

DRAFT FINDING OF NO SIGNIFICANT IMPACT

ICE HARBOR LOCK AND DAM MASTER PLAN REVISION

Walla Walla County, Washington

July 2021

The U.S. Army Corps of Engineers, Walla Walla District (Corps) is proposing to revise/update the 1977 Ice Harbor Lock and Dam Project (Project) Master Plan (MP) and therefore has written an environmental assessment (EA) in accordance with the National Environmental Policy Act (NEPA) of 1969, as amended. The EA considers, identifies, and describes potential environmental effects associated with the proposed action of revising/updating the 1977 MP for management of recreational, natural, and cultural resources at Ice Harbor Project on the lower Snake River near Burbank, Washington. The revised MP would be a strategic land use management document that guides the comprehensive management and development of all recreation, natural and cultural resources of the Project for the next 20 years.

The EA incorporated herein by reference, considered five alternatives for strategic Project development and management including the No Action alternative. The other four alternatives considered were focused on cultural resources protection, recreation, wildlife management, and an alternative that balances the three.

Screening criteria helped eliminate those alternatives that could not reasonably or practically meet the proposed action purpose and need. When setting up screening criteria, the Corps closely re-evaluated the purpose and need of the proposed action, which is to manage all Ice Harbor recreational, natural, and cultural resources in a comprehensive manner that complies with applicable laws and Corps policies, including current Corps land classification standards. After screening, the Balanced Use Alternative (Proposed Action) was carried forward for further environmental analysis. If implemented, the Proposed Action Alternative could provide for regional needs, resource capabilities and suitability, and a comprehensive recreation program.

Potential effects to the following resources were evaluated for the No Action Alternative and the Proposed Action Alternative:

Resource	In-depth evaluation conducted	Brief evaluation due to minor effects	Resource unaffected by action
Aesthetics and Visual Resources	-	-	<input checked="" type="checkbox"/>
Noise	-	-	<input checked="" type="checkbox"/>
Air Quality	-	-	<input checked="" type="checkbox"/>
Land Use	<input checked="" type="checkbox"/>	-	-
Recreation	<input checked="" type="checkbox"/>	-	-
Vegetation	<input checked="" type="checkbox"/>	-	-

Appendix A - Finding of No Significant Impact

Resource	In-depth evaluation conducted	Brief evaluation due to minor effects	Resource unaffected by action
Wildlife	<input checked="" type="checkbox"/>	-	-
Water Quality	-	<input checked="" type="checkbox"/>	-
Aquatic Resources	-	<input checked="" type="checkbox"/>	-
Threatened and Endangered Species	-	<input checked="" type="checkbox"/>	-
Geologic Features and Soil	<input checked="" type="checkbox"/>	-	-
Socioeconomics and Environmental Justice	-	<input checked="" type="checkbox"/>	-
Cultural and Historic Resources	-	<input checked="" type="checkbox"/>	-

All applicable environmental laws have been considered and coordination with appropriate agencies and officials has been completed. Refer to Section 4 (Compliance with Applicable Environmental Laws and Regulations) in the EA. The Corps considered effects to treaty resources, NEPA, Endangered Species Act, Clean Water Act, air quality under the Clean Air Act, the Bald and Golden Eagle Protection Act, the Migratory Bird Treaty Act, the Magnuson-Stevens Fishery Conservation and Management Act, the Native American Graves Protection and Repatriation Act, the Fish and Wildlife Coordination Act, and American Indian Religious Freedom Act and found the Proposed Action in compliance. The Corps also considered Executive Orders 11988 (Floodplain Management), 11990 (Protection of Wetlands), 12898 (Environmental Justice), 13007 (Native American Sacred Sites), and 13175 (Consultation and Coordination with Indian Tribal Governments) and found the Proposed Action in compliance.

The revised MP includes concepts, not details of design or administration. Detailed management and administration functions would be addressed in an Operational Management Plan, which implements the concepts of the MP into operational actions. Separate environmental compliance actions would be completed prior to any implementation of operational actions. Due to the lack of details, it is not possible to determine what effects there might be to the human or natural environment including ESA-listed species.

A 30-day public review of this Draft FONSI and the EA, for state and local agencies, Tribes, and the public began on July 1, 2021 and will conclude on July 30, 2021. All comments submitted during the public review period will be considered in development of the Final EA, and answers to the comments will be provided in the "Consultation, Coordination and Public Involvement" section of the EA.

Technical, environmental, and economic criteria used in the formulation of alternatives, were those specified in Engineering Pamphlet (EP) 1130-2-550 *Recreation Operations and Maintenance Guidance and Procedures*. All applicable laws, executive orders, regulations, regional needs and expressed public interests were considered in evaluation of alternatives. Based on this EA, the reviews by other federal, state and local agencies, Tribes, input from the public, and the review by my staff, it is my determination that the Proposed Action Alternative would not significantly affect the quality of the human environment; therefore, preparation of an Environmental Impact Statement is not required.

Date

RICHARD T. CHILDERS, P.E., PMP
Lieutenant Colonel, Corps of Engineers
District Commander



**US Army Corps
of Engineers** ®

Walla Walla District
BUILDING STRONG ®

ICE HARBOR MASTER PLAN REVISION

**Ice Harbor Lock and Dam
Lower Snake River
Burbank, Washington**

ENVIRONMENTAL ASSESSMENT

**In compliance with the
National Environmental Policy Act of 1970**

ADMINISTRATIVE RECORD – DO NOT DESTROY

PROJECT FILE NUMBER: PPL-C-2020-0049

June 2021

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Acronyms

AIRFA	American Indian Religious Freedom Act
ARPA	Archaeological Resource Protection Act
BA	Biological Assessment
BGEPA	Bald and Golden Eagle Protection Act
CAA	Clean Air Act
CTUIR	Confederated Tribes of the Umatilla Indian Reservation
CWA	Clean Water Act
DDD	4-4'-Dichlorodiphenyldichloroethane
DDT	Dichloro-diphenyl-trichloroethane
Ecology	Washington State Department of Ecology
EFH	Essential Fish Habitat
EO	Executive Orders
EPA	Environmental Protection Agency
ESA	Endangered Species Act
FCRPS	Federal Columbia River Power System
FIRA	Future or Inactive Recreation Areas
FONSI	Finding of No Significant Impact
HDR	High Density Recreation
HPRCSITS	Historic Properties of Religious and Cultural Significance to Indian Tribes
MBTA	Migratory Bird Treaty Act
MRM	Multiple Resource Management
MRM-LDR	Multiple Resource Management-Low Density Recreation
MRM-WM	Multiple Resource Management-Wildlife Management
MSA	Magnuson-Stevens Fishery Conservation and Management Act
NAGPRA	Native American Graves Protection and Repatriation Act
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
NPT	Nez Perce Tribe

NRHP	National Register of Historic Places
NTU	Nephelometric Turbidity Units
PDT	Project Delivery Team
RMJOC	River Management Joint Operating Committee
SHPO	State Historic Preservation Officer
TCPs	Traditional Cultural Properties
USDA	U.S. Department of Agriculture
USFS	U.S. Forest Service
USGCRP	U.S. Global Change Research Program
WAC	Washington Administrative Code
WQC	Water Quality Criteria
°F	Fahrenheit

Draft

Section 1: Introduction

1.1 Introduction

This environmental assessment (EA) considers, identifies, and describes potential environmental effects associated with the proposed action of revising/updating the 1977 Ice Harbor Lock and Dam Master Plan (MP) for management of recreational, natural, and cultural resources at Ice Harbor Dam Project (Project) on the lower Snake River near Burbank, Washington. The U.S. Army Corps of Engineers (Corps) proposes to revise/update the 1977 MP to comply with new Corps policy in Engineering Regulation (ER) and Engineering Pamphlet (EP) 1130-2-550 (Corps 2013), and to respond to regional and Project changes that have occurred since 1977, including changing public use.

The revised MP would be a strategic land use management document that guides the comprehensive management and development of all recreation, natural and cultural resources of the Project for the next 20 years. The revised MP would promote the efficient and cost-effective management, development, and use of Project lands. It is an important tool for the responsible stewardship and sustainability of Project resources for the benefit of present and future generations.

As required by the National Environmental Policy Act (NEPA) and subsequent implementing regulations promulgated by the Council on Environmental Quality, this EA is prepared to determine whether the action proposed by the Corps constitutes a “. . . major federal action significantly affecting the quality of the human environment . . .” and whether an environmental impact statement (EIS) is required. The EA is prepared pursuant to NEPA, Council on Environmental Quality (CEQ) regulation [40 Code of Federal Regulations (CFR) 1500-1508], and the Corps’ implementing regulation, Policy and Procedure for Implementing NEPA, ER 200-2-2 (Corps 1988), also known as 33 CFR 230. The EA covers the proposed action of revising and implementing an updated MP. However, future site-specific actions following revision of the MP (e.g., further development of camping locations), may necessitate additional analysis as required by NEPA.

The NEPA is a full disclosure law, providing for public involvement in the NEPA process. All persons and organizations that have a potential interest in major actions proposed by a federal agency – including the public, other federal agencies, state and local agencies, Native American Tribes, and interested stakeholders, are encouraged to participate in the NEPA process.

The revised MP would guide the Corps responsibilities pursuant to federal laws to preserve, conserve, restore, maintain, manage, and develop the Project lands, waters, and associated resources. The revised MP would deal in concepts, not details, of design or administration. Detailed management and administration functions would be addressed in a five-year Operational Management Plan (OMP), which would implement the concepts of the MP through operational actions. Actions identified in the OMP

would be reviewed annually to identify upcoming actions needing review under NEPA and other applicable environmental laws and regulations.

The revised MP would not address dam management procedures and functions, including operations and maintenance of the dam and hydropower facilities, navigation locks and channel, levees, fish passage ladders/facilities or emergency flood operations.

1.2 Project Location and Background Information

Ice Harbor Lock and Dam is located on the lower Snake River, at River Mile (RM) 9.7 (Figure 1-1). The dam and reservoir lie in southeastern Washington, with the right abutment of the dam in Franklin County and the left abutment in Walla Walla County. The reservoir impoundment of the Snake River, called Lake Sacajawea, extends 32 miles east to the base of Lower Monumental Lock and Dam near Kahlotus, Washington at approximately RM 41.6. The dam and reservoir Project includes about 4,500 acres of land, most of which surrounds the reservoir although a small amount of land is adjacent to or downstream of the dam.

The Project provides numerous opportunities for outdoor recreation and fish and wildlife use. There are 9 day-use areas, 130 camping sites, 5 swimming areas, and 9 boat launch facilities along the reservoir. There are also 21 habitat management units (HMUs) providing public access for hunting, fishing, hiking, and other nature activities. Popular recreation activities around the Project include fishing, swimming, picnicking, boating, hunting, and camping (See Table 2-7 in the MP).

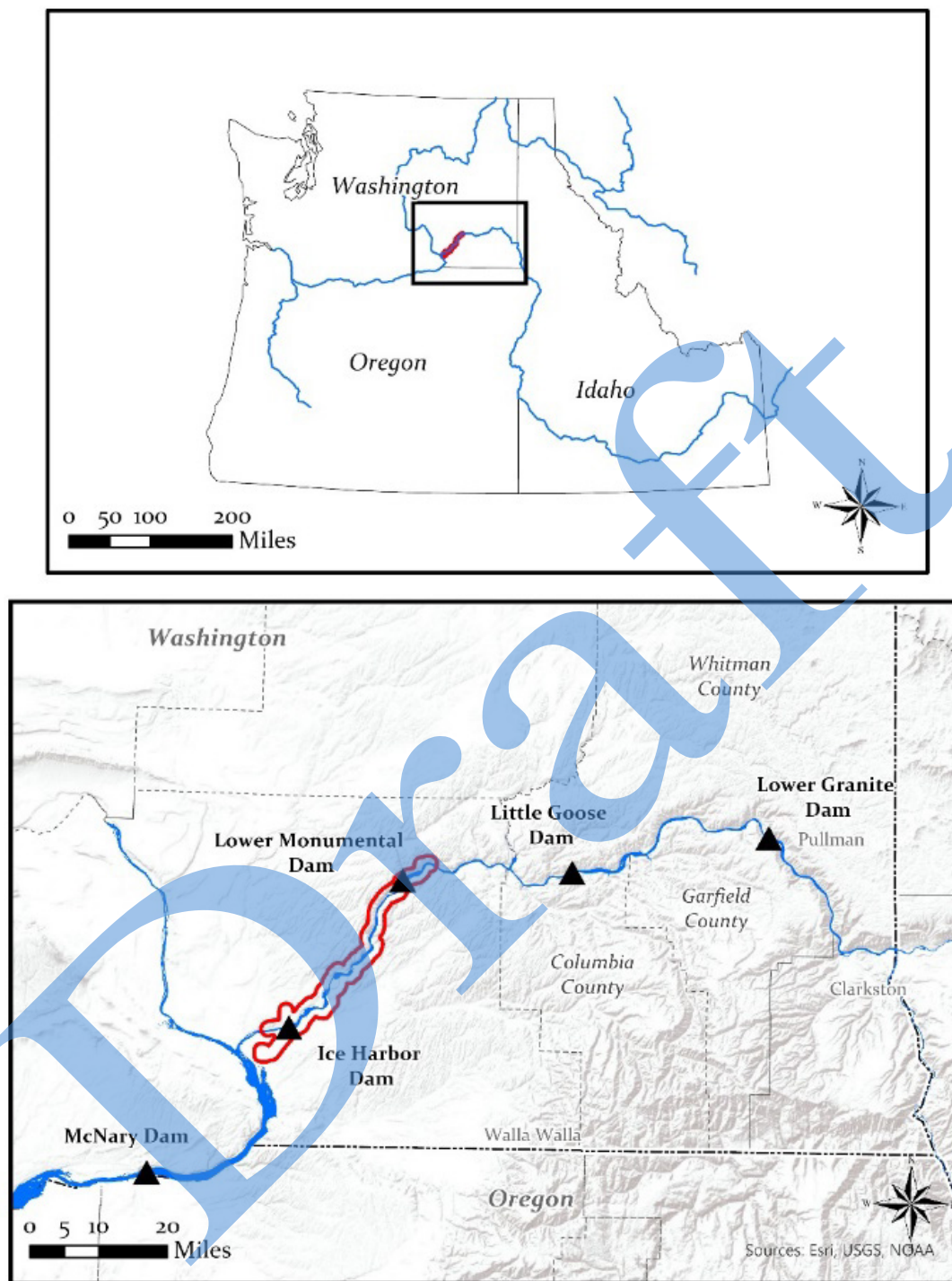


Figure 1-1. Location of Ice Harbor Lock and Dam

1.3 Authority for the Project

Ice Harbor Dam was authorized by the Rivers and Harbors Act of 1945 (Public Law (PL) 79-14), which authorized construction of a series of dams on the lower reach of the Snake River downstream from Lewiston. House Document 531, Eighty-First Congress, Second Session, dated March 20, 1950, proposed a four-dam plan with Ice Harbor as the first or most downstream unit of the four. Construction began on Ice Harbor in

January 1956 and the initial impoundment was done in two stages: to reservoir elevation 400 in November 1961 and to full pool, elevation 440, on April 27, 1962.

