



Hells Canyon Complex Aesthetic Resource Inventory and Evaluation

TECHNICAL REPORT

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**Technical Report
Appendix E.6-3**

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ABSTRACT

This technical report describes a study that is part of the Federal Energy Regulatory Commission (FERC) relicensing process for the Idaho Power Company (IPC) Hells Canyon Complex (FERC No. 1971) hydroelectric project (Project). The study was commissioned by IPC and conducted by David Evans and Associates, Inc. (DEA), and its purpose was to evaluate the effects of Project facilities and operations on the aesthetic environment within the Study Area.

The Project is located on the Snake River, the largest river in Idaho, in the southern portion of Hells Canyon. The Project includes Brownlee, Oxbow, and Hells Canyon reservoirs and the dams, powerhouses, and appurtenant facilities associated with the reservoirs. The Study Area includes the Project and adjacent lands, the Hells Canyon National Recreation Area (HCNRA), and 14 transmission lines that cover approximately 658 miles and extend through northeastern Oregon and southwestern and southern Idaho.

Because most of the public land in the Study Area is under either Bureau of Land Management (BLM) or US Forest Service (USFS) jurisdiction, the protocols for visual resource assessment used by these two agencies were used to conduct the study. The BLM's protocol is called Visual Resource Management (VRM) and relies on a Visual Contrast Rating to determine the visual condition of a landscape. The USFS's protocol is called Scenery Management System (SMS) and relies on an assessment of landscape character and scenic integrity to determine the visual and aesthetic condition of a landscape.

Of 152 potential sites in the Study Area, 91 were chosen for evaluation primarily because Project facilities, operations, or effects of the operations were visible from these sites. Project facilities and operations include transmission lines, power-generating facilities and appurtenant facilities, access and service roads, and hardscape elements. Effects of operations include reservoir and river water-level fluctuation and alterations to vegetation.

Of the 91 sites that were evaluated, 79 (87 percent) were determined to need some kind of mitigation to address the visual and aesthetic impact of Project facilities or operations. Specific mitigation measures are suggested. For suggested mitigation measures that may not be reasonable (e.g., moving transmission structures), alternative solutions are suggested. Recommendations for selecting mitigation measures for IPC's FERC relicensing application and for a long-term visual and aesthetic resource management strategy are also given.

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APPENDICES*

Appendix A: Visual Resources Inventory Summary Memorandum

Appendix B: IPC Recreation On-site Survey

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*The appendices are in a separate, bound document, which is available from IPC.

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1 INTRODUCTION

This technical report describes a study that is part of the Federal Energy Regulatory Commission (FERC)¹ relicensing process for the Idaho Power Company (IPC) Hells Canyon Complex (FERC No. 1971) hydroelectric project (Project). The study was commissioned by IPC and conducted by David Evans and Associates, Inc. (DEA), and its purpose was to evaluate the effects of Project facilities and operations on the aesthetic environment within the Study Area.

The Project is located on the Snake River, the largest river in Idaho, in the southern portion of Hells Canyon. The river follows a crescent-shaped course for 490 miles across southern Idaho, then swings northward and eventually forms the border between Idaho and Oregon, where it has cut the most spectacular of its gorges and deepest river canyon in North America, Hells Canyon. The river ultimately flows into the Columbia River in Washington.

The Project includes Brownlee, Oxbow, and Hells Canyon reservoirs and the dams, powerhouses and appurtenant facilities associated with the reservoirs. The Study Area includes the Project and adjacent lands, the Hells Canyon National Recreation Area (HCNRA), and 14 transmission lines that cover approximately 658 miles and extend through northeastern Oregon and southwestern and southern Idaho (**Fig. 1**). The HCNRA's 652,488 acres straddle Hells Canyon on the Snake River. The eastern boundary of the HCNRA is formed by the jagged peaks of Idaho's Seven Devils Mountains and the western boundary by the 10,000-foot peaks of Oregon's Wallowa Mountains (IPC, 1997).

The Study Area was divided into the two sections based on land ownership/management. The first is comprised of Bureau of Land Management (BLM) land and state, county and privately owned/managed lands (including a relatively small amount of US Forest Service [USFS] land), and the second is comprised predominantly of lands managed by the USFS, very limited state-owned lands, and lands that are privately owned.

The BLM protocol for visual assessment is the Visual Resource Management (VRM) system, and because most of the land in the first section is owned or managed by the BLM, the VRM protocol was used in this section, referred to therefore as the VRM Study Area. The VRM Study Area is described in detail in **Chapter 2**.

The USFS protocol for visual and aesthetic assessment is the Scenery Management System (SMS), and because most of the land in the second section is owned or managed by the USFS, the SMS protocol was used in this section, referred to therefore as the SMS Study Area. The SMS Study Area is described in detail in **Chapter 3**.

¹ Acronyms, abbreviations, and other terms are defined in the glossary on page 89.

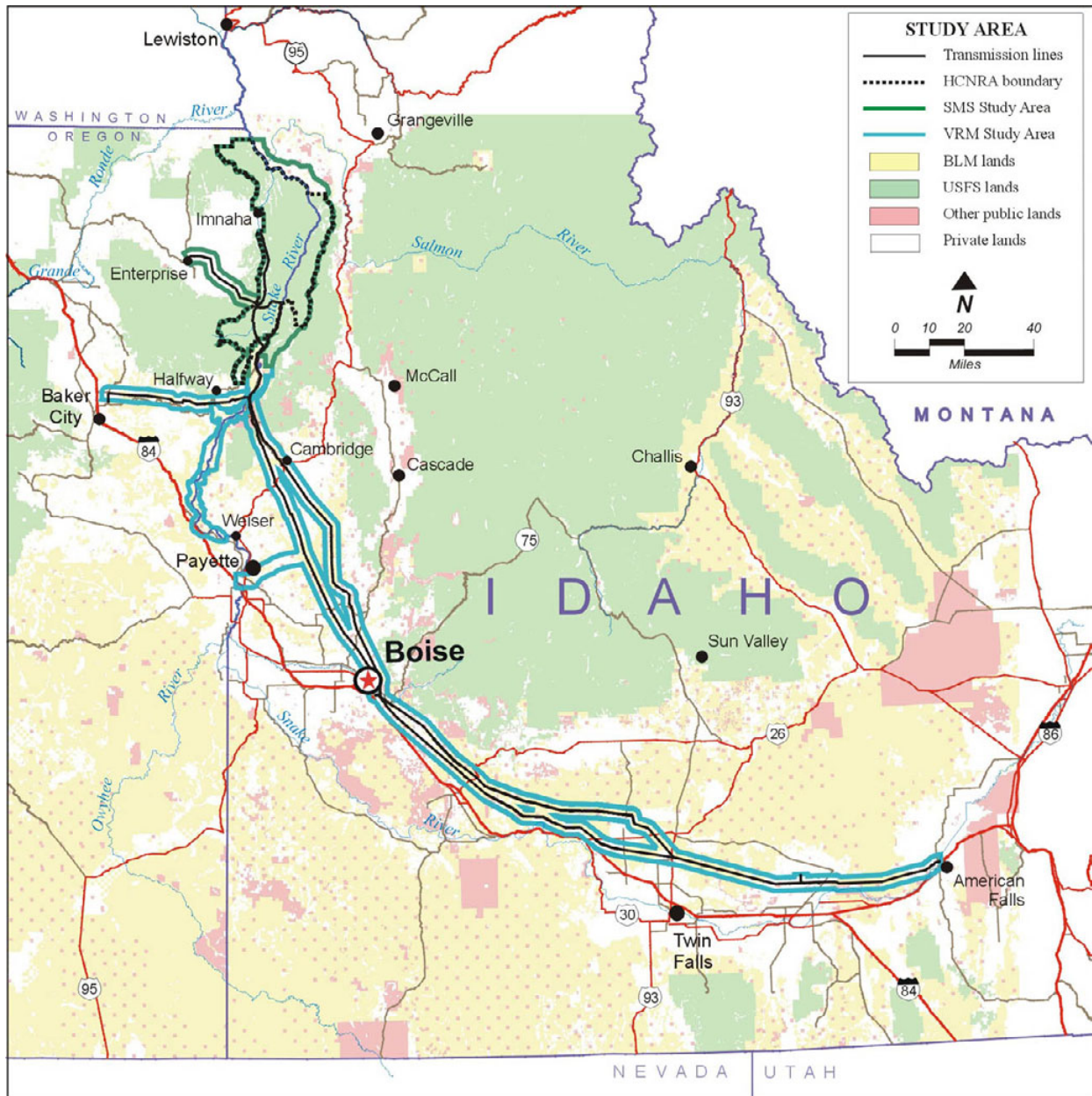


Fig. 1. Study Area.

1.1 Report organization

This chapter provides an overview of IPC's relicensing application effort and how this study fits into it. The history of and existing conditions in the Study Area are also described in **Chapter 1**.

Chapter 2 describes the study in the VRM Study Area, including methods and results. **Chapter 3** describes the study in the SMS Study Area, including methods and results. In **Chapter 4**, recommendations for mitigating Project effects in the entire Study Area are discussed.

At the end of this report, information about all viewpoints identified in the Study Area is listed in the Viewpoint Summaries. Information includes an evaluation of Project effects and suggested protection, mitigation, and enhancement (PM&E) measures, if any. Viewpoints that were determined to be Key Observation Points (KOPs) in the VRM Study Area and Special Places (SPs) in the SMS Study Area include a photo of the site.

1.2 Links to other technical reports

This study, the Hells Canyon Complex Aesthetic Resource Inventory and Evaluation (aesthetic resource study), is only one of more than 100 studies being conducted for the relicensing of IPC's Hells Canyon Complex. The following is an overview of how IPC has organized its relicensing effort and how the aesthetic resource study fits into it.

To facilitate obtaining early input from agencies with the authority to make recommendations concerning, or impose requirements on, a new Hells Canyon Complex license, IPC included representatives of these agencies in a collaborative process that enabled all to have ongoing discussions during preparation of the application.

The application was divided into (1) economic and socio-political issues and (2) technical resource issues including aquatics, terrestrial, cultural, and recreational. Resource Work Groups were created to study the technical resource issues. Within the Recreation Resource Work Group, an Aesthetic Subgroup (Subgroup) was established to deal specifically with aesthetic issues, an important and also quite technical part of the relicensing process because both the USFS and BLM have large landholdings in the Study Area and both use visual and/or scenery management systems to evaluate aesthetic effects of proposed projects. The Subgroup consisted of representatives from the USFS, BLM, National Park Service, Idaho Department of Parks and Recreation, and IPC.

The Subgroup helped identify and analyze issues, develop study plans, evaluate results and recommendations, and suggest which PM&E should be included in the application. For example, the Subgroup recommended that several KOPs be deleted from analysis because of low usage by the public. The Subgroup also suggested aesthetic improvement measures that go beyond mitigation of specific, existing Project effects. These measures are included in the recommendations (**Chapter 4**).

Many of the studies regarding technical resource issues are interrelated. For example, this study (the aesthetic resource study) overlaps in many ways with the recreational resource study in terms of the appearance of recreational facilities and recreational experience, the cultural resource study in terms of what places are considered special, and the terrestrial resource study in terms of vegetation coverage and other ecological conditions that can affect aesthetic resources.

Several PM&E suggested in this study may need to be considered in the mitigation of Project aspects other than aesthetics. For example, overuse at a dispersed recreational site may have negative aesthetic impacts, but the suggested mitigation measure of improving infrastructure at

the site may affect PM&E for recreational purposes. Furthermore, PM&E undertaken for all aspects of the Project (e.g., recreation, cultural aquatic, aesthetic) need to be consistent with one another to avoid further impacts.

Some of the information used in this study was provided by the principal investigators of other studies. In some cases, because the other studies had not yet been completed when the information was needed for this study, the best available information was used.

1.3 Study Area

The Study Area is described in terms of its history and existing conditions. How the land has been used during the past several hundred years, including its role in the generation of hydroelectric power, is reviewed briefly in the history. This study is concerned primarily with land-use issues, making a history of land use in the Study Area significant. Existing conditions of the Study Area include vegetation, climate, land use, and dam and reservoir operations, and provide a baseline of information for the remainder of the study.

1.3.1 A brief history

The earliest known inhabitants of this region were Native American hunters and gatherers. Subtle indicators of the Native American presence include rock shelters, housepits, and scattered red-pigmented pictographs throughout the Canyon.

In the mid-1700s, the Nez Perce Tribe began using the Canyon to pasture and shelter their horses. The grasslands steppes in the Canyon were typically vegetated with abundant bunchgrasses (Tisdale et al., 1969). In the 1870s, Euro-Americans settled in the Canyon and introduced cattle and sheep. Grazing and other disturbances, such as fire and drought, made the steppes vulnerable to invasion by annual vegetation such as cheatgrass and medusahead, thus dramatically altering the composition and productivity of the grasslands.

After Congress passed the Homestead Act in 1862, the Canyon saw substantial homesteading activity (Carrey et al., 1979). Further development, including the communities of Copperfield and Homestead, was connected to the development of mining, railroads, and early hydropower in Hells Canyon.

Placer mining was common in the Canyon by the 1880s, and several historic mines still exist (IPC, 1997). In 1891, Albert Kleinschmidt constructed Kleinschmidt Grade, a road that connected Peacock Mine in the Seven Devils area to the Snake River so that ore could be shipped by steamboat upriver to the Huntington and Olds Ferry railheads (Carrey et al., 1979).

By the turn of the twentieth century, the age of electricity had arrived. The settlement at Oxbow was one of the earliest sites on the Snake River to be identified for power development, and construction of the first generating plant at Oxbow was undertaken in 1908 by the Mainland brothers. In the early 1900s, several small entities attempted to capture the power generation market in

Idaho. As technology and competition increased, some of the companies consolidated or merged. Between 1913 and 1914, the five largest companies, Idaho-Oregon Light & Power Company, Idaho Railway Light & Power Company, Idaho Power & Light Company, Great Shoshone & Twin Falls Water-Power Company, and Southern Idaho Water Power Company “entered a period of financial crisis and collapse” (Stacy, 1991). These companies were consolidated into the Idaho Power Company, which was incorporated in 1915 and began operating in 1916 (Stacy, 1991).

In the late 1940s and early 1950s, IPC found itself competing with the federal government for development of a hydropower complex in Hells Canyon. Led by Thomas E. Roach, IPC proposed to build three low dams in the Canyon while the federal government proposed a single, 600-foot-high dam. A long-standing division between supporters of public and private power split the state apart in a bitter controversy.

When Dwight Eisenhower was elected president in 1952, the political climate in Washington shifted in favor of IPC. On August 4, 1955, after many hearings, the Federal Power Commission “unanimously issued a license to IPC for its three power plants” (Stacy, 1991). IPC immediately launched its program for full development of the 100-mile stretch of the Snake River, which included constructing Brownlee, Oxbow, and Hells Canyon dams. In 1959, Brownlee Dam was completed, and construction on Oxbow Dam began. Hells Canyon Dam was completed in 1968.

In 1975, Congress designated 67.5 miles along the Snake River in west-central Idaho and north-eastern Oregon, from Hells Canyon Dam to the Oregon-Washington border, as the HCNRA (Carrey et al., 1979) in part to preserve its aesthetic character. The HCNRA’s 652,488 acres straddle Hells Canyon on the Snake River, from the peaks of Idaho’s Seven Devils Mountains on the east to Oregon’s rimrock and mountain slopes on the west. To meet some of the objectives of the designation, many of the homesteads in the area were purchased for inclusion in the HCNRA by the federal government. The Wallowa-Whitman National Forest administers the HCNRA.

The 67.5-mile reach of the Snake River within the HCNRA was also designated in 1975 as Wild and Scenic under the National Wild and Scenic River Act. The “Wild” reach is the 31.5 miles from Hells Canyon Dam to a mile upstream of Pittsburg Landing, and the “Scenic” reach is the 36 miles from Pittsburg Landing downstream to the northern boundary of the Wallowa-Whitman National Forest. The remainder of the Snake River to Asotin, Washington, is currently in “study” status (**Fig. 2**).

1.3.2 Existing conditions

1.3.2.1 Vegetation and climate

Portions of the Study Area are in the vast Snake River Plain, which covers much of southern Idaho. The plain is generally treeless and covered with sagebrush and bunchgrasses. The climate is dry, and the summers are hot and winters cold. In south central Idaho, the plain transitions into gentle rolling hills and then, farther west, into Hells Canyon.

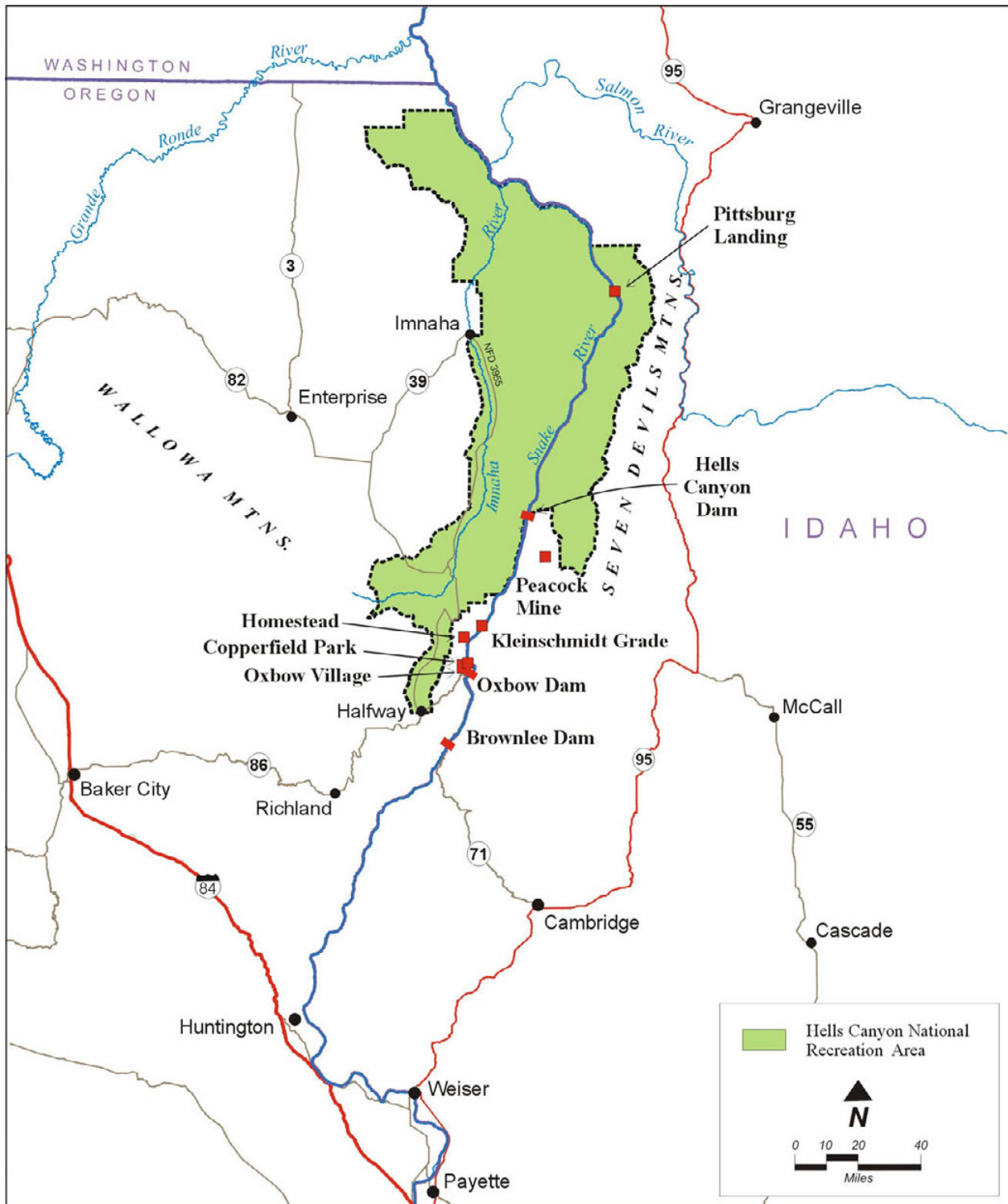


Fig. 2. Hells Canyon National Recreation Area (HCNRA).

Hells Canyon (referred in this report as “the Canyon”) features basalt outcroppings and bluffs, talus, and vegetative communities ranging from bunchgrass to Douglas-fir and Ponderosa pine. Elevation in the Canyon ranges widely from approximately 910 feet mean sea level (msl) to

9,400 feet msl (IPC, 1997), creating variations in climatic zones and vegetation. The climate in the Canyon is semi-arid because it lies in the rain shadow of the Cascade Range to the west. Winters are usually mild and summers extremely warm, especially on the Canyon floor.

1.3.2.2 Land use

The Study Area is still dominated by the types of land use established at the turn of the last century, including agriculture (irrigated and non-irrigated), livestock grazing, mining, hydropower, and scattered rural development. Much of the land is federally owned and is managed for grazing, recreation, and wildlife habitat. The bottom lands adjacent to the reservoirs are generally used for grazing, farming, and recreation. Livestock ranching is the predominant type of land use in the reservoir area. Much of the cultivated land in the reservoir areas is irrigated.

In addition to hydropower facilities, described in the next section, Project lands support recreational development including campgrounds, picnic areas, boat ramps, and trails. IPC has developed and maintains four full-service parks. The BLM, USFS, State of Oregon, and Baker County, Oregon, also operate and maintain park and recreational facilities. Several privately owned facilities are located on the Oregon side near the upstream end of the Project. The facilities in the Project vicinity and ownership are listed in **Table 1**.

Table 1. Recreational development and ownership in the Project vicinity.

Parks	Ownership	Location
Big Bar	USFS	Idaho side of Hells Canyon Reservoir
BLM Oasis Site	BLM	Downstream of Oasis Campground on Oregon side of Brownlee Reservoir, 10 miles downstream of Weiser, Idaho
Carter's Landing	IPC	Oregon side of Oxbow Reservoir
Copperfield Boat Ramp Facility	IPC	One mile downstream of Copperfield Park, on Oregon side of Hells Canyon Reservoir
Copperfield Park	IPC	Just below Oxbow Dam on the Oregon side at Oxbow Village
Deep Creek Access Trail	USFS	Hells Canyon Dam to Deep Creek
Farewell Bend Recreation Area (Farewell Bend State Park)	State of Oregon	Adjacent to Brownlee Reservoir, at Interstate 84
Hells Canyon Park	IPC	Idaho side of Hells Canyon Reservoir near Hells Canyon Dam
Hells Canyon Trail	USFS	Oregon side of Hells Canyon Reservoir
Hewitt/Holcomb Park	Baker County	Powder River arm on the Oregon side of Brownlee Reservoir, near Richland, Oregon
McCormick Park	IPC	Idaho side of Oxbow Reservoir, one mile downstream of Brownlee Dam
Mountain Man Resort and Marina (currently not operating)	Private	Idaho side of Brownlee Reservoir, 32 miles northwest of Weiser, Idaho

Table 1. Recreational development and ownership in the Project vicinity (cont.).

