effect to cultural resources.

#### **Alternative A - Preferred Alternative**

Under Alternative A, Reclamation would construct a new fire station near the west gate of the Industrial Area. The cultural resources review identified only one archaeological site- a non-contributing component of the historic Grand Coulee Dam Railroad (45GR2566) within the project footprint (McFarland et al. 2015). Since the archaeological site lacks integrity and is not a significant cultural resource, there would be no effect to it as part of the proposed project. No other archaeological sites are present, so none would be affected by construction.

Additionally, the preliminary findings based on a review of known Traditional Cultural Properties in the vicinity of the project led to the recommendation that the construction of a firehouse at this location will not have any affect due to the industrial and urban components of Grand Coulee Dam and the surrounding towns (McFarland et al. 2015). The named places and the traditional fishing site located nearby will not suffer effects to their form or future use through the construction or presence of the proposed fire station (Moreno and Curti 2011).

The construction of a fire station will require ground disturbance on a parcel of 1 to 2 acres. The finished building will be no more than two stories with a relatively small footprint compared to other dam-related infrastructure. The addition of the fire station would not alter the setting of the historic district to the east since it also contains recently constructed facilities with similar light industrial uses. Minor road changes will not affect the historic circulation patterns of Industrial Way (McFarland et al. 2015). The visual intrusion and minor road changes caused by the construction of this alternative will be limited and would not adversely affect the Grand Coulee Dam Historic District (McFarland et al. 2015).

Based on these lines of evidence, Reclamation has proposed a finding of no adverse effects to historic properties for Alternative A (36 CFR 800.5 [d] [1]).

#### **Alternative B**

Under Alternative B, Reclamation would construct a new fire station in the Crescent Bay day-use area; on land managed by the NPS. The cultural resources review identified no archaeological sites within this footprint and documented a great amount of disturbance and fill related to dam construction (McFarland et al. 2015). As such, no archaeological sites would be affected by construction.

The construction of a fire station will require ground disturbance on a parcel of 1 to 2 acres. The finished building will be no more than two stories with a relatively small footprint. The addition of the fire station would not alter the setting of the historic district to the north since it also contains recently constructed facilities with similar light industrial uses. This parcel is also obscured from visibility toward the Industrial Area by a low rise and a line of trees and fence (McFarland et al. 2015).

Although the Alternative B parcel currently houses no buildings, the industrial and urban components of Grand Coulee Dam and the surrounding town of Grand Coulee reduce the effects a new building would have on the general landscape (McFarland et al. 2015). The named places and the traditional fishing site located nearby will not suffer effects to their form or future use through the construction or presence of the proposed fire station (McFarland et al. 2015). Reclamation would continue to consult with the CCT on the design of the fire station, if Alternative B is selected, due to its proximity to tribally named places and its visibility from Lake Roosevelt and the Colville Reservation.

Alternative B is separated from the Industrial Area by SR155 and the combination of elevation change and the presence of modern buildings, berms, landscaping, and fencing help to obstruct the view toward the Industrial Area (McFarland et al. 2015). The combination of visual impairment, separation, and the existence of other modern buildings at the edge of the Industrial Area yield the recommendation that construction of Alternative B would not have an adverse effect on the proposed Grand Coulee Dam Historic District.

Based on these lines of evidence, Reclamation has proposed a finding of no adverse effects to historic properties for Alternative B (36 CFR 800.5 [d] [1]).

#### **Cumulative Effects**

No cumulative effects are anticipated on these resources as a result of the proposed project. In either of the proposed alternatives, the new fire station would be built within an already developed industrial center associated with Grand Coulee Dam and the associated towns surrounding the Reclamation facility.



## 3.4 Indian Trust Assets

The Secretary of the Interior has defined ITAs as lands, natural resources, money, or other assets held by the Federal government in trust or that are restricted against alienation for Indian tribes and individual Indians [Department of the Interior, Secretarial Order No. 3215]. Reclamation usually takes this to mean that ITAs include water rights, lands, minerals, hunting and fishing rights, money, and claims.

### 3.4.1 Affected Environment

A few of the activities proposed as a part of this project, especially the potential construction of a new fire station east of the Columbia River, would take place within the exterior boundaries of the Colville Reservation. Furthermore, the Columbia River is adjacent to the proposed project area, and it flows along the edges of both the Colville and Spokane reservations. Therefore, it is appropriate to consider the potential for the project to affect ITAs.

Following the definition provided above, Reclamation finds that there are no ITAs within the area to be affected by the proposed project. One of the proposed project areas is located on lands managed solely by Reclamation. The other area is within the Lake Roosevelt National Recreation Area in the Recreation Zone as defined in the Lake Roosevelt Cooperative Management Agreement of 1990.

Neither of the alternative project locations are within the Indian Zone (also known as the Reservation Zone), and does not have the potential to affect ITAs. The lands to be affected by the project are Federal lands withdrawn or acquired by the U.S. for CBP purposes, and they are not held in trust for either the Colville or Spokane tribes or for individual Indians. No hunting or fishing rights exist inside the Reclamation Zone.

Water rights are another potential form of ITA. Both tribes have asserted claims for water rights in the waters that border their reservations (Columbia River Initiative Agreement in Principle between the State of Washington and the CCT, January 4, 2005; Letter dated Jan. 31, 2012, from Gregory Abrahamson, Chairman, Spokane Tribe Business Council, to Keith McGowan, Environmental Protection Specialist, U.S. Bureau of Reclamation). This project would not directly affect either the Colville or Spokane tribes' access to waters of the reservations, and the proposed project would not diminish the availability of water to either tribe. Therefore, the project would not affect water rights.

### **3.4.2 Environmental Consequences**

#### **No Action Alternative**

Under the No Action Alternative, the Fire Department would not build a new station and would continue to operate out of the JKPGP. Current conditions would not change. There would be no effect to ITAs.

#### **Alternative A – Preferred Alternative**

Under Alternative A, Reclamation would construct a new fire station outside the west gate. The project would not involve actions on trust lands, and it would not reduce the ability of Indians to hunt, fish, and boat in the Colville or Spokane reservations or associated trust lands. The project would not affect the amount of water available in the Columbia River, and therefore, would not affect any water rights that might be claimed by the Colville or Spokane tribes. There would be no effect to ITAs.

#### **Alternative B**

Environmental consequences for Alternative B would be the same as Alternative A.

#### **Cumulative Effects**

Reclamation has identified other projects within the area that are on-going or near completion. No effects to ITAs were identified on individual projects; therefore, no cumulative effects were identified for the Preferred Alternative.

## **3.5 Environmental Justice**

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, dated February 11, 1994, requires Federal agencies to identify and address disproportionately high and adverse human health or environmental effects of their actions on minorities and low-income populations and communities, as well as the equity of the distribution of the benefits and risks. Environmental Justice addresses the fair treatment of people of all races and incomes with respect to actions affecting the environment. Fair treatment implies that no group should bear a disproportionate share of negative effects.

Environmental justice analysis evaluates the effects of potential adverse environmental impacts on natural resources (and associated human health impacts) and socioeconomic impacts to identify and describe potential disproportionate adverse effects to minority and/or low-income populations.

### **3.5.1 Affected Environment**

As the result of their proximity to the project areas and potential effects to citizens from the proposed action, Ferry, Grant, Lincoln, Okanogan, and Douglas counties were selected as the local study area. Table 3-4 provides the numbers and percentages of population in 2013 for six racial categories (White, Black or African American, American Indian and Alaska Native, Asian, Native Hawaiian and Other Pacific Islander, and Two or More Races), the total racial minority population, and the Hispanic or Latino population for each county, the combined five-county study area, and the State of Washington (USCB 2014).

The proportion of American Indians within the local study area is over two times greater than the State of Washington due largely to the proximity of the Colville Confederated Tribe and Spokane Tribe of Indians Reservations. Conversely, the proportion of persons within the study area who are Asian or Black or African American is noticeably less than for the State of Washington. The Total Racial Minority Population of the five-county study area is 7.6 percent, which is less than the State's percentage of 10, while the Hispanic or Latino representation within the study area is nearly three times that of the State, at 28.4 percent and 10.8 percent, respectively.



Low-income populations are identified by several socioeconomic characteristics. As categorized by the Census, specific characteristics include income (median family and per capita), percentage of the population below poverty (families and individuals), and unemployment rates were used to identify low-income percentages. Table 3-5 provides income, poverty, and unemployment information for each county in the study area and the State for the years 2011 to 2013 (USCB 2014).

As Table 3-5 illustrates the median family income and per capita income for the five counties are notably below the State average. Compared to the State of Washington, the study area also has greater percentages of families and individuals living below the poverty level. Unemployment data also serves as an indicator of low-income in relation to environmental justice. In 2011 to 2013, the unemployment rate was higher in three out of five counties. Lincoln County's unemployment rate of 2.9 percent was relatively low compared to the State's 5.8 percent, while Douglas County's joblessness was slightly lower than the State's average.

**Table 3-5. Income, Poverty, and Unemployment**

	Study Area					
	Washington State	Ferry County	Grant County	Lincoln County	Okanogan County	Douglas County
Income						
Median Household Income	\$59,374	\$35,742	\$57,573	\$45,563	\$40,924	\$52,285
Individual Income	\$30,642	\$19,320	\$20,320	\$25,154	\$20,976	\$29,991
Percent below poverty level						
Families	8.7%	12.4%	15.0%	9.0%	14.6%	11.1%
Individuals	12.9%	20.5%	20.1%	14.4%	20.6%	16.5%
Unemployment	5.8%	5.9%	7.8%	2.9%	6.1%	5.6%

Source: U.S. Census Bureau, 2011-2013 3-Year American Community Survey, American FactFinder

## 3.5.2 Environmental Consequences

### No Action Alternative

No adverse natural resource or socioeconomic effects adversely affecting minority and low-income populations have been identified for the No Action Alternative; therefore, there are no environmental justice effects.

### **Alternative A - Preferred Alternative**

Under Alternative A, Reclamation would construct a new fire station outside the west gate. No adverse natural resource effects adversely affecting minority and low-income populations were identified. The existing demand for rental housing in the project area is generally considered to be high relative to the currently available supply. During short-term construction projects such as the fire station, workers typically take temporary housing at local RV parks, motels, local campgrounds, or commute from Spokane or other nearby cities. Construction of a new fire station would not be expected to contribute to the demand of rental housing.