1.4 Authorized Project Purposes

The purposes of the Project, as originally authorized, were to improve navigation, irrigation, and hydroelectric power on the Snake River. Recreation and fish and wildlife conservation were added later as additional purposes. The Flood Control Act of 1944 (PL 78-534), provided authority to add recreation as a purpose. Fish and wildlife conservation was added as a project purpose through the Fish and Wildlife Coordination Act of 1958 (FWCA) (PL 85-624).

The ability to manage fish and wildlife resources is through the Lower Snake River Fish and Wildlife Compensation Plan (LSRFWCP), which was prepared under the authority of the FWCA. When Congress authorized the Lower Snake River Projects (LSRP), including Ice Harbor, the legislative language did not address fish and wildlife losses resulting from the LSRP or mitigation for any of the losses. Under the FWCA however, both analysis of fish and wildlife impacts associated with federal water projects and compensation for the loss of fish and wildlife resources and habitat are required. To address FWCA compliance requirements for the LSRP, the Corps developed and completed the LSRFWCP in June 1975.

The LSRFWCP is a negotiated settlement agreed to by the Corps, Washington Department of Fish and Wildlife (WDFW) and the U.S. Fish and Wildlife Service (USFWS). Its intent is to mitigate for the loss of fish and wildlife resources and their habitat, as well as for the loss of fish- and wildlife-oriented recreational opportunities caused by the construction of the four lower Snake River dams (Corps 1975). The LSRFWCP was subsequently amended by WRDA 1986 and WRDA 2007. The Corps manages 54 HMUs to provide wildlife habitat to meet the LSRFWCP goals. The alternatives described in Section 2, below, address land classifications related to LSRFWCP mitigation requirements.

1.5 Master Plan History

The original Ice Harbor MP was written in 1963 and was updated in 1977 and revised in 1981 and 1983. The 1977 MP was written in accordance with Engineering Regulation 1120-2-400, the guidance in effect at that time, to update the original MP, including updating the land use allocations. The land use maps were revised in 1981 and the land use allocations and acreages were revised in 1983.

1.6 Purpose and Need

The Corps is proposing to revise/update the 1977 Ice Harbor MP for the comprehensive management and development of recreational, natural, and cultural resources at the Project. The 1977 MP no longer fulfills the intended purpose due to changes in techniques and methods required by Corps policy, changes for endangered species management, and substantial increases in public use of the Project. An all-inclusive approach is needed to respond to public requirements while meeting all other Project

goals and resource objectives. The revised MP would promote the efficient and cost-effective management, development, and use of Project lands. It would be an important tool for responsible stewardship and sustainability of Project resources for the benefit of present and future generations.

The purpose of the Master Plan revision is to manage the Ice Harbor project recreational, natural, and cultural resources in a comprehensive manner by adopting and implementing an updated Master Plan that complies with applicable laws, regulations, and Corps policies and supports the Corps' natural and cultural resources management and recreation. The Master Plan also needs to be revised to reflect the current regional goals of invasive species management, wetland protection, and habitat management and restoration in accordance with the LSRFWCP. Further, the public has expressed interest in enhancement of native plants and animals, availability and accessibility of recreational resources, preservation of scenic resources, and public land uses that support diversity, equity, and inclusion.

An updated Ice Harbor Master Plan is needed for several reasons. Some are because of changes in Corps policy and land management requirements that came about after the current Master Plan was completed in 1977. Others are because of current or projected changes in public use and demand for facilities. Yet others are because of evolving understanding of Corps responsibilities regarding cultural resources and Tribal concerns. These changes are described below:

- Changes in Corps policy for Master Plans - In 1996, the Corps changed its guidance on Master Plans (ER/EP 1130-2-550), including land classification nomenclature. The new policy, which was revised in January 2013, requires the Corps to focus on qualities, characteristics, and potentials of project lands and also provides consistency and compatibility with national objectives and other state and regional goals and programs. The new policy also included a change in how the land is classified for use. The 1977 Master Plan used nine different land use classifications, including three types of project operations, three levels of recreational use, and two levels of fish and wildlife use. The newer guidance simplifies some of the classifications by lumping several of the previous classification together while also emphasizing that some lands are multiple use and not intended just for recreation or for wildlife.
- Changes in land classifications in the Ice Harbor Project – Some of the lands in Ice Harbor have been classified for different uses than under the 1977 Master Plan. Ice Harbor Project lands have undergone several changes since the original Master Plan was developed in 1963. The Master Plan was revised and updated in 1977, then four appendices were added to the Master Plan in 1982. There are no supplements to the 1977 Master Plan. Land acquisitions, disposals, and reclassifications through the years of operation that were never documented in an approved Master Plan or supplement are detailed in Appendix E. The 2021 Master Plan is an opportunity to document these changes and to

ensure that the public record accurately reflects the management of lands in the Project.

The large-scale changes in land ownership and use over 44 years throughout the Project, along with the nomenclature changes, should have been documented in a Master Plan revision or supplement before now. However, funding for Master Plan updates is difficult to obtain, especially under the U.S. Army Corps of Engineers, Walla Walla District (Corps) unique joint funding arrangement that requires Bonneville Power Administration (BPA) matching funds for appropriated dollars. There were some large land disposals to the Oregon-Washington Railroad and Navigation Company (now part of the Union Pacific Railroad) for railroad rights-of-way, and smaller disposals to the Port of Kahlotus and other entities between 1977 and 1983, resulting in a net decrease in total Project acres. Land was also acquired during this time, mostly to meet mitigation requirements under the LSRFWCP. These changes were never included in a Master Plan update or supplement.

In May 1982, Appendices A through D to the 1977 Master Plan were approved and distributed. These appendices updated the Project resources management plan, added a fish and wildlife plan to begin to address the requirements of the LSRFWCP, and detailed a fire protection and safety plan for Project lands. The updated Project Resources Management Plan describes changes to plans for recreational development after several years of operations.

- Implementation of mitigation under the Lower Snake River Fish and Wildlife Compensation Plan – Under the LSRFWCP, several blocks of land were designated as HMUs to mitigate for the loss of hunting opportunities caused by the construction of the four lower Snake River dams and reservoirs. While these HMUs were classified as intensive wildlife management in the 1977 Master Plan, they need to be updated to the new classification of “mitigation” to reflect their official status as mitigation lands.
- A greater awareness of responsibilities regarding Cultural Resources and Tribal concerns - The Corps is more engaged with tribal consultation now than compared to the level of effort that was expended when the original MP was produced in 1977. Additionally, the formation of multi-agency consultation groups, like the Payos Kuus Cuukwe (PKC), has enabled consistent, iterative communication between Tribes and the Corps.

The 1977 MP needs to be updated because it is more than 44 years old and provides an inadequate base with which to evaluate contemporary (current and future) land and resources management. The revised/updated MP would comply with new policy found in the Corps' ER and EP 1130-2-550, which requires the Project to focus on particular

qualities, characteristics, and potentials of Project lands and also provides consistency and compatibility with national objectives and other state and regional goals and programs. The revision and approval of the MP would assure the requirements of Corps' policies are met, and that comments from the public, local, state, federal agencies and Tribes are considered.

Corps regulations require each Civil Works Operating Project (such as Ice Harbor) to develop a Master Plan. As stated in EP 1130-2-550, MP goals must include the following screening criteria (also see Section 2.2):

- 1) Responds to regional needs and expressed public interests consistent with authorized Project purposes,
- 2) Provides for the comprehensive management and development of all Project recreational, natural, and cultural resources,
- 3) Complies with Corps Master Plan policy, environmental laws, and regulations.

The revised MP would be a document that deals in management concepts, not in the specific details of design or administration. It is intended to serve as a guide for the orderly and coordinated development, management, and stewardship of all recreational, natural, and cultural resources of the Project. The MP is an overarching framework for the more detailed OMP, which is developed after the MP is completed and updated annually. The MP classifies lands to provide for balanced management of the competing interests of these resources.

1.7 Land Classifications

All lands that were acquired for the Project were classified to provide for development and resource management consistent with authorized purposes and other federal laws. Land classification designates the primary use for which Project lands are managed. During the classification process the Corps considers direct and indirect public input through comments and site use, regional and Project specific resource requirements, and site suitability. Land classifications established in EP 1130-2-550 include the following six categories:

Project Operations: These are lands required for the dam and associated structures, administrative offices, maintenance compounds, and other areas used for Project operations and maintenance of Ice Harbor.

High Density Recreation: These lands are designated for intensive recreational use to accommodate and support the recreational needs and desires of Project visitors. They include lands where existing or planned major recreational facilities are located; and allow for developed public recreation facilities, concession development, and high-density or high-impact recreational use.

Mitigation: These are lands specifically designated to offset fish and wildlife habitat losses associated with the development of the four lower Snake River dams and reservoirs, including Ice Harbor Project.

Environmentally Sensitive Area: These are lands where scientific, ecological, cultural, or aesthetic features have been identified.

Multiple Resource Managed Lands: These are lands managed for one or more of the activities described in the following bullets:

- **Low Density Recreation:** These lands emphasize opportunities for dispersed or low-impact recreation use.
- **Wildlife Management:** These lands are designated for wildlife management, although all Ice Harbor lands are managed for fish and wildlife habitat in conjunction with other land uses.
- **Vegetative Management:** These lands focus on the protection and development of forest resources and vegetative cover, although all Ice Harbor lands are primarily managed to protect and develop vegetative cover in conjunction with other land uses.
- **Future/Inactive Recreation Areas:** These are lands where recreation areas are planned, or lands that contain existing recreation areas that are temporarily closed.

Water Surface: The water surface acreage at the Project is divided into the following zones to support public safety and security:

- **Restricted:** Water areas restricted for Project operations, safety, and security purposes.
- **Designated No-Wake:** Shoreline areas designated to protect recreational water access areas from disturbance, environmentally sensitive shoreline areas, and/or for public safety.
- **Open Recreation:** Those waters available for year-round or seasonal water-based recreational use.

Ice Harbor Project lands have undergone several changes since the original Master Plan was developed in 1963. The Master Plan was revised and updated in 1977, then four appendices were added to the Master Plan in 1982. The large-scale changes in land ownership and use over 44 years throughout the Project, along with the nomenclature changes, should have been documented in a Master Plan revision or supplement before now. However, due to multiple constraints, this would be the first full revision of the MP since 1977. The proposed 2021 Master Plan Revision is an opportunity to document these changes and to ensure that the public record accurately reflects the management of lands at the Project, as well as to classify lands for future use in order to best manage Project recreational, natural, and cultural resources.

The Corps needed to translate the old land classifications to the currently authorized land classifications under EP 1130-2-550 to revise the MP. Table 1-1 below is a rough translation between the two different classification nomenclatures. Table 1-2 below summarizes the changes in acreage under the old land classification nomenclature.

Table 1-1. Old Land Classification Nomenclature and New Land Classification Nomenclature

Old Land Classifications (1977)	New Land Classifications (2020)
Project Structures Port Terminal Industrial Use and Access	Project Operations
Operations: Recreation Intensive Use	High Density Recreation
Operations: Recreation Low Density Use Operations: Recreation Intensive Use Future Operations: Wildlife Management-Intensive Operations: Wildlife Management-Moderate	Multiple Resource Management <ul style="list-style-type: none"> • Low Density Recreation • Future and Inactive Recreation Areas • Wildlife Management
Operations: Natural Area	Environmentally Sensitive Area
----	Mitigation
Not Classified	----

Table 1-2. Land Classification Acreage Changes from 1977 to 2020

Land Use Classification	1977 Acres	2020 Acres
Operations: Project Structures	741.8	695.0
Operations: Public Port Terminals	63.2	37.2
Operations: Industrial Use and Access	30.7	0.0
Recreation: Intensive Use	372.5	341.6
Recreation: Intensive Use – Future	421.4	272.7
Recreation: Low-Density Use	312.4	74.8
Wildlife Management: Intensive	1813.6	1208.0
Wildlife Management: Moderate	314.5	1384.8
Natural Area	116.8	96.3
Not Classified	892.1	398.2
Total Acres	5079.0	4508.7

Section 2: Alternatives

2.1 Alternative Development and Evaluation

The NEPA requires federal agencies to consider a reasonable range of alternatives during the planning process. Alternatives considered under NEPA must include, at least, the proposed action and the “No Action” Alternative, which provides a baseline from which to compare other alternatives. In the case of an ongoing program, the No Action Alternative is no change from the current management direction or level of management intensity.

Therefore, to help facilitate the identification and evaluation of a reasonable range of alternatives, the Corps scheduled a 45-day “scoping period” from May 1 - June 15, 2020 to give the interested public; local, state and federal agencies; and Tribes an opportunity to provide input into the “scope” of the proposed MP Revision. Scoping was designed to receive comments on how users would like to see the Corps manage the recreational, natural, and cultural resources in the future. Scoping details and comments received are discussed in Section 5.2.1 (Scoping).