Parks	Ownership	Location
Oasis Campground	Private	Oregon side of Brownlee Reservoir, 10 miles downstream of Weiser, Idaho
Oxbow Boat Launch	IPC	Oregon side of Oxbow Reservoir
Spring Recreation Site	BLM	Downstream of Burnt River on the Oregon side of Brownlee Reservoir, near Huntington, Oregon
Steck Park	IDFG and IPC, managed by BLM	Idaho side of Brownlee Reservoir across from Burnt River outlet, downstream of Weiser, Idaho
Swede's Landing	BLM	Several miles upstream of the Powder River arm on the Oregon side of Brownlee Reservoir
Snake River RV Park	Private	Oregon side of Brownlee Reservoir, 10 miles downstream of Weiser, Idaho
Woodhead Park	IPC	Idaho side of Brownlee Reservoir near Brownlee Dam

1.3.2.3 Dam and reservoir operations

The Project provides the bulk of electricity that comprises IPC's generation capability (approximately 68 percent of total capability) and includes the Brownlee, Oxbow, and Hells Canyon dams, reservoirs, power plants, and associated transmission lines. Brownlee Reservoir is the farthest upstream of the three reservoirs, Oxbow is downstream of Brownlee, and Hells Canyon is downstream of Oxbow. Over the years, operations have changed significantly as a result of energy demands and requirements for navigation, flood control, anadromous fish protection and spawning, and recreational activities.

Of the three reservoirs, Brownlee is the largest. From the earth and rockfill Brownlee Dam, the 14,000-acre reservoir reaches upstream for 58 miles and is bordered by moderately steep topography with large rock outcrops throughout the length of the reservoir. The reservoir has a capacity for active water storage of 101 vertical feet and is the only one of the three with significant storage capacity. It is regulated primarily by the U.S. Army Corps of Engineers for flood control and navigation. IPC also voluntarily operates its facilities for flow augmentation for endangered fish species.

Because of its size and upstream location, Brownlee Reservoir drives the operation of the entire Project and is the focus of power generation, navigation, flood control, anadromous fish operations, and recreational issues. Maintaining a full pool at Brownlee Reservoir provides the greatest flexibility for meeting both short (hourly) and longer term power demands. An inadequate water level in Brownlee Reservoir that does not generate enough power to meet demand means that IPC must purchase power from other producers at a higher cost.

Brownlee Reservoir has been drawn down completely only three times in the past 30 years (1971, 1972, and 1997). Normal annual drawdown is typically about 50 feet. Spring drawdown

(March through May) is coordinated with other dams in the Northwest to provide flood control for Portland, Oregon, and other downstream areas. The depth of the drawdown is determined by the amount of precipitation that has accumulated in the upstream river basins and the predicted rate of spring runoff.

The reservoir is refilled early in the summer to provide habitat for spawning bass and crappie, and recreationists are able to enjoy a full reservoir through the Fourth of July holiday. Another drawdown begins in early July and lasts until December. Water is released for flow augmentation requirements of migrating anadromous fish and fall Chinook spawning.

Both the annual and daily storage requirements of Brownlee Reservoir have aesthetic and recreational impacts. The drawdown zone of the reservoir is what one would expect: denuded of vegetation, with the exception of invading annual weeds during the period of drawdown, and generally a steep, highly erosive surface.

Oxbow Reservoir is 12 miles long and covers 1,400 acres. It is a run-of-river, reregulating reservoir surrounded by moderate to steep topography. The reservoir is relatively narrow and shallow, with a maximum depth of 100 feet. Shorelines are primarily basalt outcrops and talus except for alluvial fans created by tributaries. The maximum fluctuation on this reservoir is five vertical feet per day, although during spring and summer weekends (April 1 through September 30), fluctuation is held to four feet. The reservoir is typically drafted during the night and refilled the following day by Brownlee outflows.

Hells Canyon Reservoir is 25 miles long and covers 2,300 acres. The narrowest of the three reservoirs, it is virtually surrounded by sheer, vertical basalt cliffs. Extensive limestone outcrops and local granite outcrops also occur (IPC, 1997). Flow into the reservoir is dependent upon discharges from the upstream Brownlee and Oxbow power plants. Maximum fluctuation of this run-of-river reregulating reservoir is five vertical feet per day, although during spring and summer weekends (April 1 through September 30), fluctuation is held to three feet. The Hells Canyon Complex license establishes a maximum variation in river stage (below Hells Canyon Dam) not to exceed one foot per hour at the Johnson Bar Gauge, located 17.6 river miles downstream of the dam. Releases from Hells Canyon Dam are made to comply with this license provision. Downstream of the Project, however, the varying width and depth of the river channel often result in highly variable water levels at different times of the day and night.

2 VRM STUDY

As described in **Chapter 1**, the Study Area was divided into two sections based on land ownership/management. The first is comprised of BLM land and state, county, and privately owned/managed lands (including a relatively small amount USFS land), and the second is comprised predominantly of lands managed by the USFS, very limited state-owned lands, and lands that are privately owned. The two sections are shown in **Fig. 1**, on page 2.

The BLM protocol for visual assessment is the Visual Resource Management (VRM) system. Because most of the land in the first section is owned and/or managed by the BLM, the VRM protocol was used in this section of the Study Area, referred to therefore as the VRM Study Area.

This chapter begins with the goals and objectives of the VRM study, followed by a description of the VRM Study Area and an overview of the VRM protocol. The application of the protocol to each VRM Study Area Objective, including methods and results, is then discussed.

2.1 Goals and objectives

The goals for the VRM Study Area were to determine compatibility of Project facilities and operations with BLM visual management objectives and to suggest PM&E measures where appropriate. Specific VRM Study Area objectives were to:

- (1) Determine existing VRM Classes and Visual Resource Objectives
- (2) Identify Key Observation Points (KOPs)
- (3) Perform Visual Contrast Ratings at KOPs to determine effects, if any, of Project facilities and/or operations on visual resources in the VRM Study Area for the Current/Proposed Operations scenario and for the Full Pool Run-of-River scenario
- (4) Determine compatibility of Project effects with VRM Classes and Visual Resource Objectives for Current/Proposed Operations scenario
- (5) Identify appropriate PM&E for Current/Proposed Operations scenario where needed

During the study, the BLM requested that existing VRM Classifications be reevaluated in portions of the Study Area. This goal was an addition to the original scope. Furthermore, if the reevaluation resulted in a recommendation that one or more of the existing classifications be changed, Project compatibility with the recommended change(s) would then be determined. Results of the reevaluation are presented in a separate Summary Memorandum in **Appendix A** and summarized in **Section 2.4.4.2**.

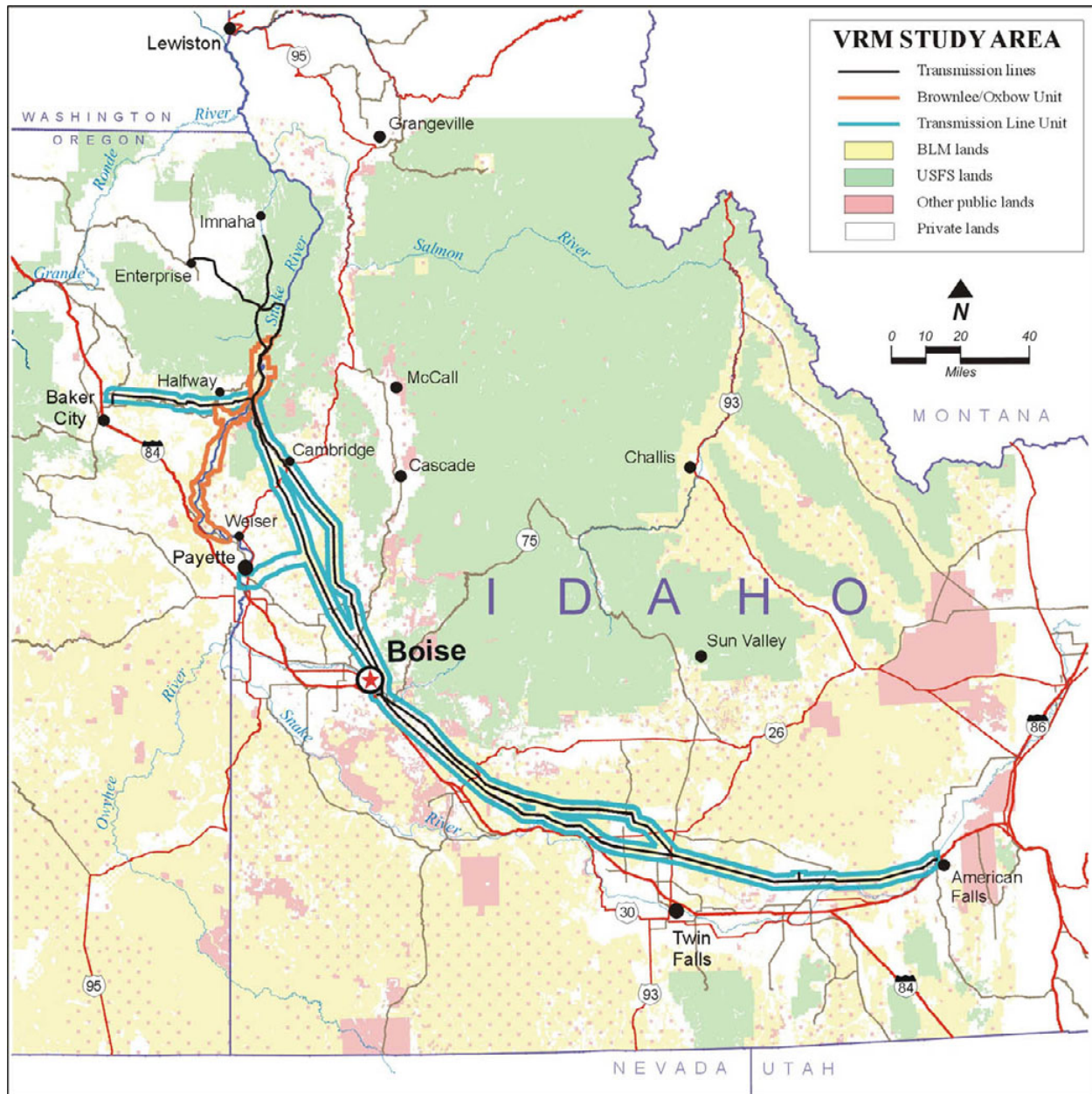


Fig. 3. The two subdivisions of the VRM Study Area: the Brownlee/Oxbow Unit and the Transmission Line Unit.

2.2 VRM Study Area

The VRM Study Area was subdivided into the Brownlee/Oxbow Unit and the Transmission Line Unit (**Fig. 3**) because of the distinct differences in landscape character between the reservoirs and transmission line corridors, and for convenience in conducting the fieldwork.

The Brownlee/Oxbow Unit includes:

- Brownlee and Oxbow reservoirs
- Lands rim-to-rim adjacent to Brownlee and Oxbow reservoirs extending from Oxbow Dam upstream nearly to Weiser, Idaho
- A small portion of Hells Canyon Reservoir
- A small amount of BLM land adjacent to Hells Canyon Reservoir from Oxbow Dam to below the townsite of Homestead, which is on the Oregon side of the river

The Transmission Line Unit includes the nine transmission lines that extend beyond the Brownlee/Oxbow Unit. Although geographically split into two areas east and west of the Brownlee/Oxbow Unit, the Transmission Line Unit is considered a single unit. The transmission lines are listed in **Table 2** and shown in **Fig. 4**.

Table 2. Transmission lines in the VRM Study Area and their kilovoltage (kV).

Line	Name	Location	kV
903	Brownlee to Quartz Junction	Brownlee Dam to Quartz Junction (Baker)	230
904	Brownlee to Boise Bench #1 and #2	Brownlee Dam to Boise Bench Substation	230
905	Brownlee to Oxbow	Brownlee Dam to Oxbow Dam	230
906	Boise Bench to Midpoint #2	Boise Bench to Midpoint Substation	230
911	Brownlee to Boise Bench #3 and #4	Brownlee Dam to Boise Bench Substation	230
912	Boise Bench to Midpoint #3	Boise Bench Substation to Midpoint Substation	230
923	Borah to Brady #2	Borah to Brady	230
951	Midpoint to Borah #2	Midpoint Tap to Adelaide Tap to Borah	345
952	Adelaide Tap	Midpoint Tap to Borah #1	345

The BLM divides its lands into Resource Areas (RAs) for administrative purposes. There are five RAs whose boundaries intersect the VRM Study Area (**Fig. 5** on page 14). IPC facilities and operations within these RAs should be compatible with their management objectives. The RAs in the Study Area are Baker (Oregon), and Cascade, Bruneau, Shoshone, and Snake River (Idaho). A sixth RA, Malheur (Oregon), is adjacent to the VRM Study Area. During the study, BLM reorganized some of its RAs in Idaho and combined the Cascade and Bruneau RAs into the Four Rivers RA. The Snake River RA was renamed Burley Field Office. For the purposes of the study, DEA uses the original names because those were the sources for much of the information provided by BLM. The reorganization did not affect VRM Classes or Visual Resource Objectives in the VRM Study Area.

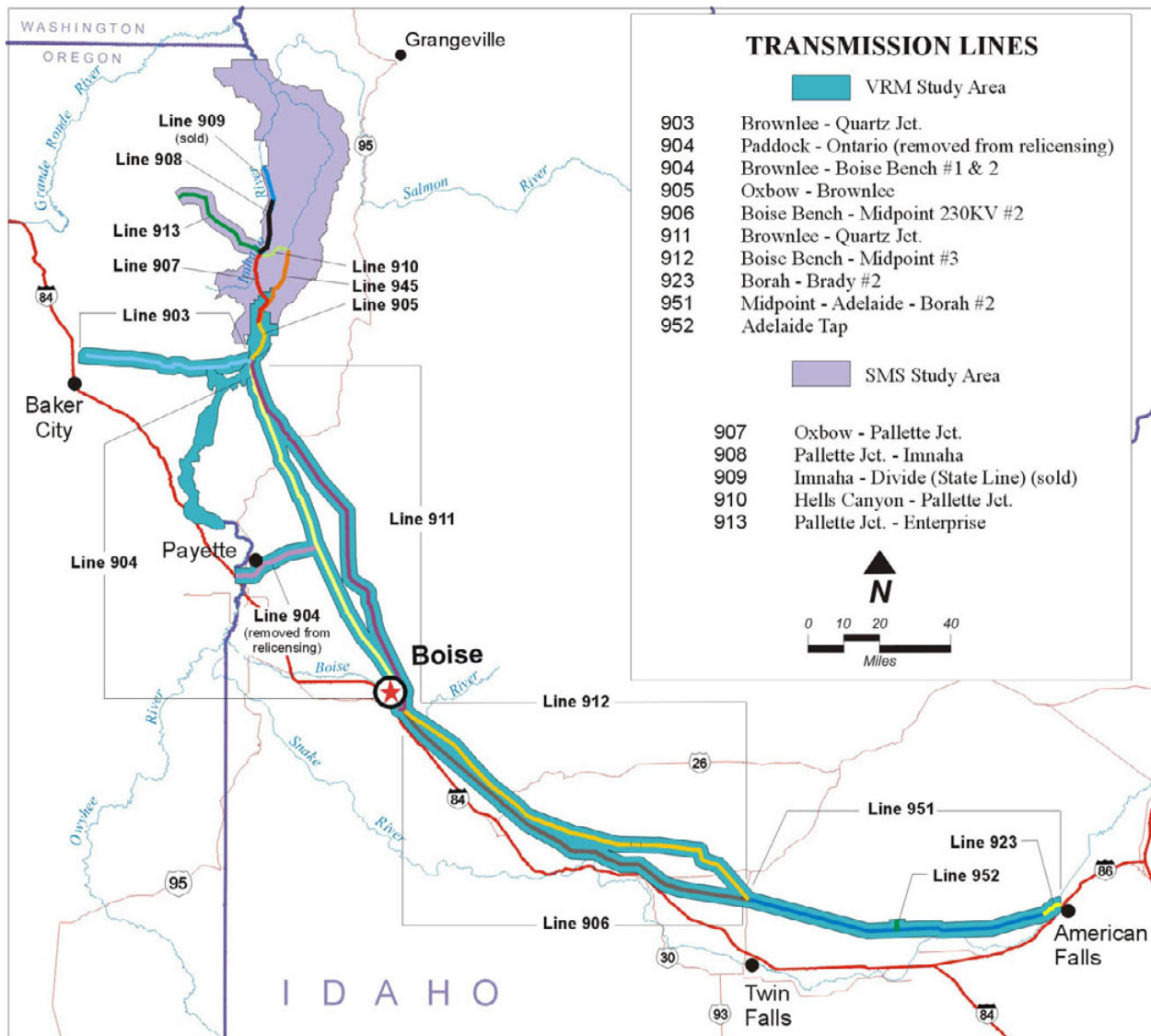


Fig. 4. Transmission lines in the Study Area.

2.3 Overview of the VRM system

This overview is based on information contained in *Visual Resource Management 8400-05* (BLM, 2000), except where otherwise noted.

The BLM has a responsibility to identify and protect the visual value of public lands. To meet this responsibility, the BLM uses the VRM system², which was authorized by the Federal Land Policy and Management Act of 1976, the National Environmental Policy Act (NEPA) of 1969, and the Surface Mining Control and Reclamation Act of 1977.

² For a detailed description of the VRM system, refer to *Visual Resource Management 8400* (BLM, 1984), *H-8410-1* (BLM, 1986b), and *H-8431-1* (BLM, 1986c).

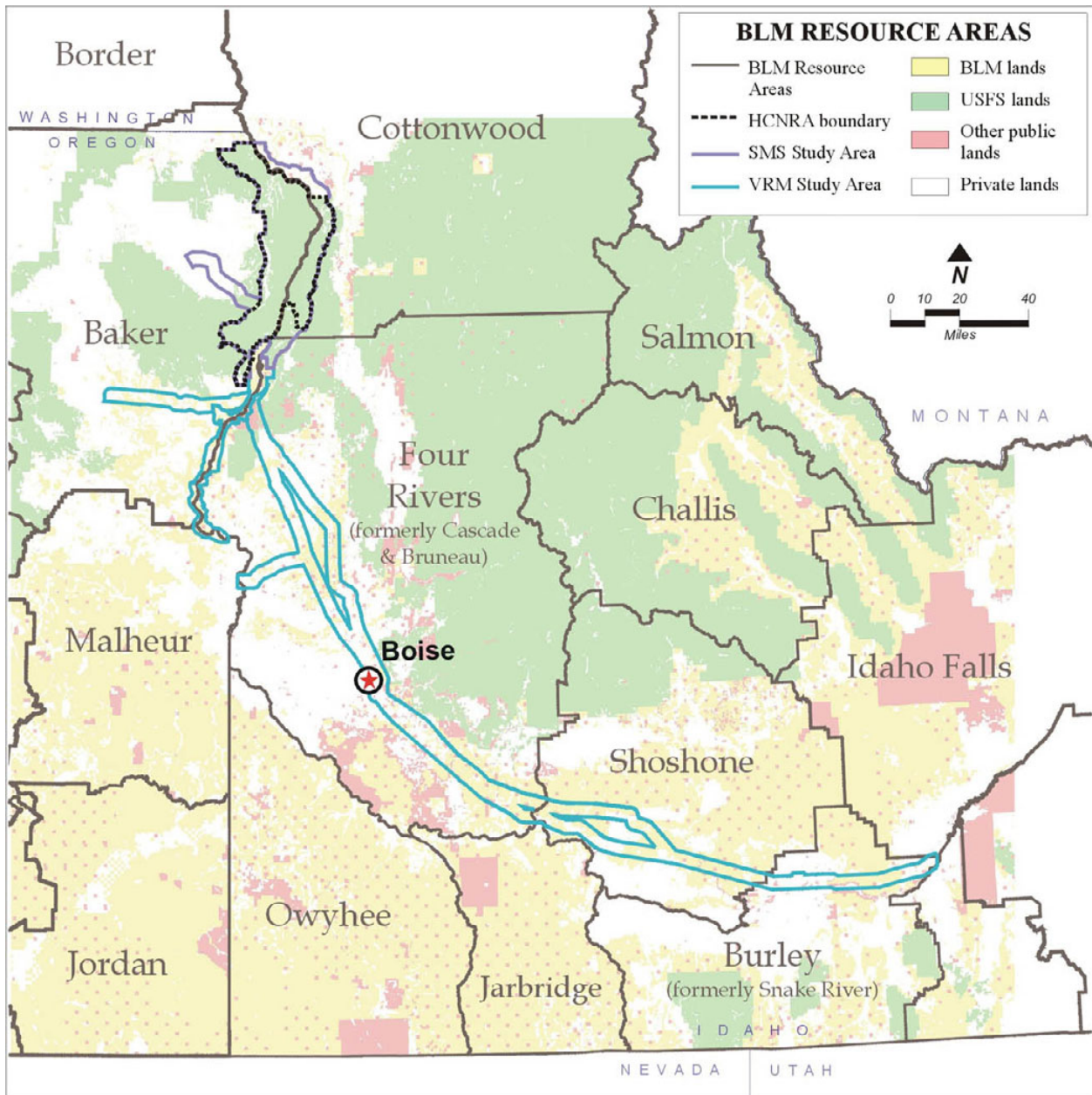


Fig. 5. BLM Resource Areas (RAs) near the Study Area.

The major components of the VRM system are the Visual Resource Inventory (VRI), which is used to identify visual values and help establish management objectives, and the Visual Contrast Rating, which is used to protect the visual values. The focus of the study in the VRM Study Area was the Visual Contrast Rating. Information from the VRI component that was needed to perform the rating was provided by the BLM.

2.3.1 Visual Resource Inventory (VRI)

An important natural resource is the visual value of the landscape, and it is evaluated through a Visual Resource Inventory (VRI). Based on scenic quality, visual sensitivity, and distance zone, landscapes are assigned a VRI Class from I to IV; Class I has the highest visual value and Class IV the lowest. Special Areas such as Wilderness Areas, Wilderness Study Areas, and Wild and Scenic Rivers are normally designated as Class I.

2.3.1.1 Scenic quality

The scenic quality or visual appeal of a landscape is measured using factors such as landform, vegetation, water, color, adjacent scenery, scarcity, and cultural modifications.

2.3.1.2 Visual sensitivity

Visual sensitivity is defined as public concern for scenic quality and is measured using factors such as type of user, amount of use, and public interest (local, state, or national groups). Adjacent land uses, Special Areas (e.g., Wild and Scenic Rivers), and research containing indicators of visual sensitivity are also considered.

2.3.1.3 Distance zones

Delineation of distance zones is based on relative visibility from travel routes and observation points. There are three categories: foreground-middleground, background, and seldom-seen. Typically, a foreground-middleground zone extends from three to five miles beyond viewpoint, a background zone extends beyond the seen area of the foreground-middleground zone to a distance of fifteen miles, and seldom-seen zones are beyond the background or hidden from view.