### **Alternative B**

Under Alternative B, Reclamation would construct a new fire station in the Crescent Bay day-use area, on land managed by the NPS. Potential effects for Alternative B would be the same as those for the Preferred Alternative.

### **Cumulative Effects**

Contract workers typically utilize RV parks, motels, local campgrounds, or commute from Spokane or other nearby cities during the construction period. Reclamation will have two other projects (TPP overhaul and JKPGP modernization) on-going during the timespan of the proposed fire station construction. However, given the transitory nature of the projects, workers are not expected to contribute to the demand of rental housing.

## **3.6 Air Quality and Climate Change**

The purpose of this section is to examine the potential effects the alternatives may have on current and/or future air quality and climate change.

### **3.6.1 Existing Environment**

The locations being examined in this EA are both within the City of Grand Coulee, south of Grand Coulee Dam and Industrial/Administration Areas, and north of the major residential/commercial areas of the City. Both locations are situated in previously disturbed landscape settings, however, neither are being utilized at this time.

### **3.6.2 Environmental Consequences**

#### **No Action Alternative**

Under the No Action Alternative, the department would remain housed in the JKPGP and no new adverse or beneficial effects to air quality would occur, greenhouse gases (GHG) emissions would remain at current levels.

### **Alternative A - Preferred Alternative**

Under Alternative A, Reclamation would construct a new fire station on federally owned and mostly disturbed land.

#### *Air Quality*

In the short term, soil loosened during construction may become airborne as the result of the wind. Proper methods of controlling dust, such as the use of water trucks, will be utilized as necessary to help control airborne particulates during construction.

In the long term, parking areas and other impervious surfaces as well as vegetated storm water catchment swales could reduce airborne particulates during windstorms.

#### *Climate Change*

The proposed fire station would be built to the Federal Guiding Principles for sustainability that include concepts on energy performance, sustainable and recycled building materials, and sustainable construction methods.

Construction equipment emit exhausts that contain GHG. Given the short duration of the proposed project, the level of GHG emissions in the project area would be low.

Additionally, staffing levels and the number of fire apparatus are anticipated to remain static for the foreseeable future, resulting in no net increase of vehicle traffic and GHG emissions. Therefore, the action would not be expected to increase the total GHG that would result in a significant effect.

### **Alternative B**

Under Alternative B, Reclamation would construct a new fire station in the Crescent Bay day-use area, on land managed by the NPS. Both potential effects to air quality and climate change would be the same for Alternative B as they are for Alternative A.

### **Cumulative Effects**

Vehicular traffic, recreational activities, and commercial and residential facilities in the project area have all contributed to air quality effects and GHG emissions. These emission sources would continue to occur. The combustion emissions and dust generation from the project are expected to have a temporary and localized air quality effect. Other projects identified in the Grand Coulee area include the TPP overhaul and JKPGP modernization. Construction traffic generated by either alternative would add to that generated by the TPP and the JKPGP projects. However, the combined peak increase, as the result of the TPP and JKPGP projects, is expected to be about 2.6 percent in the average daily two-way traffic on SR 155 (Reclamation 2010). As the result of the new station construction site being approximately 1 mile from the closest other construction project, the addition of contract workers is not expected to add a significant number of vehicles to the cumulative traffic. Given the low level of emissions from the project and good

air quality in the project area, the incremental effect on air quality and climate change from the combined projects in the area would be low. Therefore, the cumulative effect from the various projects on air quality and climate change would be low.

## **3.7 Water Quality**

### **3.7.1 Existing Environment**

The State of Washington Department of Ecology (Ecology) under the framework of the Clean Water Act regulates water quality of Lake Roosevelt. Washington has established water quality standards for specific physical and chemical parameters in order to provide suitable conditions to support designated and potential uses. Some of these uses include agriculture water supply, domestic water supply, stock water supply, industrial water supply, commercial navigation, boating, wildlife habitat, harvesting, and aesthetics (Ecology 2006). The designated uses of Lake Roosevelt include core salmonid summer habitat and extraordinary primary contact recreation, as well as nine additional standard uses. Extraordinary primary contact recreation is a designated use for some high quality or special waters of the state. This designation and the associated water quality standards provide more stringent protection against waterborne disease than primary contact recreation standards.

Section 303(d) of the Clean Water Act requires states and tribes to identify water bodies that do not meet water quality standards. States and tribes must publish a list of these impaired waters every 2 years. The most recent approved 303(d) list for the State of Washington is the 2008 Integrated Report approved by U.S. Environmental Protection Agency on January 29, 2009 (Ecology 2009). For lakes, rivers, and streams identified on this list, states and tribes must develop water quality improvement plans known as total maximum daily loads (TMDLs). These TMDLs establish the amount of a pollutant a water body can carry and still meet water quality standards. Water temperature was identified as one of the primary water quality problems in the Columbia River segments near Grand Coulee Dam, while low dissolved oxygen (DO) and polychlorinated biphenyls (PCBs) (a persistent organic pollutant with toxicities similar to dioxins) were also identified as water quality concerns. There are currently no TMDLs for temperature, DO, or PCBs in Lake Roosevelt.

The location of one of the Alternatives being examined in this EA is adjacent to Lake Roosevelt in the Crescent Bay boat launch area. Conversely, the other location being examined is some distance from the lake, across the highway in a more industrial/city setting.

### **3.7.2 Environmental Consequences**

#### **No Action Alternative**

Under the No Action Alternative, the department would remain housed in the JKPGP and there would be no change in water quality from the present condition.



### **Alternative A – Preferred Alternative**

Under Alternative A, Reclamation would construct a new fire station near the west gate entrance to GCPO's industrial area. A new station at this location should have no adverse effect on Lake Roosevelt or ground water quality as storm-water runoff from the parking lot and the facility would be diverted to storm water catchment swales. The water catchment swales will contain natural grasses and other vegetation that have the ability to utilize storm-water, take up contaminants, and retain sediments from runoff.

### **Alternative B**

Under Alternative B, Reclamation would construct a new fire station in the Crescent Bay day-use area, on land managed by the NPS. Because of the proximity of the new station to Lake Roosevelt, catchment swales would be constructed to catch storm-water runoff from parkings, structures, and other impervious surfaces. The water catchment swales will contain natural grasses and other vegetation that have the ability to utilize storm-water, take up contaminants, and retain sediments from runoff.

### **Cumulative Effects**

No cumulative effects are anticipated on this resource as a result of the proposed project.

## **3.8 Threatened and Endangered Species**

### **3.8.1 Affected Environment**

The following list of species and candidate species protected by the ESA was developed by accessing listed species for Grant and Douglas Counties, Washington.

[http://ecos.fws.gov/tess\\_public/reports/species-by-current-range-county?fips=53025](http://ecos.fws.gov/tess_public/reports/species-by-current-range-county?fips=53025) and  
[http://ecos.fws.gov/tess\\_public/reports/species-by-current-range-county?fips=53017](http://ecos.fws.gov/tess_public/reports/species-by-current-range-county?fips=53017)

Bull trout (*Salvelinus confluentus*), Threatened  
Gray wolf (*Canis lupus*), Endangered/Delisted<sup>3</sup>  
Columbia Basin DPS of Pygmy rabbit (*Brachylagus idahoensis*), Endangered  
Ute ladies'-tresses (*Spiranthes diluvialis*), Threatened Plant  
Northern spotted owl (*Strix occidentalis caurina*) Threatened  
Marbled murrelet (*Brachyramphus marmoratus*) Threatened  
Grizzly bear (*Ursus arctos horribilis*) Threatened  
Yellow-billed Cuckoo (*Coccyzus americanus*) Threatened

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<sup>3</sup> Though Gray wolf was listed on the species lists by county, further research shows the populations in Grant and Douglas counties are part of the Northern Rocky Mountain DPS. Research also indicates that no known wolves are known to occur in Grant or Douglass Counties  
<http://ecos.fws.gov/speciesProfile/profile/speciesProfile?spscode=A00D>, Accessed 12/22/14). This DPS was delisted on May 5, 2011 (76 FR 25590). Therefore, the Gray Wolf will not be considered in this analysis.

## **Bull Trout**

### *Status and Distribution*

The USFWS issued a final rule listing the Columbia River and Klamath River populations of bull trout (*Salvelinus confluentus*) as threatened species under the ESA on June 10, 1998 (63 FR 31647). This listing was reaffirmed in the most recent status review (USFWS 2008).

Bull trout are known to use the mainstem Columbia River for feeding, migration, and overwintering habitat (USFWS 2008). Bull trout are rare in Lake Roosevelt, but a few have been documented (Spotts et al. 2000; Lake Roosevelt Forum 2011). In Banks Lake, bull trout were identified in the 1952 to 1954 catches (Nelson 1954; Spence 1965), as they were likely pumped from Lake Roosevelt with irrigation water as the lake filled. However, bull trout are not currently found in Banks Lake and never established populations due to lack of habitat (Reclamation 2001).

### *Life History and Ecology*

Bull trout are a cold-water fish of relatively pristine stream and lake habitats. They have very specific habitat requirements including cold-water temperatures, clean stream substrates for spawning and rearing, and complex habitats with riffles, deep pools, undercut banks, and large woody debris, as well as connectivity between headwater spawning habitats and mainstem river or lake overwintering habitats (USFWS 2011a). Both resident and migratory life history forms are expressed by bull trout, with migratory fish spawning in cold, high-mountain tributaries in fall, and overwintering in mainstem river habitats and lakes. Juvenile migratory fish typically rear in tributaries for 2 years then outmigrate to lakes and mainstem rivers. Residents stay in spawning tributaries for their entire life cycle. Adults are primarily piscivores, with juveniles feeding on aquatic invertebrates (NatureServe 2011).

### *Reasons for Decline*

The Columbia River distinct population segment (DPS) is threatened by habitat degradation and fragmentation, blockage of migratory corridors, poor water quality, and past fisheries management practices such as the introduction of nonnative species (USFWS 2002a).

### *Designated Critical Habitat*

The mainstem Columbia downstream of Chief Joseph Dam is included in critical habitat designated for bull trout on October 18, 2010 (75 FR 63898). Designated Critical Habitat did not include Lake Roosevelt, the Columbia River below Grand Coulee Dam to Chief Joseph Dam, nor tributaries entering these water bodies, nor Banks Lake.