In addition, the proposed MP Revision is directed by specific Corps policy which informs consideration of alternatives for strategic Project development and management. Formulation and establishment of resource objectives (ROs) for each Civil Works Project is required by EP 1130-2-435. ROs are clearly written statements that respond to identified issues and specify measurable and attainable activities for resource development and/or management of the lands and waters under jurisdiction of the Walla Walla District at the Ice Harbor Project.

Proposed MP Revision Resource Objectives

1. General Resource Objectives

- a. **Safety and Security** – Provide use areas and facilities that are safe and provide the public with safe and healthful recreational opportunities.
- b. **Aesthetic Resource** – Plan all management actions with consideration given to landscape quality and aesthetics.
- c. **Facilities Management** – Ensure all current and future facilities are maintained and meet federal and state design standards.
- d. **Real Estate Management** – Prevent unintentional trespass and negative impacts associated with encroachments on government property while allowing state, county, municipal, and private entities opportunities to provide public recreation services.

2. Recreation Resource Objectives

a. Land and Water Accessibility – Provide use areas and facilities that are accessible for all Ice Harbor Project visitors.

b. Interpretive Services and Outreach Programs – Interpretive services would focus on agency, Corps, and Ice Harbor Project missions, benefits, and opportunities. Interpretive services at the Project will be used to enhance public education and safety through promoting public awareness, understanding and appreciation of the Project and its resources.

c. Recreation Optimization and Sustainability – Use leveraged resources when possible to maintain and improve recreation facilities that reduce operations and maintenance costs while meeting public demand.

d. Quality Outdoor Recreation in Rural Settings (Low Density Use) - Operate and maintain multi-purpose facilities, as well as develop new facilities that meet public demand, to provide opportunities for multiple user groups in a rural setting.

3. Environmental Stewardship

a. Riparian and Wetland Protection – Protect and limit impacts to wetlands and riparian corridors on the Project in conjunction with missions, water quality, and fish and wildlife benefits.

b. Fish and Wildlife Habitat Management – Conserve, protect, restore, and/or enhance habitat and habitat components important to the survival and proliferation of threatened, endangered, special status, regionally important, and LSRFWCP habitat and species on Project lands.

c. Cultural Resources Management – Inventory, record, and evaluate cultural resources per legal requirements of the National Historic Preservation Act (NHPA). Preserve resources as per the Archaeological Resources Protection Act (ARPA), Native American Graves Protection and Repatriation Act (NAGPRA), and Treaty responsibilities. Pursue enforcement actions under Title 36, or through local law enforcement, in the event of destruction, injury, defacement, removal or any alteration of public property, including historical and archaeological features (36 CFR § 327.14). Convey importance of cultural resources and proactive planning to Project staff through planning documents and the Historic Properties Management Plan (Hicks 2000) and update those documents as appropriate.

d. Integrated Pest Management – Minimize negative impacts to native flora and fauna and damage to government facilities by reducing and/or eradicating invasive and nuisance species on Ice Harbor lands.

e. Fire Management - Minimize the negative effects of wildfires, including impacts to federal property and the recreating public.

2.2 Screening Criteria

For any alternative to be acceptable for further evaluation it must meet certain objectives, or screening criteria.

Screening criteria help eliminate those alternatives that could not reasonably or practically meet the proposed action purpose and need. When setting up screening criteria, the Corps closely re-evaluated the purpose and need of the proposed action, which is to manage all Ice Harbor recreational, natural, and cultural resources in a comprehensive manner that complies with applicable laws and Corps policies, including current Corps land classification standards. In this re-evaluation, it became evident that truly achieving a balance between the Corps natural resource management mission and environmental stewardship/ecosystem management principles was key to successfully updating the Ice Harbor MP.

With these objectives in mind, the Corps developed the following technical and environmental screening criteria:

- 1) Responds to regional needs and expressed public interests consistent with authorized Project purposes,
- 2) Provides for the comprehensive management and development of all project recreational, natural, and cultural resources,
- 3) Complies with Corps Master Plan policy, environmental laws, and regulations.

2.3 Alternatives

The Project Delivery Team (PDT) evaluated all options and developed a reasonable range of alternatives to include the No Action Alternative which is required by NEPA, Alternative 2 that focuses on balanced uses, Alternative 3 that focuses on cultural resources, Alternative 4 that focuses on recreation, and Alternative 5 that focuses on wildlife. The five alternatives initially considered in this EA include:

2.3.1 Alternative 1: No Action Alternative (No Change to Current Practice)

If Alternative 1 was adopted, the Corps would not revise or update the 1977 MP. Instead, the Corps would continue with the current management practices based on strategy and guidelines in the 1977 MP, the 1979 LSRFWCP supplement, and LSRFWCP mitigation requirements implemented since 1979.

To compare acreage across land classifications for all alternatives, the land classifications were converted to currently authorized land classifications as shown in Table 1-2 on page 9. See Table 2-1 on page 15 to see how approximately 3,700 acres of land and water are classified amongst seven land classifications including 460 acres of land currently not classified.

2.3.2 Alternative 2: Balanced Use Alternative

Alternative 2 constitutes the proposed action of a MP Revision which focuses on Project characteristics and potential and aligns with national objectives and state and regional goals and programs. The revision and approval of the MP would assure the requirements of Corps' policies are met, and that comments from the public, local, state, federal agencies and Tribes are considered.

Alternative 2 was developed to balance designed visitor use with recreational, natural, and cultural resource sustainability. The Balanced Use Alternative would meet all the conditions of the stated purpose and need and responds to current Corps policy and regulations. It would provide the required analysis for regional needs, resource capabilities and suitability, and a comprehensive recreation program.

The Balanced Use Alternative would incorporate current Corps of Engineers land classification standards (including updated land classification maps), include contemporary requirements mandated by federal environmental laws, and reflect the Corps of Engineers Environmental Operating Principles, natural resource management mission and environmental stewardship and ecosystem management principles.

The Balanced Use Alternative would include the development of ROs that were not part of the 1977 MP. The ROs would be consistent with current Corps regulations, authorized Project purposes, federal laws, and directives, and would take into consideration regional needs, resource capabilities, state comprehensive outdoor recreation plans, cultural and natural resources, and public input. See Table 2-1 on page 15 to understand how the Balanced Use Alternative would distribute approximately 12,000 acres of land and water amongst nine land classifications.

2.4.3 Alternative 3: Cultural Resources Focus Alternative

Alternative 3 would be a MP Revision emphasizing changes to land classifications along the shoreline to devise a framework that would maximize the development of OMPs focused on protection of cultural resources.

The Cultural Resources Focus Alternative would consider known cultural resources and existing ways that the Corps manages the land for multiple uses. This alternative proposes to change the current land classifications along the shoreline (for a distance of 100 to 300 feet inland) to the "Environmentally Sensitive Area" classification in largely "natural" areas that are within Traditional Cultural Properties (TCPs) and Historic Properties of Religious and Cultural Significance to Indian Tribes (HPRCSITs) (Table 2-1). Land classification focused on cultural resource management would subsequently ensure that future OMPs limit impacts to these resources.

Intrusions on lands classified for maximum protection of cultural resources would result in OMPs that would not allow for manmade intrusions such as powerlines, non-Project roads, and water and sewer lines, but may still allow for mitigation under the LSRFWCP. Areas within TCPs and HPRCSITs where there is already development, such as Ice Harbor Dam, roads, railroads, powerlines, existing leases and easements, and recreation areas (except portions of Charbonneau, Fishhook, Windust, and Matthews Parks) would not be changed to this classification. See Table 2-1 on page 15 to understand how the Cultural Resource Focus Alternative would distribute approximately 12,760 acres of land and water amongst nine land classifications.

The Cultural Resource Focus Alternative would also change portions of Charbonneau, Big Flat, Fishhook, Anchor Canyon South Shore, Lost Island, Hollebeke, Snake River Junction, Walker, Burr Canyon, and Windust HMU from MRM-WM to the “Environmentally Sensitive Area” classification. All of these HMUs and recreation areas contain sensitive cultural resources of importance to local Tribes within undeveloped landscapes.

2.4.4 Alternative 4: Recreation Focus Alternative

Alternative 4 would be a MP Revision emphasizing changes to land classifications intended to expand recreational opportunities on Corps-managed lands as proposed in future OMPs. PDT personnel identified potential land classifications and land management units to change to either High Density Recreation (HDR, also called parks) or Multiple Resource Management – Low Density Recreation (MRM-LDR). This would include changing Operations and Multiple Resource Management – Wildlife Management (MRM-WM) lands as well as converting MRM-LDR lands to HDR. PDT staff assessed site suitability and used recent visitation trends and scoping comments to determine which land management units to convert. Selection of this alternative would allow for the creation of new parks, easier access, and upgraded or new visitor facilities. See Table 2-1 on page 15 to understand how the Recreation Focus Alternative would distribute approximately 12,760 acres of land and water amongst nine land classifications.

2.4.5 Alternative 5: Wildlife Focus Alternative

Alternative 5 would be a MP Revision emphasizing changes to land classifications intended to prioritize preservation and enhancement of wildlife resources and habitat in future OMPs. This alternative would focus on changes to land classifications to maximize preservation and enhancement of wildlife resources and habitat. PDT personnel identified land management units to convert to MRM-WM from Operations and MRM-LDR which would benefit wildlife. Personnel identified areas with wildlife habitat potential and lower visitation to select sites for conversion to MRM-WM. Selection of this alternative would reduce recreation opportunities and allow for the creation or enhancement of better wildlife habitat on Corps-managed lands. See Table 2-1 on page 15 to understand how the Wildlife Focus Alternative would distribute approximately 12,760 acres of land and water amongst nine land classifications.

Table 2-1. Alternative Matrix. Acres by Land Classification for each Alternative

LAND CLASSIFICATION NOMENCLATURE 2020	ALTERNATIVES				
	NO ACTION	BALANCED USE	CULTURAL RESOURCE FOCUS	RECREATION FOCUS	WILDLIFE FOCUS
Operations	732.2	272.3	263.1	272.3	273.7
High Density Recreation (HDR)	341.6	315.9	297.8	356.7	303.2
Multiple Resource Management (MRM) Low Density Recreation (LDR)	74.8	152.1	152.1	186.5	52.6
Multiple Resource Management (MRM) Wildlife Management (WM)	2,592.7	615.5	610.6	615.5	779.0
Multiple Resource Management (MRM) Future or Inactive Recreation Areas (FIRA)	272.7	26.6	15.4	7.7	0.0
Environmentally Sensitive Areas	96.3*	242.0	353.8	228.7	217.2
Mitigation	0.0	2,884.1	2,815.8	2,841.1	2,884.1
Water Surface	0.0**	8,254.3	8,254.3	8,254.3	8,254.3
Not Classified	398.4	0.0	0.0	0.0	0.0
TOTALS	4,508.7	12,762.7	12,762.7	12,762.7	12,762.7

Source: Nomenclature from Engineering Pamphlet 1130-2-550

*Natural Area Classification is much like current Environmentally Sensitive Areas, though not the same

**Water surface acres were not classified in the 1977 MP

2.4 The Screening Process

Once the screening criteria was developed and the alternatives were formulated, the PDT compared the alternatives against the screening criteria by placing them in a table (Table 2-2). Alternatives that met all five screening criteria were carried forward for environmental analysis in Chapter 3. Alternatives that did not meet all five screening criteria were eliminated from further consideration.

Alternatives are marked as “Y” if they meet the definition of the criteria and “N” if they do not. Only Alternative 2 meets all criteria.

Table 2-2. The Screening Process

SCREENING CRITERIA	ALTERNATIVES				
	NO ACTION	BALANCED USE	CULTURAL RESOURCE FOCUS	RECREATION FOCUS	WILDLIFE FOCUS
Responds to regional needs and expressed public interests consistent with authorized Project purposes	N	Y	N	N	N
Provides for the comprehensive management and development of all project recreational, natural, and cultural resources	N	Y	N	N	N
Complies with Corps Master Plan policy, environmental laws, and regulations	N	Y	N	N	N

2.5 Alternatives Carried Forward for Detailed Analysis

- Alternative 1: No Action Alternative (No Change to Current Practice)
- Alternative 2: Balanced Use Alternative (Proposed Action)

Alternative 1 (No Action/No Change to Current Practice) will be carried forward to Chapter 3 “Affected Environment and Environmental Effects” as required by NEPA, providing a basis for comparison with other alternatives. Under this alternative, the Corps would continue to use the 1977 MP with its associated management practices, and not implement a MP revision/update. The 1977 MP does not provide a regional analysis of recreation and ecosystem needs, Project resource capabilities, and recreation program analysis, which are essential to the balanced approach and requirements of current Corps MP policy. Although the Corps currently uses the 1977 MP, the document does not fulfill all current Corps requirements for an approved MP.

Alternative 2, the Balanced Use Alternative, would meet all the conditions of the stated purpose and need, and would respond to current Corps policy and regulations. The Balanced Use Alternative would help focus on the primary components that were not included in the 1977 document, or that require expanded analysis, including: (1) Responds to regional needs and expressed public interests consistent with authorized Project purposes; (2) Protects and manages Project recreational, environmental, and human resources; and (3) Complies with Corps Master Plan policy, environmental laws, and regulations. Alternative 2 will be carried forward to Chapter 3 as the Proposed Action Alternative.

2.6 Alternatives Removed from Further Consideration

- Alternative 3: Cultural Resources Focus Alternative
- Alternative 4: Recreation Focus Alternative
- Alternative 5: Wildlife Focus Alternative

Alternatives 3, 4 and 5 all fail to fully respond to the purpose and need identified for the proposed action. Of critical importance is the need to emphasize that a revised MP would seek to balance protection and conservation of natural and cultural resources with recreational development and use. These alternatives are not consistent with multiple use authorized Project purposes as each alternative focuses on either recreation, cultural resources, or natural resources (wildlife), but not all three as required by the ER/EP 1130-2-550 discussed above. Alternatives 3, 4, and 5 have, therefore, been eliminated from further consideration as not satisfying the purpose and need for the proposed action, as identified in Section 1.6 (Purpose and Need).

Section 3: Affected Environment and Environmental Effects

3.1 Introduction

This section describes the affected environment and evaluates potential environmental effects on those resources for each alternative. Alternative 1 (No Action) and Alternative 2 (Balanced Use) were carried forward for analysis.