2.3.2 VRM Class

VRI class is only one of many factors used to determine the more complex and important VRM Class designation, which provides the standard for planning, designing, and evaluating future projects. The BLM uses a process documented in its Resource Management Plan (RMP) to determine VRM Class. In addition to VRI class, other issues such as wildlife habitat, riparian habitat, vegetation, forestry and vegetative products, watershed areas, livestock grazing, cultural resources, recreation, wilderness areas, rights-of-way, utility corridors, minerals (e.g., gold, silver, copper, oil, gas), and fire management are considered during the RMP process. Input from the public is also an important component of the process (BLM, 2001). Through the RMP, VRM Classes are designated. In the simplest terms, VRI Class represents a categorical assessment of existing visual resources while VRM class includes not only a consideration of VRI Class but also of other resources to determine how an area will be managed.

VRM Classes range from I to IV and are accompanied by standard management objectives. (**Table 3**). Additional management objectives, referred to as Visual Resource Objectives, may also be adopted.

Table 3. VRM Classes and their standard management objectives.

VRM Class	Standard management objective	Explanation
I	Preserve the existing character of the landscape	Natural ecological change and very limited management activity are allowed. Change resulting from management activity should be very low and must not attract attention.
II	Retain the existing character of the landscape	Change resulting from management activity should be low. Activities may be visible, but should not attract the attention of the casual observer.
III	Partially retain the existing character of the landscape	Change resulting from management activity should be moderate. Activities may attract attention but should not dominate the view of the casual observer.
IV	Provide for management activities that require major modification of the existing landscape	Change resulting from management activities can be high. Activities may dominate the view and be the major focus of viewer attention.

2.3.3 Visual Contrast Rating

The second major component of the VRM is the Visual Contrast Rating, the purpose of which is to protect the visual value of the land when surface-disturbing projects or developments (e.g., construction of a road) are proposed. The rating determines whether potential visual impacts from the activities will comply with VRM Class management objectives, or whether adjustments will be required. The assumption underlying the contrast rating is that the degree to which an activity will affect visual value depends on how much visual contrast there will be between the project and existing landscape.

A Visual Contrast Rating is determined by comparing project features with major features of the existing landscape, i.e., land/waterbody, vegetation, and structures, using the four basic design elements of form, line, color, and texture. Design elements are rated according to the scale listed in **Table 4** and weighted as shown in **Table 5**. Scores can range from 0 (no contrast) to 90 (very high contrast). The worksheet that is used to complete a Visual Contrast Rating is shown in **Figs. 6a** and **6b**, on pages 18 and 19.

Table 4. Scale used to determine degree of contrast for the four basic design elements in a Visual Contrast Rating.

Degree of contrast	Points	Description
None	0	The element contrast is not visible or perceived
Weak	1	The element contrast can be seen but does not attract attention
Moderate	2	The element contrast begins to attract attention and begins to dominate the characteristic landscape
Strong	3	The element contrast demands attention, will not be overlooked, and is dominant in the landscape

Table 5. Portion of the Visual Contrast Rating form that is used to compute the score. Examples of scores have been filled in to illustrate how the highest possible score of 90 is attained.

Degree of Contrast		Features												Total
		Land/Water Body				Vegetation				Structures				
		Strong (3 pt)	Mod (2 pt)	Weak (1 pt)	None (0 pt)	Strong (3 pt)	Mod (2 pt)	Weak (1 pt)	None (0 pt)	Strong (3 pt)	Mod (2 pt)	Weak (1 pt)	None (0 pt)	
Elements	Form (x4)	12				12				12				36
	Line (x3)	9				9				9				27
	Color (x2)	6				6				6				18
	Texture (x1)	3				3				3				9
Total		30				30				30				90

The Visual Contrast Rating can be used as a guide for reducing visual impacts if the rating exceeds what is allowed. BLM managers can approve or deny the proposed project or attach mitigation stipulations that will bring it into compliance (BLM, 2000). Scores can range from 0 (no contrast) to 90 (very high contrast). The acceptable range of contrast for each VRM Class is listed in **Table 6**.

Table 6. VRM Classes and acceptable Visual Contrast Ratings.

VRM Class	Acceptable Visual Contrast Rating	Description
I	0	No contrast allowed
II	1 to 10	Contrast can be seen but does not attract attention
III	11 to 20	Contrast attracts attention and begins to dominate scene
IV	21 to 90	Contrast demands attention and cannot be overlooked by the average observer

2.4 Application of the VRM system to this study

In this section, the application of the VRM system to this study is explained by describing how the system was used to meet the five VRM Study Area objectives. The VRM system is shown in **Fig. 7** on page 20.

2.4.1 VRM Study Area Objective 1

Determine existing VRM Classes and Visual Resource Objectives.

2.4.1.1 Method

IPC requested VRM Classes and Visual Resource Objectives, if any, from the six BLM RAs that intersect or are adjacent to the Study Area.

Form 8400-4
(September 1985)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Date _____
District _____
Resource Area _____
Activity (program) _____

VISUAL CONTRAST RATING WORKSHEET
HELLS CANYON COMPLEX AESTHETIC
RESOURCE INVENTORY AND EVALUATION STUDY

SECTION A. PROJECT INFORMATION

1. Project Name	4. Location Township _____ Range _____ Section _____ LAT. _____ LONG. _____	5. Location Sketch
2. Key Observation Point		
3. VRM Class		

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM			
LINE			
COLOR			
TEXTURE			

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM			
LINE			
COLOR			
TEXTURE			

SECTION D. CONTRAST RATING SHORT TERM LONG TERM

DEGREE OF CONTRAST	FEATURES												2. Does project design meet visual resource management objectives? <input type="checkbox"/> Yes <input type="checkbox"/> No (Explain on reverse side)	
	LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)					
	3	2	1	0	3	2	1	0	3	2	1	0		
Form	4													3. Additional mitigating measures recommended <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Explain on reverse side) SUGGESTED PMAE MEASURE Evaluator's Names _____ Date _____
Line	3													
Color	2													
Texture	1													

Fig. 6a. Page 1 (of 2) of BLM Form 8400-4 Visual Contrast Rating Form. The form has been modified slightly for this study.

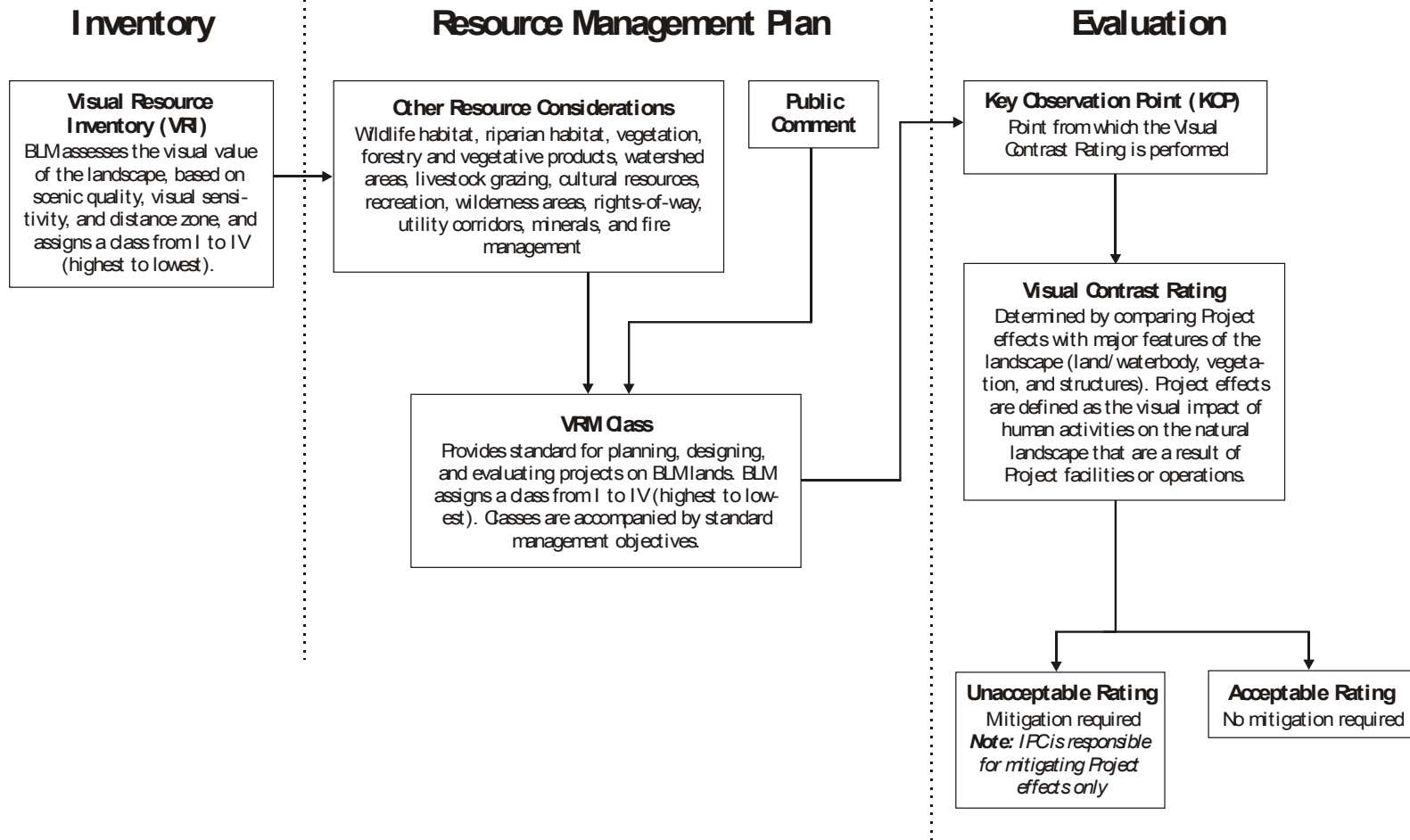


Fig. 7. An overview of the BLM's Visual Resource Management (VRM) system.

2.4.1.2 Results

As noted in **Section 2.2**, the BLM reorganized some of its RAs in Idaho during the study. For purposes of the study, DEA used the original RA names because the reorganization did not affect VRM Classes or Visual Resource Objectives. The BLM provided printed maps with polygons delineating the locations of VRM Classes in five of the six BLM RAs that intersect or are adjacent to the Study Area (Baker and Malheur in Oregon, and Cascade, Bruneau, and Snake River in Idaho). In the Shoshone RA, only VRI Classes were available. Details of the information are listed below. None of the information was provided in electronic format.

It had been hoped that the VRM Class information could be presented on a map of the VRM Study Area, but this was not feasible because it would have required manually transferring information from a number of sources into one source, a lengthy process. However, the VRM Class information was used to identify the VRM Class for each KOP, and this data is presented in the Viewpoint Summaries at the end of this report.

As described in **Section 2.3.2**, VRM Class designations are accompanied by standard management objectives, but additional objectives, referred to as Visual Resource Objectives, can be adopted by the BLM. No Visual Resource Objectives were found to have been adopted in the VRM Study Area.

2.4.1.2.1 Baker RA

BLM provided a photocopy of an unnamed map with hand-written notes and polygons indicating locations of VRM Class polygons. Later, DEA downloaded additional information from the *Baker Resource Management Plan Record of Decision, Rangeland Program Summary* Web site (BLM, 1989b) for VRM Class II locations shown in “Map 5: Off-Road Vehicles, Extensive Recreation Management Areas and Areas of High Visual Quality.” The BLM had previously sent DEA a printed version of the document, which provided guidance for the management of visual resources in a manner consistent with the standard VRM Class objectives, but it did not include Map 5 (BLM, 1989a).

2.4.1.2.2 Malheur RA

BLM provided “Map VRM-1: Visual Resource Management (Alternative C, preferred)” from the *Draft Southeastern Oregon Resource Management Plan/Environment Impact Statement* (BLM, 1998). It was determined that this information did not impact the Study Area, so the identification of Visual Resource Objectives was not determined by DEA. However, VRM Class information was used to extrapolate classifications from Malheur RA to adjacent, unclassified lands in the VRM Study Area, particularly near Farewell Bend State Park.

2.4.1.2.3 Cascade RA

BLM provided two types of mapping. The first was oversized photocopies of the “Cascade Resource Area North Half” and “South Half” maps, dated April 1985. The maps included no scale, but by measuring a known distance on the map, DEA determined the approximate scale

to be 1:100,000. These maps included hand-drafted polygons indicating the location of VRM Classes. The second type was a copy of “Map 3.8 Visual Resources Management” from the *Proposed Resource Management Plan and Environmental Impact Statement for the Cascade Resource Area* (BLM, 1987). This map also delineated VRM Class polygons. For the purposes of this study, DEA used the information in “Map 3.8 Visual Resources Management” as it was deemed most current. The *Cascade RMP* also provided direction for assessing contrast using the standard VRM Class objectives and determining that no additional Visual Resource Objectives were in place.

The Cascade RA was combined with the Bruneau RA into the Four Rivers RA by the BLM during the study.

2.4.1.2.4 Bruneau RA

BLM provided original hand-drafted polygons on BLM Edition Surface Management Status 1:100,000 scale maps; Boise (1993), Murphy (1990), Idaho City (1992), Mountain Home (1995), and Glens Ferry (1992) quads. No Visual Resource Objectives were identified by the BLM.

The Bruneau RA was combined with Cascade RA into the Four Rivers RA by the BLM during the study.

2.4.1.2.5 Shoshone RA

BLM provided a blackline print of “Shoshone District Visual Resource Management Class” map by Jarvis and Madry, October 1987. The maps included no scale, but by measuring a known distance on the map, DEA determined the approximate scale to be 1:128,000.

The BLM “has not designated formal Visual Resource Management Classes in a Land Use Plan” in the Shoshone RA (VanderVoet, 2000). The BLM confirmed that the polygons on the map were actually VRI class polygons, rather than VRM Class polygons. The BLM recommended that DEA use the VRI Classes as though they were VRM Classes in the study (VanderVoet, 2001). DEA found no additional Visual Resource Objectives.

2.4.1.2.6 Snake River RA

BLM provided original hand-drafted polygons on BLM Edition Surface Management Status 1:100,000 scale maps for Lake Walcott (1995) and Pocatello (1993) quads. The *Monument Proposed Resource Management Plan* (Snake River RA) (BLM, 1986a), which includes the VRM Study Area in its jurisdiction, does not include Visual Resource Objectives.

The Snake River RA has been renamed Burley Field Office.

2.4.2 VRM Study Area Objective 2

Identify Key Observation Points (KOPs).

2.4.2.1 Method

KOPs are the points from which the Visual Contrast Rating is performed and include the most critical viewpoints, e.g., from communities and road crossings, typical views in representative landscapes, and of specific Project features such as skyline crossings, river crossings, and substations. Potential KOPs for this study were identified in three ways:

- (1) In response to a request from IPC, the BLM suggested several potential KOPs through written and oral communication.
- (2) IPC provided recreational information including developed sites and dispersed sites with relatively high use.
- (3) DEA conducted a spatial analysis using GIS software (ArcView) and maps, including digital copies of BLM edition 1:100,000-scale topographic surface management status maps, to identify additional potential KOPs. The proximity to and/or intersection of Project facilities and operations with specific features and the exact locations at which Project effects were visible were determined. Specific features included travel routes (e.g., state highways, Scenic Byways, significant suburban and rural connectors), rivers, trails (e.g., the Lewis and Clark Trail, Idaho Centennial Trail), and other recreational hubs (e.g., Idaho State parks, local parks, lakes, reservoirs).

DEA listed the potential KOPs in a Microsoft Excel spreadsheet, assigned identification numbers beginning with #1, mapped them, and generated coordinates using ArcView. DEA then conducted a spatial analysis using ArcView to determine from which potential KOPs Project effects were visible. Potential KOPs were field tested during an eight-month period from March to October 2000 and in June 2001. Coordinates were verified using a Garmin 12X Global Positioning Unit (GPS).

2.4.2.2 Results

Fifty-nine (59) viewpoints in the VRM Study Area were identified as potential KOPs. Of the 59, 11 viewpoints were removed from consideration as KOPs during field testing because Project effects were not visible from the viewpoint or the site had less historical and/or landscape character than had been originally thought. One viewpoint (#26: Transmission Line 904, Paddock Tap) was initially determined to be a KOP but later removed because IPC indicated that the transmission line would be sold prior to IPC's submittal of its application for relicensing. The number of viewpoints that were identified as KOPs was therefore 47.

The Subgroup concurred with the removal of the 12 viewpoints from consideration as KOPs. However, rather than deleting them from the study, they were reclassified as Observed Points

(OPs), allowing DEA to document all viewpoints that were visited, a course of action that was requested by the Subgroup.

The 59 viewpoints (12 OPs and 47 KOPs) are listed in the Viewpoint Summaries at the end of this report, and locations are shown in **Fig. 8**. Factors that determined the designation of a viewpoint as an OP rather than a KOP are listed under “Comments” in the Viewpoint Summaries.

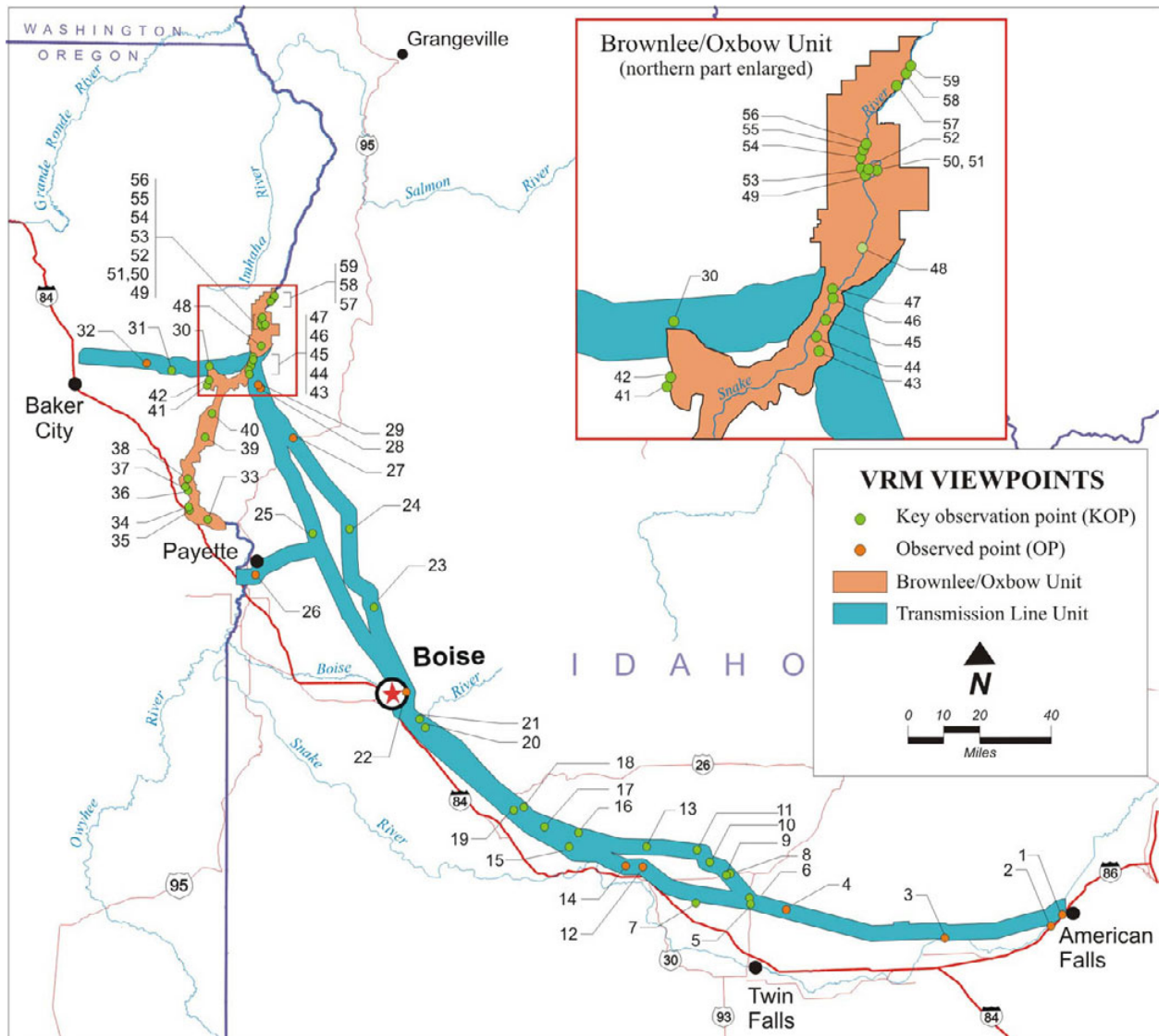


Fig. 8. The 59 viewpoints in the VRM Study Area.

2.4.3 VRM Study Area Objective 3

Perform Visual Contrast Ratings at KOPs to determine effects, if any, of Project facilities and/or operations on visual resources in the VRM Study Area for the Current/Proposed Operations scenario and for the Full Pool Run-of-River scenario.

2.4.3.1 Method

During a five-month period from April to August 2000, DEA visited each KOP, photographed the surrounding landscape, and performed the Visual Contrast Rating by completing BLM Form 8400-4 (Figs. 6a and 6b, on pages 18 and 19). The ratings were conducted by a landscape architect and an environmental planner trained in the VRM system. In the few instances when a rating was conducted by only one person, both people reviewed the rating together at the first opportunity using photographs taken during the rating. None of the reviews resulted in a change to the rating.

Visual Contrast Ratings for each KOP were performed by completing the form by hand in the field; data were entered electronically in the office. Copies of all Visual Contrast Rating forms and photographs are maintained by IPC.

The Visual Contrast Ratings were then used to determine if and how Project facilities and/or operations were affecting the visual quality of each KOP. For example, at a KOP from which a reservoir is visible, a drawdown of the water level may leave a demarcation on the exposed rocks along the edge of the reservoir. The demarcation would increase visual contrast and would therefore be considered a Project effect. In this study, the demarcation caused by the drawdown is referred to as the “drawdown effect.”

Project effects were determined first for the Current/Proposed Operations scenario, one of two scenarios that IPC has developed for its application for relicensing. The Current/Proposed Operations scenario is defined as the management regime under which the Project typically operates.

Project effects were then determined for the Full Pool Run-of-River scenario, the second scenario, which is defined as the management regime under which the reservoirs would be maintained at full-pool elevations and the volume of water entering the Project plus tributary inflow would equal outflow from the Project.

Comparing the two scenarios will help determine the extent of impacts that would occur in the affected environment as a result of IPC’s current/proposed operations during the new license term.

2.4.3.2 Results

Visual Contrast Ratings ranged from 0 (Viewpoint #33, Oasis Park) to 70 (Viewpoint #44, Woodhead Park) out of a possible score of 90 (0 indicates no contrast). Contrast scores for the KOPs are listed in Viewpoint Summaries at the end of this report.

Many contrast ratings were performed from a stationary position that under normal circumstances would be viewed from a moving position, such as from an automobile. This situation typically occurs in the Transmission Line Unit where, under normal circumstances, the effect is visible for only a short period as the motorist passes beneath the line. Therefore, it is possible that the effect results in a less significant visual impact than the Visual Contrast Rating would suggest.