## **Columbia Basin DPS of Pygmy Rabbit**

### *Status and Distribution*

The Columbia Basin pygmy rabbit likely occurred in portions of six Washington counties during the first half of the 1900s, including Douglas, Grant, Lincoln, Adams, Franklin, and Benton (USFWS 2007a). Within Washington, the range of the pygmy rabbit (*Brachylagus idahoensis*) has been reduced to five isolated fragments of sagebrush-dominated habitat within Douglas County. On November 30, 2001, the USFWS announced an emergency listing of the Columbia Basin DPS of the pygmy rabbit species as endangered (66 FR 59734). The last wild population of Columbia Basin pygmy rabbit was considered extirpated in 2004 (USFWS 2007a), but a significant proportion of suitable habitat in their historic range has not been surveyed (USFWS 2011b). Surveys conducted by the USFWS were unable to find any pygmy rabbits within the Banks Lake area (USFWS 2002b); however, the USFWS recommended additional surveys be conducted before any future activities are allowed that could adversely affect the sagebrush-steppe community. The only known Columbia Basin pygmy rabbits are held in a captive breeding program, with 92 individuals averaging about 65 percent Columbia Basin ancestry in the program as of April 15, 2011. The last purebred Columbia Basin pygmy rabbit in captivity died in August 2008 (USFWS 2011b).

### *Life History and Ecology*

This is the smallest North American rabbit species and is one of only two rabbit species in North America that dig their own burrows. Pygmy rabbits are typically found in habitat types that include tall, dense stands of sagebrush (*Artemesia spp.*), upon which they are highly dependent for food and shelter throughout the year. They require areas that also include relatively deep, loose soil that allows burrowing (USFWS 2007a).

### *Reasons for Decline*

Large-scale loss and fragmentation of native shrub steppe habitats, primarily for agricultural development, was likely the primary factor in the long-term decline of the Columbia Basin pygmy rabbit. Once a population declines below a certain threshold, it is at risk of extirpation from a number of influences including chance environmental events, catastrophic habitat loss or resource failure, predation, disease, demographic limitations, loss of genetic diversity, and inbreeding. To varying degrees, all of these influences have affected the Columbia Basin pygmy rabbit and, in combination, have led to the population's endangered status (USFWS 2007a).

## **Ute Ladies'-Tresses**

### *Status and Distribution*

Ute ladies'-tresses (*Spiranthes diluvialis*), a perennial orchid, was federally listed as threatened in 1992 (57 FR 2048). This is a wetland and riparian species found in springs, wet meadows, river meanders, and floodplains from elevations 1500 to 7000 feet (USFWS 1998). Populations of Ute ladies'-tresses orchids are known from three broad general areas of the interior western United States -- near the base of the eastern slope of the Rocky Mountains in southeastern Wyoming and adjacent Nebraska and north-central and central Colorado; in the upper Colorado River basin, particularly in the Uinta River basin; and in the Bonneville River basin along the Wasatch Front and westward in the eastern Great Basin, in north-central and western Utah, extreme eastern Nevada, and southeastern Idaho. The orchid also has been discovered in southwestern Montana, in the Okanogan area, and along the Columbia River in north-central Washington (USFWS 2011c). The USFWS conducted Ute-ladies'-tresses surveys in late August 1999 during the peak blooming period when this species is most conspicuous. The USFWS found no Ute ladies'-tresses and little potential habitat within the Banks Lake area (Reclamation 2004). Banks Lake habitats where Ute ladies'-tresses may occur include wet meadows fed by freshwater springs; riparian forest, riparian shrub, and wet meadow mosaics; wet areas in open shrub or grassland; wetlands created in gravel or borrow pits; and habitats dominated by grasses, rushes, and sedges (Reclamation 2004).

### *Life History and Ecology*

Ute ladies'-tresses inhabit full sun to partial shade in early to mid-seral communities subject to flooding or periodic inundation. Beaked spikerush (*Eleocharis rostellata*) appears to be the dominant species in habitat occupied by Ute ladies'-tresses and is a good indicator throughout its range.

### *Reasons for Decline*

Urbanization, stream channelization, water diversions, watershed degradation, conversion of riparian and floodplain to agricultural uses, and decline of pollinators have all contributed to the decline of this species (Reclamation 2004). This species also appears to have a very low reproductive rate and does not compete well with aggressive species, such as reed canarygrass (*Phalaris arundinacea*) or purple loosestrife (*Lythrum salicaria*).

## **Yellow-billed Cuckoo**

### *Status and Distribution*

On October 3, 2014, the USFWS issued a final rule, under the ESA of 1973, determining threatened status for the western DPS of the yellow-billed cuckoo (*Coccyzus americanus*) (79 FR 59991 60038).

The yellow-billed cuckoo has historically bred throughout much of North America; however, available data suggests because of streamside habitat loss, there have been significant declines in the species distribution west of the Rocky Mountains (USFWS 2014a). The yellow-billed cuckoo (Western U.S. DPS) is known to or believed to occur in all of Washington State counties (USFWS 2015a).

### *Life History and Ecology*

Yellow-billed cuckoo's are medium sized birds that average about 12 inches long, weigh approximately 2 ounces, are brownish above and white below, rusty colored flight feathers, and a long black and white tail. Unlike some species of cuckoo, the yellow-billed is not a brood parasite (laying eggs in other bird's nests) but typically builds its own nest and also raise their own young. The cuckoo prefers floodplain forests with thick deciduous vegetation. Historically, they will fly south in September to wintering habitat and return around mid-May. Large insects which include caterpillars and cicadas make up the bulk of the birds diet, although, they will occasionally eat small frogs and lizards. Breeding corresponds with the occurrence of the tent caterpillar and cicadas.

### *Reasons for Decline*

The loss of riparian habitat has been reported to be the greatest threat to the species. Biologists have estimated that riparian habitat degradation as a result of agriculture, streamflow management, overgrazing, and exotic plant competition has reduced yellow-billed cuckoo's riparian habitat by 90 percent in the west (USFWS 2014a).

### *Designated Critical Habitat*

On August 15, 2014, the USFWS proposed a rule in the Federal Register to designate critical habitat for the western DPS of the yellow-billed cuckoo. Approximately 546,335 acres in Arizona, California, New Mexico, Colorado, Idaho, Nevada, Texas, Utah, and Wyoming are being proposed as critical habitat. The Designated Critical habitat does not include the project areas (79 FR 67154 67155).

## **Grizzly Bear**

### *Status and Distribution*

The USFWS listed the Grizzly Bear (*Ursus arctos horribilis*) as a threatened species in the 48 conterminous states of the United States on July 28, 1975. The August 2011 status review by the USFWS, confirmed that the lower 48 states listing qualified as a DPS and recommended that it should remain in the threatened status (76 FR 66370 66439). Today, in the lower 48 states, ecosystems that biologist have identified to contain suitable habitat for grizzly bears are Yellowstone (northwestern Wyoming, southwestern Montana, and eastern Idaho), Northern Continental Divide (northwestern Montana), the Cabinet-Yaak (northwestern Montana), Selkirks (northern Idaho and eastern Washington), the North Cascades (Washington), and Bitterroot

(central Idaho and western Montana) (USFWS, 2007b). Grizzly bears are known or believed to occur in Ferry and Okanogan Counties, as well as several other counties in Washington State (USFWS 2015c).

#### *Life History and Ecology*

The average weight of the grizzly bear is in the range of 400 to 1,500 pounds. Male bears, on the average weigh nearly twice that of females. Diet and temperature from various geographic regions the bears inhabit determine their color, which range from blonde to deep brown or black. Additionally, they have humped shoulders and long, curved claws (USFWS 2015b). Grizzlies lead primarily solitary lives when not mating or raising young. Male bears utilize 200 to 500 square miles for their home range, with females using 50 to 300 square miles. The landscapes of grizzly habitat are made up of diverse forests with moist meadows, and grasslands that are situated near or in mountainous regions. Green vegetation, wild fruits and berries, nuts, and bulbs or roots of certain plants make up 80 to 90 percent of grizzly bears diet. Insects are also a large part of their diet, sometimes tearing apart rotten logs or turning over stones, the bears search for adult insects or their larvae (USFWS 2007b).

Generally, the grizzly will seek remote, high mountain slopes with deep snow to dig their dens for winter. The bear will often build the den at the base of large trees, digging under the trees roots, and pushing rocks and soil to the surface. The bears will winter over, not eating or drinking for 5 to 6 months with the male bear typically emerging from the den in March or April and females coming out in late April or May. The grizzly will usually travel back to lower elevations to reach vegetated areas (USFWS 2007b).

#### *Reasons for Decline*

Habitat loss and mortality are the leading causes for the decline of the grizzly bear in the lower 48 conterminous states. The bears require large areas of undisturbed habitat. Human encroachment through gas and oil development, recreational development, road building, and poorly designed timber harvest has led to habitat degradation (NRCS 2011). Despite protection under the ESA, grizzlies continue to be killed by humans. Between 70 and 90 percent of the adult grizzlies killed in the U.S. Rocky Mountains are killed by humans. The bears are primarily killed because of they are mistaken for black bears, the threat to human safety, and the destruction of property or livestock (USGS 2015).

#### *Designated Critical Habitat*

In 1976, the USFWS proposed a determination of critical habitat for the grizzly bear. The proposal included numerous areas in the northwestern United States that were delineated into four regions. Region number four, includes extreme northwestern Montana and Northern Idaho in the Cabinet Mountains mostly in the Kootenai, Kaniksu, and Lolo National Forests as well as extreme northern Idaho and northeastern Washington, mostly in the Kaniksu National Forest (41 FR 48757 48759).

## Northern Spotted Owl

### *Status and Distribution*

In a final rule issued on June 26, 1990, The USFWS determined the northern spotted owl (*Stix occidentalis caurina*) to be a threatened species pursuant to the ESA of 1973 (55 FR 26114 26194). It is believed the owl historically populated most forests throughout southwestern British Columbia, western Washington and Oregon, and northwestern California as far south as the San Francisco Bay (USFWS 2014b). Today locations in which the owl is known to or is believed to occur include Douglas and Grant Counties in eastern Washington State (USFWS 2014c).

### *Life History and Ecology*

The northern spotted owl is medium sized and dark brown in color with white spotting on the head, breast, and belly. The owl is a “perch-and-pounce,” nocturnal predator. They capture, primarily small forest animals with their claws. As with most owl species, spotted owls nest in the top of trees or the cavities of naturally deformed or diseased trees.