The following descriptors are used in the body of this chapter for consistency in describing impact intensity in relation to significance:

- **No or Negligible Impact:** The action would result in no effect or the effect would not change the resource condition in a perceptible way. Negligible is defined as of such little consequences as to not require additional consideration or mitigation.
- **Minor Impact:** The effect to the resource would be perceptible; however, the effect would not be major and unlikely to result in an overall change in resource character.
- **Moderate Impact:** The effect to the resource would be perceptible and may result in an overall change in resource character.
- **Significant Impact:** The effect to the resource would be perceptible and may be severe. The effect would likely result in an overall change in resource character. The determination of significant impact to any resource would require the completion of an Environmental Impact Statement.

3.2 Environmental Evaluation by Resource

The following resource areas were evaluated: Land Use, Recreation, Vegetation, Geologic Features and Soils, Threatened and Endangered Species, Wildlife, Water Quality, Aquatic Resources, Socioeconomics and Environmental Justice, Cultural Resources, and Climate Change Analysis. It was determined that it was not necessary to evaluate Aesthetics/Visual Quality, Noise, or Air Quality as implementation of the Balanced Use Alternative would have no or negligible effects on these resources (Table 3-1).

Table 3-1. Environmental resources not evaluated further

Environmental Component	Explanation
Aesthetics/Visual Quality	Aesthetics/Visual resources would evolve in the action area through natural processes as vegetation matures, or streambanks erode, or through changes occurring on adjacent lands within the view shed. Aesthetics/Visual Quality would be negligibly impacted by the proposed MP Revision.
Noise	The proposed action is located within a rural area with relatively few noise sources. Sources may include boat operation along the Snake River and vehicle use. Noise levels would be negligibly impacted by the proposed MP Revision.
Air Quality	The project area meets Washington State's ambient air quality standards and is in "attainment." No Statement of Conformity is needed in attainment areas, such as Franklin and Walla Walla counties. Air quality would be negligibly impacted by the proposed MP Revision.

3.2.1 Land Use

Affected Environment

The Ice Harbor Project is in the Columbia Plateau region about 12 miles east of Pasco, Washington near the town of Burbank. Ice Harbor Dam straddles the river between Franklin and Walla Walla counties. The area is characterized by a rolling rural landscape, dominated by agricultural areas and grasslands. The primary land use in Franklin County is cropland (73%), pastureland (23%), and other land use makes up the remaining 4% (USDA 2017). The primary land use in Walla Walla County is cropland (87.7%), pastureland (7%), with other land uses making up the remaining 5.3% (USDA 2012).

Chapter 4 of the MP (Land Allocation, Land Classification, and Project Easement Lands) provides an overview of the land classification nomenclature changes that have occurred from 1977 to 2021. The MP shows how the Project lands would be classified and discusses the management and use of the lands assigned to each land classification in connection with the appropriate resource objectives identified in Chapter 3 (Resource Objectives) of the MP.

Project lands are classified to designate the primary use for which those lands are managed. The classification process considers public input, and regional and Project specific resource requirements. Land classification also considers what resources are present, the accessibility of the site, and public desirability for the site.

Lands in the Project area are classified for recreation, wildlife habitat, and operational needs. Public recreation use of the Project lands are described below in Section 3.2.2 (Recreation). Lands classified as wildlife habitat can be used by the public for hunting, fishing, bird watching, and viewing. The Corps manages these lands to provide wildlife with habitat and migration corridors as described in Section 3.2.4 (Wildlife).

Environmental Effects

Alternative 1 – No Action. Under the No Action Alternative, land classifications and land use potential on Corps managed properties would continue as outlined in the 1977 MP. There would be no short-term impacts to land use under this alternative. However, long-term impacts would become more direct if land designated for recreation is developed and the potential for increased public access to the Corps managed lands is realized. As undeveloped designated recreation land currently supports vegetation communities that create wildlife habitat, there would be moderate impacts to that land use as potential recreation areas are developed. Additionally, because the No Action Alternative is more focused on the development of recreational areas, there is less focus on the management, or protection of, natural and cultural resources, and those resources could be damaged or removed as more acres would be converted to recreation.

Although there would remain the potential for recreational land development, that potential has not been realized. In fact, separate NEPA compliance would be conducted if potential recreational land was proposed to be developed, so although the No Action Alternative leaves the potential for recreational land development open, the No Action Alternative itself would not have a significant impact on land use.

Alternative 2 - Balanced Use Alternative. Short-term and long-term impacts to land use from the Balanced Use Alternative would be the same or similar to the No Action Alternative. However, there would be long-term moderate beneficial direct and indirect impacts from the implementation of the Balanced Use Alternative, because the Balanced Use Alternative removes the potential to develop land for high density recreation and focuses instead on the protection of natural and cultural resources. Land designated to protect natural and cultural resources would increase by 1,052 acres (Environmentally Sensitive Areas +Mitigation - MRM-WM in Table 3-2).

Table 3-2. Land Classification Changes from 1977 to 2021

Land Classification	Changes in acres
High Density Recreation (HDR)	- 25.7
Multiple Resource Management- Low Density Recreation (MRM-LDR)	+ 77.3
Future or Inactive Recreation Areas (MRM-FIRA)	- 246.1
Project Operations	- 459.9
Water Surface*	+ 8,254.3
Environmentally Sensitive Areas	+ 145.7
Mitigation	+ 2,885.3
Multiple Resource Management- Wildlife Management (MRM-WM)	- 1,977.2

* The water surface was not classified in 1977, so increase is due to surface water classification per EP 1130-2-550.

Water surface is comprised of three classifications: Designated No-Wake Zone, Open Recreation, and Restricted. Designated No-Wake Zone would increase by 28.2 acres, Open Recreation would increase by 8,052.9 acres, and Restricted would increase by 130.1 acres totaling the 8,254.3 acres shown in Table 3-2.

Further, the Balanced Use Alternative would classify lands according to the required analysis for regional needs, resource capabilities and site suitability, and would provide a comprehensive recreation program. The Balanced Use Alternative would not

substantially reduce, eliminate, or expand current public access to Corps managed lands in the project area, only how those lands are managed and developed in the future; therefore would not have significant impacts to land use.

3.2.2 Recreation

Affected Environment

Ice Harbor Lock and Dam forms Lake Sacajawea which extends over a 32-mile reach of the Snake River above RM 9.7. Lake Sacajawea has a surface area of 9,200 acres and approximately 55 miles of shoreline. Lake Sacajawea offers 9 day-use areas, 130 camping sites, 9 boat launch areas, and 5 designated swimming beaches. Recreational activities take place throughout the year, with the highest activity levels during the fair-weather periods of late spring, summer, and early autumn.

Ice Harbor staff manage 21 HMUs comprising around 4,300 acres. The HMUs offer wildlife hunting and viewing opportunities and some of the HMUs contain campsites and boat launches. Hunting opportunities include big game, upland gamebirds, and waterfowl.

Most recreation is related to the water resources presented by the Snake River such as boating. Much of the boating is related to fishing; however, waterskiing, tubing, wake boarding, jet skiing, sailing, kayaking, and canoeing are also important boating activities. Most anglers fish for steelhead (*Oncorhynchus mykiss*), walleye (*Sander vitreus*), Chinook salmon (*O. tshawytscha*), and smallmouth bass (*Micropterus dolomieu*).

Environmental Effects

Alternative 1 – No Action. There would be negligible short-term impacts to recreation from the No Action Alternative, because there are no sudden surges in recreational use predicted and because there are no planned changes to recreational land available. The No Action Alternative allows for the additional development of designated recreation areas as local and regional populations grow. There would be moderate direct and indirect long-term beneficial impacts from the No Action Alternative if parks are developed and recreational use is increased. However, it's unlikely that long-term visitation trends would support the increased recreational development.

There would be no permanent loss of existing recreational opportunities as a result of the No Action Alternative. In fact, there is the potential for recreation growth and development. Therefore, there would be no significant impact to recreation.

Alternative 2 – Balanced Use Alternative. Short-term impacts to recreation from the Balanced Use Alternative would be the same or like the No Action Alternative. However, there would be moderate direct long-term impacts to recreation from the Balanced Use Alternative. Implementation of the Balanced Use Alternative would result in the net loss of 194.5 acres of land classified for recreation (HDR+MRM-LDR+MRM-FIRA in Table 3-2).

The Balanced Use Alternative would provide a comprehensive and efficient recreation program based on public demand, while balancing the need to protect natural and cultural resources on Project lands. There would be no permanent loss of existing recreation or decrease of recreational use resulting from the Balanced Use Alternative. There would be an increase of area available for future recreational development. All land reclassifications under the Balanced Use Alternative allow for recreation except three: restricted, project operations, and environmentally sensitive areas. Therefore, there would be no significant impact to recreation.

3.2.3 Vegetation

Affected Environment

The Project area is located primarily in a grasslands/shrub-steppe zone. Three types of vegetation classes occur in the area adjacent to the Snake River: riparian (lies adjacent to streams and rivers), wetlands (occur where groundwater saturates the surface layer of soil during a portion of the growing season), and upland (grassland/shrubland areas).

Riparian

Floodplains consisting of rich alluvial soils associated with the Snake River supported riparian vegetation along the river prior to construction of dams. These included terraces with woody vegetation, which were too dry to be classified as wetlands, sand and gravel bars, wet meadows, flood-scoured areas, and other stream-related habitats. Riparian areas serve as important wildlife habitat and are integral to the function of river aquatic ecosystems. The two significant native plant communities which grow along the riparian edge in this area are Black Cottonwood (*Populus trichocarpa*) and Coyote Willow (*Salix exigua*) (Bailey, 2008a; Bailey, 2008b). On irrigated lands the most prevalent tree species is Russian olive (*Elaeagnus angustifolia*) and the most dominant shrub is Himalayan blackberry (*Rubus armeniacus*), which grow in impenetrable masses. Both species are non-native and form thickets that prohibit the growth of other species.

Wetlands

Wetland habitats are important ecological features providing a multitude of benefits to the human environment and a unique variety of fish, wildlife, and plant species that are adapted to survive at least part of their life cycle in aquatic environments. Wetlands are areas inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions (40 CFR 232.2 Clean Water Act - Definitions). Wetlands are usually a transitional area between upland habitats and aquatic habitats. Because wetlands, including riparian habitats, are dependent on the duration of seasonal inundation, these habitats are sensitive to changes in Project operations influenced by river flows and precipitation patterns.

Emergent wetlands are restricted by the steep shorelines, seasonal drawdowns, and shorter-term reservoir fluctuations that also influence other habitat types.

Based on the U.S. Fish and Wildlife National Wetland Inventory maps, approximately 24 of the 39 acres of wetlands around Lake Sacajawea are identified as freshwater emergent wetlands. Emergent wetlands occur along the shoreline primarily in embayments, the mouths of small streams, and in the confluences of larger tributary streams and rivers. Common plants present in emergent wetlands include cattails (*Typha sp.*), horsetail (*Equisetum sp.*), bulrush (*Cyperaceae sp.*), and sedges (*Carex sp.*). Invasive species such as common reed (*Phragmites australis*), reed canary grass (*Phalaris arundinacea*), pondweed (*Potamogeton sp.*), parrotweed (*Bocconia frutescens*), duckweed (*Lemnoideae sp.*), invasive Elodea, knotweed (*Polygonum sp.*), milfoil (*Myriophyllum sp.*), flowering rush (*Butomus umbellatus*), yellow flag iris (*Iris pseudacorus*), purple loosestrife (*Lythrum salicaria*), salt cedar (*Tamarix sp.*), and Japanese knotweed (*Reynoutria japonica*) can become a dominant species in some areas.

Freshwater shrub wetlands, which are wetlands dominated by woody vegetation less than 6 m (20 feet) tall, comprise the other 15 percent of wetlands around Lake Sacajawea. Common plants in freshwater shrub wetlands include willows, red osier dogwood (*Cornus sericea*), common snowberry (*Symphoricarpos albus*), black hawthorn (*Crataegus douglasii*), wild rose (*Rosa sp.*), red alder (*Alnus rubra*), and black cottonwood (*Populus balsamifera ssp. trichocarpa*). Invasive western false indigo can become a dominant in areas typically comprised of willow.

Upland Community

The upland vegetation in the study area is typical of steppe communities in the Columbia Basin Province, which are dominated by rabbitbrush (*Chrysothamnus sp.*), cheatgrass (*Bromus tectorum*), and remnant bunchgrasses such as Idaho fescue (*Festuca idahoensis*), bluebunch wheatgrass (*Pseudoroegneria spicata*), and Sandberg's bluegrass (*Poa secunda*), while shrub-steppe communities are co-dominated by sagebrushes, such as big sagebrush (*Artemisia tridentata*), gray rabbitbrush (*Chrysothamnus sp.*), serviceberry (*Amelanchier alnifolia*), currant (*Ribes sp.*), antelope bitterbrush (*Purshia tridentata*) and non-native cheatgrass (Corps, 2002).

Common forbs include arrowleaf balsamroot (*Balsamorhiza sagittata*), yarrow (*Achillea millefolium*), various buckwheats (*Polygonaceae sp.*), blanket flower (*Gaillardia sp.*), various parsleys (*Apiaceae sp.*), and lupines (*Lupinus sp.*).

Presently, about 50 percent of the Ice Harbor Project is classified as wildlife under the 1977 MP. These areas mainly consist of grassland and shrub-steppe. Habitat management around Lake Sacajawea has focused on grassland enhancement and vegetation diversity, including efforts to increase riparian habitat through the planting of shrubs and trees to compensate for habitat lost after dam construction (under the Lower Snake River Fish and Wildlife Compensation Plan as well as environmental stewardship). A wildlife contract has been in place for over 20 years to control noxious weeds, manage native grasses, plant wildlife food plots, and plant native trees and shrubs.

No lands are currently classified as Mitigation or Environmentally Sensitive Areas in the 1977 MP. More than three-quarters of the Project lands are classified as wildlife lands providing any type of long-term vegetation protection. Most of the rest of the land is designated for recreation and has the potential to be further developed for recreational use.