It was not possible to perform all contrast ratings under the same field conditions. This is especially relevant to several KOPs adjacent to the reservoirs where water levels may vary significantly. In general, contrast ratings were performed when Brownlee Reservoir was drawn down at least 30 feet (per investigator's visual estimate). However, ratings adjacent to Brownlee Reservoir were conducted at five KOPs when the reservoir was near full pool. In these cases, the visual contrast was not as high as it might be under drawdown conditions. Contrasts at Viewpoints #33 (Oasis Park), #34 (Weiser Dunes), and #35 (Farewell Bend State Park) may increase when water levels are lower than levels at the time of the rating. These sites are at the upstream end of the Project in a reach of the reservoir that is notably broader than the downstream reaches confined by the Canyon. The sites may not be as susceptible to water-level fluctuations as sites farther downstream. Contrasts at Viewpoints #41 (Holcomb Park) and #42 (Hewitt Park) will increase when water levels are lower than levels at the time of the rating. These sites occur relatively close to Brownlee Dam and are therefore very susceptible to water-level fluctuations.

Project effects are visible from more locations than just the identified KOPs. In several cases, most notably adjacent to the reservoirs in the Brownlee/Oxbow Unit, the Project effects noted at a KOP actually represent typical conditions throughout the unit.

2.4.3.2.1 Classification of effects

It is extremely important to determine if effects are the result of Project facilities and/or operations or the result of activities not related to the Project. It is important because IPC is responsible only for mitigating Project effects. The Subgroup helped to develop classifications of effects and concurred with the classifications assigned in this report. DEA therefore classified effects into one of four categories:

- **Direct Fact (DF)** – The identified effect is indisputably a result of Project facilities and operations, and the effect exists without question. A transmission line and tower silhouetted against the horizon is an example of a Direct Fact.
- **Direct Hypothetical (DH)** – The identified effect, if it exists, may be a direct result of Project facilities and operations, but existing data is inconclusive or insufficient to determine whether the Project has actually caused it. The loss of sandy beaches at specific locations along the Snake River is an example of a Direct Hypothetical effect. IPC will use information from ongoing sediment and hydrology studies to determine if, and to what extent, sandy beaches have been lost and whether or not any loss is a result of the Project.
- **Indirect Fact (IF)** – The identified effect may be an indirect result of Project facilities and operations, and the effect exists without question. Damaged and/or destroyed vegetation resulting from increased recreational use is an example of an Indirect Fact. Whether or not the Project causes this effect may be in dispute since the link between the two are removed and uncertain.
- **Non-Project (NP)** – The visual or aesthetic contrast identified in the evaluation is not a result of Project facilities and operations.

All of the Project effects in the VRM Study Area were determined to be DFs. Effect classifications are documented in the Viewpoint Summaries at the end of this report.

2.4.3.2.2 Project effects: Current/Proposed Operations scenario

The contrast ratings revealed several Project effects that were common throughout the VRM Study Area: transmission structures silhouetted against the horizon, transmission structures intersecting or adjacent to travel corridors, power-generation facilities and substations, reservoir drawdown, alterations to vegetation, and hardscape elements. These effects are described below and in the Viewpoint Summaries at the end of this report.

Transmission structures silhouetted against the horizon. Transmission lines and towers were commonly silhouetted against the horizon throughout the Study Area (**Fig. 9**). Generally, fewer than five towers were silhouetted at most viewpoints. Depending on the distance from the viewpoint to the structure, contrasts in form and line were strong to moderate and contrasts in color



Fig. 9. Transmission lines and conductors silhouetted against the horizon (VP#30).

and texture were moderate to weak. Conductors (i.e., transmission lines) were highly reflective in sunny conditions and were also visible in overcast conditions. Safety balls, used to help aircraft see conductors, were present at only a few sites and increased the contrast of the conductors. Safety balls, however, are required by the Federal Aviation Administration (FAA) and cannot be removed.

Transmission structures intersecting or adjacent to travel corridor. Transmission lines, towers, and access and service roads also commonly crossed or paralleled travel corridors (**Fig. 10**). Similar to the previous effect, distance from viewpoint to structure and the number of towers



Fig. 10. Transmission lines crossing the travel corridor (VP#19).

visible dictated the relative degree of contrast. Generally, contrasts in line and form were strong to moderate and contrasts in color and texture were moder-

ate to weak. Views of structures were generally short-lived when intersecting a travel corridor and therefore had less effect than when paralleling a travel corridor. At some viewpoints, structures were also silhouetted on the horizon and thus increased the contrast. Often, non-Project transmission structures shared the same easement corridor as the Project structures. In these cases, the non-Project structures created as much or more visual contrast than the Project structures, thereby potentially nullifying the benefits of mitigating the Project structures.

Power-generating and substation facilities. Power-generating facilities that are visible from KOPs include the Brownlee and Oxbow dams, powerhouses, access roads, and appurtenant facilities, including substations (**Figs. 11**



Fig. 11. Substation facilities at Brownlee Dam.

and **12**). These facilities typically dominate views and create strong to moderate degrees of contrast in form, line, color, and texture.



Fig. 12. Power-generating facilities at Oxbow Dam (lower left).



Fig. 13. The Brownlee Cage protects Project facilities on the approach to Brownlee Dam.

The Brownlee Cage protects Project facilities from falling rocks on the approach to Brownlee Dam along Idaho State Route 71 (**Fig. 13**). The cage is constructed of steel beams, wire mesh, and support cables. The cage and road cut are visible from VP #46 and contribute to the Brownlee power-generating facility's strong contrast in form, line, color, and texture.

Transmission structures were also visible and augmented the contrast at the Brownlee and Oxbow facilities.

Reservoir drawdown. The drawdown effect is a result of the water-level fluctuations in the reservoirs and appears in the landscape as a distinct white- to buff-colored band along the perimeter of the reservoirs. The drawdown effect can be dramatic at Brownlee Reservoir (**Fig. 14**), where water levels can fluctuate as much as 101 feet in a season, although the reservoir has been fully drawn down only three times in the past 30 years. The effect is much less noticeable at Oxbow



Fig. 14. Drawdown effect at Brownlee Reservoir.

Reservoir (**Fig. 15**), where fluctuations typically range between three feet (summer weekends) and four feet (spring weekends). At Brownlee Reservoir, the drawdown effect typically results in weak contrasts in form and line, strong contrast in color, and moderate contrast in texture. At Oxbow Reservoir, the drawdown effect typically results in weak contrast in form, line, and texture, and moderate contrast in color.



Fig. 15. Drawdown effect at Dead Man's Spot at Oxbow Reservoir (VP #49).

Alterations to vegetation. Deviations from native vegetation created visual contrast and were generally limited to the Brownlee/Oxbow Unit. Two types of deviations were noted. The first appeared limited and occurred where fluctuating water levels created opportunities for annual weed species to colonize bare soil as reservoir water levels receded. In this case, the contrast ratings were typically low because the vegetation, thought to be non-native and potentially noxious, had no or weak contrast in form, line, color, and texture when viewed from the KOPs. The second deviation occurred where non-native plants were incorporated into the landscape at IPC facilities such as Woodhead Park (**Fig. 16**). In this case, the use of non-native plants and their placement in the landscape resulted in strong to moderate contrasts in form and line, moderate contrast in color, and weak contrast in texture.



Fig. 16. Non-native vegetation at Woodhead Park (VP #44).

Alterations to vegetation resulting from Project facilities and operations were not observed and therefore did not typically create contrast in the Transmission Line Unit. Vegetation common to this unit features low-growing scrub-shrub and grasses such as sage and bunchgrass. Because the vegetation does not grow tall enough to impact the transmission lines, aggressive maintenance techniques to clear the easements are not required and therefore do not cause contrast.

Hardscape elements. Hardscape elements include items such as site furnishings, parking areas, boat ramps, road, picnic shelters, and toilet facilities. These items are common at developed recreational sites such as Copperfield Park (**Fig. 17**) and at dispersed recreational sites throughout the Study Area. Hardscape elements generally created strong contrasts in form, line, and color, and moderate contrasts in texture. Exceptions to contrasting materials include the use of sun-bleached logs to direct vehicular traffic and parking at Spring Recreation Site (VP #37) and gravel, rather than concrete, for access roads and parking at McCormick Park (VP #47).



Fig. 17. Hardscape elements at Copperfield Park (VP #53).

2.4.3.2.3 Project effects: Full Pool Run-of-River scenario

In the VRM Study Area, the Project effects for the Full Pool Run-of-River scenario are the same as for the Current/Proposed Operations scenario with two exceptions. First, maintaining the full-pool elevation in the reservoirs would eliminate visual contrast created by the drawdown effect. Second, maintaining the full-pool elevation in the reservoirs would eliminate undesirable vegetation in the drawdown zone.

2.4.3.2.4 Non-Project effects

DEA identified several non-Project effects in the VRM Study Area. Typically, these effects result from improvements by others at recreational sites such as Steck Park. The effects impact the visual environment but are not subject to the FERC review process. Opportunities exist to coordinate with the appropriate third party to reduce visual contrast. These opportunities are noted under “Comments” in the Viewpoint Summaries at the end of this report and discussed in greater detail in **Chapter 4**.

2.4.4 VRM Study Area Objective 4

Determine compatibility of Project effects with VRM Classes and Visual Resource Objectives for the Current/Proposed Operations scenario.

2.4.4.1 Method

In its application for relicensing, IPC will propose its desired operational scenario, the Current/Proposed Operations scenario, for future operations. Therefore, this study addresses only Project compatibility against the Current/Proposed Operations scenario and not the Full Pool Run-of-River scenario. Because no Visual Resource Objectives were identified, determining compatibility defaulted to the standard VRM Class objectives. The Visual Contrast Ratings of KOPs were compared to the allowable range of contrast for the VRM Class of each KOP.

2.4.4.2 Results

Of 47 KOPs, Visual Contrast Ratings at 35 exceeded the acceptable level of contrast established by the standard VRM Class objectives. These sites are listed in **Table VS-2** in the introductory material to the Viewpoint Summaries at the end of this report.

It should be noted that, as discussed in **Section 2.4.3.2**, different water levels at KOPs along the reservoirs may increase or decrease the degree of contrast, thus potentially changing the Visual Contrast Rating. The ratings listed in this report were performed only once at each KOP.

In some cases, a Project effect occurred in two different adjacent VRM Classes. This occurred more often in the Brownlee/Oxbow Unit than in the Transmission Unit. In the Brownlee/Oxbow Unit, it was most common near the upstream end of Brownlee Reservoir where lands are classified as Class II on the Idaho side of the river and Classes III and IV on the Oregon side. In these situations, DEA used the more restrictive classification to determine compatibility.

As stated in **Section 2.1**, once the study was underway, BLM requested that existing VRM Classifications be reevaluated in portions of the VRM Study Area. When the reevaluation resulted in a recommendation that an existing classification be changed, Project compatibility with the recommended change was also then reevaluated.

DEA reevaluated portions of the Brownlee/Oxbow Unit, the results of which are included in **Appendix A**. Twenty-seven (27) KOPs (Viewpoints #33 – #59) were affected by the reevalu-

ation. In all instances, the reevaluation resulted in lower (i.e., less restrictive) VRI Classes. When the Visual Contrast Ratings for the 27 KOPs were compared against the VRI Classes, ten were found to be within the acceptable range of contrast, and 17 exceeded the acceptable range. The net result was that the Visual Contrast Rating at seven sites (Viewpoints #36, #37, #39 – #43) that were previously unacceptable became acceptable when compared against the existing VRM Classes.

The proposed VRI classes and the determination of acceptable contrast are included in the Viewpoint Summaries at the end of this report, should the BLM decide to adopt the recommendations.

2.4.5 VRM Study Area Objective 5

Identify appropriate PM&E for the Current/Proposed Operations scenario where needed.

2.4.5.1 Method

As noted above, IPC will propose the Current/Proposed Operations scenario in its application for relicensing. Therefore, this study identifies only PM&E for the Current/Proposed Operations scenario and not the Full Pool Run-of-River scenario. DEA identified specific mitigation measures where Project effects exceeded the contrast allowed by the respective VRM Class and any applicable Visual Resource Objectives. Suggested PM&E were based on a professional consensus of the investigators and documented in the Viewpoint Summaries.

2.4.5.2 Results

PM&E are needed to reduce the visual contrast of IPC facilities and operations at the 35 KOPs (out of 47) where the Visual Contrast Rating exceeds the acceptable range. It should be noted that (1) the water-level fluctuation effect at Viewpoints #31 – #33, #41, and #42 would be mitigated if the same effect is mitigated at other sites throughout the reservoir, and (2) modifying the color and texture of certain facilities and structures may conflict with the historic character of some sites. According to IPC, several facilities in the Study Area may be eligible for the National Register of Historic Places. Eligibility has been investigated in other IPC relicensing studies.

In some cases, a suggested PM&E may apply to more than one effect. In addition, some effects may have similar components that can be treated similarly. For example, access roads to transmission towers and to maintenance facilities are identified under different common effects, but similar techniques can be used to reduce contrast for both roads.

Very often, there are multiple ways to mitigate a Project effect, but only one may be appropriate at a particular site. The following sections list several ways of mitigating the most common Project effects in the VRM Study Area: transmission structures, access and service roads, power-generating and substation facilities, reservoir drawdown, alterations to vegetation, and hardscape elements.

2.4.5.2.1 Transmission structures

- Replace conductors with non-specular materials to reduce reflectivity and therefore contrast in line and color. Replacement should occur during the transmission line's normal maintenance cycle. Dull surfaces and hardware that cannot be painted.
- Paint towers to match the color of the landscape to reduce contrast in color. Matching the color of the surrounding landscape (i.e., the backdrop) will also reduce the visual contrast of form, line, and texture.
- In isolated cases, consider relocating towers to avoid silhouetting and therefore reduce contrast in form, line, color and texture. This measure is extreme and should be considered only where the need to reduce contrast is equally extreme.
- Provide education and interpretive signage and/or facilities where other measures are not reasonable.

2.4.5.2.2 Access and service roads

Access and service roads affect the visual environment and are common to several typical Project effects. Therefore, they are addressed separately, rather than as a part of another effect.

- Modify surface color, where reasonable, to match the surrounding landscape and reduce contrast in color. Matching the road color to the landscape will also decrease contrast in line as the road becomes less noticeable.
- Modify alignment in response to existing landform so the road blends into the landscape and minimizes excessive cuts and fills. Where feasible, combine and/or decommission multiple service roads to reduce contrast in form, line, color, and texture. Where alignment modification is not feasible, grade existing cut and fill slopes to blend into landscape.
- Revegetate cut and fill slopes and decommissioned road alignments using desirable vegetation (native species wherever possible).

2.4.5.2.3 Power-generating and substation facilities

- Modify the color of powerhouses, maintenance facilities, and appurtenances in the normal maintenance cycle to match the color of the surrounding landscape. Reducing the contrast in color will also reduce contrast in form, line, and texture. Dull surfaces that cannot be painted.
- Screen powerhouses, maintenance facilities, substations, and appurtenances using desirable vegetation (native species wherever possible). Providing effective screening will reduce contrast in form, line, color and texture.
- Organize and generally clean up facility yards and vicinity. Removing debris, unused materials and similar elements will reduce contrast in form, line, color, and texture.

- Modify the Brownlee Cage. The engineering limitations of modifying this structure are not currently known, but modifications should include materials and construction details that would minimize visual contrast to the degree possible.
- Provide education and interpretive signage and/or facilities where other measures are not reasonable.

2.4.5.2.4 Reservoir drawdown

- Moderate the water-level fluctuations in the reservoirs to minimize the drawdown effect. Minimizing the effect will reduce contrast in line and color. This may require approval from governmental agencies, which may or may not be obtainable.
- Maintain full-pool elevations in the reservoirs to eliminate the drawdown effect and contrasts in form, line, color, and texture. This may require approval from governmental agencies, which may or may not be obtainable.
- Provide education and interpretive signage and/or facilities where other measures are not reasonable.

2.4.5.2.5 Alterations to vegetation

- Maintain full-pool elevations in the reservoirs to eliminate undesirable vegetation in the drawdown zone. This may require approval from governmental agencies, which may or may not be obtainable. Although undesirable vegetation (e.g., invasive weedy species) typically results in weak to no visual contrast, undesirable vegetation should be mitigated.
- Modify landscaping (e.g., ornamental landscaping at Woodhead Park, VP #44) to mimic an indigenous condition using native species wherever possible. Modifications will reduce contrast in form, line, color and texture. Plantings should be functional, i.e., should provide shade, windbreaks, direct views, and circulation, and should screen undesirable views. It must be noted that the climate in the Study Area is exceptionally harsh and establishing vegetation may not be reasonable in some areas. The feasibility of establishing vegetation must be determined on a case-by-case basis.

2.4.5.2.6 Hardscape elements

- Modify and/or dull the color of hardscape elements to match the surrounding landscape and reduce contrast in color and line.
- Replace unnatural elements (e.g., Jersey barriers at McCormick Park, VP #47) with materials more consistent with the surrounding landscape to reduce contrast in form, line, color and texture.
- Incorporate compliance with visual standards (i.e., proposed aesthetic and design standards and guidelines discussed in **Chapter 4**) into IPC permit system for private facilities.

3 SMS STUDY

As described in **Chapter 1**, the Study Area was divided into two sections based on land ownership/management. The first section, the VRM Study Area, has been discussed earlier. The second section is comprised of lands managed by the USFS, very limited state-owned lands, and lands that are privately owned (**Fig. 1** on page 2). The USFS uses a scenery and aesthetic management protocol called the Scenery Management System (SMS) to manage its lands. Because most of the land in this section is owned and/or managed by the USFS, the SMS was used in this study for this area, referred to therefore as the SMS Study Area.

The chapter begins with goals and objectives of the SMS Study and description of the SMS Study Area. An overview of the SMS protocol follows. For purposes of this study, the protocol was deviated from slightly, and the deviations are described following the overview. Finally, the application of the protocol to each SMS Study Area Objective, including method and results, is discussed.

3.1 Goals and Objectives

The goals for the SMS Study Area were to establish existing conditions and recommend objectives in accordance with the SMS system, determine Project compatibility with those objectives, and suggest PM&E measures if and where objectives were not achieved. Specific SMS Study Area objectives were to:

- (1) Obtain information concerning user (constituent) preferences, values, and desires regarding the aesthetics of the SMS Study Area
- (2) Identify Special Places (SPs)
- (3) Describe the basic ecological factors that affect the aesthetics of the SMS Study Area
- (4) Develop a landscape character statement for each SP
- (5) Determine an existing scenic integrity level for each SP
- (6) Determine an existing ecological integrity level for each SP
- (7) Recommend a desired landscape character for each SP
- (8) Recommend a desired scenic integrity level for each SP
- (9) Identify Project facilities and operations at each SP and evaluate their effects on the aesthetics of each SP for the Current/Proposed Operations and Full Pool Run-of-River scenarios
- (10) Suggest PM&E where needed to achieve recommended desired landscape character and scenic integrity level for Current/Proposed Operations scenario

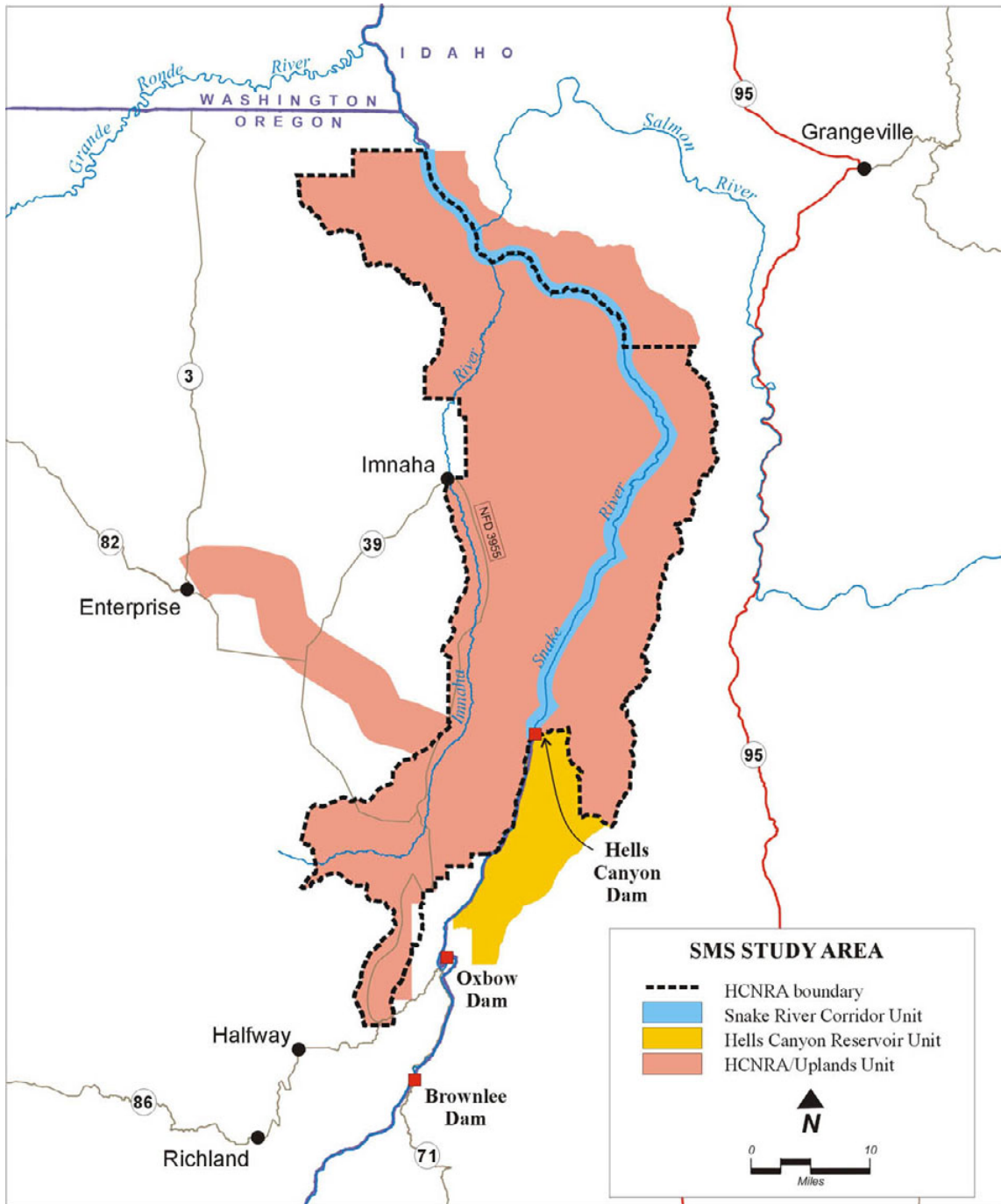


Fig. 18. SMS Study Area.

3.2 SMS Study Area

The SMS Study Area extends generally from Oxbow Dam downstream to the northern boundary of the HCNRA, excluding the BLM lands below Oxbow Dam, as noted above (Fig. 18).

The SMS Study Area was subdivided into three units:

- (1) Hells Canyon Reservoir Unit, including the rim-to-rim Canyon area between Oxbow and Hells Canyon Dam, and excluding the BLM lands belonging to the VRM Study Area
- (2) Snake River Corridor Unit, which follows the Wild and Scenic river corridor from Hells Canyon Dam to the northern border of the HCNRA and extends approximately 0.25 mile on each side of the high water mark
- (3) HCNRA Uplands Unit, which includes the remaining portion of the SMS Study Area

The SMS Study Area also includes the five transmission lines that traverse USFS lands. The transmission lines are listed in **Table 7** and shown in **Fig. 19**, on page 38.