The northern spotted owl generally lives in dense canopy forests with a variety of habitat such as mature and old growth trees, multi-layered canopies of several tree species, standing snags, fallen dead trees, and considerable open space within and beneath the canopy (USFWS 2014b). Washington and Oregon conifer forests begin to develop habitat conditions that are suited for the spotted owl at about 80 to 120 years of age. Old forests were dependably selected for foraging and roosting by the owls in southwestern Oregon (NatureServe 2014).

Elevation and geographic location provide variations to the breeding season; however, spotted owls generally nest from February to June (USFWS 2014b). The female lays an average of two eggs but may lay one to four. The male feeds the female as she is in the incubation period that lasts about 30 days.

Leaving the nest at about 5 weeks, the young will fly at about 6 weeks. Adult owls feed their young until they learn to hunt on their own and parental care continues for several weeks, as the adult will roost with them during the day (NatureServe 2014).

Because of the great horned owl and other natural predators, as well as starvation, the mortality rate is high for young spotted owls (USFWS 2014b). However, the owls that survive the early months of life are relatively long-lived and have a long reproductive life span (NatureServe 2014).

### *Reasons for Decline*

Late successional and old growth forests exhibit characteristics preferred for timber harvesting. These old forests are also the preferred habitat of the spotted owl. Timber harvest and land conversion has led to a decline of suitable habitat and numbers of spotted owls (USFWS 2014b). Additionally, catastrophic fire, volcanic eruption, disease, and windstorms exacerbate habitat

loss. More recently, barred owls have been identified as a greater threat than once thought (USFWS 2011d). The barred owl, has a broader diet, is more aggressive, and resilient to habitat conversions have begun encroaching on spotted owls leading to further declines in their population (USFWS 2014b).

#### *Designated Critical Habitat*

On December 4, 2012, the USFWS issued a final rule designating 9,577,969 acres in California, Oregon, and Washington as Critical Habitat for the northern spotted owl (*Strix occidentalis caurina*). The designated critical habitat is divided into 29 regions. The six Washington State unit names are the Olympic Peninsula, Northwest Washington Cascades, Okanogan, Southwest Washington Cascades, and Southeast Washington Cascades. The Okanogan Unit is comprised of lands managed by the Okanogan and Wenatchee National Forests in Whatcom, Okanogan, and Chelan Counties (77 FR 71875 72068). Neither of the Alternative locations of this project are located within Designated Critical Habitat areas.

#### **Marbled murrelet**

##### *Status and Distribution*

The USFWS issued a final rule on October 1, 1992, determining Washington, Oregon, and California populations of the marbled murrelet (*Brachyramphus marmoratus marmoratus*)<sup>4</sup> as threatened (57 FR 45328 45337). The marbled murrelets breeding range extends throughout much of Alaska and British Columbia, Washington, Oregon, to northern Monterey Bay in central California. Along with coastal waterways, the birds have been detected on rivers and inland lakes (USFWS 2011e). The murrelet is known to or believed to occur in several Washington State counties, including Douglas and Grant (USFWS 2015e).

##### *Life History and Ecology*

As long-lived seabirds, the marbled murrelet spends most of their life in a marine environment but utilize old growth forests for nesting. While spending most of their time roosting and feeding on or near the ocean, the murrelet will travel up to 50 miles inland to nest in forest stands. Old growth, dense shady forests generally have large trees with large branches or deformities the birds will use for nesting. The highest quality habitat for marbled murrelet nesting is large old growth stands; however, they will nest in stands from several acres to thousands of acres (USFWS 2011e).

The robin-sized bird is a solitary breeder that appears to form strong pair bonds and has an average 15-year lifespan (USFWS 2011e).

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<sup>4</sup> The USFWS finalized a taxonomic revision of the scientific name of the marbled murrelet from *Brachyramphus marmoratus marmoratus* to *Brachyramphus marmoratus* (76 FR 61599 61621). In this EA we will be using the revised name.



Murrelets nest from late March to late September with the highest nesting activity from early May through early August in Washington State. The murrelet will generally lay one egg, the incubation period of, lasts about 30 days with both sexes alternating in the nest for 24-hour shifts (NatureServe 2009). Because of laying only one egg per nest, as well as not all adults nest every year, marbled murrelets have a naturally low reproductive rate (USFWS 2011e).

The murrelet diet includes fishes, crustaceans, and mollusks. In some British Columbia lakes, the birds feed on fingerling sockeye salmon and salmon fry while murrelets living near marine environments may feed exclusively on freshwater prey for several weeks. The murrelet mainly forages in water up to 260 feet deep and about 1 mile from shore and their hunting dives may be up to about 100 feet below the surface (NatureServe 2009).

### *Reasons for Decline*

Typical forest management practices include cutting and replanting forest stands every 40 to 60 years. However, it takes 100 to 250 years for a forest to mature into marbled murrelet nesting habitat.

Loss or modification of nesting habitat in old growth or mature forests because of human-induced fire, commercial timber harvests, land conversions, and/or forest/habitat fragmentation is the primary cause for the decline in the marbled murrelet population (USFWS 2011e).

### *Designated Critical Habitat*

The USFWS issued a final rule revising the designated critical habitat for the marbled murrelet (*Brachyramphus marmoratus*), pursuant to the ESA of 1973, on October 5, 2011. In the 2011 revised rule, no changes were made to the 1996 critical habitat designation in regards to habitat in Washington State (76 FR 61599 61621). Maps included in the final rule indicate designated critical habitat in Washington State is located west of the Cascade Mountains (61 FR 26257 26320). The project area is located outside of any designated critical habitat region.

## **3.8.2 Environmental Consequences**

The species list was used for Grant and Douglas Counties of Washington State, in order to fully consider all listed species that could possibly be found in the area affected by the proposed action alternatives. Status distributions were analyzed to determine specifically where in the area of effect each species may be found, and what components of the proposed project may potentially affect a species in that location. For instance, water quality analyses were considered for aquatic species and direct effects on individuals or habitat from either construction activities or future habitat reductions were considered for terrestrial species. Other elements of this EA, such as vegetation, water quality, and soils were also utilized in the examination of whether, or not, habitats conducive for listed species populations exist at this time. In each case, the species were determined not to be found in locations where they would be subject to any effects from the project, so no further analysis was needed.

#### **No Action Alternative**

Under the No Action Alternative, the Fire Department would remain in the JKPGP. Current conditions and habitat for listed species would not change.

#### **Alternative A - Preferred Alternative**

Under Alternative A, Reclamation would construct a new fire station near the west gate leading to the GCPO Administration/Industrial Area. The potential effects this alternative would have on water quality as well as hydrology and terrestrial habitat were examined to determine the potential effect on listed species in the area.

##### *Bull Trout*

Bull trout are rare in Lake Roosevelt. Neither of the project locations, Alternative A or Alternative B, are located in or near the water. The hydrology and water quality analyses considered determined that bull trout habitat would not be affected by the proposed action.

##### *Yellow-billed Cuckoo*

The preferred habitat of the yellow-billed cuckoo consists of floodplain forests with thick deciduous vegetation. Neither site are in or adjacent to a floodplain or contain dense vegetation conducive to cuckoo environment, therefore, the proposed action would not affect habitat or the yellow-billed cuckoo.

##### *Canada Lynx*

The Canada lynx prefers subalpine forests and is not known to occur in the project areas. Therefore, habitat of the Canada lynx would not be affected by the proposed action.

##### *Grizzly Bear*

The grizzly bear is not known to inhabit the project areas nor does the semi-arid vegetation type typically support the bears. Grizzly habitat would not be affected by the proposed action.

##### *Columbia Basin DPS of Pygmy rabbit*

Pygmy rabbits are generally dependent and utilize tall, dense stands of sagebrush for food and shelter. They also require relatively deep, loose soil to burrow. Fill material containing gravel, cobbles, combined with bedrock outcrops and underground utilities are not conducive to Columbia Basin pigmy rabbit habitat. The proposed action would not affect habitat of the pigmy rabbit.

##### *Ute ladies'-tresses*

The Ute ladies'-tresses is a wetland and/or riparian species found in springs, wet meadows, river meanders, and floodplains. Neither landscapes in both Alternative A and Alternative B meet the necessary criteria for the specie to inhabit. The Ute ladies'-tresses would not be affected by the proposed action.

### *Northern Spotted Owl*

The northern spotted owl generally lives in dense canopy forests with a variety of habitat such as mature and old growth trees and/or multi-layered canopies of several tree species. The northern spotted owl is not known to inhabit the project area; therefore, the owl would not be affected by the proposed action.

### *Marbled murrelet*

No marbled murrelets are known to inhabit the project areas. The proposed action would not affect the marbled murrelet habitat or the species.

## **Alternative B**

Under Alternative B, Reclamation would construct a new fire station in the Crescent Bay day-use area, on land managed by the NPS. Potential effects to Threatened and Endangered species would be the same for Alternative B as they are for the Preferred Alternative.

## **Cumulative Effects**

No cumulative effects are anticipated on this resource as a result of the proposed project.

# **3.9 Soils**

The purpose of this section is to examine current conditions and the potential effects the alternatives would have on soils. The alternative locations are both situated in areas that have, to some degree, been reworked and disturbed as the result of activities associated with the construction of the Grand Coulee Dam and appurtenant facilities beginning in the 1930s.

## **3.9.1 Affected Environment**

### **West-Gate location – Preferred Alternative**

A portion of the west gate site is located on an abandoned railroad bed and roadway that served the project area. Soils within the roadbed were imported to the site and are of typical subgrade composition, consisting of mostly gravel with sand and occasional cobbles. Soil outside of the abandoned roadway area appears to be naturally deposited sediments composed primarily of gravelly-sandy silt overlying granitic bedrock. About 30 percent of the site consists of bedrock outcrops (NRCS 2015). Bedrock is also exposed in the Highway 155 road cut.

### **Crescent Bay location**

The majority of the Crescent Bay location consists of fill material that originated from the initial excavation for the construction of the Grand Coulee Dam. The fill material is variable and contains clay, silt, sand, gravel, and cobbles with occasional boulders. A well log from a boring adjacent to the site describes the soils as sandy clay to sandy gravelly clay with a veneer of wood

chips and sawdust (Reclamation 1990). The wood chips are the remnants of a sawmill facility that was formerly located at the site.

### **3.9.2 Environmental Consequences**

#### **No Action Alternative**

Under the No Action Alternative, the Fire Department would remain in the JKPGP. Current soil conditions would not change.