Environmental Effects

Alternative 1 – No Action. The potential increase in recreational areas available to the public increases the potential for moderate direct and indirect long-term negative effects to vegetation. Trampling, unauthorized digging, and other ground disturbance related to recreational activity would all increase and have a negative direct impact on vegetation. Additionally, existing vegetation, including riparian and wetland vegetation, may be removed during construction which would cause the potential for soil erosion and subsequent stormwater runoff into the Snake River.

Although there would remain the potential for recreational land development, that potential has not been realized. Separate NEPA compliance would be conducted if potential recreational land was proposed to be developed, so although the No Action Alternative leaves the potential for recreational land development open, the No Action Alternative itself would not have a significant impact on vegetation.

Alternative 2 – Balanced Use Alternative. Short-term impacts from the implementation of the Balanced Use Alternative to vegetation would be the same or like the No Action Alternative. There would be both direct and indirect moderate beneficial long-term effects to vegetation from increasing the acres classified as Mitigation, MRM-WM, and Environmentally Sensitive Areas. Land classified as Mitigation would increase by 2,885 acres and Environmentally Sensitive Areas would increase by 146 acres by implementing the Balanced Use Alternative; land classified as wildlife management would decrease by 1,977 acres resulting in a net increase of 954 acres of land use that would prioritize developing, enhancing, and maintaining healthy native vegetation communities.

Beneficial direct impacts would come from vegetation plantings on Mitigation and MRM-WM lands and from new land management practices ensuring vegetation health. Indirect benefits would come from the decreased potential for recreational development and corresponding public use and the addition of 28.2 acres of Designated No Wake Zone which would reduce streambank erosion where vegetation grows. The Balanced Use Alternative would not have negative significant impacts, because the reclassification of the land and associated land management practices would be beneficial to vegetation.

3.2.4 Wildlife

Affected Environment

The Ice Harbor Project provides fish and wildlife habitat for over 250 species. Corps-managed HMUs provide public hunting and fishing opportunities, as well as access to

view wildlife for educational, recreational, and aesthetic experiences. Section 2.4 (Resource Analysis (Level One Inventory data)) of the 2021 Ice Harbor Master Plan provides a comprehensive list of terrestrial wildlife in the Project area.

Riparian corridors (rivers, streams, and adjacent lands) are particularly valuable habitats for wildlife. This includes many of what are ordinarily thought of as "upland" species as well as wetland species. Many mammals, birds, and reptiles are dependent on undeveloped, vegetated riparian areas along rivers and streams for habitat and migration corridors.

Mammal species dependent upon the habitats provided by rivers, streams and associated ponds and wetlands include mink (*Neovison vison*), muskrat (*Ondatra zibethicus*), river otter (*Lontra canadensis*), American water shrew (*Sorex palustris*), American beaver (*Castor canadensis*), and moose (*Alces alces*). Many other species, however, spend much of their lives within the habitats immediately surrounding the waterways; they are dependent on mixed upland and lowland habitat. Species in this category include everything from raccoon (*Procyon lotor*) to deer (*Odocoileus sp.*), which often forage in the water. Bats often forage on insects above the water. All these species, as well as many others, occasionally use river corridors as travel routes.

Riparian and wetland habitat provides essential habitat for migrating birds and waterfowl. Many other shorebird species occur along rivers where appropriate mud bars develop. Belted kingfishers (*Megaceryle alcyon*) patrol the river in search of small fish. Osprey (*Pandion haliaetus*) flourish along rivers and heron and bittern depend to a large extent on riparian corridors for food, roosting and nesting sites. Bald eagles (*Haliaeetus leucocephalus*) frequent riverine corridors in search of fish and roosting areas. Birds such as cormorants, night herons, and gulls are present in the area in search of good feeding regions. River corridors are also major migration routes for many species of songbirds such as vireos, flycatchers, thrushes, tanagers, and wood warblers.

Amphibians depend on standing water such as shallow boat basins or streams or seasonal water sources such as ephemeral wetlands for reproduction. Common amphibian species in the project area include: tiger salamander (*Ambystoma tigrinum*), long-toed salamander (*A. macrodactylum columbianus*), Great Basin spadefoot (*Spea intermontana*), Western toad (*Bufo boreas boreas*), Woodhouse's toad (*B. woodhousii woodhousii*), Pacific treefrog (*Pseudacris regilla*), Columbia spotted frog (*Rana luteiventris*), Northern leopard frog (*R. pipiens*), and American bullfrog (*R. catesbeiana*).

Many of the reptiles associated with riparian and wetland habitats in the United States (turtles, snakes, and a few lizards) are the opposites of amphibians in life history strategy. They differ by using riparian and wetland areas for food and cover, but move to the habitat edge or to drier land to deposit eggs (Clark 1979). Common reptile species include: Western painted turtle (*Chrysemys picta*), red-eared slider (*Trachemys scripta elegans*), pygmy short-horned lizard (*Phrynosoma douglasii*), western fence lizard (*Sceloporus occidentalis*), sagebrush lizard (*Sceloporus graciosus*), western skink (*Plestiodon skiltonianus*), rubber boa (*Charina bottae*), North American racer (*Coluber*

constrictor), gopher snake (*Pituophis catenifer catenifer*), and western rattlesnake (*Crotalus viridis*).

Environmental Effects

Alternative 1 – No Action. There would be minor short-term impacts to wildlife species from the No Action Alternative. Moderate direct long-term impacts to wildlife would occur with increased human presence in HMUs and recreational areas. The potential increase in recreational areas available to the public increases the potential for direct and indirect negative effects to wildlife. Development of recreation areas and increased public access would make these areas less hospitable for wildlife, resulting in decreased wildlife habitat and wildlife would likely move to alternative habitat areas of lesser habitat value.

Although there would remain the potential for recreational land development, that potential has not been realized. Separate NEPA compliance would be conducted if potential recreational land was proposed to be developed, so although the No Action Alternative leaves the potential for recreational land development open, the No Action Alternative itself would not have a significant impact on wildlife.

Alternative 2 – Balanced Use Alternative. Short-term impacts to wildlife from the implementation of the Balanced Use Alternative would be the same or like the No Action Alternative. However, there would be direct moderate benefits to wildlife in the long-term. The Balanced Use Alternative would increase the amount land that would be a direct benefit to wildlife in the area by providing food, shelter, and migration corridors to wildlife by 3,742 acres (WRW-WM + Mitigation + Environmentally Sensitive Areas in Table 3-2).

The Balanced Use Alternative would comply with new Corps guidance, and would provide analysis of use, demand, carrying capacity, and environmental and social effects of future proposed actions. Utilizing the guidance and updated analysis would assist in sustaining the long-term natural ecosystem process for many habitats and populations of wildlife species that use and/or require the habitat characteristics associated with Project lands.

The Balanced Use Alternative would not cause substantial loss of populations or habitat and therefore would have no significant impact. Overall, wildlife populations would benefit from the new land designations in the Balanced Use Alternative.

3.2.5 Water Quality

Affected Environment

The Washington State Department of Ecology (Ecology) has placed the lower Snake River in the Project area on the Section 303(d) list due to impairment by temperature, dissolved oxygen, 4-4'-Dichlorodiphenyldichloroethan (DDD), and total chlordane. Section 303(d) of the Clean Water Act requires Ecology to identify waterbodies that do not meet water quality standards.

Temperature is generally high in the summer months, though it is moderated by cold water releases from Dworshak Dam. Summer releases from Dworshak Dam are used to reduce water temperatures downstream in the lower Snake River (Lower Granite, Little Goose, Lower Monumental, and Ice Harbor reservoirs) where temperatures historically exceeded the current Ecology standard of 68°F (20°C). The cooling effect in the lower Snake River diminishes at each successive downstream reservoir and the frequency of exceedances above the standard increases. Winter water temperatures are typically in the low 30s°F (0 to 2°C) range, with some surface icing during colder winters.

Water quality criteria (WQC) for temperature in the lower Snake River from the mouth of the Clearwater to the mouth of the Columbia is 68°F (20°C). Table 3-3 shows observed temperatures in the lower Snake River for five years during the summer months. Water temperatures exceeded 68°F 54 days or a total of 15 percent of the time measured. On average, water temperatures were 0.7 degrees above the WQC with a max of 1.4 degrees above (EPA 2020).

Table 3-3. Observed Annual Temperature in the Lower Snake River, July, August, September, and October (2011 – 2016).

Temperature Scale	Annual		July		August		September		October	
	Mean	Max	Mean	Max	Mean	Max	Mean	Max	Mean	Max
°C	12	21.4	19.5	21	20.5	21.2	19.2	20.5	16.5	18.1
°F	53.6	70.5	67.1	69.8	68.9	70.1	66.6	68.9	61.7	64.6

Water temperature is one of the most important characteristics of an aquatic system affecting dissolved oxygen levels. The solubility of oxygen decreases as water temperature increases, so cold water can hold more dissolved oxygen than warm water. In winter and early spring, when the water temperature is low, the dissolved oxygen concentration is higher. In summer and fall, when the water temperature is high, the dissolved-oxygen concentration is low.

4-4'-DDD, a metabolite of dichloro-diphenyl-trichloroethane (DDT), was used as an organochlorine insecticide until treatments using the chemical were discontinued in 1972. Chlordane is also an organochlorine compound that was used as a pesticide for termite-treatment until it was banned in 1988. Chemical contamination can become high in waterbodies due to agricultural runoff.

The existing National Pollutant Discharge Elimination System program regulates certain identified compounds from point sources, but other unaccounted for pollutants may also be present. Rural land uses for residential, commercial, industrial, and recreational activities can contribute pollutants and sediments to surface waters. Watercraft using the docks could adversely affect water quality along the shoreline. Many watercraft leak small amounts of fuel and oil. Engines and hydraulic components also leak petroleum products into the bilge water, which is ultimately pumped into the river. Allowing watercraft to be moored increases the occurrence of petroleum products contaminating water along the shoreline.

Environmental Effects

Alternative 1 – No Action. There would be minor long-term indirect impacts to water quality from the No Action Alternative because water quality would remain at risk due to temperature impacts. Any future development of recreation lands would have minor indirect impacts to water quality in the long-term from construction activities and any increase in impermeable and paved surfaces. Existing vegetation, including riparian and wetland vegetation, may be removed during construction which would cause the potential for soil erosion and subsequent storm water runoff into the Snake River. Washington state water quality regulations (173-201A Washington Administrative Code (WAC)) indicate that actions shall not cause turbidity to exceed 5 nephelometric turbidity units (NTU) over background limits when the background turbidity is 50 NTU or less; monitors would be in place during any future activity to ensure turbidity does not exceed these standards. Impermeable surfaces would increase runoff of oils, sediment, and other contaminants.

Although there would remain the potential for recreational land development, that potential has not been realized. Separate NEPA compliance would be conducted if potential recreational land was proposed to be developed, so although the No Action Alternative leaves the potential for recreational land development open, the No Action Alternative itself would not have a significant impact on water quality.

Alternative 2 – Balanced Use Alternative. Short-term benefits to water quality would be the same or similar to the No Action Alternative. Long-term benefits to water quality would come from the increases in lands classified as Mitigation and MRM-WM would drive these impacts. Tier II of the Washington State Antidegradation Policy (WAC 173-200-030) ensures that waters that meet a higher quality than the limits set in the standards are not degraded. Lands classified as Mitigation and MRM-WM are generally more protective of water quality due to decreased development, lack of impermeable surfaces, and increased emphasis on healthy vegetation communities. New plantings on mitigation lands would increase thermal cover in areas with little shade from vegetation which would slightly reduce water temperatures and increase dissolved oxygen which are two water quality impairments mentioned above. Designated No Wake Zones would help reduce stream bank erosion and reduce turbidity caused by motorboats.

3.2.6 Aquatic Resources

Affected Environment

The Snake River is home to 35 native fish species including both resident and anadromous species in the Project area. Lake Sacajawea has a combination of fish species common to both reservoir environments and rivers. Native, anadromous species include Chinook salmon, sockeye salmon (*Oncorhynchus nerka*), and steelhead, while native resident species include bull trout (*Salvelinus confluentus*), northern pikeminnow (*Ptychocheilus oregonensis*), chiselmouth (*Acrocheilus alutaceus*), and white sturgeon (*Acipenser transmontanus*). In addition, a variety of introduced fish species are present including largemouth bass (*Micropterus salmoides*), smallmouth

bass, white crappie (*Pomoxis annularis*), black crappie (*P. nigromaculatus*), common carp (*Cyprinus carpio*), walleye, channel catfish, and lake trout (*S. namaycush*). Section 2.4 (Resource Analysis (Level One Inventory Data)) of the 2021 Ice Harbor Master Plan provides a comprehensive list of fishes present in the Project area.

Aquatic habitat elements, such as refugia, substrate, pool frequency, and pool quality, are impaired in the Project area. Little to no off-channel habitats exist in this reach of the lower Snake River and sources of refugia materials such as large woody debris are limited in Lake Sacajawea. Substrate is impacted by the deposition of sand and silt in some areas of the lower Snake River.

Environmental Effects

Alternative 1 – No Action. Short-term and long-term impacts from the No Action Alternative to aquatic species would be the same or similar to the impacts discussed for the No Action Alternative in Section 3.2.5 (Water Quality). Any future development of recreation lands would have minor indirect impacts to aquatic species in the long-term from construction activities and any increase in impermeable and paved surfaces. Existing vegetation, including riparian and wetland vegetation, may be removed during construction which would cause the potential for soil erosion and subsequent stormwater runoff into the lower Snake River.

Erosion and storm water runoff would create short-term turbidity plumes. Any future project-related turbidity increases would be localized to the construction site, and approximately 300 feet downstream, and limited to the in-water work window. Fish native to the Snake River are adapted for short-term turbidity pulses and salmonids have been observed to move laterally and downstream to avoid turbid plumes (Lloyd et al. 1987; McLeay et al. 1984; McLeay et al. 1987; Scannell 1988; Servizi and Martens 1991; Sigler et al. 1984).

Impermeable surfaces would increase runoff of oils, sediment, and other contaminants which would pose short- and long-term impacts to aquatic species if not mitigated using best management practices to reduce run-off into the river. Specific adverse effects to aquatic wildlife are dependent on several factors including the dosage, duration, exposure, and particular species being exposed.