Table 7. Transmission lines in the SMS Study Area and their kilovoltage (kV).

Line	Name	Location	kV
907	Oxbow to Lolo and Brownlee	Oxbow Dam to Palette Junction	230
908	Oxbow to Lolo	Palette Junction to Imnaha	230
910	Brownlee to Hells Canyon and Hells Canyon to Hurricane	Hells Canyon Dam to Palette Junction	230
913	Hells Canyon to Hurricane	Palette Junction to Enterprise, Oregon	230
945	Pine Creek to Hells Canyon	Pine Creek – Oxbow Tap – Ballard Park – Lime Point Creek – Big Bar Eagle Bar – Hells Canyon Big Bar Tap	69

3.3 Overview of the SMS

The overview is based on information contained in *Landscape Aesthetics, A Handbook for Scenery Management* (USFS, 1995), except where otherwise noted.

There are a number of federal laws that require federal land-management agencies to consider scenery and aesthetic resources in land-management planning, resource planning, and project design, implementation, and monitoring.³ Title 7, Code of Federal Regulations, section 2.7 (7 CFR 2.7) gives the chief of the USFS legal authority to issue directives concerning USFS operations. One of the directives is the SMS, a systematic method of determining the relative value and importance of scenery in a national forest and of managing the scenery.

The USFS uses different versions of the SMS for large- and small-scale investigations. The SMS Study Area (in this study) is considered by the USFS to be small-scale, and the version of the SMS that was used for this study is appropriate for this scale (Bacon, 2001). Only the small-scale version is described in the overview.

³ Wilderness Act of 1964, Wild and Scenic Rivers Act of 1968, National Trails System Act of 1968, National Environmental Policy Act (NEPA) of 1969, Environmental Quality Act of 1970, Forest and Rangeland Renewable Resources Planning Act of 1974, National Forest Management Act of 1976, Surface Mining Control and Reclamation Act of 1977, and Public Rangelands Improvement Act of 1978.

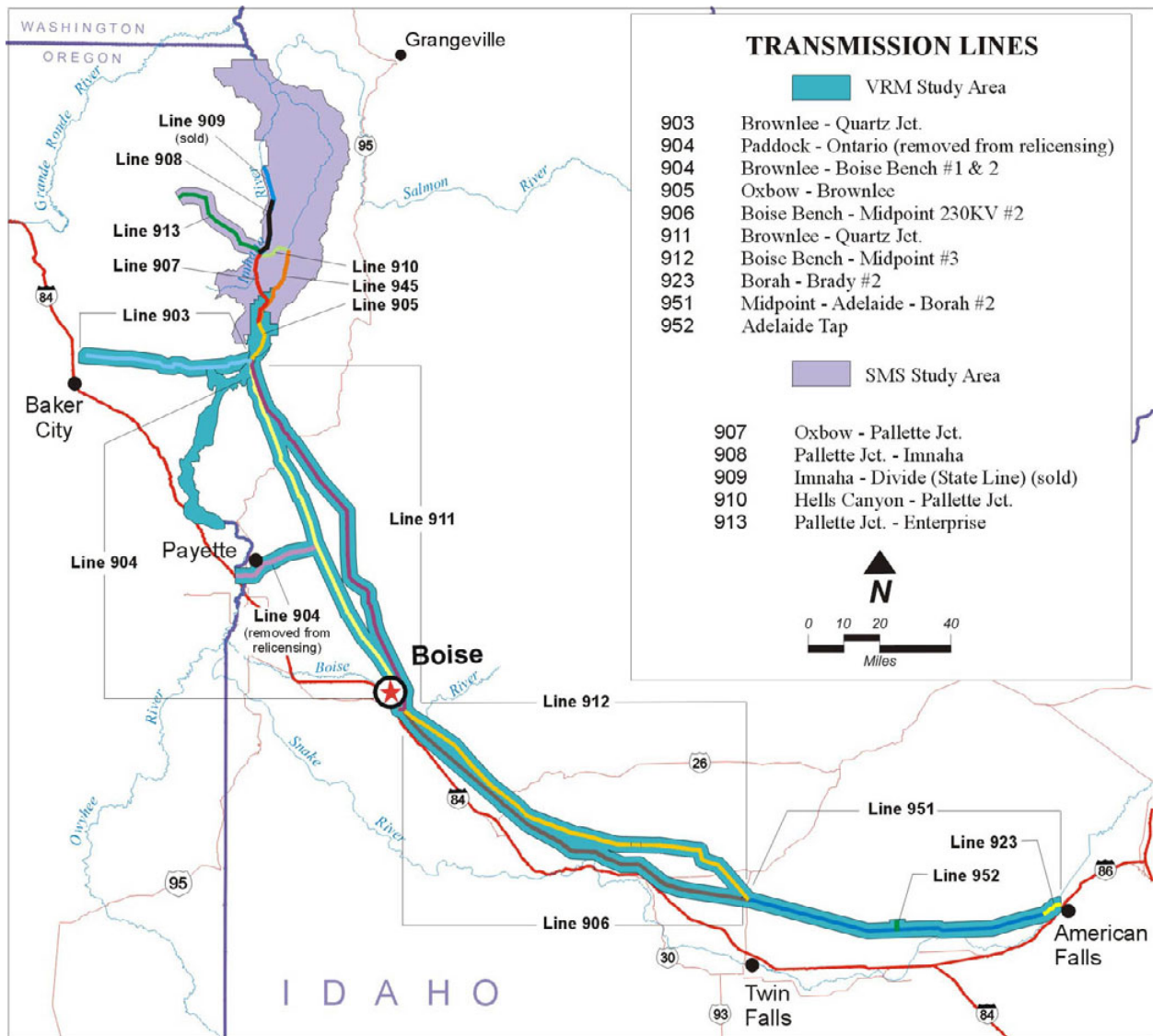


Fig. 19. Transmission lines in the Study Area.

Furthermore, because the SMS is currently undergoing some refinement, the version of the protocol that was used for this study has not yet been fully documented. However, the USFS reviewed this version and confirmed that it is the most current and therefore the most appropriate for this study (Slider, 2000).

Based on concepts from ecosystem management and social science, the SMS is used to inventory, analyze, and manage scenery and activities (e.g., timber harvesting, recreational development, utility line construction) on lands administered by the USFS. It is set in a landscape aesthetics context encompassing the five senses (sight, smell, hearing, taste, and touch). “Benefits, values, desires, and preferences regarding aesthetics and scenery” are integrated with biological, physical, social, and cultural resources for land-management planning (p. 11).

The major components of the SMS are:

- Constituent information and social ecology
- Special Places
- Ecological factors
- Existing landscape character
- Existing ecological integrity
- Existing scenic integrity
- Recommended landscape character
- Recommended scenic integrity
- Recommended PM&E
- Implementation and monitoring

The components are described below.

3.3.1 Constituent information

Information from constituents is an essential part of the SMS, and the purposes in collecting it are to determine (1) which places people consider special and (2) what people value, prefer, expect, and find acceptable in terms of landscape character and scenic integrity.

The cultural context of this information is extremely important. For example, European Americans visiting Hell's Canyon tend to value rock art as individual pieces of art, while Native Americans tend to value rock art in a sacred/spiritual context involving larger parts of the landscape. Cultural context is a part of social ecology, which "is concerned with the relationships between human populations and their environments" (University of California, Irvine, 2001) and includes consideration of the physical, emotional, spiritual, cultural, and economic well-being of people and communities.

Surveys, interviews, focus groups, and other similar methods are used to gather information from constituents. Observations of visitor behavior by land-use professionals familiar with user patterns and preferences are also an important source of constituent information.

Constituent information is used to help identify SPs, the particular locations that are evaluated for aesthetic quality (**Section 3.3.2**). Other constituent information is used indirectly in the development of existing landscape character statements (**Section 3.3.4**) and recommended landscape character (**Section 3.3.7**), and in the evaluation of scenic integrity (**Section 3.3.5**) and development of recommended scenic integrity (**Section 3.3.8**).

3.3.2 Special Places

The USFS refers to areas that will be analyzed and managed under the SMS protocol as “Special Places” (SPs) and defines them as specific locations and expanses in outdoor settings to which people have formed attachments. A place that is special to an individual is usually somehow connected to his or her beliefs, values, and feelings. Examples are traditional meeting places, historic places, and recreational, spiritual, cultural, and natural landscapes.

SPs can be quite small or encompass an entire area. For example, some people may consider all of the HCNRA an SP, particularly if their visits to the area have been limited. With more exploration, they may begin to consider smaller parts as special in some way.

SPs are identified by the USFS using input from constituents.

3.3.3 Ecological factors

Ecology is the study of the interrelationships between organisms or groups of organisms and their environment. More specifically, it is the study of actions or events that link organisms and their environment, such as disturbance, successional development, nutrient cycling, carbon sequestration, productivity, and decay. In the SMS, an aesthetic analysis of a landscape would be incomplete without an understanding of the ecological factors at work such as fire, erosion, and plant succession that may affect the aesthetics of the landscape.

Ecological information is obtained through a review of literature and field studies. It is used to help develop landscape character statements and to evaluate both scenic and ecological integrity.

3.3.4 Existing landscape character

Existing landscape character describes the positive landscape attributes in terms of people’s values, desires, and needs and provides an image of the area. Existing landscape character includes a history of the landscape, existing scenic and other positive attributes, and existing land-cover types.

Scenic attributes may include land-, rock-, and waterform, vegetation, and cultural features. Other positive attributes include those that are perceived by senses other than visual (hearing, smell, taste, and touch); for example, the sound that quaking aspens make or an especially pleasant fragrance from spring flowers.

A land-cover type is defined as land that is dominated by a relatively homogenous feature. There are three distinct categories of features: (1) vegetation (dominated by different plant lifeforms such as grass, forbs, shrubs, trees, or various combinations), (2) natural features (e.g., cliff/talus slopes, water, barren land), and (3) land use (e.g., residential, parks, industrial) (Slider, 2001). It should be noted that a vegetation feature can be identified as positive by constituents even though it may not be desirable from an ecosystem viewpoint, e.g., cheatgrass looks natural and therefore “positive” but is in fact a shallow-rooted, non-native annual that can negatively affect the ecosystem.

In short, the existing landscape character statement identifies those attributes that are considered positive such as interesting rock formations, water, historic structures, or pleasing vegetation. It does not include attributes that are considered negative such as transmission structures, unsightly road cuts, or development that is considered inconsistent with desired conditions.

A landscape character statement is developed for each SP and based on information from constituents, ecological factors, a review of literature, and field studies. The statement is then used as a baseline from which to measure scenic integrity and to develop recommended landscape character statements.

3.3.5 Existing scenic integrity

Scenic integrity is an evaluation of the scenic intactness and wholeness of a landscape in terms of how much negative deviation there is from the existing landscape character. Negative deviations are often but not always the result of visual disturbances created by human activity. The level of scenic integrity is rated according to a six-level scale from very high to unacceptably low. Levels are defined in **Section 3.5.5.1**.

The existing landscape character statement is used as a baseline for evaluating scenic integrity. For example, if the existing landscape character statement for a particular view identifies a historic barn and corral complex as desirable, then the contemporary ranch house adjacent to the complex could be considered a negative deviation from the existing landscape character, and thus a detractor from scenic integrity. The evaluation is made through field studies, an inspection of site photographs, and a review of constituent information. Existing scenic integrity is used as a baseline for recommended scenic integrity.

3.3.6 Existing ecological integrity

Ecological integrity is an evaluation of the ecological intactness and wholeness of a landscape in terms of how much negative deviation there is from a sustainable, resilient, healthy landscape. Ecological integrity is determined by an ecologist and is done through a review of literature and field studies. There are three levels — high, moderate, and low. Land use is considered in determining ecological integrity and is discussed in terms of cover type, similar to plant assemblages. Ecological integrity is used in the development of recommended landscape character statements.

Because of the many variables affecting ecological integrity, desired levels of ecological integrity are not recommended in the SMS. Instead, recommendations are generally limited to moving plant assemblages toward stable and/or climax communities where possible. Recommendations are included in recommended landscape character.

3.3.7 Recommended landscape character

A recommended landscape character is one that can be sustained over time (i.e., has a high degree of ecological integrity) and simultaneously satisfies the values, desires, and needs of the

constituents. Recommendations are determined by a review of constituent information, ecological factors, existing landscape character, and ecological integrity.

3.3.8 Recommended scenic integrity

Existing scenic integrity is used as a baseline for recommended scenic integrity, which is determined primarily by a professional consensus of the investigators. Cost and feasibility are important considerations.

In some cases, the scenic integrity level required to achieve a recommended landscape character may be different than the level required to maintain the character; these levels may be thought of as short- and long-term, respectively. For example, constituents may accept a scenic integrity level of low that is the result of a necessary ground-disturbing activity such as clearing and revegetating in order to achieve a future high level of scenic integrity.

3.3.9 Recommended PM&E

Recommended PM&E are established by the SMS with the intention of reducing negative attributes of scenic integrity and moving the landscape toward the recommended landscape character.

3.3.10 Implementation and monitoring

If there are differences between the existing and recommended landscape character and/or between the existing and recommended scenic integrity, a transition strategy is developed and implemented. Monitoring then occurs at regular intervals to ensure the strategy is successful.

3.4 Deviations from the SMS

For this study, there were four deviations from the SMS protocol: (1) existing ecological integrity was limited to a consideration of vegetation, (2) the names of certain components were modified to be consistent with other IPC technical reports, (3) Project effects were identified and evaluated since the goal was to determine IPC's effect on aesthetic resources, and (4) the implementation and monitoring component was not addressed because it will be addressed by others at a future time.

3.4.1 Existing ecological integrity

Ecological integrity normally consists of an evaluation of hydrology (including sedimentation), vegetation (including forest, shrub, and grassland) and aquatics. Hydrology, sedimentation, and aquatics in the SMS Study Area are addressed in other portions of IPC's application for relicensing, and the results were not available for this study. Therefore, ecological integrity reflects only an evaluation of vegetation (with some wildlife implications). The results concerning sedimenta-

tion and hydrology in issues such as the potential loss of sandy beaches will be considered by IPC prior to completing its application for relicensing.

3.4.2 Modifications of component names

“Recommended landscape character” has been changed to “recommended desired landscape character,” and “recommended scenic integrity” has been changed to “recommended desired scenic integrity” to make terminology consistent with other IPC technical reports supporting relicensing.

3.4.3 Project effects

All negative effects to landscape character are considered in the determination of existing and recommended scenic integrity levels, but because Project effects are the focus of this study, they are identified and classified separately. The classification system is defined in **Section 3.5.9.2.1**.

3.4.4 Implementation and monitoring

The last component of the SMS, implementing and monitoring recommended improvements, is outside the scope of this study. Decisions about these activities will be made by IPC.

3.5 Application of the SMS to this study

In this section, the application of the SMS to this study is explained by describing how the system was used to meet the ten SMS Study Area objectives. The SMS protocol that was used in this study is shown in **Fig. 20**, on page 44.

3.5.1 SMS Study Area Objective 1

Obtain information concerning user (constituent) preferences, values, and desires regarding the aesthetics of the SMS Study Area.

3.5.1.1 Method

Information from constituents (defined for this study as people who have visited the Study Area) was obtained in four ways: (1) on-site surveys, (2) mail-in surveys, (3) focus groups, and (4) observations by land-management professionals familiar with user patterns and preferences. Methods of selecting participants for the first three were determined by the Subgroup.

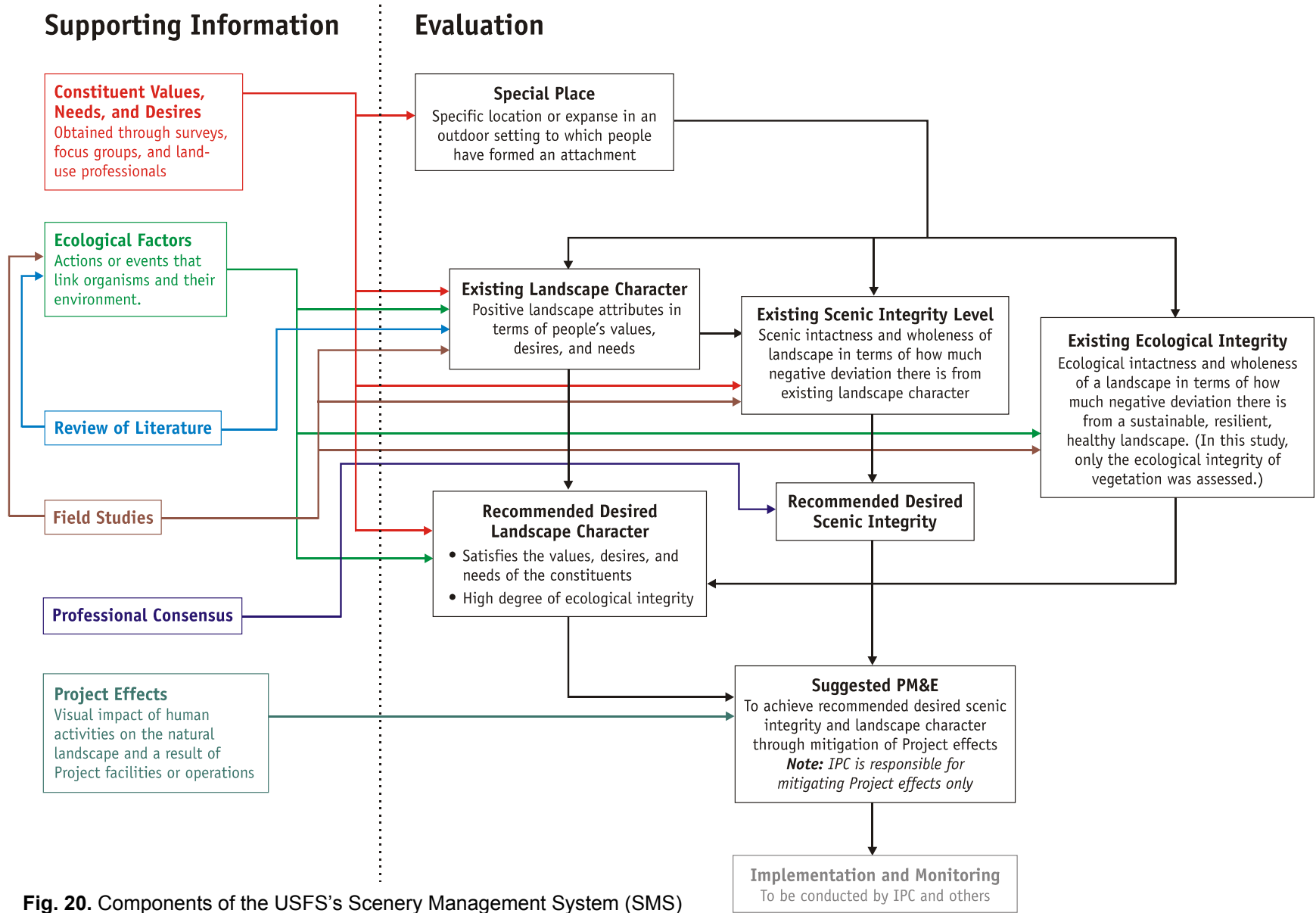


Fig. 20. Components of the USFS's Scenery Management System (SMS) protocol, as used in this study.

3.5.1.1.1 On-site surveys

IPC has an ongoing recreational survey program on the IPC reservoirs, in which people are surveyed periodically about recreational activities. Surveys are completed by IPC employees at randomly selected locations. See **Appendix B** for a copy of the survey.

One portion of the on-site survey was deemed relevant to this study. The portion contains four open-ended questions about special places in the reservoir areas and is preceded by this statement: “In the following four questions, we are interested in your opinions concerning the aesthetics — the look, sound, smell, and feel — of special places within the Oxbow, Brownlee, and Hells Canyon reservoir areas.” Of the three reservoirs, only Hells Canyon Reservoir is in the SMS Study Area, so comments regarding the other two reservoirs were not compiled.

The open-ended questions are:

- What specific places within these reservoir areas have a special meaning or attraction for you? Please try to be as specific as possible.
- What do you like about those places?
- Are there places within these reservoir areas that you do not like? Please try to be as specific as possible.
- What do you not like about those places?

3.5.1.1.2 Mail-in surveys

Approximately 440 people were randomly selected from the participants of the on-site interview to receive mail-in surveys, the purpose of which was to obtain information concerning constituents’ preferences, values, and expectations regarding aesthetics and scenic quality. The names of people who completed and returned the mail-in survey by the deadline were entered in a drawing for ten \$100 cash prizes and one grand prize, a \$1,000 gift certificate for Cabela’s (outdoor recreational gear). See **Appendix C** for a copy of the survey.

The survey was divided into three sections. In Section 1, participants were asked to look at 33 photos depicting scenes within the Study Area and to rate each one on a scale from 1 to 7 (1 = dislike very much; 7 = like very much). The photographs depicted a range of landscape characters and levels of scenic integrity. In Section 2, participants were asked to rate 10 statements regarding aesthetic quality on a scale of 1 to 5 (1 = agree very much; 5 = disagree very much). In Section 3, participants were asked to prioritize 8 photographs depicting different types of landscapes (e.g., a landscape with a river flowing through a deep, rugged canyon; a stagnant, horizontal landscape with vegetation dominated by low grasses) in terms of importance (1 = most important; 8 = least important). At the end of Section 3, participants were asked for general comments on the aesthetic quality of the Hells Canyon area.

3.5.1.1.3 Focus groups

The objectives of the focus groups were to determine (1) which places within the SMS Study Area participants consider special in some way, and (2) what participants value, prefer, expect and find acceptable in terms of aesthetics and scenic quality.

Five meeting sites were selected. To obtain a diversity of opinion and perspective, large, metropolitan areas (Boise, Idaho, and Portland, Oregon) and small, rural communities (Lewiston and Weiser, Idaho, and Halfway, Oregon) were chosen as sites. It was also important that three of the sites (Lewiston, Weiser, and Halfway) were quite close to the SMS Study Area, and the other two were much farther away.

Participants were chosen by sorting the addresses (according to zip code) of people who participated in the on-site survey (**Section 3.5.1.1.1**). People who lived near one of the meeting sites were mailed an invitation approximately two weeks before the meeting and offered \$20 and refreshments to attend the meeting. A total of 771 people were invited.

At the meetings, the mail-in survey (**Section 3.5.1.1.2**) was presented as a slide show, and participants were asked to record their responses on a printed copy of the survey. See **Section 3.5.1.1.2** for a description of the three sections of the survey.

Participants were also asked to express verbally what they liked or disliked about the photographs, and their responses were noted. This information was not obtained in the mail-in survey. A discussion about the definition of a special or favorite place followed, and participants were asked to identify a place that was special to them and to explain why. Meetings generally lasted about two hours.

Table 8 lists the locations and dates of the five focus group meetings.

Table 8. Locations and dates of the focus group meetings.