#### **Alternative A - Preferred Alternative**

Under Alternative A, Reclamation would construct a new fire station near the west gate of the Administration/Industrial area. Care would be taken to minimize soil erosion during construction. Standard construction practices such as the use of water trucks and erosion fencing, when necessary, would be implemented to decrease erosion as the result of wind, equipment and truck traffic, and precipitation events.

#### **Alternative B**

Under Alternative B, Reclamation would construct a new fire station in the Crescent Bay day-use area, on land managed by the NPS. The same construction standards would be used for Alternative B as would be for the Preferred Alternative.

#### **Cumulative Effects**

No cumulative effects are anticipated on this resource as a result of the proposed project.

## **3.10 Socioeconomic Conditions**

The purpose of this section is to examine the potential effects the alternatives may have on the socioeconomic conditions within the project area. The proposed project is relatively short in duration and Reclamation is assuming that the contractor's will bring in workers from outside the area. Therefore, school enrollment, permanent jobs, and housing sales will not be analyzed in this EA.

The only potential effects identified would be possible positive economic benefits to area businesses and workers utilizing RV parks.

Reclamation anticipates a workforce of 15 to 20 to be working on the project at any given time.

### **3.10.1 Affected Environment**

The Grand Coulee area has numerous businesses ranging from gas stations, grocery stores, restaurants, to entertainment venues and motels. Additionally, the area has fully developed RV parks and campgrounds with RV and tent sites. Full-service RV utility sites and formal tent sites

are provided at Coulee City Community Park, Coulee Playland, Sunbanks Resort, Grand Coulee RV Park, King's Court, and Lakeview Terrace. Other camping and RV sites are available at Spring Canyon Campground on Lake Roosevelt and Steamboat Rock at nearby Banks Lake.

### **3.10.2 Environmental Consequences**

#### **No Action Alternative**

Under the No Action Alternative, the Fire Department would remain in the JKPGP and there would be no positive or negative socioeconomic effects.

#### **Alternative A - Preferred Alternative**

Under Alternative A, Reclamation would construct a new fire station near the west gate of the Administration/Industrial area. Reclamation is assuming that the workforce who would be utilized for the construction of a new fire station will be temporary and from outside the immediate area. This analysis also assumes that the various contractors' workforce would spend a portion of their wages in the area, at local businesses, during the construction period.

Contractors' workforce typically utilizes area RV parks during the workweek in Grand Coulee. Additional revenues could be realized by this; however, workers would also be competing for parking/camping space with tourists, particularly in the summer months. The area has a number of full-service RV utility sites and formal tent sites that provide camping opportunities for tourists and workers alike. Short- and longer-term spaces are at Coulee City Community Park, Coulee Playland, Sunbanks Resort, Grand Coulee RV Park, King's Court, and Lakeview Terrace. Other camping and RV sites are available at Spring Canyon Campground on Lake Roosevelt and Steamboat Rock at nearby Banks Lake. It is assumed that the relatively small increase of users by this project would not affect the availability of RV or camping sites for tourists.

#### **Alternative B**

Under Alternative B, Reclamation would construct a new fire station in the Crescent Bay day-use area, on land managed by the NPS. Reclamation identified the same potential socioeconomic impacts for Alternative B as were for the Preferred Alternative.

#### **Cumulative Effects**

Reclamation has identified other projects at the JKPGP and TPP at Grand Coulee Dam. These projects bring approximately 15 to 45 additional workers to the Grand Coulee area at any given time. Additional workers would potentially spend a portion of their wages at local businesses; however, in doing so they may compete for RV, camping space, and motels with tourists. This analysis assumes that due to contract and construction timing, not all potential workers would be in the area at the same time and the cumulative numbers of workers would not be sufficient to affect tourist availability to RV or camping sites and motel rooms.

## **3.11 Visual Quality**

### **3.11.1 Affected Environment**

The Grand Coulee Dam area includes two view sheds: the upper view shed of Lake Roosevelt and the town of Grand Coulee and the main view shed that includes the face of the dam, the TPP, and the spillway. Both alternative locations are included within the upper view shed.

### **3.11.2 Upper View Shed**

This area includes the lower end of Lake Roosevelt, portions of SR 155 and SR 174, and residential lands in the East Heights area of the City of Grand Coulee. Primary components are the top of the dam and arch spillway structures, Crescent Bay boat launch and day use area, Crescent Lake, Lake Roosevelt Reclamation facilities and parking areas, residential areas within the Town of Grand Coulee, and surrounding granite outcrops and hillsides.

Visitors traveling along this route are expected to be anticipating and looking for a view of the dam. The overall character of views as people approach Grand Coulee Dam is developed land and the Lake Roosevelt in the foreground with background views of non-forested hills and granite outcrops.

Views for travelers on SR 155 include the commercial zone of the Town of Grand Coulee, a roadside park, and a visitor's parking area. Partial views of Crescent Bay and Lake Roosevelt lead to views of the top of Grand Coulee Dam and Reclamation facilities.

Views for East Heights residents are primarily water views of Lake Roosevelt and landform views of hillsides above. Human built features include the top of the dam, a log boom, and Reclamation facilities. These views are considered scenic due to the combination of water, natural landforms, views of the top of the dam, and background views of distant topography below the dam.

Views for recreationists at Lake Roosevelt are at or near lake level and include open water and adjacent upland landforms. For this assessment, views of the dam, adjacent facilities, Crescent Bay day use area, and the City of Grand Coulee from lake level, as boaters approach the area are included in the upper view shed.

### **3.11.3 Environmental Consequences**

#### **No Action Alternative**

Under the No Action Alternative, the Fire Department would remain in the JKPGP and there would be no changes to the current view sheds at this time. The NPS may choose to alter the view shed at Crescent Bay at a later time.

### **Alternative A - Preferred Alternative**

Under Alternative A, Reclamation would construct a new fire station near the west gate of the GCPO Industrial Area. The proposed station would be constructed on federally owned property, managed by GCPO and would be the focal point as visitors and others travel north, toward the dam, on SR 155. As the result of the station being the first Reclamation facility, other than possibly the top of the dam, that the public views when they enter the GCPO area and an important asset to the upper view shed, detail would be given to construct a station which is architecturally appealing and fits the theme of the dam and other institutional structures.

### **Alternative B**

Under Alternative B, Reclamation would construct a new fire station in the Crescent Bay day use area, managed by the NPS. As the result of the proposed station being constructed within the Lake Roosevelt National Recreational Area, care would be taken, as well as NPS involvement in the design phase, in order to ensure NPS standards for style and color were taken into account.

Care would be taken to minimize the potential effect to the current view of Crescent Bay and Lake Roosevelt from SR 155. Additionally, architectural style, building size, materials, and color scheme would be chosen to best blend in with the natural landscape, as seen from SR 155, as well as from Crescent Lake and Lake Roosevelt.

### **Cumulative Effects**

No cumulative effects related to visual quality are anticipated as a result of the Preferred Alternative. Under Alternative B, the NPS initially had plans to potentially construct a marina, visitor center, and campground in the Crescent Bay area (NPS 2009). However, in the distant, yet foreseeable future, NPS would limit development to a new day use area and improvements near Crescent Lake (Edwards 2015a).

## **3.12 Vegetation**

### **3.12.1 Affected Environment**

The purpose of this section is to examine the potential effects the alternatives would have on natural vegetation. The proposed project alternatives are located in areas that have previously undergone extensive disturbance. The landscape at the west gate location (Preferred Alternative) has been altered a number of times since its natural state while the Crescent Bay site (Alternative B) consists of fill material.

Alterations to the landscape at the location of the Preferred Alternative include a roadway and railroad bed from the construction days of Grand Coulee Dam, sewer lines, utility vaults and conduits, and drainage structures. The Crescent Bay location consists of fill material that originated from the initial excavation for the construction of the Grand Coulee Dam. Additional traffic, drilling of monitoring wells, and other forms of disturbance have led to continued

alteration of the landscape. Natural vegetation is limited as non-native species such as cheatgrass (*Bromus tectorum*) and Dalmation toadflax (*Linaria dalmatica*) continue to compete with native plants. The predominate native species found at both locations are Big sagebrush (*Artemisia tridentate*), Bitterbrush (*Purshia tridentate*) and bunchgrasses. Plant species which are native but not typically found in the project areas include Serviceberry (*Amelanchier alnifolia*), Purple sage (*Salvia dorii*), and Gray rabbitbrush (*Chrysothamnus nauseosus*) (NPS 2009).

## 3.12.2 Environmental Consequences

### No Action Alternative

Under the No Action alternative, the Fire Department would remain in the JKPGP and there would be no effects on vegetation.

### Alternative A - Preferred Alternative

Under Alternative A, Reclamation would construct a new fire station near the west gate of the GCPO Industrial Area. Natural and non-native vegetation will be disturbed and/or removed during ground preparation and while construction occurs. A feature of the proposed station are water catchment swales which will contain natural grasses and other native vegetation to utilize storm-water, take up contaminants, and retain sediments from runoff. The final landscape will also be re-vegetated with native species.

### Alternative B

Under Alternative B, Reclamation would construct a new fire station in the Crescent Bay day-use area, on land managed by the NPS. Reclamation identified the same potential effects to vegetation for Alternative B as were for the Preferred Alternative. Reclamation would consult with NPS to ensure proper species would be used for re-vegetating.

### Cumulative Effects

No cumulative effects are anticipated on this resource as a result of the proposed project.

## 3.13 Wildlife

The purpose of this section is to examine the potential effects the alternatives would have on wildlife and wildlife habitat.

### 3.13.1 Affected Environment

The varied habitats found in the GCPO area supports wildlife. Particularly, mule deer are known to inhabit the landscape that surrounds the dam. Quail, turkeys, and other species may also be found; however, throughout the area, wildlife are transitory and no resident populations have



been documented (Edwards 2015b). Because the majority of the landscape has been previously disturbed, wildlife habitat in the project areas is limited and long-term effects would not occur. Analysis of these habitats is limited to a brief, general description and analysis of any short-term disturbances that may occur due to construction activities.

### **No Action Alternative**

Under the No Action Alternative, the Fire Department would remain in the JKPGP. Interactions and potential effects to wildlife remain as they currently are.

### **Alternative A - Preferred Alternative**

Under Alternative A, Reclamation would construct a new fire station near the west gate of the GCPO Industrial Area. Limited numbers of wildlife species utilize the location. Additionally, the landscape at the Preferred Alternative site has been previously disturbed by grading, installation of sewer lines, and electrical and communication conduits and vaults, which limit habitat. Wildlife in the area are accustomed to noise from industrial machinery and nearby human use, therefore, wildlife would not be negatively affected by construction of the station.