Although there would remain the potential for recreational land development, that potential has not been realized. Separate NEPA compliance would be conducted if potential recreational land was proposed to be developed, so although the No Action Alternative leaves the potential for recreational land development open, the No Action Alternative itself would not have a significant impact on aquatic resources.

Alternative 2 – Balanced Use Alternative. Short-term benefits to aquatic resources would be the same or similar to the No Action Alternative. There would be minor beneficial indirect long-term impacts to aquatic resources from implementation of the Balanced Use Alternative. Large increases in lands classified as Mitigation and MRM-WM would drive these positive impacts.

Lands classified as Mitigation and MRM-WM are generally more protective of the river itself due to decreased development, lack of impermeable surfaces, and increased emphasis on healthy vegetation communities. New plantings on mitigation lands would increase thermal cover in areas with little shade from vegetation which would slightly reduce water temperatures and increase dissolved oxygen which are two water quality impairments mentioned above. Because motorboat-caused stream bank erosion and the resulting turbidity is detrimental to fish, the Designated No-Wake zones would be a benefit to aquatic resources along the shoreline. The Balanced Use Alternative would not cause substantial loss of aquatic species populations or habitat or inhibit the movement or migration of fish. For these reasons the Balanced Use Alternative would have no significant impact to aquatic resources.

3.2.7 Threatened and Endangered Species

Affected Environment

There are six species listed under the Endangered Species Act (ESA) in the Project area. These include: Snake River spring/summer and fall chinook (*Oncorhynchus tshawytscha*), Snake River sockeye (*O. nerka*), Snake River steelhead (*O. mykiss*), bull trout, and yellow-billed cuckoo (*Coccyzus americanus*). The lower Snake River and its tributaries within the Project area contain designated critical habitat for all ESA-listed fish.

Snake River Spring/Summer Chinook Salmon

Snake River spring/summer Chinook salmon were listed as threatened on April 22, 1992, and include all natural-origin populations in the Tucannon, Grande Ronde, Imnaha, Salmon, and mainstem Snake Rivers. Adult and juvenile spring/summer Chinook salmon generally only migrate through the Project area. Several limiting factors impact Spring/Summer Chinook populations in the lower Snake River including degraded migration conditions, degraded rearing habitat within the hydropower system, and recreational and commercial harvest.

Snake River Fall Chinook Salmon

Snake River fall Chinook salmon were listed as threatened on June 28, 2005 and reaffirmed April 14, 2014. Historically, the lower and middle Snake River populations formed the two major population groups, however, the construction of Hells Canyon Dam extirpated the middle Snake River population. Fall Chinook salmon migrate through the Project area, fall Chinook smolts likely rear in the lower Snake River within the Project area, and a small population of adults typically spawn in the lower Snake River immediately below Lower Granite Dam.

Snake River Sockeye Salmon

Snake River sockeye salmon were listed as endangered on November 20, 1991. Sockeye generally only migrate through the Project area.

Snake River Steelhead

Snake River steelhead were listed as threatened on August 18, 1997, and protective regulations were issued under section 4(d) of the Endangered Species Act on July 10, 2000. Their threatened status was reaffirmed on January 5, 2006, and again on April 14, 2014. This distinct population segment includes populations below natural and manmade impassable barriers in streams in the Snake River basin of southeast Washington, northeast Oregon, and Idaho. Steelhead typically migrate through the Project area.

Bull Trout

The USFWS listed the Columbia River Basin population of bull trout as a threatened species on June 10, 1998. Bull trout are still listed throughout the western United States as a threatened species. Historically, bull trout were found in about 60 percent of the Columbia River Basin, they now occur in less than half of that area. Populations remain in portions of Oregon, Washington, Idaho, Montana, and Nevada (USFWS 2014).

Adult fish passage at Ice Harbor Dam fish ladders are necessary for migratory bull trout from core areas in the Walla Walla River and Tucannon River subbasins to interact with migratory bull trout from core areas in the Asotin Creek, Grande Ronde River, or Imnaha River subbasins to cross breed and maintain genetic diversity. The Tucannon River is the most likely origin of many of the bull trout observed at Ice Harbor Dam because of its relatively healthy migratory population and proximity (Barrows et al. 2016).

Western Yellow-Billed Cuckoo

The western yellow-billed cuckoo (YBC) was listed as threatened on October 3, 2014. Critical habitat was also proposed for designation at that time, but not in Washington. In the Pacific Northwest, the species was fairly common in willow bottoms along the Willamette and Columbia Rivers in Oregon, and in the Puget Sound lowlands and along the lower Columbia River in Washington, but was rare east of the Cascade Mountains in these states.

The analysis below focuses on the aquatic threatened and endangered species (salmonids and bull trout) present in Lake Sacajawea. Terrestrial threatened and endangered species (Spalding's catchfly and yellow billed cuckoo) are not known to be present on any of the Corps managed lands covered under the Ice Harbor Master Plan.

Environmental Effects

Alternative 1 – No Action. There would be no short-term or long-term direct impacts to ESA-listed species under the No Action Alternative. Effects to aquatic threatened and endangered species would be the same or similar to the impacts discussed in Section 3.2.6 (Aquatic Resources). The No Action Alternative would not have a significant impact to threatened and endangered species, because it would not put threatened or

endangered populations in jeopardy or adversely impact critical habitat as defined by the ESA.

Alternative 2 – Balanced Use Alternative. Short-term direct impacts to threatened and endangered species would be the same or similar as the No Action Alternative. Land classification changes that provide additional natural resource protections or mitigation would have indirect minor beneficial long-term impacts to threatened and endangered species.

For example, increases in acreage of Environmentally Sensitive Areas, which are managed to protect ecological features provide additional long-term benefits to terrestrial threatened and endangered species; YBC are not currently present in the Project area, but the establishment of Environmentally Sensitive Areas would maintain potential habitat integrity should they return. Additionally, increases to wildlife and mitigation lands would indirectly benefit threatened and endangered species through native vegetation plantings and invasive species management in riparian areas. The Balanced Use Alternative would not have a significant impact, because it would not put threatened or endangered populations in jeopardy or adversely impact critical habitat as defined by the ESA.

3.2.8 Geologic Features and Soils

Lake Sacajawea is physiographically situated near the eastern margin of the Columbia Plateau in the canyon eroded by the Snake River into the Columbia River basalts. The loess covered hills and slopes extending back from the canyon are a part of the great eastern Washington dryland wheat farming region. In the canyon are several extensive bars above the reservoir shoreline. Otherwise, the river occupies most of the narrow canyon bottom, which is closely flanked by steep talus slopes below basalt cliffs.

The seven most abundant soil types surrounding Lake Sacajawea are Roloff-Rock outcrop complex (30 to 70 percent slopes), Basalt rockland steep, Basalt rockland undulating to hilly, Quincy fine sand (0 to 30 percent slopes, eroded), Ellisforde very fine sandy loam (3 to 8 percent slopes), Roloff-Lickskillet-Rock outcrop complex (0 to 15 percent slopes), and Basalt rock outcrop. The abundant soil types consist of both loess and silt, which are highly erodible by wind or water, and unweathered bedrock which is not highly erodible. Three of the soil types are classified as farmland of statewide importance, see Table 3-4.

Table 3-4. Soil Classifications of the most abundant soil types

Soil Type	Farmland Classification	Parent Material
Roloff-Rock outcrop complex (30 to 70 percent slopes)	Not prime farmland	Loess and glaciofluvial deposits
Basalt rockland steep	Not prime farmland	Loess colluvium and residuum weathered from basalt
Basalt rockland undulating to hilly	Not prime farmland	Loess, alluvium and colluvium derived from igneous rock

Soil Type	Farmland Classification	Parent Material
Quincy fine sand, 0 to 30 percent slopes eroded	Farmland of statewide importance	Loess over stratified calcareous sandy and silty lacustrine deposits
Ellisforde very fine sandy loam (3 to 8 percent slopes)	Farmland of statewide importance	Loess over stratified calcareous sandy and silty lacustrine deposits
Roloff-Licksillet-Rock outcrop complex (0 to 15 percent slopes)	Farmland of statewide importance	Loess and glaciofluvial deposits
Basalt rock outcrop	Not prime farmland	Unweathered bedrock

Environmental Effects

Alternative 1 – No Action. There would be no short-term impacts to geologic features or soil under the No Action Alternative. Any future development of recreation lands would have moderate direct impacts to soils in the long-term from construction activities and potential paved surfaces. Existing vegetation may be removed during construction which would cause the potential for soil erosion. The No Action Alternative could result in soil erosion or the loss of topsoil, but would not have significant impacts to geologic features and soils.

Alternative 2 – Balanced Use Alternative. The short-term impacts to geologic features and soils would be the same or like the No Action Alternative. There would be minor long-term indirect benefits to soils because increased plantings would reduce soil erosion and acreage set aside for preservation of environmentally sensitive resources would protect soils from human activities such as digging, excavating, or compaction from vehicle or foot traffic. Additionally, Designated No Wake Zones would help reduce stream bank soil erosion. The Balanced Use Alternative would not result in soil erosion or the loss of topsoil and therefore would not have significant impacts to geologic features and soils. Any impacts would be beneficial.

3.2.9 Socioeconomics and Environmental Justice

The Ice Harbor Project, located in southeastern Washington, occupies portions of Franklin and Walla Walla counties.

Population and Demographics

Franklin County currently has a population of about 95,000 residents. Pasco is the largest city within Franklin County with about 73,000 residents. The town closest to Ice Harbor is Burbank, Washington in Walla Walla County. The population of Burbank is 3,358 residents. Walla Walla County currently has a population of about 61,000 residents. Walla Walla is the largest city within Walla Walla County with about 33,000 residents.

Franklin County has the youngest and most diverse population. Racial diversity in Franklin County is nearly double both the Washington State and national averages.

Franklin and Walla Walla counties are both below the Washington State average for populations with high school degrees. Populations with college degrees is lower in both counties than both the Washington State and national averages. Area employment has largely recovered from the national recession in 2008-2010, and incomes have continued to increase throughout the region; however, Walla Walla County still has a lower population in the labor force and a lower median income than both the Washington State and the national averages (Table 3-5).

Table 3-5. Education and Income for Franklin and Walla Walla Counties Compared (U.S. Census Bureau 2019 Data)

Demographic	Franklin County	Walla Walla County	Washington State	National
Persons under 18	32.0%	20.7%	21.8%	22.3%
Persons Over 65	9.7%	18.7%	15.9%	16.5%
Percent Minority	63.6%	30.2%	34.6%	42.1%
High School Graduates	75.0%	88.3%	91.3%	88.0%
Four-Year Degree or Higher	17.7%	29.8%	36.0%	32.1%
Percent in Labor Force	65.9%	57.1%	63.6%	63.0%
Median Household Income	\$63,584	\$57,858	\$73,775	\$62,843

Environmental Justice

As outlined in Executive Order 12898, federal agencies must evaluate environmental justice issues related to any action proposed for implementation. This evaluation includes identification of minority and low-income populations, identification of any negative impacts that would disproportionately affect these minority groups or low-income, and proposed mitigation to offset the projected negative impacts. The evaluation of environmental justice issues includes identification of minority and low-income populations in the Ice Harbor Project area.

Minority Groups

While less racially diverse than other areas of the country, the two counties are home to people of a broad variety of races. Most of the population in the two counties is white. The second highest racial identity is Hispanic or Latino (Table 3-6).

Table 3-6. Racial Identification in the Two Counties.

Race	Franklin County	Walla Walla County	Washington State
White	89.9%	91.4%	78.5%
Black or African American	2.8%	2.2%	4.4%
American Indian and Alaskan Native	1.7%	1.4%	1.9%
Asian	2.4%	1.7%	9.6%
Native Hawaiian and Other Pacific Islander	0.4%	0.4%	0.8%
Hispanic or Latino	53.6%	21.7%	13.0%

Note that percentages do not add to 100, as categories are not mutually exclusive (U.S. Census Bureau 2019 data).

Low-income

Both Franklin (13.5%) and Walla Walla (13.3%) counties have higher poverty rates than both the Washington State (9.8%) and national (10.5%) averages. The largest demographic living in poverty in Franklin County are females 6 - 11, followed by females 25 - 34 and then males under 5. The largest demographic living in poverty in Walla Walla County are females 18 - 24, followed by males 18 - 24 and then females 35 - 44 (Census Bureau 2019).

Environmental Effects

Alternative 1 – No Action. There would be no short-term impacts to socioeconomics and environmental justice under the No Action Alternative. Corps land management would continue as normal and would not require additional employees for maintenance or operational tasks. Visitors would continue to utilize Project facilities without disparity for economic considerations.

The No Action Alternative would not lead to actions that exceed the capacity of the surrounding communities to absorb or result in the unfair treatment of specific income or minority groups. The No Action Alternative would not have significant impacts to socioeconomics or environmental justice for these reasons.

Alternative 2 –Balanced Use Alternative. Short-term impacts to socioeconomics and environmental justice under the Balanced Use Alternative would be the same or like the No Action Alternative.

The Balanced Use Alternative would provide the required analysis for regional needs, resource capabilities and suitability, and a comprehensive recreation program. As such, the Balanced Use Alternative would better serve the needs of the public by providing the types of opportunities the public expressed they want. The Balanced Use Alternative increases lands available for hunting and fishing in the HMUs and parks.

The Balanced Use Alternative would have minor long-term benefits by increasing public access to Ice Harbor Project lands. Increased mitigation lands would lead to more planting and land management contracts or increase the need for new hires by the

Corps to perform these tasks internally; and increased high density recreation or multiple resource management would create more areas accessible for free recreational opportunities. The Balanced Use Alternative would not lead to actions that exceed the capacity of the surrounding communities to absorb or result in the unfair treatment of specific income or minority groups. The implementation of the Balanced Use Alternative would not have significant impacts to socioeconomics or environmental justice for these reasons.

3.2.10 Cultural and Historic Resources

Affected Environment

Cultural resources are usually identified as the remnants of past human lifeways, such as archaeological sites, artifacts, graves, historic buildings, trails, and other inanimate objects or areas. However, cultural resources also include areas of ongoing importance and use by Tribes and the public.