Location	Date
Lewiston, Idaho	Monday, October 16, 2000
Halfway, Oregon	Tuesday, October 17, 2000
Weiser, Idaho	Wednesday, October 18, 2000
Boise, Idaho	Thursday, October 19, 2000
Portland, Oregon	Tuesday, October 24, 2000

3.5.1.1.4 Observations of land-management professionals

This information was obtained from a USFS landscape architect with 12 years of experience, an HCNRA archaeologist (retired) with more than 20 years of experience in Hells Canyon, and three IPC recreation specialists who have spent many hours observing visitor behavior on the three reservoirs and talking to people about their recreational choices. All interviews were conducted by the investigators during 2000 and took place in the field, in an office, or via telephone.

The interviews included these questions:

- (1) What sites or areas in the Hells Canyon vicinity seem to be special to people?
- (2) What attachments do they seem to have for the sites?
- (3) What behavior do they exhibit at each site?
- (4) Is there anything special about a particular site's character or the views from it?
- (5) Are there aspects of the site that people do not seem to like?

3.5.1.2 Results

As described in **Section 3.5.1.1**, information from constituents (defined for this study as people who have visited the Study Area) was obtained in four ways: (1) on-site surveys, (2) mail-in surveys, (3) focus groups, and (4) observations by land-management professionals familiar with constituent patterns of behavior and preferences. Results that are specific to each method are presented first (e.g., how many people attended the focus group meetings). Results that contain similar types of information from two or more methods are combined and presented second. The combined results are divided into four categories: (1) 33 photographs depicting various types of landscapes that were rated in terms of visual appeal, (2) 10 statements about aesthetic quality that were rated in terms of agreement or disagreement, (3) 8 photos depicting various types of landscapes that were ranked in terms of importance, and (4) general comments from constituents about the aesthetics of the Study Area. It must be noted that numerical results have not been statistically analyzed, and conclusions therefore reflect suggested trends only.

3.5.1.2.1 Results specific to each method

IPC completed 6,725 on-site surveys in 2000. Approximately 1,125 contained responses about SPs within the Hells Canyon Reservoir, which is in the SMS Study Area. Of the 440 mail-in surveys that were mailed, 54 percent (236) were returned. Of the 771 people who were invited to focus group meetings, 10 percent (76) attended. **Table 9** lists attendance by meeting location and date. Finally, three formal interviews and several informal discussions with land-use professionals took place in 2000.

Table 9. Attendance at the focus group meetings.

Location	Date	Number attending
Lewiston, Idaho	Monday, October 16, 2000	10
Halfway, Oregon	Tuesday, October 17, 2000	20
Weiser, Idaho	Wednesday, October 18, 2000	23
Boise, Idaho	Thursday, October 19, 2000	14
Portland, Oregon	Tuesday, October 24, 2000	9
Total		76

3.5.1.2.2 Combined results

Visual appeal of 33 photographs of landscapes. Constituents who completed the mail-in survey and participated in the five focus group meetings rated 33 photographs depicting a range of landscape characters and levels of scenic integrity on a scale from 1 to 7 (1 = dislike very much; 7 = like very much). Of 312 surveys (236 returned from the mail-in survey and 76 responded to during the focus groups), 305 had complete responses. Incomplete responses were not included in the results. The responses were averaged and are presented in **Figs. 21a-c**.

Photo #15, an image of the rugged walls of Hells Canyon and nearby Wallowa Mountains, received the highest score of 6.6, indicating strong appeal. Photo #17, an image of a hillside with prominent transmission lines, a silhouetted steel lattice tower, and a dirt access road, received the lowest score of 4.1, indicating neutral appeal.

Photos #16 and #25, images of rugged landscapes in which the water-level fluctuation effect on the Snake River is noticeable, received a score of 6.2, indicating strong appeal. Images with transmission lines and access roads as significant visual features in otherwise natural landscapes (Photos #20, #23, and #17) received scores of 4.9, 4.8, and 4.1, respectively, indicating neutral appeal. The scores for these five photos may imply that constituents are generally tolerant of the visual impact of these effects.

Constituents were neutral about images with significant development, such as Oxbow Village (Photo #14), Hells Canyon Dam (Photo #18), and Oxbow Dam (Photo # 31). Scores for these photos were 4.9, 4.9, and 4.4, respectively.

Water is present in 19 of the 33 photos, and scores for these photos ranged from 6.5 (strong appeal) to 4.4 (neutral appeal), suggesting water is a more positive than negative visual element.

The photos fell into three groups. The group of photos with the highest scores, 6.0 and above, were images of relatively undisturbed, dramatic images of the Canyon and surrounding landscape. Half of these photos (six of twelve) included Project effects. Images with the middle scores, 5.9 to 5.1, included noticeable human alterations such as road cuts, distant transmission lines, and limited development. Most of these photos (ten of twelve) included Project effects. Images with the lowest scores, 4.9 to 4.1, included substantial human alterations such as transmission lines silhouetted or in the foreground, roads, dams, and significant development. All of these photos (nine of nine) included Project effects.

Finally, it must be noted that several variables (not just Project effects) exist in the 33 photos that may have affected viewer opinion. These variables include variety in the landscape, the presence of sky, and scale. Determining the effect of these variables on the ranking is beyond the scope of this study.

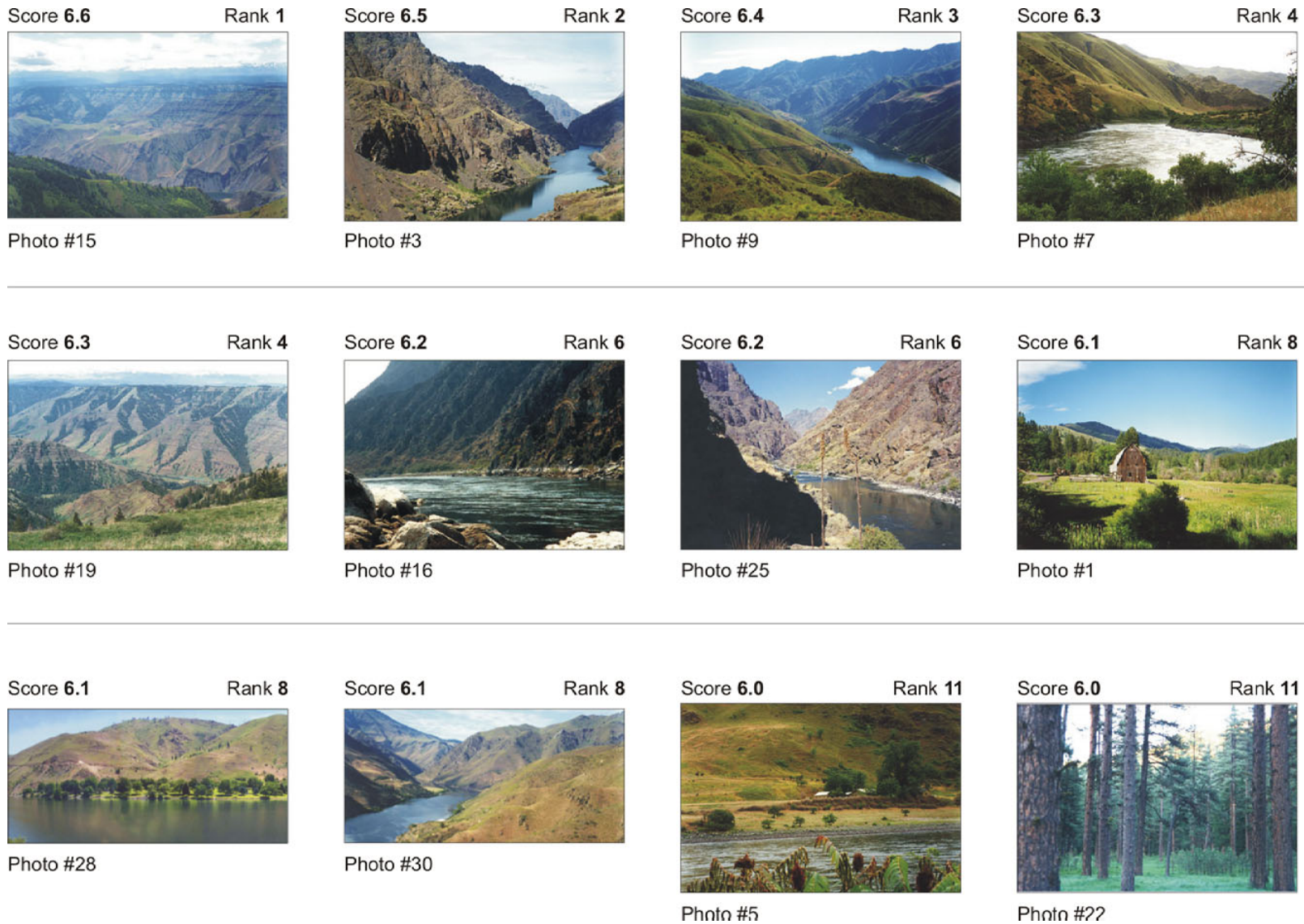


Fig. 21a. Of 33 photographs of landscapes rated by 305 constituents, these photos scored the highest (6.0 to 6.6). Photos were rated on a scale of 1 to 7 (1 = dislike very much; 7 = like very much). Rank, photo number, and average score are shown.

Score 5.9 Rank 13



Photo #33

Score 5.8 Rank 14



Photo #21

Score 5.7 Rank 15



Photo #27

Score 5.6 Rank 16



Photo #10

Score 5.5 Rank 17



Photo #12

Score 5.3 Rank 18



Photo #4

Score 5.3 Rank 18



Photo #13

Score 5.2 Rank 20



Photo #2

Score 5.2 Rank 20



Photo #11

Score 5.2 Rank 20



Photo #8

Score 5.1 Rank 23



Photo #29

Score 5.1 Rank 23



Photo #6

Fig. 21b. Of 33 photographs of landscapes rated by 305 constituents, these photos scored in the mid-range of all the scores (5.1 to 5.9). Photos were rated on a scale of 1 to 7 (1 = dislike very much; 7 = like very much). Rank, photo number, and average score are shown.

Score **4.9** Rank **25**



Photo #18

Score **4.9** Rank **25**



Photo #14

Score **4.9** Rank **25**



Photo #20

Score **4.9** Rank **25**



Photo #24

Score **4.8** Rank **29**



Photo #23

Score **4.4** Rank **30**



Photo #31

Score **4.3** Rank **31**



Photo #32

Score **4.2** Rank **32**



Photo #26

Score **4.1** Rank **33**

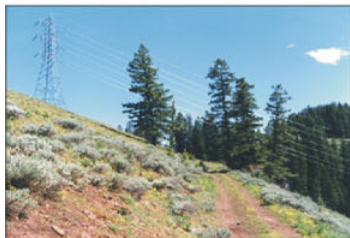


Photo #17

Fig. 21c. Of 33 photographs of landscapes rated by 305 constituents, these photos scored the lowest (4.1 to 4.9). Photos were rated on a scale of 1 to 7 (1 = dislike very much; 7 = like very much). Rank, photo number, and average score are shown.

Responses to ten statements about aesthetic quality. Constituents who completed the mail-in survey and participated in two focus group meetings in Boise, Idaho, and Portland, Oregon, (total = 255) responded to 10 statements regarding aesthetic quality in terms of how much they agreed or disagreed with the statements on a scale of 1 to 5 (1 = strongly disagree; 5 = strongly agree). The responses were averaged and are presented in **Table 10**.

Table 10. Average rating by 255 constituents of statements about aesthetic quality on a scale of 1 to 5 (1 = strongly disagree; 5 = strongly agree).

Statement	Average response
People interact with the environment in three ways: physically, mentally, and spiritually.	4.5
High quality scenery, especially as it relates to the natural landscape, enhances people's lives and benefits society as a whole.	4.3
As a region's human population continues to grow, the value of undeveloped places increases.	4.2
Human alterations to the land can occur in a landscape without the loss of scenic quality.	3.8
The value of land or water is defined by how it is used.	3.7
Working landscapes are the places where people earn a living, and natural landscapes are the places where people seek recreational experiences.	3.6
Natural resources are the raw materials of economic progress and need to be identified and used for economic benefit.	3.3
My awareness of scenic attractiveness depends directly on the type of activity I am involved in.	3.3
Alteration of the natural environment is the price that must be paid for economic development.	2.9
Generally, if I cannot see the visually disruptive development, I am not concerned about it.	2.6

DEA infers from these results that constituents generally agree that people interact with the environment physically, mentally, and spiritually, and that scenery with high quality is valuable. The statement regarding loss of scenic quality received an average score of 3.8, suggesting constituents somewhat agree that human alterations can occur without the loss of scenic quality. Because many scores range between 2.0 and 4.0, the rankings also suggest that constituents are uncertain about many of the statements presented in the survey.

Ranked importance of 8 photographs of landscapes. Constituents who completed the mail-in survey and participated in the five focus group meetings ranked 8 photographs depicting different types of landscapes (1 = most important; 8 = least important). Of the 312 surveys that were returned (236 from the mail-in survey and 76 from the focus groups), 299 had complete responses. Incomplete responses were not included in the results. The responses were averaged and are presented in **Fig. 22**.

Score 2.13 Rank 1 (of 8)



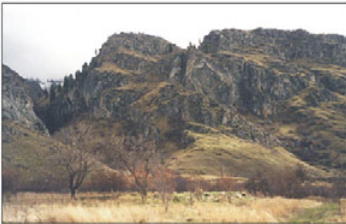
Score 3.4 Rank 2 (of 8)



Score 3.43 Rank 3 (of 8)



Score 4.08 Rank 4 (of 8)



Score 4.56 Rank 5 (of 8)



Score 5.0 Rank 6 (of 8)



Score 5.63 Rank 7 (of 8)



Score 6.63 Rank 8 (of 8)

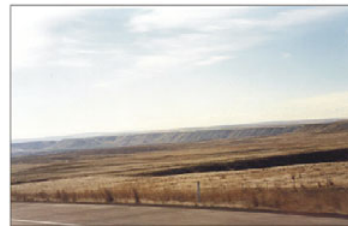


Fig. 22. Average ranking of 8 photographs of landscapes by 299 constituents on a scale of 1 to 8 (1 = most important; 8 = least important).

The photo that was ranked most important was a dramatic image of Hells Canyon, and the photo ranked least important was of a flat rangeland with limited distinguishing characteristics. In general, images suggesting a sense of rugged wilderness (e.g., Hells Canyon) were ranked more highly than the images depicting less rugged landscapes. The two images including water (Snake River and Brownlee Reservoir) were ranked first and second. Images that included obvious human impact (e.g., fences, roads, and structures) were ranked fifth, seventh, and eighth.

Comments about aesthetics in the Study Area. The following sections include information on Special Places named by constituents, comments made in the mail-in surveys and focus group meetings, and comments from land-use professionals regarding their observations of constituents.

SPs named by participants of the on-site surveys and focus groups. The places that were named by participants as special (and therefore as potential SPs for this study) are listed in **Table 11**. Of

the sites listed, 23 out of 53 have some development. Approximately 1,200 constituents are represented in the list.

Table 11. Potential SPs named by participants of the on-site survey and focus groups.

Places named as special	Reasons
Barton Cabin – Battle Creek	Fishing
Big Bar Airstrip	Scenery, solitude, fishing, wildlife, personal history, history, vegetation
Big Bar Airstrip and Campsite	Nice picnic area, boat launch
Black Lake	No reason given
Black Point	Scenery, views, fishing
Cottonwood Rapids	Good camping site
Deep Creek	Fishing, trail
Dry Diggins View	No reason given
Duck Lake/Doe Creek	No reason given
Eagle Bar	Camping/fishing, personal history, seclusion
Flat Iron Dry Gulch – Sawpit Creek	Hunting
Freezeout Saddle Trailhead	No reason given
Gore Gulch	Wildlife
Granite Rapids	No reason given
Hat Point Lookout	Rafting, camping, scenery, view
Heaven’s Gate Scenic Overlook	View
Hell’s Canyon Dam/ Hell’s Canyon Creek	Steelhead fishing, scenic, Christmas Day fishing trip, good launch facility
Hell’s Canyon Dam	Scenery, history, personal history, seclusion, facilities, vegetation, blackberries
Hell’s Canyon Park	Views, fishing, boating, vegetation, solitude, access, warm water, blackberries
Hell’s Canyon Visitors Information Center	Nice center, wildlife, viewing, trail access, hiking
Imnaha lower canyon (South of Mountain Chief Mine)	Beautiful, scenic
Indian Crossing Campground	No reason given
Johnson Bar Landing	No reason given
Kinney Point Overlook	No reason given
Kirkwood Ranch	Great rafting and jetboat stop
Kleinschmidt Grade Overlook	Scenery, out of Canyon, fishing, wildlife, off-roading
Lake Fork campground	Uncrowded camping
Little Granite Creek (Ridge at South)	Shed antler hunting
Lower Pittsburg Landing	No reason given
McGraw Creek	Primitive camping, good fishing
McGraw Lookout	Amazing views, superb photo site, adequate parking
McGraw Trailhead	Scenery, ruggedness

Table 11. Potential SPs named by participants of the on-site survey and focus groups (cont.).

Places named as special	Reasons
Ollokot Campground	Isolated, peaceful
Pine Bar	Good camping site
Pittsburg Landing	Solitude, rafting, fishing
South Hell's Canyon Dam	Like picnic table under cliff, picnic with friend, saw wildlife, scenic
Saddle Creek	Camping site
Salmon and Snake River Confluence	Focal point of two great watersheds of North America, great national area; nice stop
Sand Dunes Pit Houses	Swimming, fishing
Sheep Lake	Backpacking
Sheep Rock Overlook	Nature trail
Smith Mt. Overlook	Great lookout
Steamboat Creek	Wilderness
Steep Creek	Nice beach
Stud Creek	Nice area, fishing, hiking
Suicide Point	No reason given
Temperence Creek	No reason given
Upper Pittsburg Landing	Hiking
Wallow Loop Road	No reason given
Wallowa Mt. Loop	Excellent roadside camping
Warm Springs	Springs
Western National Recreational Trail (Summit Ridge)	No reason given
Wild Sheep Rapids	No reason given

Comments from participants of the mail-in survey. Approximately 43 percent said the scenic beauty and quality of the Hells Canyon area were good to high. Some said the area is one of their favorite places, a good place to get away, a spiritual place, and one that creates a feeling of peace. Other comments referred positively to boating, fishing, rafting, exciting wildlife, diversity, camping, and well-maintained facilities. Some people said that the area provided access to a wide range of recreational activities but that access should be controlled.

Several people mentioned that there is a need for more shade trees, and that some facilities are overdeveloped. Some wanted to leave the landscape as natural as possible, although they realized that landscapes must sometimes be altered. Some commented on the negative attributes of power facilities and power lines but also said they realized that power facilities, dams, and power lines are necessary and provide economical power for homes and industry. Still others said that the limited development that has occurred has not harmed the aesthetic value of the Canyon area as a whole.

Comments from the focus groups. Comments are divided into positive and negative and listed in **Table 12.**

Table 12. Comments about aesthetics in the Study Area from the focus groups.

Positive	Negative
Scenery and natural landscape, remote, feeling of peace	Power lines and poles
Water, reflections and the stillness	Some park facilities overdeveloped in addition to roads and structures detracting from the natural landscape
Vegetation color (green)	Dewatering and low water levels
Rock formations of canyon, ruggedness of terrain	Lack of entry and vegetation, fence and bare slope
Well-maintained park facilities	Power substation, vertical transmission towers
Accessibility of the area and the facilities	Lack of vegetation in clear-cut areas, at power lines
Health and diversity of the forest ecosystem	White line at water edge
Historical aspect of river and quality of structures	Water quality
Fishing and wildlife	Fluctuating water level
Canyon is a wonder of nature	
Favorite place and visit as often as possible	
Reservoirs enhance the area by providing access to scenery and boating	
Camping and facilities	
“Lowest power rates in the country” combined with tremendous recreational opportunities	

Comments from land-use professionals. Land-use professionals provided their insights and opinions based on their many years of observation in the Study Area. Their comments are divided into reasons people form attachments to places, observed patterns of behavior, and negative aspects.

People form attachments to places for many reasons:

- provides a good fishing spot
- is a favorite place to camp, a traditional family gathering spot, a place to watch wildlife
- has innate attractiveness in terms of dramatic views, rock outcrops, vegetation
- has sandy beaches and/or exciting rapids
- includes historic structures or prehistoric features such as rock shelters, pit houses and rock art

There are numbers of rock art sites that are important to users. Historic ranches that are important to people are McGaffee Cabin at Bernard Creek, Sheep Creek Ranch, Barton Cabin at Battle

Creek, and Kirkwood Ranch. Mining sites that are valued include the Chinese Massacre site, Mt. Chief Mine Tunnel, Eureka Mine, and the mine at the confluence of the Salmon and Snake rivers.

Observed behavior includes camping, socializing with friends and family, fishing, watching wildlife, floating and jet boating the river, learning about the history, prehistory, and geology of the area, searching for artifacts and historic remnants, and exploring historic structures and rock art.

Comments made to land-use professionals about negative aspects of the area include poison ivy, cockle burs, noise and smell from jetboats, potential loss of sandy beaches, denuded sites, and summer heat. Comments about vandalism include:

- Historic ranches are very visible, not maintained, and have been vandalized.
- At Bernard Creek Cabin, tin sheets from roofs, historic barbed wire, and tin cans have been stolen.
- At Sheep Creek Ranch, tools from the blacksmith shop and much of the machinery have been stolen.
- Contents of graves at Indian cemetery have been stolen.

3.5.2 SMS Study Area Objective 2

Identify Special Places (SPs).

3.5.2.1 Method

The USFS refers to areas that will be analyzed and managed under the SMS protocol as “Special Places” (SPs). Because there is not a specific process for identifying SPs in the SMS, criteria were developed for this study (but are not intended to set a precedent for other aesthetic studies). A place was identified as potentially special for this study if it met at least one of these criteria:

- (1) At least two of the surveyed constituents identified it as special.
- (2) It has significant historic, archeological, geological, or aesthetic characteristics.
- (3) It has been designated as a Wilderness, Wild and Scenic River, or National Recreation Area.
- (4) It was recommended for consideration by IPC recreation specialists, the USFS, the Subgroup, or relevant literature.

DEA listed the potential SPs in a Microsoft Excel spreadsheet, assigned identification numbers beginning with #101, mapped them, and generated coordinates using ArcView. DEA then conducted a spatial analysis using ArcView to determine from which potential SPs Project effects were visible. Potential SPs were field tested during an eight-month period from March to October 2000 and in June 2001. Coordinates were verified using a Garmin 12X Global Positioning Unit (GPS).

3.5.2.2 Results

Ninety-three (93) viewpoints were identified as potential SPs in the SMS Study Area. Of these, 46 viewpoints were removed from consideration as SPs during field testing because Project effects were not visible from the viewpoint or the site had less historical and/or landscape character than had been originally thought. Three additional viewpoints (#186, #187, and #188, all along transmission line 909) were removed from consideration because IPC sold the line during the study. The number of viewpoints that were identified as SPs was therefore 44. The Subgroup concurred with the removal of the 49 viewpoints from consideration as SPs. However, rather than deleting the 49 viewpoints from the study, they were reclassified as OPs, allowing DEA to document all viewpoints that were visited, a course of action requested by the Subgroup.