### **Alternative B**

Under Alternative B, Reclamation would construct a new fire station in the Crescent Bay day use area, managed by the NPS. Wildlife species are transitory with no resident populations. The soils which make up the landscape of the site is primarily fill, with little natural vegetation and limited habitat. Local wildlife are accustomed to human use, traffic, and noise from industrial and recreational machinery and would not be affected negatively from construction activities.

### **Cumulative Effects**

No cumulative effects are anticipated on this resource as a result of the proposed project.

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## **Chapter 4 Consultation and Coordination**

### **4.1 National Historic Preservation Act**

Congress enacted the NHPA in 1966. Section 106 of the NHPA requires Federal agencies to consider project-related impacts to historic properties, which includes prehistoric and historic-period archeological sites, traditional cultural properties, and elements of the built environment. Federal regulations (36 CFR 800) define the process for implementing the NHPA, which includes consultation with the SHPO, affected Tribes, and the ACHP about Federal findings regarding project effects (36 CFR 800.4 [a][4]).

Reclamation engaged in consultation with the SHPO regarding the project Area of Potential Effect, level of effort, and recommended effects. Reclamation provided the agency with the completed NHPA Section 106 cultural resources review for the Project. SHPO responded with their concurrence of a finding of No Historic Properties Affected for any of the alternatives (36 CFR 800.5 [d] [1]). The consultation letters between Reclamation and SHPO are provided with this document as Appendix D.

### **4.2 Tribal Coordination and Consultation**

Reclamation engaged the CCT during public scoping. At that time, the CCT Tribal Historic Preservation Office (THPO) responded through an email. In their response, they provided some recommendations of methods and expectations for the cultural resources review process and requested involvement in review of the design process for Alternative B due to the visual exposure of the proposed fire station along Lake Roosevelt (Appendix B). Reclamation incorporated the THPO's recommendations for the fieldwork methods and expectations into the Scope of Work for the cultural resources review process.

Reclamation is engaged in consultation with the CCT THPO regarding project effects now that Reclamation's cultural resources review is complete. Reclamation provided the cultural resources review document to the THPO and is seeking comment on the finding of no adverse effects to historic properties for any of the alternatives (36 CFR 800.5 [d] [1]). Reclamation also used this NHPA consultation to seek confirmation that the Contractor's research regarding Properties of Traditional Religious and Cultural Importance to Indian Tribes presented in the cultural resources review document (McFarland et al 2015) was complete and acceptable to the THPO. We received an email on September 8, 2015 from the CCT THPO concurring with our finding of No Historic Properties in the APE of Reclamation's proposed new Grand Coulee Power Office fire station (Appendix D).

## **4.3 Endangered Species Act (1973) Section 7 Consultation**

The ESA requires all Federal agencies ensure that their actions do not jeopardize the continued existence of listed species, or destroy or adversely modify their critical habitat. As part of the ESA's Section 7 process, an agency must request information from the USFWS and NOAA Fisheries on whether any threatened and endangered species occur within or near the action area. The agency then must evaluate impacts to those species. If the action may affect any listed species, the agency must consult with the USFWS or NOAA Fisheries. Reclamation obtained listed species information from NOAA Fisheries<sup>1</sup> and the USFWS<sup>2</sup>.

Reclamation determined the preferred alternative would have no effect on listed species; therefore, neither NOAA Fisheries or USFWS were consulted.

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<sup>1</sup> [http://www.westcoast.fisheries.noaa.gov/publications/protected\\_species/salmon\\_steelhead/status\\_of\\_esa\\_salmon\\_listings\\_and\\_ch\\_designations\\_map.pdf](http://www.westcoast.fisheries.noaa.gov/publications/protected_species/salmon_steelhead/status_of_esa_salmon_listings_and_ch_designations_map.pdf)

<sup>2</sup> [http://ecos.fws.gov/tess\\_public/reports/species-by-current-range-county?fips=53025](http://ecos.fws.gov/tess_public/reports/species-by-current-range-county?fips=53025) and [http://ecos.fws.gov/tess\\_public/reports/species-by-current-range-county?fips=53017](http://ecos.fws.gov/tess_public/reports/species-by-current-range-county?fips=53017)

## Chapter 5 Literature Cited

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# APPENDICES

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# **APPENDIX A**

## **PUBLIC SCOPING**

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## Public Comment Needed to Construct a New Fire Station

Media Contact: Kelly Bridges, (208) 378-5101

Lynne Brougher, (509) 633-9503

For Release: May 19, 2014

GRAND COULEE, Wash. - The Bureau of Reclamation is seeking public comment to identify issues to be addressed in an environmental assessment for the proposed construction of a new fire station for the Grand Coulee Power Office Fire Department.

The purpose of the project is to relocate the fire department to a new independent station to ensure reliable protection for all Reclamation facilities and lands, as well as local communities and other agencies, through mutual aid agreements. The fire department is currently housed in the John W. Keys III Pump-Generating Plant.

Information obtained during the scoping period, May 19 through June 19, will bring focus to concerns, issues, and analyses that should be included in the draft environmental assessment. Completion of a final environmental assessment is anticipated in the fall of 2014.

The three proposed alternatives include:

- No Action: Grand Coulee Power Office Fire Department would continue to be located in and operate from the John W. Keys III Pump Generating Plant.
- Construct a new fire station on Reclamation land near the intersection of Hwy 155 and B Street.
- Construct a new fire station on lands managed by the National Park Service at Crescent Bay, uphill from the boat launch and adjacent to the access road.

Download a map of the proposed locations for the new fire station:

<http://www.usbr.gov/pn/programs/ea/wash/gcpofd/firestationlocations.pdf>.

A draft environmental assessment is scheduled to be available for public review Sept. 2014.

Written comments can be sent to Lon Ottosen, Bureau of Reclamation, Grand Coulee Power Office, PO Box 620, Grand Coulee, Wash. 99133 or emailed to [lottosen@usbr.gov](mailto:lottosen@usbr.gov).

Comments must be received by June 19, 2014 to be considered in the draft environmental assessment.

Grand Coulee Dam was completed in 1941 and serves as a multipurpose facility providing water for irrigation, hydroelectric power production, flood control, recreation, fish and wildlife.

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Reclamation is the largest wholesale water supplier and the second largest producer of hydroelectric power in the United States, with operations and facilities in the 17 Western States. Its facilities also provide substantial flood control, recreation, and fish and wildlife benefits. Visit our website at [www.usbr.gov](http://www.usbr.gov) and follow us on Twitter [@USBR](https://twitter.com/USBR).



MAY 16 2014

GCPO-5200  
LND-6.00

Honorable Patty Murray  
10 North Post Street, Suite 600  
Spokane WA 99201

Subject: Public Scoping for the Environmental Assessment for the Proposed Construction  
of a New Fire Station for the Grand Coulee Power Office Fire Department

Dear Senator Murray:

The Bureau of Reclamation is proposing to construct a new fire station and will prepare an Environmental Assessment (EA) pursuant to the National Environmental Policy Act for these actions. The beginning of the process is to notify you of these actions and ask for you to inform us of any concerns that you may have regarding the proposal or comments on the scope of studies to be prepared for the EA.

A description of the proposal is contained in the attached document. I invite you to send your written comments on this proposal to Lon Ottosen, Natural Resource Specialist, Bureau of Reclamation, Grand Coulee Power Office, PO Box 620, Grand Coulee, Washington, 99133. Comments must be received by June 19, 2014, to ensure consideration during preparation of the EA. If you have any questions concerning the proposal, contact Mr. Ottosen at 509-633-9324 or [lottosen@usbr.gov](mailto:lottosen@usbr.gov).

Sincerely,



Kerry McCalman  
Acting Power Manager

Enclosure

bc: PN Regional Liaison, Attention: PN-96-42010 (w/encls.)  
Regional Director, Boise ID, Attention: PN-1200 (w/encls.)

Files, 1100 (Turner), 1400, 1900, 5001, 5200(Ottosen) (w/encls. to each)

Identical Letter Sent To:

Honorable Patty Murray  
10 North Post Street, Suite 600  
Spokane WA 99201

Honorable Maria Cantwell  
W. 920 Riverside, #697  
Spokane WA 99201

Honorable Doc Hastings  
2715 St. Andrews Loop, Suite D  
Pasco WA 99301

Honorable Michael O. Finley  
Chairman, Confederated Tribes of the  
Colville Reservation  
PO Box 150  
Nespelem WA 99155

Honorable Rudy Peone  
Chairman, Spokane Tribe of Indians  
PO Box 100  
Wellpinit WA 99040

Honorable Christopher Christopherson  
Mayor, City of Grand Coulee  
PO Box 180  
Grand Coulee WA 99133-0180

Honorable Greg Wilder  
Mayor, Town of Coulee Dam  
300 Lincoln Ave.  
Coulee Dam WA 99116

Honorable Jerry Sands  
Mayor, City of Electric City  
PO Box 130  
Electric City WA 99123

Honorable Gail Morton  
Mayor, Town of Elmer City  
PO Box 179  
Elmer City WA 99124

Mr. Dan Foster, Superintendent  
Lake Roosevelt National Recreation Area  
1008 Crest Drive  
Coulee Dam WA 99116

Grand Coulee Dam Area Chamber  
of Commerce  
306 Midway Ave.  
Grand Coulee WA 99133

Mr. Al Gilson  
Public Information Officer  
WSDOT Eastern Region  
2714 N. Mayfair Street  
Spokane WA 99207

Mr. Scott Hunter, Editor  
The Star Newspaper  
PO Box 150  
Grand Coulee WA 99133

# **Grand Coulee Power Office Fire Station Construction Environmental Assessment (EA)**

The Bureau of Reclamation (Reclamation) is preparing an Environmental Assessment (EA) for the proposed construction of a new fire station and is requesting public comment and agency input to help identify issues to be addressed in the EA. Comments obtained during the scoping period (May 19 – June 19, 2014) will help in developing the EA. A draft EA is scheduled to be available for public review by August 2014. Comments on the draft will be accepted during this time. The final EA is scheduled for completion in the fall of 2014.