There is ample evidence that native people, including the Nez Perce, Palus, and Cayuse lived along the Snake River in the Ice Harbor Project area for thousands of years. These areas not only represent long ago activities, they are still of living importance today to multiple Tribes, including the Confederated Tribes and Bands of the Yakama Nation, the Confederated Tribes of the Umatilla Indian Reservation (CTUIR), the Confederated Tribes of the Colville Reservation, the Nez Perce Tribe (NPT), and the Wanapum Band.

Important camps and village sites are found along the Snake River, as well as locations used for fishing, hunting, and gathering of food, medicines, toolstones, and other resources (Hunn et al. 2015, Scheuerman and Trafzer 2015, Nez Perce Tribe 2003). The river served as an important travel corridor, and trails led through and across what is now Corps managed land to the prairies and high country where resources were found at different times of the year.

Cultural resource studies in the Ice Harbor area really began in earnest in the mid-twentieth century, largely related to dam building, but there are earlier works that provide information on the resources and inhabitants of the area. Euroamerican explorers, missionaries, and ethnographers reported on their interactions with the Cayuse, Nez Perce, and Palus people living in the Ice Harbor area throughout the 1800s, and into the 1900s.

Historic built resources, including buildings, structures, and objects, have been recorded to a limited extent on Project lands. In 1962, the Ice Harbor Dam exterior structure was completed, and the reservoir behind it was filled, meaning that the dam is now over 60 years of age. The Washington State Historic Preservation Officer (SHPO) concurred in 2020 that the dam is eligible for listing on the National Register of Historic Places (NRHP).

Traditional Cultural Properties, which includes Historic Properties of Religious and Cultural Significance to Indian Tribes, are areas tied to beliefs, customs, and practices of a living community. TCPs have been identified at Ice Harbor by the Confederated Tribes of the Colville Reservation, the CTUIR, the NPT, the Confederated Tribes and Bands of the Yakama Nation, and the Wanapum Band.

Environmental Consequences

Alternative 1 – No Action. Under the No Action Alternative, there would be no changes to any process affecting cultural resource management. The existing land classifications provide a blueprint for appropriate uses, and under the No Action Alternative the Corps would continue to operate these areas under its current classification. The No Action Alternative uses outdated land classifications and does not have a classification for Environmentally Sensitive Areas. Actions implemented under the No Action Alternative would continue to be subject to consultation under Section 106 of the NHPA, which provides for the avoidance, minimization, and mitigation of potential impacts. Cultural resources would continue to be affected by natural processes, recreation, Corps land management, and other uses. As the existing land use classifications are only a blueprint to guide future work, the continued use of the current land classification system would have no significant impacts to cultural resources.

Alternative 2 – Balanced Use Alternative. Impacts to historic and cultural properties would be the same or like the No Action Alternative because the land use classifications only create a blueprint for potential future actions. However, the designation of areas as environmentally sensitive may have a moderate, beneficial effect regarding the cumulative effects of future land use activity or limitation of activities. The establishment of 242 acres of land classified as Environmentally Sensitive Areas (classified for cultural or natural resource benefit) could provide beneficial long-term moderate, cumulative impacts to historic and cultural properties by limiting the types of authorized uses in these areas. The Corps would continue to review individual proposed actions and consult with the Washington SHPO and affiliated Tribes in accordance with Section 106 of the NHPA. Cultural resources would continue to be affected by natural processes, recreation, Corps land management, and other uses. As the proposed land use classifications are only a blueprint to guide future work, the Balanced Use Alternative would have no significant impacts to cultural resources.

3.3 Climate Change Analysis

Earth's climate is now changing faster than at any point in the history of modern civilization. Climate shapes where and how people live and the environment. Natural ecosystems, agricultural systems, water resources, and the benefits they provide to society are adapted to past climate conditions and their natural range of variability. The assumption that current and future climate conditions will resemble the recent past is no longer valid (USGCRP 2017).

Existing Conditions

The Snake River Basin experiences seasonal variations in temperature and geographic variations in precipitation. The Ice Harbor Project area lies in the path of prevailing westerly winds and is largely influenced by air from the Pacific Ocean. Winters are generally damp and foggy with an average daily high of 32 degrees Fahrenheit (°F) in January. Occasionally, polar outbreaks of cold air pass over the Rocky Mountains, resulting in short periods of extremely low temperatures. Summers are hot and dry.

The hot season lasts for two and a half months, with an average daily high of around 84°F in July. Average and extreme temperatures for January and July around Lake Sacajawea are provided in Table 3-7. The average frost-free period extends from late May through September, and the average growing season is about 130 days.

Table 3-7. January and July Temperature in the Snake River Basin

Month	Average Maximum	Average Minimum	Average Monthly	Extreme
January	38	20	27	-15
July	87	49	87	112

Future outlook

Annual trends of warming temperatures, earlier spring snow melt, and reduced snowpack are already affecting water resources in the western United States, and these trends are expected to continue (USGCRP 2017). Temperatures in the region have warmed about 1.5 degrees Fahrenheit since the 1970s and are expected to warm another 1 to 4 degrees Fahrenheit by the 2030s (RMJOC 2018). Numerous studies have projected that as warming continues, snowpack in the Snake River Basin region is likely to decline as more winter precipitation falls as rain instead of snow, fall and winter streamflows will tend to increase, peak seasonal snowmelt season will tend to occur earlier in the spring with higher flow peaks, and summer flows will likely decrease. The period of low summer flows that historically extend from mid-July to October may shift earlier over time (RMJOC 2018).

Reduced precipitation during the summer months would impact vegetation type and quantity, resulting in changes to wildlife habitat, including food sources, cover vegetation, and possibly reproduction areas. Along with rising air temperatures, there would be a corresponding rise in stream temperature. Higher temperatures would increase evaporation rates from Lake Sacajawea, reducing the flow through the reservoir, and increasing water temperature, impacting aquatic flora and fauna. This would likely reduce the quality and suitability of fish and wildlife habitat in the Ice Harbor Project area.

Climate change is expected to have important consequences for water quality conditions across the Snake River Basin. In addition to causing increased temperatures and altered flow regimes, climate change also has the potential to alter stream networks and erosion regimes (Lettenmaier et al. 2008 and USFS 2010).

Environmental Effects

Alternative 1 – No Action. There would be no impacts to climate change because of implementing the No Action Alternative. The No Action Alternative would have negligible, de minimus impacts to climate change from the emissions of construction equipment's combustible engines if recreational land is developed in the Project area.

However, climate change would have moderate impacts to the Corps managed lands and land uses by changing weather patterns and flow regimes. Changing weather

could shift flow regimes to earlier in the year if more precipitation falls as rain instead of snow. If the water regimes change the flow regimes through the dams would change. Flood peaks could shift to earlier in the season and flows could further decrease during already low flow periods

Hotter summers could dry out vegetation, reducing wildlife habitat value, and shifting recreational use to cooler seasons. Increasing air temperatures may increase the temperature of the water in the summer and lower the amount of dissolved oxygen which would further degrade water quality and negatively impact aquatic life habitat. There would be no impacts to geologic features and soils, socioeconomics, environmental justice, or historic and cultural resources.

There are no federal, state, or local thresholds of significance for climate change impacts and therefore no definitive determination of significance is given in this EA for the No Action Alternative. Any future construction activities that could emit greenhouse gasses or in other ways affect climate change would be assessed separately at that time.

Alternative 2 – Balanced Use Alternative. Impacts to climate change from implementing the Balanced Use Alternative would be negligible or de minimus. The Balanced Use Alternative reduces the potential to develop land for recreational uses, which reduces the carbon emissions from construction equipment's combustible engines in the Project area. Short-term impacts from climate change would be the same or similar as the No Action Alternative. Impacts from climate change would be slightly alleviated by increasing mitigation lands and practices by increasing the amount of overwater vegetation shade.

There are no federal, state, or local thresholds of significance for climate change impacts and therefore no definitive determination of significance is given in this EA for the Balanced Use Alternative. Any future construction activities that could emit greenhouse gasses or in other ways affect climate change would be assessed separately at that time.

3.4 Selection of Preferred Alternative

Revising the 1977 MP to incorporate the Balanced Use Alternative is the Preferred Alternative. The intent of the Balanced Use Alternative is to develop a guide for the sustainable use of resources at Ice Harbor Project. The EP 1130-2-550, (Corps 2013) provides the following MP guidance: "A current, approved MP is necessary before any new development, construction, consolidation, or land use change can be pursued. These activities will not be included in budget submissions unless they are included in an approved MP." The primary objective of implementing the Balanced Use Alternative is to publish a clear, concise, and strategic land use document that will guide the comprehensive management and development of all Ice Harbor Project recreational, natural, and cultural resources.

The Balanced Use Alternative would provide conceptual guidelines for the effective management of the Project. Guidelines were developed in accordance with the Corps

master planning process. Preparation of the revised MP required: (1) an appraisal of the natural and human-related resource conditions of the Project and the surrounding region, and (2) an examination of environmental and administrative constraints and influences. The revised MP seeks to balance the use of recreational, natural, and cultural resources of the Project based on resource objectives, public needs, and operational efficiency.

The revised MP would be a living document establishing the basic direction for management and development of the Ice Harbor Project in agreement with the capabilities of the resource and public needs. The revised MP would be flexible in that supplementation can be achieved through a formal process that addresses unforeseen needs. The revised MP would be reviewed every five years to facilitate the evaluation and utilization of new information as it becomes available.

Section 4: Compliance with Applicable Environmental Laws and Regulations

Section 4 identifies the legal, policy, and regulatory requirements applicable to the Proposed Action Alternative. The updated MP will not, when adopted, authorize any new site-specific actions. Site-specific actions may require subsequent NEPA review and would be identified in future 5-year OMPs. The following paragraphs address the principal environmental review and consultation requirements applicable to the proposed updated MP. Pertinent federal treaties, statutes, and Executive Orders (EO) are included.

4.1 TREATIES AND NATIVE AMERICAN TRIBES

Treaties are legally binding contracts between sovereign nations that establish those nations' political and property relations. Treaties between Native American tribes and the United States confirm each nation's rights and privileges. It is important to be clear that "the rights of sovereign Indian tribes pre-existed their treaties; they were not granted them by treaties or by the United States government. Rather, the treaties gave their rights legal recognition." (Hunn et al. 2015:58). These reserved rights were retained by the tribes and are exercised by their members today.

Treaties with the Nez Perce (Treaty of June 11, 1855, Treaty with the Nez Perces, 12 Stat. 957 (1859); Treaty of June 9, 1863, Treaty with the Nez Perces, 14 Stats. 647 (1867)), the CTUIR (Treaty of June 9, 1855 with the Walla Walla, Cayuse, etc, 12 Stat. 945 (1859)), and the Yakama (Treaty of June 9, 1855, Treaty with the Yakama, 12 Stat. 951) established reservations and explicitly reserved unto the Tribes certain rights, including the exclusive right to take fish in streams running through or bordering reservations, the right to take fish at all usual and accustomed places in common with citizens of the territory, amongst other rights. Like other treaty obligations of the United States, Indian treaties are "the supreme law of the land," and they are the foundation upon which federal Indian law and the federal Indian trust relationship is based. Implementation of Alternative 2, the Balanced Use Alternative, would not affect treaty rights or resources. The MP is a planning document providing conceptual guidance regarding NRM and does not cause any new site-specific actions. Individual site-specific undertakings would be subject to review under applicable federal laws.

4.2 FEDERAL LAWS

4.2.1 National Environmental Policy Act

As required by NEPA and subsequent implementing regulations promulgated by the Council on Environmental Quality, this EA was prepared in order to determine whether the proposed action constitutes a "...major Federal action significantly affecting the quality of the human environment..." and whether an Environmental Impact Statement is required.

This EA considers and describes potential environmental effects associated with adoption of an updated MP for management of recreational, natural, and cultural

resources at Ice Harbor Project. The Corps released the Draft Finding of No Significant Impact (FONSI) and this EA to other federal and state agencies, Tribes, and the public for a 30-day review and comment period from July 1 to July 30, 2021. While preparing the EA, the Corps did not identify any impacts that would significantly affect the quality of the human environment. If no such impacts are identified during the public review process, compliance with NEPA would be achieved upon the signing of the FONSI which would be posted to the Corps website and available to the public.

Implementation of Alternative 2, the Balanced Use Alternative would comply with this Act. Subsequent implementing actions would be subject to further tiered review under NEPA.

4.2.2 Endangered Species Act

The ESA established a national program for the conservation of threatened and endangered fish, wildlife and plants and the habitat upon which they depend. Section 7(a)(2) of the ESA requires federal agencies to consult with the USFWS and the National Marine Fisheries Service (NMFS) (the Services), as appropriate, to ensure that their actions are not likely to jeopardize the continued existence of endangered or threatened species or adversely modify or destroy their critical habitats. Section 7(c) of the ESA and the federal regulations on endangered species coordination (50 CFR §402.12) require that federal agencies prepare biological assessments (BA) of the potential effects of major actions on listed species and their critical habitat.

The revised MP includes concepts, not details of design or administration. Detailed management and administration functions would be addressed in an OMP, which implements the concepts of the MP into operational actions. Due to the lack of details, it is not possible to determine what effects there might be to ESA-listed species. Development of the revised MP would have no effect on ESA-listed species and no ESA consultation is required at this time.

4.2.3 Magnuson-Stevens Fishery Conservation and Management Act - Essential Fish Habitat

The consultation requirement of section 305(b) of the Magnuson-Stevens Fishery Conservation and Management Act (MSA) directs federal agencies to consult with NMFS on all actions, or proposed actions that may adversely affect Essential Fish Habitat (EFH). Adverse effects include the direct or indirect physical, chemical, or biological alterations of the waters or substrate and loss of, or injury to, benthic organisms, prey species and their habitat, and other ecosystem components, if such modifications reduce the quality or quantity of EFH. Adverse effects to EFH may result from actions occurring within EFH or outside EFH, and may include site-specific or EFH-wide impacts, including individual, cumulative, or synergistic consequences of actions (50 CFR 600.810).