Data for the 93 viewpoints (49 OPs and 44 SPs) are listed in the Viewpoint Summaries at the end of this report, and locations of the viewpoints are shown in **Fig. 23**. Factors that affected the designation of a viewpoint as an OP rather than an SP are listed under “Comments” in the Viewpoint Summaries.

3.5.3 SMS Study Area Objective 3

Describe the basic ecological factors that affect the aesthetics of the SMS Study Area.

3.5.3.1 Method

This information was determined through a review of literature, specifically, *Revised Draft Environmental Impact Statement, Hells Canyon National Recreation Area Comprehensive Management Plan* (USFS, 1999a) and *Vegetation of the Snake River Corridor in Hell’s Canyon — Weiser, Idaho, to the Salmon River* (Holmstead, 2000).

3.5.3.2 Results

Vegetation, fire, erosion, hydrology, and sedimentation, which are all ecological factors that can affect the aesthetics of the SMS Study Area, are discussed briefly in this section. Erosion, hydrology, and sedimentation are examined in greater detail in other parts of IPC’s application for relicensing.

Plants are “critical components in the maintenance of a dynamic ecosystem” (Holmstead, 2000). Plants provide food, habitat and cover, affect climatic patterns, stabilize slopes, contribute to soil development, and help cycle oxygen, nitrogen, and other nutrients. Wide variations in slope, aspect, soil type, elevation, and precipitation in the SMS Study Area result in diverse plant communities ranging from riparian to grassland and shrubland to subalpine and alpine. This diversity is an integral part of the SMS Study Area’s aesthetic environment. The color of balsamroot blossoms, the contrast between Ponderosa pine bark and foliage, the smell of sage, and the sound of wind moving through the trees are all part of the aesthetic experience.

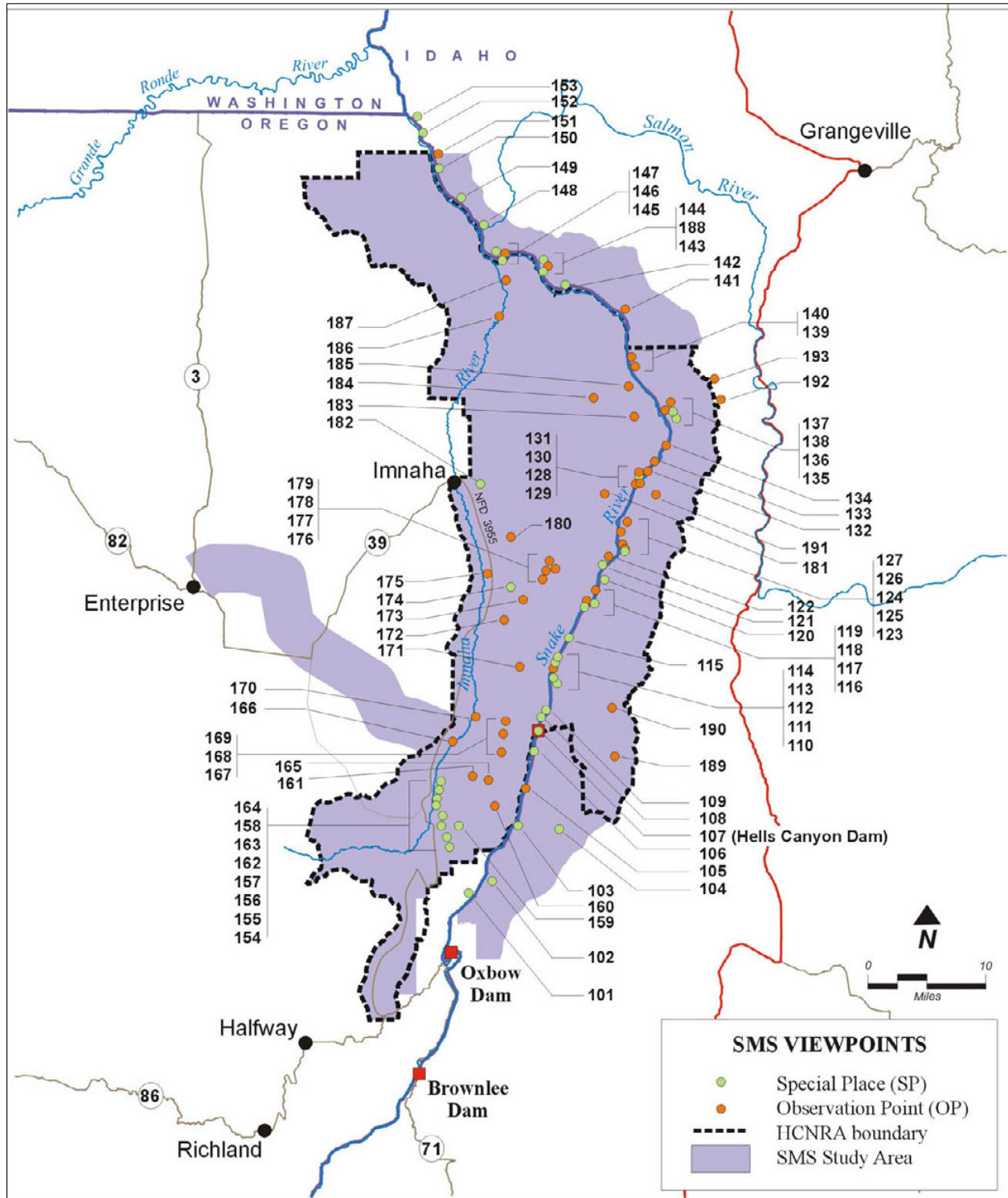


Fig. 23. The 93 viewpoints in the SMS Study Area.

Vegetation also directly affects wildlife, an important part of the setting and thus the aesthetic experience, by affecting wildlife habitat. The sight of a big horned sheep, for example, can be part of the aesthetic experience.

Fire has played an important role in the Study Area by periodically burning the understory and thus preventing the buildup of fuel loads in forest communities and by maintaining the open nature of the grasslands. The practice of fire suppression in recent years has resulted in a significant fuel load in many forested areas. Accordingly, the threat of catastrophic wildfire is imminent, as is the threat to the aesthetic environment.

A function of hydrologic processes, land use, and soil properties, erosion is expected even in undisturbed environments as part of normal ecological processes. However, it is often exacerbated by human activities and changes to the landscape. Erosion is common along the reservoirs when, during periods of drawdown, unvegetated slopes are exposed to wind and wave action, resulting in scars along the reservoir's perimeter where large areas of soil have been undermined by wave action and have fallen into the water. Erosion results in increased turbidity, loss of vegetation, loss of habitat, gullying, mass wasting, and sedimentation.

Hydrology and sedimentation are also factors that may affect aesthetics in the Study Area. Fluctuations in water levels can create noticeable changes in the appearance of Hells Canyon Reservoir and may also affect the appearance of the Snake River below Hells Canyon Dam. Below the dam, the appearance of sandy beaches may be affected by the potential lack of materials eroded from upstream sources. Other studies in IPC's application for relicensing will include an examination of the degree to which these factors affect the aesthetic environment.

3.5.4 SMS Study Area Objective 4

Develop a landscape character statement for each SP.

3.5.4.1 Method

As noted above, landscape character statements include a history of the landscape, existing scenic and other positive attributes, and existing land-cover types. Information used to develop the statements was obtained from field studies conducted by DEA between April and August 2000 and in June 2001, the USFS, relevant literature, and constituents. *Snake River of Hells Canyon* (Carrey et al., 1979) provided most of the historical background of the area. Landscape character statements were documented in detail (**Appendix D**) and summarized in the Viewpoint Summaries.

3.5.4.2 Results

Landscape character statements, including historical context, are documented in the Viewpoint Summaries at the end of this report. Additional landscape character and historic information is included in **Appendix D**.

Twelve land-cover types were identified in the SMS Study Area: cliff talus slopes, grassland, forested upland, tree savanna, shrubland, shrub savanna, forbland, forested wetland, scrub-shrub wetland, shore and bottomland wetland, parks and recreation, and agriculture. **Appendix E** contains detailed descriptions of the land-cover types in the SMS Study Area.

3.5.5 SMS Study Area Objective 5

Determine an existing scenic integrity level for each SP.

3.5.5.1 Method

As noted above, scenic integrity is an evaluation of the scenic intactness and wholeness of a landscape in terms of how much negative deviation there is from the existing landscape character. The evaluation was made through field studies and a review of constituent information.

The field study evaluation was performed between April and August 2000 and in June 2001 by teams consisting of two or more investigators. The team developed a form to document the evaluation (**Figs. 24a** and **24b** on pages 62 and 63) and used this scale, as defined by the SMS:

- **Very high:** Landscape character is intact with no or insignificant deviation.
- **High:** Landscape character appears intact. Deviations are present but repeat the form, line, color, texture, and pattern common to the landscape character so completely that they are not evident.
- **Moderate:** Landscape character appears slightly altered. Noticeable deviations are visually subordinate to the landscape character.
- **Low:** Landscape character appears moderately altered and deviations begin to dominate.
- **Very low:** Landscape character appears heavily altered and deviations strongly dominate.
- **Unacceptably low:** Landscape character appears extremely altered and deviations are extremely dominant. Landscapes with this level of integrity need rehabilitation.

Existing scenic integrity levels were documented in the Viewpoint Summaries.

3.5.5.2 Results

Existing scenic integrity levels are documented in the Viewpoint Summaries at the end of this report. Detailed statements describing detractors to scenic integrity for many of the SPs are included in **Appendix D**.

As discussed above, scenic integrity levels are typically based on a six-level scale from unacceptably low to very high. To more accurately describe our findings, DEA added “low to moderate”

SCENIC INTEGRITY IMPACT WORKSHEET

**HELLS CANYON COMPLEX AESTHETIC
RESOURCE INVENTORY AND EVALUATION STUDY
(USFS SCENERY MANAGEMENT SYSTEM)**

Date _____

Time of Day _____

Weather Condition _____

Evaluator _____ Date _____

SECTION A. PROJECT INFORMATION

1. Recreation Analysis Area:	4. Location:	5. Location Sketch
2. Key Observation Point:	LAT. _____	
3. Is this a "Special Place"?	LONG. _____	

SECTION B. LANDSCAPE INTEGRITY & CHARACTER

1. Current Scenic Integrity: _____

2. Ecological Landscape Integrity: _____

3. Current Landscape Character: _____

SECTION C. IPC FACILITIES

Type	Visibility	Distance Zone	Duration of View	Approx. No. of Viewers	Context of Viewers	Concern Level
Facility						
T-Line						
Substation						
Dam, Spillway, etc.						
Powerhouse						
Service Roads						
Other						
Operations						
Reservoir Fluctuation						
Other						
Other						

Fig. 24a. Page 1 (of 2) of the Scenic Integrity Impact Worksheet.

SECTION D. DESIRED FUTURE CONDITION

1. Landscape Character Goal: _____

2. Scenic Integrity Objectives: _____

SECTION E. EFFECTS OF IPC FACILITIES AND OPERATIONS

SECTION F. COMMENTS

SECTION G. POSSIBLE PM&Es

Fig. 24b. Page 2 (of 2) of the Scenic Integrity Impact Worksheet.

and “moderate to high” for sites that were not clearly low, moderate or high. **Table 13** quantifies the scenic integrity levels determined at the SPs throughout the SMS Study Area. The data shows that the existing scenic integrity at SPs in the Hells Canyon Reservoir Unit averages between low and low to moderate, in the Snake River Corridor Unit between moderate and moderate to high, and in the HCNRA Upland Unit between low to moderate and moderate.

Table 13. Existing scenic integrity for SPs by Study Area unit.

Level	Hells Canyon Reservoir		Snake River Corridor		HCNRA Uplands		Total	
	No.	%	No.	%	No.	%	No.	%
Unacceptably low	0	0	0	0	0	0	0	0
Very low	1	17	0	0	1	9	2	5
Low	2	33	4	15	2	18	8	18
Low to moderate	2	33	3	11	0	0	5	12
Moderate	0	0	9	33	7	64	16	36
Moderate to high	0	0	1	4	0	0	1	2
High	0	0	7	26	1	9	8	18
Very high	1	17	3	11	0	0	4	9
Total	6	100	27	100	11	100	44	100

DEA identified detractors from scenic integrity that occurred commonly throughout the Study Area including transmission structures, power-generating facilities, access roads, reservoir draw-down effect, river water-level fluctuation effect, modifications to vegetation, hardscape elements (e.g., river gauging stations, campground shelters, sidewalks, picnic tables), and possibly loss of sandy beaches. Negative attributes were considered when scenic integrity levels were determined. See **Section 3.5.9.2** for a discussion of the detractors resulting from the Project.

3.5.6 SMS Study Area Objective 6

Determine an existing ecological integrity level for each SP.

3.5.6.1 Method

This information was provided by the IPC ecologist and includes land-cover types and plant assemblages, dominant plant species, threats to integrity such as erosion and noxious weeds, and implications of vegetation for wildlife such as wildlife habitat. Detailed information was documented (**Appendix E**) and summarized in the Viewpoint Summaries.

3.5.6.2 Results

Existing ecological integrity levels for each SP based on vegetation are listed in the Viewpoint Summaries at the end of this report. Detailed statements of ecological integrity for many of the SPs are also included in **Appendix D**. In addition, descriptions of the 12 plant communities occurring in the SMS Study Area are included in **Appendix E**.

Existing ecological integrity information was not available for the SP at Viewpoint #104 (Horse Mountain Lookout) within the Nez Perce National Forest. Based on guidance from USFS, DEA extrapolated the ecological integrity for this site from a similar area with similar plant communities in the Payette National Forest. Ecological integrity level information was also not available for the SPs at Viewpoint #139 (Cherry Creek Falls and Ranch), Viewpoint #150 (Jim Creek Ranch), Viewpoint #152 (Lower Cottonwood), and Viewpoint #153 (Cache Creek).

As discussed in **Section 3.3.6**, ecological integrity levels are typically based on a three-level scale from high to low. To more accurately describe our findings, DEA added “low to moderate” and “moderate to high” for sites that were not clearly low, moderate, or high. **Table 14** quantifies the ecological integrity levels at the SPs throughout the SMS Study Area. The data shows that ecological integrity at SPs in the Hells Canyon Reservoir Unit averages low to moderate, in the Snake River Corridor Unit moderate to high, and in the HCNRA Upland Unit moderate.

Table 14. Existing ecological integrity for SPs by Study Area unit.

Level	Hells Canyon Reservoir		Snake River Corridor		HCNRA Uplands		Total	
	No.	%	No.	%	No.	%	No.	%
Low	2	33	0	0	1	9	3	7
Low to moderate	1	17	2	7	0	0	3	7
Moderate	0	0	2	7	9	82	11	25
Moderate to high	1	17	5	19	0	0	6	13
High	2	33	14	52	1	9	17	39
Not available	0	0	4	15	0	0	4	9
Total	6	100	27	100	11	100	44	100

Detractors to ecological integrity included disturbed conditions that favor opportunistic and introduced plant species, the presence of weedy, non-native vegetation, negative effects from grazing, erosion from road cuts, low diversity in species and structure, presence of paved surfaces and compacted soils, high recreational use resulting in trampled, altered, or removed vegetation, and the negative effects of fire, such as the complete kill of an area resulting from the buildup of excessive fuel loads.

3.5.7 SMS Study Area Objective 7

Recommend a desired landscape character for each SP.

3.5.7.1 Method

Recommendations were determined by a professional consensus of the investigators after a review of constituent information, ecological factors, existing landscape character, and existing ecological integrity. As noted in **Section 3.3.7**, the recommended desired landscape character generally includes a recommendation to move vegetation toward a more sustainable state. Recommended desired landscape character statements were documented in detail (**Appendix D**) and summarized in the Viewpoint Summaries.

3.5.7.2 Results

Recommended desired landscape character statements for the SPs are listed in the Viewpoint Summaries at the end of this report. See **Appendix D** for additional information.

In general, recommended desired landscape character statements include:

- move existing plant assemblages towards stable and/or climax plant communities
- re-establish native plant assemblages and manage noxious weeds
- protect existing plant species that have particular value, such as habitat diversity and potential roosting/nesting sites for bald eagles, as well as aesthetic value (e.g., Ponderosa pine at Stud Creek)
- improve landscape aesthetics by replicating natural colors and materials in the landscape (e.g., Hells Canyon Park) and incorporating valued historical elements into the architecture and landscape features
- retain, stabilize, replicate, and/or restore historic structures or remnants
- redesign the approach to SPs to make them more inviting and aesthetically pleasing (e.g., Hells Canyon Dam)
- replicate pit houses as they might have existed in prehistoric times
- incorporate educational and interpretive signs and/or facilities at existing trails (e.g., Stud Creek)
- address problems caused by excessive recreational use

3.5.8 SMS Study Area Objective 8

Recommend a desired scenic integrity level for each SP.

3.5.8.1 Method

Using existing scenic integrity as a baseline, recommended desired scenic integrity was determined by a professional consensus of the investigators, including a consideration of the management goals and objectives in the *Revised Draft Environmental Impact Statement, Hells Canyon National Recreation Area Comprehensive Management Plan*. (USFS, 1999a) and the *Wild and Scenic Snake River Management Plan* (USFS, 1999b). Desired scenic integrity levels were recommended for each SP and were documented in detail (**Appendix D**) and summarized in the Viewpoint Summaries.

3.5.8.2 Results

Recommended desired scenic integrity levels for each SP are listed in the Viewpoint Summaries at the end of this report. All recommended levels are equal to or exceed existing levels. Because the USFS, Congress, and constituents have set a high standard for scenic integrity in the SMS Study Area, most of the recommended desired scenic integrity levels are high or very high. The high standard is supported by the following information:

- The *Wild and Scenic Snake River Management Plan* (USFS, 1999b) specifies that visual resources in the area are to be managed for preservation (allowing for ecological change only) in the Wild section, and for retention (human activities should not be evident to the casual visitor) in the Scenic section. Scenic values of the Snake River have been determined to be outstanding, providing stunning contrasts of landform, vegetation, color, climate, and sound (USFS, 1999b).
- In 1975, Congress designated 652,488 acres and 67.5 miles along the Snake River in west-central Idaho and northeastern Oregon, from Hells Canyon Dam to the Oregon-Washington border, as the HCNRA in part to preserve its aesthetic character. The federal government purchased many homesteads in the area to help preserve its aesthetic character.
- Constituents who participated in the focus groups and mail-in survey indicated that they accept some deviation in the landscape upstream of Hells Canyon Dam but expect to experience natural (and even pristine) conditions below the dam along the river.

It must be noted that although high scenic integrity levels may be desirable, they may not be realistically attainable in some cases. For example, recommended levels at Eagle Bar and Red Ledge Mine are high, but it would not be reasonable to modify Hells Canyon Dam, which is visible from these viewpoints, so that it is not evident.

3.5.9 SMS Study Area Objective 9

Identify Project facilities and operations at each SP and evaluate their effects on the aesthetics of each SP for the Current/Proposed Operations and Full Pool Run-of-River scenarios.

3.5.9.1 Method

IPC has developed two operational scenarios, Current/Proposed Operations and Full Pool Run-of-River, for its application for relicensing. Comparing the two scenarios will help determine the extent of impacts that would occur in the affected environment as a result of IPC's proposed operations during the new license term. For purposes of this study, the Current/Proposed Operations is used as the base case, which is defined as the management regime under which the Project typically operates. The Full Pool Run-of-River scenario is one in which inflow to the Project equals outflow from the Project plus tributary inflows.

Project facilities and operations that were visible from SPs were identified and evaluated for both scenarios.

3.5.9.2 Results

Through the process of determining existing scenic integrity, DEA identified a comprehensive list of detractors from scenic integrity. This discussion focuses on the detractors that are a result of Project facilities and operations.

3.5.9.2.1 Classification of effects

It is extremely important to determine if effects are the result of Project facilities and/or operations or the result of activities not related to the Project. It is important because IPC is responsible only for mitigating Project effects. The Subgroup helped to develop classifications of effects and concurred with the classifications assigned in this report. DEA therefore classified effects into one of four categories:

- **Direct Fact (DF)** – The identified effect is indisputably a result of Project facilities and operations, and the effect exists without question. A transmission line and tower silhouetted against the horizon is an example of a Direct Fact.
- **Direct Hypothetical (DH)** – The identified effect, if it exists, may be a direct result of Project facilities and operations, but existing data is inconclusive or insufficient to determine whether the Project has actually caused it. The loss of sandy beaches at specific locations along the Snake River is an example of a Direct Hypothetical effect. IPC will use information from ongoing sediment and hydrology studies to determine if, and to what extent, sandy beaches have been lost and whether or not any loss is a result of the Project.
- **Indirect Fact (IF)** – The identified effect may be an indirect result of Project facilities and operations, and the effect exists without question. Damaged and/or destroyed vegetation resulting

from increased recreational use is an example of an Indirect Fact. Whether or not the Project causes this effect may be in dispute since the link between the two are removed and uncertain.

- **Non-Project (NP)** – The visual or aesthetic contrast identified in the evaluation is not a result of Project facilities and operations.

DEA determined and confirmed with the Subgroup that most of the Project effects in the Hells Canyon Reservoir and HCNRA Uplands units were DFs. These effects typically resulted from transmission structures and reservoir drawdown. DEA determined and confirmed with the Subgroup that most of the Project effects in the Snake River Corridor Unit were DHs. These effects generally resulted from river water-level fluctuations that may or may not result in a visual indication and changes in hydraulic and hydrologic regimes that may or may not affect the loss of sandy beaches, for example. Existing data is insufficient or inconclusive to determine cause and effect. IFs, such as damage to vegetation from recreational use, also occurred.

Classifications were documented in the Viewpoint Summaries.

3.5.9.2.2 Project effects: Current/Proposed Operations scenario

The field investigations revealed several Project effects that were common or dominant throughout the SMS Study Area for the Current/Proposed Operations scenario. These effects are described below and summarized for each SP in the Viewpoint Summaries at the end of this report.

Transmission structures. Transmission lines and towers are common detractors that were inconsistent with the form, line, color, and texture of the valued landscape (**Fig. 25**). Lines and towers in several places dominated the foreground and middleground views, particularly along



Wallowa Mountain Loop Road, a designated Scenic Byway. Several steel lattice towers and wooden poles were silhouetted against the skyline. Conductors (i.e., transmission lines) were highly reflective in sunny conditions and were also visible in overcast conditions. Safety balls, used to help aircraft see conductors, were present at only a few sites and increased the contrast of the conductor; however, since these are required by the FAA, they cannot be removed. Service roads created contrast in line and color as well as opportunities for erosion.

Fig. 25. Transmission lines through the Imnaha River valley.