## **PURPOSE AND NEED**

The purpose of constructing a new fire station is to relocate the Grand Coulee Power Office Fire Department (Department) to an independent, centrally located station. Currently, the Department is housed in the John W. Keys III Pump/Generating Plant. In order to ensure reliable protection for all Reclamation facilities and lands, Reclamation has determined the Department's station should be independent of critical infrastructure. Additionally, a centrally located station will lessen response time and enable the Department to better provide mutual aid to other agencies and the surrounding communities.

## **PROPOSED ALTERNATIVES**

Reclamation is currently investigating the alternatives identified below.

- **No Action**  
Under the No Action alternative the Department would continue to operate out of the John W. Keys III Pump/Generating Plant.
- **Alternative Site A**  
Construct a new fire station on Reclamation land outside of the Grand Coulee Power Office industrial area, near the intersection of Hwy 155 and B Street.
- **Alternative Site B**  
Construct a new fire station on lands managed by the National Park Service at Crescent Bay, uphill from the boat launch and adjacent to the access road.

## **YOUR FEEDBACK REQUESTED**

Please send your written comments to Lon Ottosen, Bureau of Reclamation, Grand Coulee Power Office, P.O. Box 620, Grand Coulee, WA 99133 or emailed to [lottosen@usbr.gov](mailto:lottosen@usbr.gov). Comments must be received by June 19, 2014, to be considered in the EA.

**FOR MORE INFORMATION**

For more information about this project, please contact:

Lon Ottosen, Natural Resource Specialist  
U.S. Bureau of Reclamation  
Grand Coulee Power Office  
PO Box 620  
Grand Coulee WA 99133  
509-633-9324  
[lottosen@usbr.gov](mailto:lottosen@usbr.gov)





General Locations for Proposed New Fire Station

**RECLAMATION**  
*Managing Water in the West*





## **APPENDIX B**

### **SCOPING COMMENTS**

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6/19/2014

DEPARTMENT OF THE INTERIOR Mail - Fire Station



Ottosen, Lon <lottosen@usbr.gov>

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## Fire Station

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**Guy Moura** <Guy.Moura@colvilletribes.com>

Wed, Jun 18, 2014 at 8:05 AM

To: "Derek Beery (dbeery@usbr.gov)" <dbeery@usbr.gov>, "lottosen@usbr.gov" <lottosen@usbr.gov>

Cc: Jon Meyer <Jonathan.Meyer@colvilletribes.com>, Guy Moura <Guy.Moura@colvilletribes.com>

Derek,

We have limited comment or concerns regarding the new fire station. Alternative A would require survey and documentation because there are rock features there associated with dam construction – there may be aboriginal rock features as well. I have seen an old photograph of the area, as someone took a shot of the railroad tracks. I don't know where that is now, but you probably have it.

For Alternative B, we know the landform to be total disturbed, however, the edifice will be in the view shed of several TCPS and we would like to see the conceptual design of the building for review and comment.

Guy Moura

Program Manager, History/Archaeology

Tribal Historic Preservation Officer

Confederated Tribes of the Colville Reservation

(509) 634-2695



**Public Scoping for the Environmental Assessment for the proposed construction of a new fire station for GC power office fire department.pdf**

315K



# Town of Coulee Dam

Office of the Mayor · 300 Lincoln · Coulee Dam, WA 99116 · 509-633-0320 · 509-633-3252 (fax)

June 4, 2014

Kerry McCalman  
Acting Power Manager  
United States Department of the Interior, Bureau of Reclamation  
PO Box 620  
Grand Coulee, WA 99113-0620

Re: EA Scoping / Proposed new Fire Station

Dear Mr. McCalman:

Projects of this type and scope almost always offer additional opportunity.

IF the fire station is located on the property designated as alternative site "B", the project should consider an architecture that reflects the recreational nature of its immediate proximity to Lake Roosevelt. As well, by including additional design features and/or facilities that offer resources to the touring public, we (you) can help grow the local economy. These features might be a well maintained rest area/rest stop, observation deck/roof, a kiosk information feature, and/or some other combination of a multi-use facility. Additionally, a joint cities/USBR fire Apparatus and/or Ambulance facility just might better serve the USBR and the local communities. If some mix-use/joint-use facility is not considered we are in opposition to the use of site "B" as the preferred site. We believe that this area should preserve the view-scape and/or be reserved for public use as open-space, parks, tourist/local park-related facilities, or other shared uses.

IF the proposed facility is located on site "A", my comments would be driven by if or not it is clearly visible from the highway. If it is a visible (from the highway) structure, we would hope that due attention will be considered to insure an architecturally attractive facility. As with any other location in the general area, we believe that the time to explore viable shared-use options should be early in your planning and decision-making process and appreciate the opportunity to respond to this environmental assessment.

The Town of Coulee Dam would be interested in exploring joint-use or shared facility resources.

Sincerely,

F. Gregory Wilder, Mayor

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## United States Department of the Interior

NATIONAL PARK SERVICE  
Lake Roosevelt National Recreation Area  
1008 Crest Drive  
Coulee Dam, WA 99116

IN REPLY REFER TO:

June 11, 2014

Lon Ottesen  
Natural Resource specialist  
Bureau of Reclamation  
Grand Coulee Power Office  
PO Box 620  
Grand Coulee, WA 99133

Dear Lon:

On behalf of the National Park Service (NPS), Lake Roosevelt National Recreation Area (LRNRA), I am providing the following comments regarding the Bureau of Reclamation's (BOR) proposal to construct a new fire station, specifically with regard to Alternative B.

In 2010, the NPS completed a programmatic Shoreline Management Plan for LRNRA. As part of this management plan, a Development Concept Plan was completed that specifically addressed development of the Crescent Bay Area. Although we are aware of local interest in development of this area, the NPS has not been able to move forward on this due to lack of funding and staff capability for long-term care and maintenance.

While the construction of a fire station was not analyzed during the 2010 planning process, the NPS feels the development of a fire station at this location may present opportunities to partner in the development of the Crescent Bay area. Not only would such a partnership aid in reaching responsibilities of both agencies, but also represent an excellent opportunity to provide benefits to visitors and the local area.

With that in mind, it is important to understand the goals and objective that BOR is trying to achieve with this project. With those clearly stated, the two agencies can better ascertain how our two agencies can work to achieve common efforts.

With this in mind, some items necessary for construction of a fire station under Alternative B include:

- The proposed fire station location is also the site of an historic saw mill. Cultural resource documentation would be required.
- The current entrance and access road would need stabilization and hardening into an all season road to accommodate fire station traffic, as well as the visiting public.
- The design of the station would need to be such that does not adversely affect the visual aesthetics of the area (i.e., large hose drying towers, multiple stories, or visually contrasting paint colors).
- Lighting of the station would need provide adequate security, while not affecting visitors to the area, or detract from potential future development such as a campground.

- Several spur or side roads from the main access road facilitating dispersion of visitors would need to be closed/removed to provide increased security to the fire station and safety to the visiting public. This may require some contouring of the area, but would assist in the completion of the next item.
- A parking area for the fire station would need to be developed that may also serve the visiting public accessing to the area.
- Development of adequate signage directing visitors to the BOR fire station verses NPS opportunities.

Items for consideration of mitigation resulting from this construction, but would also bolster public support include:

- Development of a single road access to Crescent Lake for visitor access to the area.
- Construction of a kayak/canoe launch, fishing dock, and ADA accessible access to Crescent Lake.
- Development of an all season toilet at the Crescent Bay boat launch.
- Potential storage for the NPS in the fire station.

The NPS appreciates the complexities of planning, design, and construction of this type of facility and understands BOR's need to protect infrastructure as well as that of the outlying community. As you are aware, the NPS must also meet agency mandates, objectives, and goals. Regardless of the alternative selected, we welcome the opportunity to work in partnership to further our agencies programs in managing this unique area.

Sincerely,



Dan A. Foster  
Superintendent

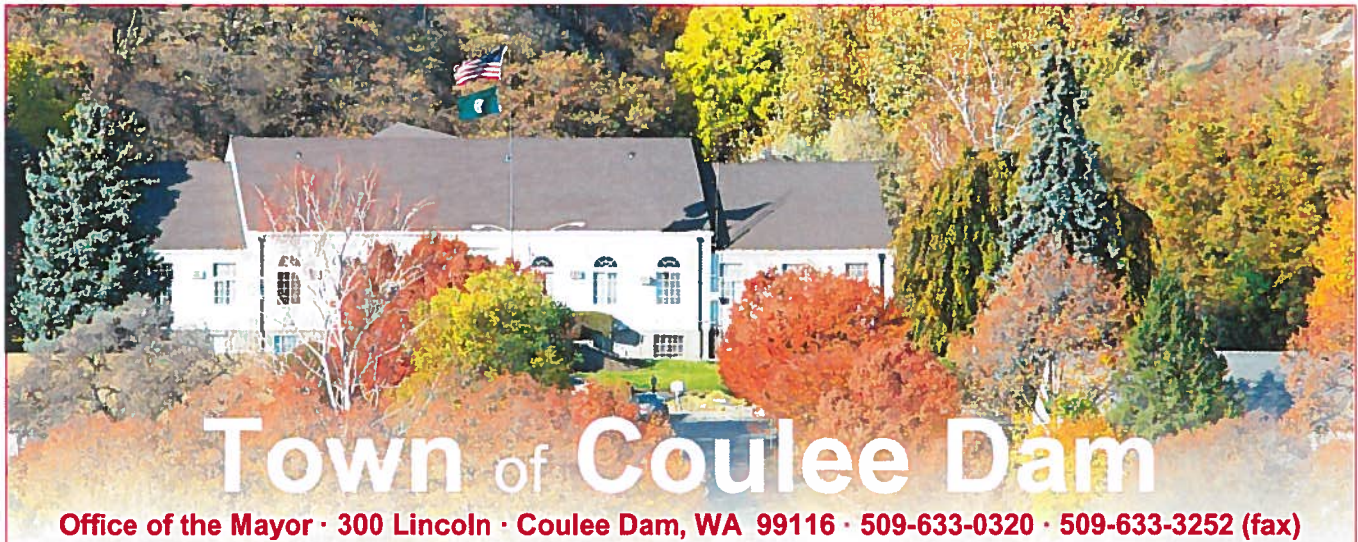
**APPENDIX C**

**COMMENTS TO PUBLIC REVIEW AND  
RECLAMATION'S RESPONSES**

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September 09, 2015

Lon Ottosen  
Natural Resources Specialist  
Bureau of Reclamation  
PO Box 620  
Grand Coulee, WA 99113-0620

Re: Draft Environmental Assessment / Proposed new Fire Station (Alternative "B")

Dear Mr. Ottosen:

Projects of this type and scope almost always offer additional opportunity.