Chinook and Coho salmon are the only species in the area protected by the MSA. Implementation of the Balanced Use Alternative would have no adverse effect on Chinook, or Coho EFH and would comply with this Act.

4.2.4 Fish and Wildlife Coordination Act

The FWCA requires consultation with the USFWS and state fish and wildlife agencies to evaluate the impacts to fish and wildlife species where the “waters of any stream or other body of water are proposed or authorized, permitted or licensed to be impounded, diverted...or otherwise controlled or modified” by any agency under a federal permit or license. The FWCA also requires equal consideration and coordination of wildlife conservation with other water resources development programs.

The Lower Snake River Fish and Wildlife Compensation Plan was developed under the FWCA. Many of the environmental improvements on Corps lands stem from that plan.

Implementation of Alternative 2 would not be subject to the Act as it would not “result in the control or modification of a natural stream or body of water. Implementing future plans or actions would require subsequent review to ensure compliance with the FWCA.

4.2.5 Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (16 U.S.C. §§ 703-712, as amended) prohibits the taking of and commerce in migratory birds (live or dead), any parts of migratory birds, their feathers, or nests. Take is defined in the MBTA to include by any means or in any manner, any attempt at hunting, pursuing, wounding, killing, possessing, or transporting any migratory bird, nest, egg, or part thereof. There is also a Memorandum of Understanding between the Department of Defense and the USFWS, signed July 31, 2006, to promote the conservation of migratory birds.

A wide variety of species listed under the MBTA occur on Corps managed lands within the Ice Harbor Project area. There would be no take of migratory birds and the proposed action would not conflict with the purpose of the MBTA. The adoption of the revised MP would comply with the MBTA. Depending on the nature or type of proposed future actions, subsequent environmental compliance would be required to ensure compliance with the MBTA.

4.2.6 Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (BGEPA) prohibits the taking or possession of and commerce in bald and golden eagles, with limited exceptions, primarily for Native American Tribes. Take under the BGEPA includes both direct taking of individuals and take due to disturbance. Disturbance is further defined in 50 CFR 22.3.

Bald and golden eagles are known to nest and roost on Corps managed lands in the Ice Harbor Project area. While all nest sites have not been formally documented in the Corps' Walla Walla District, locations of some nests are known.

Implementation of the Balanced Use Alternative would comply with the BGEPA and would not result in disturbance or take of bald or golden eagles. Depending on the

nature or type of proposed future actions, subsequent environmental compliance would be required to ensure compliance with the BGEPA.

4.2.7 National Historic Preservation Act

The NHPA of 1966 as amended directs federal agencies to assume responsibility for all cultural resources under their jurisdiction. Section 106 of NHPA requires agencies to consider the potential effect of their actions on properties that are listed, or are eligible for listing, on the NRHP. The NHPA implementing regulations, 36 CFR Part 800, requires that the federal agency consult with the SHPO, Tribes and interested parties to ensure that all historic properties are adequately identified, evaluated, and considered in planning for proposed undertakings.

The Corps has previously acknowledged that the ongoing operation of Ice Harbor Dam is an adverse effect under NHPA as part of the Federal Columbia River Power System (FCRPS) Programmatic Agreement (BPA et al. 2009). The FCRPS is a series of 14 hydroelectric power projects in the Columbia River Basin located on the mainstem Columbia River and in several of its major tributaries that provide about one-third of the electricity used in the Pacific Northwest. The 2009 FCRPS Programmatic Agreement outlines that some of the effects to cultural resources include "inundation, erosion, exposure, and other factors" (BPA et al. 2009:2).

The Programmatic Agreement outlines a series of "standards, requirements, and obligations for compliance with Section 106 of NHPA" that must be met by the Corps, BPA, and Bureau of Reclamation (BPA et al. 2009:4). As part of the program, the Corps has responsibility to address compliance requirements (i.e. review undertakings, seek to minimize adverse effects, and conduct mitigation if they cannot be minimized); collaborate with consulting parties; adhere to professional standards; provide public benefit from resource management; maintain confidentiality; and comply with these principles during the 20-year lifespan of the Programmatic Agreement.

The Corps received a letter from the CTUIR on July 15, 2020 containing 13 specific comments to consider in the Master Plan revision. The comments were regarding Tribal sovereignty, Tribal fishing, water quality, wetland protection, oil pollution from dams, enhancement of native plants and animals, cultural resources, climate change, air pollution, recreational resources, scenic resources, diversity, equity, and inclusion, and irrigation and industry.

The Corps received a letter from the Confederated tribes of the Colville Reservation June 29, 2020 stating that the Archaeological Resources Section of the 1977 Master Plan needs to be updated and include Traditional Cultural Properties.

The revised MP would not authorize any new site-specific actions, and therefore does not have the potential to cause effects to historic properties. The land use classifications provide a blueprint for management actions that may be appropriate in different areas on Corps land. However, implementation of site-specific actions would be identified in future 5-year OMPs. Those actions would require tiered NEPA review and compliance specific to all applicable laws. Since specific actions having the

potential to affect cultural resources would be reviewed separately, the revised MP has no potential to cause effects.

4.2.8 American Indian Religious Freedom Act

The American Indian Religious Freedom Act (AIRFA) of 1978 (42 USCA 1996) established protection and preservation of Native Americans' rights of freedom of belief, expression, and exercise of traditional religions. Courts have interpreted AIRFA to mean that public officials must consider Native Americans' AIRFA interests before undertaking actions that might harm those interests.

The Corps respects AIRFA and is receptive to tribal comments at any time. Implementation of Alternative 2, the Balanced Use Alternative, complies with AIRFA. The MP is a planning document providing conceptual guidance regarding NRM and does not cause any new site-specific actions or changes to tribal access for exercising religious freedoms. Individual site-specific proposed actions would be subject to review under applicable federal laws, including AIRFA.

4.2.9 Clean Water Act

The Federal Water Pollution Control Act (33 U.S.C. §1251 et seq., as amended) is more commonly referred to as the Clean Water Act (CWA). This act is the primary legislative vehicle for federal water pollution control programs and the basic structure for regulating discharges of pollutants into waters of the United States. The act was established to restore and maintain the chemical, physical, and biological integrity of the Nation's waters and sets goals to eliminate discharges of pollutants into navigable water, protect fish and wildlife, and prohibit the discharge of toxic pollutants in quantities that could adversely affect the environment. The act has been amended numerous times and given several titles and codifications.

Revision of the MP would not require or trigger compliance with the CWA. Future site-specific actions would be reviewed, as appropriate, for compliance with the CWA.

4.2.10 Clean Air Act

The Clean Air Act (CAA) of 1970, as amended, established a comprehensive program for improving and maintaining air quality throughout the United States. Its goals are achieved through permitting of stationary sources, restricting the emission of toxic substances from stationary and mobile sources, and establishing National Ambient Air Quality Standards. Title IV of the CAA includes provisions for complying with noise pollution standards.

Revision of the MP would have no adverse impacts on air quality and would comply with the CAA. Future site-specific actions would require subsequent review to ensure compliance with the CAA.

4.3 Executive Orders (EO)

4.3.1 EO 11988 and EO 13690, Floodplain Management

These EO's outline the responsibilities of federal agencies in the role of floodplain management. Each agency must evaluate the potential effects of actions on floodplains and avoid undertaking actions that directly or indirectly induce development in the floodplain or adversely affect natural floodplain values.

The proposed action of revising the MP would not change floodplain function or increase floodplain development in the proposed action area. A detailed review of potential future site-specific actions would be completed to ensure floodplains values and functions would not be affected.

4.3.2 EO 11990, Protection of Wetlands

This EO requires federal agencies to minimize the destruction, loss or degradation of wetlands, and to preserve and enhance the natural and beneficial values of wetlands.

Wetlands would not be detrimentally impacted by implementation of the Balanced Use Alternative. A detailed review of potential future site-specific actions would be completed to ensure wetland values and functions would not be affected.

4.3.3 EO 12898, Environmental Justice

This EO requires federal agencies to consider and minimize potential impacts to subsistence, low income, or minority communities. The goal is to ensure that no person or group of people shoulder a disproportionate share of negative environmental impacts resulting from the execution of the country's domestic and foreign policy programs.

The revised MP is a conceptual planning document for strategic land management and development of project recreation, natural and cultural resources. It is intended for responsible stewardship and sustainability of resources. The revised MP would not direct specific actions that would cause a disproportionate share of negative environmental impacts to a person or group of people.

Revision of the MP would not conflict with requirements of this EO. Implementing future plans or actions would require subsequent review to ensure compliance with this EO.

4.3.4 EO 13007, Native American Sacred Sites

EO 13007 directs federal agencies to accommodate access to and ceremonial use of tribal sacred sites by tribal religious practitioners. Agencies are to avoid adversely affecting the physical integrity of such sacred sites and to maintain the confidentiality of sacred sites when appropriate. The Act encourages government-to-government consultation with tribes concerning sacred sites. Some sacred sites may qualify as historic properties under the NHPA.

Revision of the MP would have no potential to affect any Native American sacred sites. The revised MP is a planning document and does not authorize any new site-specific actions. The Corps would continue to consult with Native American Tribes regarding Sacred Sites on Ice Harbor Project Lands.

4.3.5 EO 13175, Consultation and Coordination with Indian Tribal Governments, November 6, 2000, and Presidential Memorandum, “Government to Government Relations with Native American Tribal Governments”, April 29, 1994

EO 13175 sets forth guidelines for all federal agencies to establish regular and meaningful consultation and collaboration with Indian tribal officials in the development of federal policies that have tribal implications; strengthen the United States government-to-government relationships with Indian tribes; and reduce the imposition of unfunded mandates on Indian tribes.

The Presidential Memorandum of 1994 states in part that, “each...department and agency shall consult, to the greatest extent practicable and permitted by law, with tribal governments prior to taking actions that affect federally recognized tribal governments.”

A scoping process for the revised MP was initiated on May 1, 2020 and ended on June 15, 2020. Letters announcing the scoping period were sent to interested public, Tribal governments, organizations, stakeholders, congressional offices, and federal and state agencies offering the opportunity to comment on the scope of the proposed action (revising the MP). Announcements for the scoping period were also distributed in five newspapers to cover five Washington State counties, local radio stations, and social media. The Corps received a total of 23 comments from 11 commentors during the scoping period.

The Corps received a letter from the CTUIR on July 15, 2020, containing 13 specific comments to consider in the MP revision. The comments were regarding Tribal sovereignty, Tribal fishing, water quality, wetland protection, oil pollution from dams, enhancement of native plants and animals, cultural resources, climate change, air pollution, recreational resources, scenic resources, diversity, equity, and inclusion, and irrigation and industry.

The Corps received a letter from the Confederated tribes of the Colville Reservation stating that the Archaeological Resources Section of the 1977 MP needs to be updated and include Traditional Cultural Properties.

The revised MP would not authorize any new site-specific actions, which could have tribal implications or affect tribal governments. Site-specific actions would be identified in future 5-year OMPs, and those actions may require tiered NEPA review and compliance specific to all applicable laws.

4.3.6 EO 13112, Invasive Species

EO 13211 directs federal agencies to prevent the introduction of invasive species, to provide their control and to minimize the economic, ecological, and human health impacts from invasive species.

Reducing and restricting the spread of invasive and nuisance species would be achieved by monitoring, assessment, and an integrated pest management approach to treatment according to the Corps' IPMP. This includes the use of chemical, mechanical, and biological control methods, as well as reseeding and planting with native plant species.

4.4 State and Local Regulations

State, county, and/or local laws and regulations may also be applicable to any potential action, based on aspects of the individual action. The proposed action of revising the MP would not trigger compliance with any state, county, or local laws and regulations. On a case by case basis, these types of requirements would be addressed for site specific actions under the OMPs.

Section 5 – Consultation, Coordination and Public Involvement

5.1 Public Involvement

5.1.1 Scoping

A public scoping process for the revised MP was initiated on May 1, 2020 and ended on June 15, 2020. Letters announcing the scoping period were sent to interested public, Tribal governments, organizations, stakeholders, and federal and state agencies offering the opportunity to comment on the scope of the proposed action (revising the MP). The Corps also sent letters to the offices of U.S. Senators Maria Cantwell and Patty Murray and U.S. Representatives Kathy McMorris Rodgers and Dan Newhouse. Announcements for the scoping period were also distributed in five newspapers to cover five Washington State counties, local radio stations, and social media. Scoping meetings were not held due to public health restrictions for the COVID-19 pandemic in 2020.

The Corps received eight total public comments regarding ways to improve recreational opportunities by improving maintenance at HMUs, providing better road access and shoreline fishing access to HMUs, and the addition of boat-in or hike-in only primitive campsites. The Washington State Parks and Recreation Commission commented on the Corps coordinating efforts with their goals of improving the 130-mile long Columbia Plateau Trail. Another comment requested that there be no more development of parks or boat launches around Lake Sacajawea. One scoping comment received pertained to dam breaching and floodplain restoration.

5.2.2 Draft Document Review

The Draft MP, Draft FONSI and this EA will be released to the public, Tribes, agencies and interested parties on July 1 to July 30, 2021 for a 30-day review and comment period. Documents can be viewed on the Corps website at:

<https://www.nww.usace.army.mil/Locations/District-Locks-and-Dams/Ice-Harbor-Lock-and-Dam/Ice-Harbor-Master-Plan/>

5.2 External Coordination

On April 16, 2020, the Corps sent a letter offering government-to-government consultation to the Colville, the CTUIR, the Confederated Tribes and Bands of the Yakama Nation, the Wanapum Band, and the Nez Perce Tribe.

The Colville and the CTUIR provided written comments on the text of the 1977 Master Plan and amendments on and June 29, 2020 and July 15, 2020, respectively. Comments included suggestions to update the text regarding communication with Tribes, to add reference to TCPs, that replanting activities should use native plant species, and Tribal development, placement, and review of interpretative signage. On July 1, 2021, the Corps sent letters to the Colville, CTUIR, Yakama, the Wanapum

Band, and the Nez Perce Tribe requesting review and comment on the Draft Ice Harbor Master Plan, Draft Finding of No Significant Impact (FONSI), and this EA.

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