IF the fire station is located on the property designated as alternative site "B", the project should consider an architecture that reflects the recreational nature of its immediate proximity to Lake Roosevelt. As well, by including additional design features and/or facilities that offer resources to the touring public, we (you) can help grow the local economy. These features might be a well maintained rest area/rest stop, observation deck/roof, a kiosk information feature, and/or some other combination of a multi-use facility. Additionally, a joint cities/USBR fire Apparatus and/or Ambulance facility just might better serve the USBR and the local communities. If some mix-use/joint-use facility is not considered we are in opposition to the use of site "B" as the preferred site. We believe that this area should preserve the view-scape and/or be reserved for public use as open-space, parks, tourist/local park-related facilities, or other shared uses.

IF the proposed facility is located on site "A", my comments would be driven by if or not it is clearly visible from the highway. If it is a visible (from the highway) structure, we would hope that due attention will be considered to insure an architecturally attractive facility. As with any other location in the general area, we believe that the time to explore viable shared-use options should be early in your planning and decision-making process and appreciate the opportunity to respond to this environmental assessment.

The Town of Coulee Dam would be interested in exploring joint-use or shared facility resources.

Sincerely,

F. Gregory Wilder, Mayor





## **Reclamation Response to Comments on Draft EA**

### **Response to Town of Coulee Dam, F. Gregory Wilder, Mayor Comment on the Draft EA for construction of a new GCPO Fire Station, dated September 9, 2015**

Services and conveniences such as a rest area, observation deck, information center, or other mixed use elements may provide additional experiences to visitors of the Grand Coulee area. However, recreational amenities are not suited for this project. Guidelines must be followed regarding structure layout, size and footprint, and use of new Federal facilities. The purpose of the project is to provide an independent station to ensure reliable protection for all Reclamation facilities and lands, as well as provide mutual aid to other agencies and surrounding communities. A Federal Government only facility is the most effective way to fulfill the mission. Under Alternative B, care in design would be taken to preserve the view-scape and appropriate for a recreation area.

Under the Preferred Alternative A, Reclamation would construct the new fire station near the west gate entrance to the Industrial Area. Given site restrictions and the location of the new building, recreational improvements would not be appropriate. Reclamation recognizes the importance of preserving the view-scape and utilizing appropriate architectural design. As the new station would be the focal point as visitors and residents travel north on SR 155, towards the dam, detail would be given to build a structure that is architecturally appealing and fits into the theme of the dam and other Reclamation structures.



## **APPENDIX D**

### **TRIBAL AND AGENCY CORRESPONDENCE**

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IN REPLY REFER TO:

## United States Department of the Interior

BUREAU OF RECLAMATION  
Pacific Northwest Region  
Grand Coulee Power Office  
P.O. Box 620  
Grand Coulee, WA 99133-0620

**AUG 21 2015**

GCPO-1000  
ENV 3.00

CERTIFIED – RETURN RECEIPT REQUESTED

Dr. Allyson Brooks  
Washington State Historic Preservation Officer  
Department of Archaeology & Historic Preservation  
P.O. Box 48343  
Olympia, WA 98504-8343

Subject: The Bureau of Reclamation Grand Coulee Dam Fire Station Project  
(Tracking No. U15-010:15.02)

Dear Dr. Brooks:

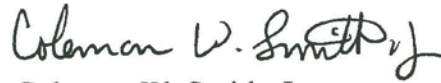
The Bureau of Reclamation (Reclamation) proposes to build the Grand Coulee Dam Fire Station in close proximity to the Grand Coulee Dam Power Office in Grand Coulee, Washington. The Reclamation Fire Department does not currently have facilities, and is housed within the Pump Generating Plant (PGP) of Grand Coulee Dam. The PGP is considered a high-hazard facility that fails to meet life safety codes and fire department regulatory standards.

Reclamation recently contracted a cultural resources review (CRR) from CH2M Hill to help us gather required cultural resources compliance documentation for the National Historic Preservation Act (NHPA) and the National Environmental Policy Act (NEPA). As you will see in the attachment, we are considering two main action alternatives. The Areas of Potential Effect designated in the attached document includes the effects of both of these options. The CRR presents findings and defines the potential effects to historic properties for both options. The CH2M Hill report presents a recommendation of a finding of No Adverse Effect to Historic Properties.

We request that you concur with the APE, the level of work, and the finding of no adverse effects to historic properties as described in the attachment.

If you have questions about this undertaking or other issues related to it, please contact Derek Beery, the Power Office Archeologist, at (509) 633-9233.

Sincerely,

A handwritten signature in black ink that reads "Coleman W. Smith, Jr." with a stylized flourish at the end.

Coleman W. Smith, Jr.  
Power Office Manager

Enclosure

cc: Guy Moura, Acting Tribal Historic Preservation Officer  
History/Archaeology Program  
Confederated Tribes of the Colville Reservation  
P.O. Box 150  
Nespelem, Washington 99155-0150

Katherine Pollock, Project Archaeologist  
Bonneville Power Administration  
KEC-4  
P.O. Box 3621  
Portland, Oregon 97208-3621



Allyson Brooks Ph.D., Director  
State Historic Preservation Officer

August 26, 2015

Mr. Coleman W. Smith Jr.  
Grand Coulee Power Office  
Bureau of Reclamation  
PO Box 620  
Grand Coulee, Washington 99133

Re: Grand Coulee Dam Fire Station Project  
Log No.: 082615-13-BOR

Dear Mr. Smith:

Thank you for contacting our department. We have reviewed the professional archaeological review you provided for the proposed revised Grand Coulee Dam Fire Station Project, Grant County, Washington.

We concur with your determination of No Historic Properties Affected.

We would appreciate receiving any correspondence or comments from concerned tribes or other parties that you receive as you consult under the requirements of 36CFR800.4(a)(4).

In the event that archaeological or historic materials are discovered during project activities, work in the immediate vicinity must stop, the area secured, and this office notified.

These comments are based on the information available at the time of this review and on the behalf of the State Historic Preservation Officer in conformance with Section 106 of the National Historic Preservation Act and its implementing regulations 36CFR800. Should additional information become available, our assessment may be revised.

Thank you for the opportunity to comment and a copy of these comments should be included in subsequent environmental documents.

Sincerely,

Robert G. Whitlam, Ph.D.  
State Archaeologist  
(360) 890-2615  
email: [rob.whitlam@dahp.wa.gov](mailto:rob.whitlam@dahp.wa.gov)









IN REPLY REFER TO:

## United States Department of the Interior

BUREAU OF RECLAMATION  
Pacific Northwest Region  
Grand Coulee Power Office  
P.O. Box 620  
Grand Coulee, WA 99133-0620

GCPO-1000  
ENV 3.00

**AUG 21 2015**

CERTIFIED – RETURN RECEIPT REQUESTED

Mr. Guy Moura,  
Tribal Historic Preservation Officer, History/Archaeology Program  
Confederated Tribes of the Colville Reservation  
P.O. Box 150  
Nespelem, Washington 99155-0150

Subject: The Bureau of Reclamation Grand Coulee Dam Fire Station Project  
(Tracking No. U15-010:15.01)

Dear Mr. Moura:

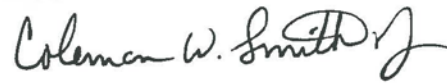
The Bureau of Reclamation (Reclamation) proposes to build the Grand Coulee Dam Fire Station in close proximity to the Grand Coulee Power Office in Grand Coulee, Washington. The Reclamation Fire Department is currently housed within the Pump Generating Plant (PGP) of Grand Coulee Dam. The PGP is considered a high-hazard facility that fails to meet life safety codes and fire department regulatory standards.

Reclamation recently contracted for a cultural resources review (CRR) from CH2M Hill to help us gather required cultural resources compliance documentation for the National Historic Preservation Act (NHPA) and the National Environmental Policy Act (NEPA). As you will see in the attachment, we are considering two main action alternatives. The Areas of Potential Effect designated in the attached document includes the effects of both of these options. The CRR presents findings and defines the potential effects to historic properties for both options. The fieldwork and methods took into account your recommendations from the June 2014 public scoping process. The CCR also makes preliminary recommendations regarding the identification and evaluation of Traditional Cultural Properties based on available information. In short, the CH2M Hill report recommends of a Finding of No Adverse Effect to Historic Properties.

This letter is to request that the Confederated Tribes of the Colville Reservation review the information presented in the CRR. We also request that you concur with a Finding of No Adverse Effects if the CRR is deemed to be accurate.

If you have questions about this undertaking or other issues related to it, please contact Derek Beery, the Power Office Archeologist, at (509) 633-9233.

Sincerely,

A handwritten signature in black ink, reading "Coleman W. Smith, Jr." with a stylized flourish at the end.

Coleman W. Smith, Jr.  
Power Office Manager

Enclosure

cc: Dr. Allyson Brooks, Washington State Historic Preservation Officer  
Department of Archaeology & Historic Preservation  
P.O. Box 48343  
Olympia, WA 98504-8343

Katherine Pollock, Project Archaeologist  
Bonneville Power Administration  
KEC-4  
P.O. Box 3621  
Portland, Oregon 97208-3621



Beery, Derek <dbeery@usbr.gov>

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## Fire station

Beery, Derek <dbeery@usbr.gov>

Tue, Sep 8, 2015 at 7:34 AM

To: Lon Ottosen <lottosen@usbr.gov>, James Taylor <jbtaylor@usbr.gov>, Ian Turner <iturner@usbr.gov>, Kelly Vick <kvick@usbr.gov>

From: **Guy Moura** <Guy.Moura@colvilletribes.com>

Date: Tue, Sep 8, 2015 at 12:10 AM

Subject: RE: Fire station

To: "Beery, Derek" <dbeery@usbr.gov>

Cc: "rob.whitlam@dahp.wa.gov" <rob.whitlam@dahp.wa.gov>, Brenda Covington <Brenda.Covington@colvilletribes.com>, Brent Martinez <Brent.Martinez@colvilletribes.com>, Jackie Cook <Jackie.Cook@colvilletribes.com>, Jon Meyer <Jonathan.Meyer@colvilletribes.com>

Derek,

We concur with a finding of No Historic Properties in the APE of Reclamation's proposed new Grand Coulee Power Office fire station

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