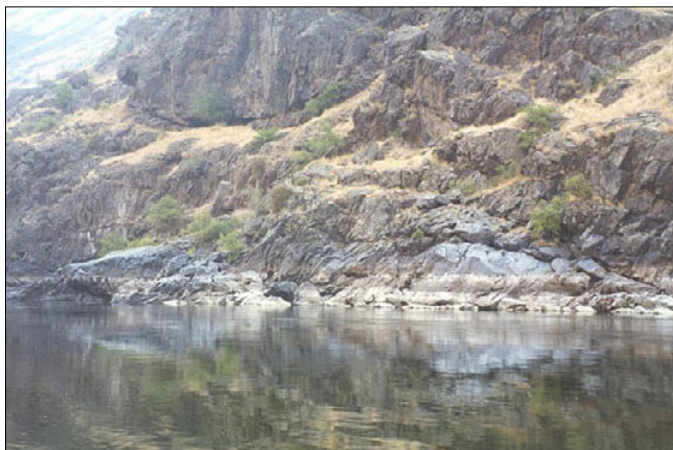
Fig. 26. Hells Canyon Dam, viewed from the north.

tunnel structure and concrete pads also detract from scenic integrity. The transmission line, although visible at one point, is not obvious along the drive from the dam to the Hells Canyon Visitor Information Center. Nevertheless, the design of the entry sequence is lackluster and does not adequately reflect the importance of the HCNRA.

Reservoir drawdown effect. The reservoir drawdown effect is a result of the water-level fluctuations in Hells Canyon Reservoir and appears in the landscape as a distinct white-to buff-colored band along the perimeter of the reservoir (**Fig. 27**). The band is typically no wider than three feet during spring and summer weekends. It results in weak contrast in form, line, and texture, and moderate contrast in color.



Fig. 27. Drawdown effect at Hells Canyon Reservoir.



River water-level fluctuation effect.

Fluctuations in water level may result in a prominent white-to-buff band along the river's edge, which can vary from several inches to several feet in width (**Fig. 28**). The river fluctuation effect is categorized as a DH rather than a DF because the cause has not been conclusively determined to be Project-

Fig. 28. Water-level fluctuation effect on the Snake River.

related. A similar line occurs on the Salmon River, which is free-flowing and not affected by hydroelectric facilities and operations. The Salmon River flows into the Snake River near the northern boundary of the SMS Study Area.

Alterations to vegetation.

Project facilities and operations affect the aesthetic quality of vegetation in three significant ways. First, ornamental landscaping and irrigated lawn deviate substantially from the surrounding landscape context and compete with native vegetation. Changes in color and form are very noticeable and inconsistent with the historical



Fig. 29. Hells Canyon Park.

landscape character. However, many users identify the non-native shade trees and irrigated lawn as a welcome oasis from the heat of Hells Canyon. Examples include Hells Canyon Park (Viewpoint #101) (**Fig. 29**) and Kirkwood Ranch (Viewpoint #134). Second, maintenance of transmission line rights-of-way has resulted in a substantial edge effect and substantial deviations in form, line, color and texture; however, this typically occurs only in the HCNRA Uplands Unit and the effect is geographically limited. Third, recreational use below Hells Canyon Dam has resulted in trampled vegetation at many sites (assumed to be an IF).

Hardscape elements and structures.

Hardscape elements include items such as site furnishings, parking areas, boat ramps, roads, picnic shelters, and toilet facilities. These items were typically seen at developed sites, such as Hells Canyon Park (Viewpoint #101) (**Fig. 30**) and Dug Bar Landing (Viewpoint #144) throughout the SMS Study Area. Detractors from scenic integrity include the contrasting color and reflective qualities of materials used in docks, structures, and buildings; contrasting materials, colors, and form of handrails, chairs and tables, and fencing; use of Jersey barriers; unattractive signage; and poorly functioning parking areas. Hardscape elements generally create strong contrasts in form, line, and color, and moderate contrasts in texture. Typically, these elements are not consistent with the historical context of the landscape.



Fig. 30. Hardscape elements at Hells Canyon Park boat ramp.



Fig. 31. Sandy beach below Hells Canyon.

Possible loss of sandy beaches. Sandy beaches occur at several sites below Hells Canyon Dam (**Fig. 31**). Observations by members of the Subgroup and others suggest the extent of sandy beaches has been reduced, in some cases significantly. However, adequate documentation does not exist to determine if Project facilities and operations have resulted in the loss of sandy beaches below Hells Canyon Dam.

Similar to the river water-level fluctuation effect, the possible loss of sandy beaches is included in this report as a DH effect. Ad-

ditional investigation beyond the scope of this report is required to document any loss and determine the relationship between the loss of beach and the Project.

3.5.9.2.3 Project effects: Full Pool Run-of-River scenario

The Project effects for the Full Pool Run-of-River scenario are the same as for the Current/Proposed Operations scenario except that the drawdown effect in Hells Canyon Reservoir would be eliminated and the river water-level fluctuation effect, which is classified as a DH effect, might be eliminated. Existing information is insufficient or inconclusive to determine the cause and effect of the river fluctuation, so it is not currently possible to determine if the river water-level fluctuation effect would be eliminated in the Full Pool Run-of-River scenario.

Daily fluctuations would be eliminated in the Full Pool Run-of-River scenario, but there would be greater variation between the late summer, fall, and early winter flows and the late spring and early summer flows. Late summer, fall, and early winter flows would be lower than in the Current/Proposed Operations scenario, while late spring and early summer flows would be higher. Thus, a combination of higher high flows and lower low flows may result in a greater band of shoreline affected by seasonal fluctuations. It is beyond the scope of this report to determine how these potentially greater fluctuations might or might not affect riparian vegetation and the water-level fluctuation effect.

3.5.9.2.4 Non-Project effects

DEA identified several non-Project effects in the SMS Study Area. Typically, these effects included improvements by others at developed sites, manipulation (e.g., grazing) of pasture and grassland habitats, and fire that burned Ponderosa pine and hackberry trees. Non-Project effects are not subject to the FERC relicensing process.

DEA also identified effects that were classified as IFs, as defined in **Section 3.5.9.2.1**. Recognizing that the link between cause and effect may be in dispute, IPC may not be responsible for

mitigation in certain cases. These effects typically include social trails, trampled vegetation, erosion, and compacted soils, all resulting from recreational use below Hells Canyon Dam.

Opportunities exist to coordinate with the appropriate agency(ies) to reduce these detractors from scenic integrity. These opportunities are noted in the Viewpoint Summaries at the end of this report and discussed in **Chapter 4**.

3.5.10 SMS Study Area Objective 10

Suggest PM&E where needed to achieve recommended desired landscape character and scenic integrity level for Current/Proposed Operations scenario.

3.5.10.1 Method

Because IPC will propose in its application for relicensing that the new license be issued based on the Current/Proposed Operations scenario, the application will include PM&E for the documented effects of that scenario only. The Full Pool/Run-of-River scenario simply provides an alternative against which to compare the effects of the Current/Proposed Operations scenario. Therefore, this study suggests PM&E for the Current/Proposed Operations scenario only.

Using professional knowledge and experience, DEA identified specific mitigation measures when the recommended desired landscape character and/or scenic integrity level were not achieved due to Project effects. DEA considered a wide range of possible PM&E and eliminated some that were clearly unreasonable, such as relocating an entire transmission line. Suggested PM&E were based on a professional consensus of the investigators and documented in the Viewpoint Summaries.

3.5.10.2 Results

At 41 of the 44 SPs, the recommended desired landscape character is not achieved. The three SPs where it is achieved are Viewpoints #104, #113, and #114. At 33 of the 44 SPs, the recommended desired scenic integrity is not achieved. The 11 sites where it is achieved are Viewpoints #104, #115, #116, #120, #136, #142, #143, #145, #147, #148, and #149. PM&E are listed in the Viewpoint Summaries at the end of this report.

It is important to note that IPC is responsible only for the effects listed in the Viewpoint Summaries under the heading “IPC Facilities and Operations.” Furthermore, during the study, it was determined that mitigating all Project effects may not necessarily achieve the recommended desired landscape character and/or scenic integrity level because non-Project effects, for which IPC is not responsible, may continue to have significant impacts.

Establishing vegetation to screen, soften edges, and revegetate disturbed areas is suggested to reduce contrast in many situations, discussed below. It must be noted that because the climate in Hells Canyon is exceptionally harsh, establishing vegetation may not be reasonable in some areas and must therefore be determined on a case-by-case basis.

Modifying the color and texture of certain facilities and structures may be in conflict with maintaining the historic character of some sites. According to IPC, several facilities in the Study Area may be eligible for the National Register of Historic Places. Eligibility has been investigated in other IPC relicensing studies.

In some cases, a suggested PM&E may apply to more than one effect. In addition, some effects may have similar components that can be treated similarly. For example, access roads to transmission towers and to maintenance facilities are identified under different common effects, but similar techniques can be used to reduce contrast for both roads.

Very often, there are multiple ways to mitigate a Project effect, but only one may be appropriate at a particular site. The following sections list several ways of mitigating the most common Project effects in the SMS Study Area: transmission structures, access and service roads, power-generating and substation facilities, reservoir drawdown, alterations to vegetation, and hardscape elements.

3.5.10.2.1 Transmission structures

- Replace conductors with non-specular materials to reduce reflectivity and therefore contrast in line and color. Replacement should occur during the transmission line's normal maintenance cycle.
- Paint towers to match the color of the landscape to reduce contrast in color. Matching the color of the surrounding landscape (i.e., the backdrop) will also reduce the visual contrast of form, line, and texture. Dull surfaces and hardware that cannot be painted.
- Provide vegetative screening using native species to screen views of transmission structures.
- In isolated cases, consider relocating towers to avoid silhouetting and therefore reduce contrast in form, line, color, and texture. This measure is extreme and should be considered only where the need to reduce contrast is equally extreme.
- Provide education and interpretive signage and/or facilities where other measures are not reasonable.

3.5.10.2.2 Access and service roads

Access roads affect the aesthetic environment and are common to several typical Project effects. Therefore, they are addressed separately, rather than as part of another effect.

- Modify surface color, where reasonable, to match the surrounding landscape and reduce contrast in color. Matching the road color to the landscape will also decrease contrast in line as the road becomes less noticeable.
- Modify alignment in response to existing landform so road blends into landscape and minimizes excessive cuts and fills. Where feasible, combine and/or decommission multiple access roads to reduce contrast in form, line, color, and texture. Where alignment modification is not feasible, grade existing cut and fill slopes to blend into landscape.

- Revegetate cut and fill slopes and decommissioned road alignments where feasible using desirable vegetation (native species wherever possible).
- Modify the color of road cuts that occur in rock to match surrounding conditions.

3.5.10.2.3 Power-generating facilities

- Modify the color of facilities and appurtenances where practical in the normal maintenance cycle to match the color of the surrounding landscape. Reducing the contrast in color will also reduce contrast in form, line, and texture. Safety signage, safety balls, and similar items must be of contrasting color to ensure public notice, and these items should therefore not be modified to reduce contrast. Dull surfaces that cannot be painted. Modifying the color of certain facilities, such as Hells Canyon Dam, must be addressed on a case-by-case basis to determine if the positive benefit would justify the effort required to reduce contrast.
- Screen facilities and appurtenances using desirable vegetation (native species wherever possible). Providing effective screening will reduce contrast in form, line, color, and texture.
- Organize, and generally clean up, facility yards and vicinity. Removing concrete pads, debris, unused rock and similar elements will reduce contrast in form, line, color, and texture.
- Consider modification of the color and texture of the diversion tunnel structure at Hells Canyon Dam to reduce contrast in form, line, color and texture.
- Retain the dark stains on the face of Hells Canyon Dam.
- Provide education and interpretive signage and/or facilities where other measures are not reasonable.

3.5.10.2.4 Reservoir drawdown effect

- Moderate the water-level fluctuations in the reservoirs to minimize the drawdown effect. Minimizing the effect will reduce contrast in line and color.
- Maintain full-pool elevations in the reservoirs to eliminate the drawdown effect and contrasts in form, line, color, and texture.
- Provide education and interpretive signage and/or facilities where other measures are not reasonable.

3.5.10.2.5 River water-level fluctuation effect

- Moderate the water-level fluctuations to potentially minimize the daily fluctuation effect.
- Revegetate disturbed areas with native vegetation.

- Stabilize banks using erosion control and bank stabilization techniques (bioengineering approach where feasible)
- Provide education and interpretive signage and/or facilities where other measures are not reasonable.

3.5.10.2.6 Alterations in vegetation

- Modify landscaping (e.g., ornamental landscaping at Hells Canyon Park) to mimic an indigenous condition using native species wherever possible. Modifications will reduce contrast in form, line, color, and texture. Plantings should be functional, i.e., should provide shade, windbreaks, direct views, and circulation, and should screen undesirable views.
- Modify vegetation management in transmission line rights-of-way to achieve screening of lines and softening of edge effect to reduce contrast in form, line, color, and texture.

3.5.10.2.7 Hardscape elements and structures

- Modify and/or dull the color of hardscape elements to match the surrounding landscape and reduce contrast in color and line.
- Replace unnatural elements (e.g., Jersey barriers) with materials more consistent with the surrounding landscape to reduce contrast in form, line, color, and texture.
- Utilize materials that are consistent with the historical landscape character (e.g., rough-sawn lumber).
- Incorporate compliance with visual standards (i.e., proposed aesthetic and design standards and guidelines discussed in **Chapter 4**) into IPC permit system for private facilities.

3.5.10.2.8 Loss of sandy beaches

Mitigating the loss of sandy beaches by replacing the sand and using erosion control techniques to retain it could be problematic. The river's designation as Wild and Scenic may limit the disturbance that is allowed, and the limit may restrict the work required to replace the sand and install erosion-control measures. Traditional engineering approaches, such as riprap would significantly detract from scenic integrity, and bioengineering approaches, such as coir lifts, livestaking, and revegetating, could disturb the open nature of the beach because developed root systems are required to hold unstable materials in place. Furthermore, the cost of importing and maintaining sand may not be reasonable.

Additional investigation beyond the scope of this report would be required to determine the feasibility of replacing and maintaining sandy beaches if IPC decides the measure is justified. If the PM&E is determined not to be feasible, mitigation may include pursuing other opportunities in coordination with USFS or improving USFS facilities in the SMS Study Area. These opportunities are discussed in **Chapter 4** and noted in the Viewpoint Summaries.

4 RECOMMENDATIONS

Because Project effects are similar in both the VRM and SMS Study Areas, this chapter discusses recommendations for mitigating the effects in the entire Study Area, rather than dividing it into the VRM and SMS portions, as earlier chapters have done. Specifically, the chapter discusses recommendations for (1) selecting mitigation measures for the relicensing application and (2) a long-term strategy for managing visual and aesthetic resources in the Project vicinity that are potentially affected by Project facilities and operations.

4.1 Selecting PM&E for the relicensing application

DEA recommends that IPC and the Subgroup consider several factors, discussed below, when selecting suggested mitigation measures for the relicensing application. Decisions about which measures to include in the application will be IPC's.

4.1.1 Resource allocation

The resources available to mitigate Project effects are not unlimited. A key consideration in selecting mitigation measures is how much overall impact the mitigation will have. For example, the cost of relocating a transmission tower in a low-use area to achieve an acceptable contrast rating may be better applied to improving the aesthetics in a more heavily used area, such as the panoramic view of the Canyon that is visible to all visitors approaching from Highway 71.

4.1.2 Non-Project effects

The improvement resulting from mitigating a Project effect could be insignificant if non-Project effects at the same site are not also addressed. For example, private development (e.g., barns, sheds, houses) that is visible in the foreground from Viewpoint #18 (Rattlesnake Station Historical Site) creates more visual impact than the IPC transmission line. Mitigating the effect of the transmission line by itself would therefore not substantially improve the visual condition of this site.

4.1.3 Constituent information

Results of this study suggest that constituents are tolerant of transmission lines and structures and accept them as a necessary part of the landscape. The results also suggest that constituents are more tolerant of the river water-level fluctuation and visual conditions affected by development upstream of Copperfield Park (i.e., Oxbow and Brownlee Reservoirs) than downstream (i.e., Hells Canyon Reservoir and the Snake River). Therefore, mitigation of these effects along transmission line corridors and in areas upstream of Copperfield Park may not be as important as other types of mitigation. The conclusions regarding constituent opinion are consistent with con-

stituent information considered in the reevaluation of the VRM Classes on BLM lands, completed by DEA at the request of the BLM (reevaluation results are listed in **Appendix A**).

4.1.4 Visual simulation and cost/benefit analysis

Although DEA eliminated some PM&E from consideration because the measures were clearly unreasonable (e.g., relocating a transmission structure where non-Project effects also create significant impact on visual resources), some of the PM&E that were suggested may also prove to be unreasonable. In some cases, additional studies, such as visual simulation or cost/benefit analysis, may help to determine whether or not a suggested measure is worthwhile, but conducting these studies was beyond the scope of this study. Based on professional opinion and Subgroup consensus, DEA recommends the sites listed in **Table 15** for visual simulation. Although DEA is not recommending specific sites for cost/benefit analysis, it is an extremely useful tool and should be used where appropriate.

Table 15. Viewpoints recommended for visual simulation.

#25 Paddock Valley Reservoir	#51 Oxbow Spillway
#46 Brownlee Dam (and substation)	#107 Hells Canyon Dam

4.1.5 Reservoir vicinity improvements

In this study, Project effects were evaluated only from KOPs and SPs, as required by the VRM and SMS protocols, respectively, but Project effects are in fact also visible from other areas. Measures that would improve the visual and aesthetic quality of the non-KOP and non-SP areas could be as valuable as the suggested PM&E for the KOPs and SPs. The most important example is the route along Highway 71 and Hells Canyon Road from Brownlee Dam to the Hells Canyon Visitor Information Center. Project effects are visible along most of this route, including areas that were not identified as KOPs or SPs.

DEA recommends that IPC make aesthetic improvements on its properties between Brownlee Dam and the Hells Canyon Visitor Information Center. In simple terms, IPC should clean up debris, organize equipment and material storage areas, and address other ongoing maintenance needs. Suggested specific improvements are listed in **Table 16**.

4.1.6 Prioritizing PM&E

Given that prioritizing mitigation measures is not an easy task, DEA recommends that they be prioritized by type of improvement, listed below from higher to lower:

- (1) clean-up measures directed at removing/screening operational equipment and materials from view
- (2) improvements to recreational facilities (includes IPC facilities and partnering to address other public facilities)

Table 16. Suggested improvements along Highway 71 and Hells Canyon Road between Brownlee Dam and the Hells Canyon Visitor Information Center.

Location	Improvement
Below Hells Canyon Park	Replace damaged guardrail along trail on the Oregon side paralleling road the road in compliance with proposed design standards and guidelines
Eccles Creek site	Relocate pole to line up with road
Burn pit adjacent to Hells Canyon Park	Eliminate or relocate burn pit
Hells Canyon landing strip	Regrade and revegetate bare earth at end of airstrip; minimize contrasts of old substation, including color of building, chain link fence
Oxbow Dam and plant	Clean up general litter left by fishermen, area around hatchery and gravel/concrete spoils piles
Brownlee Dam and yard area	Replace screening over Idaho SR 71 to keep rocks off powerhouse with more attractive material; clean up yard area to be more orderly
Oxbow Reservoir	Remove graffiti from rocks
Along Hells Canyon Road	Clean up spoils piles (gravel, concrete debris) along the road; remove/replace signage that has been damaged

- (3) improvements to IPC Project facilities in Hells Canyon and HCNRA
- (4) improvements to transmission lines outside of Hells Canyon
- (5) stabilization/maintenance of reservoir levels that are higher than current levels
- (6) stabilization of river water-level fluctuation

4.1.7 Other mitigation options

If suggested PM&E are determined to be unreasonable, three other options for mitigation exist: (1) implementing an interpretive and educational program, (2) partnering with other agencies, and (3) conducting PM&E activities in areas other than KOPs and SPs (**Section 4.1.5**).

Opportunities for interpretation are the drawdown effect, the salmon net anchors at Brownlee Reservoir, and the significant natural resources and wildlife in the Study Area. Opportunities for education are hydropower generation, the multiple factors that affect IPC's management strategy of the Hells Canyon Complex, and the history of Hells Canyon. **Table 17** lists the sites DEA recommends for interpretation and education. **Section 4.2.3** discusses interpretation and education as a long-term mitigation strategy.

Partnering with other agencies to mitigate non-Project effects and improve other facilities in the Study Area is a second mitigation option. Other agencies include the BLM, USFS, Idaho Department of Parks and Recreation, Oregon Department of Parks and Recreation, and/or Baker County, Oregon. **Table 18** lists sites DEA recommends as opportunities for partnering.

Table 17. Viewpoints with opportunities for interpretation and education.

#35 Farewell Bend State Park	#109 Stud Creek	#135 Upper Pittsburg Landing and Mexican Hat Site
#44 Woodhead Park	#111 Barton Cabin at Battle Creek	#136 Lower Pittsburg Landing and Campground
#45 Salmon Net Anchor Site	#116 Saddle Creek	#142 Deep Creek (Chinese Miner Massacre Site)
#47 McCormick Park	#120 Bill's Creek	#143 Nez Perce Crossing
#53 Copperfield Park	#121 Sluice Creek/Winniford Place	#145 Mountain Chief Mine Tunnel
#102 Kleinschmidt Grade Overlook	#123 Johnson Bar and Barton Bullock House	#147 Eureka Mine
#107 Hells Canyon Dam	#130 Temperance Creek Ranch	#164 Ollokot Fish Trap

Table 18. Viewpoints with opportunities for partnering.

#34 Weiser Dunes	#108 Hells Canyon Visitor Information Center	#135 Upper Pittsburg Landing and Mexican Hat Site
#35 Farewell Bend State Park	#109 Stud Creek	#136 Lower Pittsburg Landing and Campground
#36 Burnt River Confluence/Steck Park	#110 Warm Springs	#142 Deep Creek (Chinese Miner Massacre Site)
#37 Spring Recreation Site	#111 Barton Cabin at Battle Creek	#143 Nez Perce Crossing
#41 John Holcomb Memorial Park	#116 Saddle Creek	#144 Dug Bar
#42 Hewitt Park	#120 Bill's Creek	#145 Mountain Chief Mine Tunnel
#44 Woodhead Park	#121 Sluice Creek/Winniford Place	#147 Eureka Mine
#59 Copper Creek Trailhead Park	#123 Johnson Bar and Barton Bullock House	#153 Cache Creek
#102 Kleinschmidt Grade Overlook	#130 Temperance Creek Ranch	#164 Ollokot Fish Trap
#103 Big Bar	#133 Kirkwood Ranch	#182 Five Mile Viewpoint

4.2 Long-term management strategy

The PM&E that are suggested in this report are aimed at correcting problems that exist today. DEA recommends that IPC develop a long-term strategy for managing the visual and aesthetic resources in the Project vicinity that are potentially affected by Project facilities and operations. A long-term strategy would facilitate (1) prioritizing mitigation measures now (for relicensing) and also in the future and (2) monitoring the impacts. The recommended strategy is divided into transmission lines, design standards and guidelines, interpretation and education, and leased and permitted facility compliance with standards and guidelines.

4.2.1 Transmission line aesthetics plan

In many cases, mitigating the visual impact of a transmission line by moving it is unreasonable. A transmission line aesthetics plan within IPC's operations and maintenance program would provide a systematic approach to identifying flexible, yet effective, mitigation alternatives for transmission lines. The objective of the plan should be to reduce the visual impacts of structures, conductors, and rights-of-way over the long term. The plan should apply to existing and future lines and consider the following:

- using non-specular conductors when conductors are replaced or upgraded during the normal maintenance cycle
- incorporating aesthetic concerns when compatible with existing engineering needs and designs for future structures and structures to be replaced
- reviewing proposed structure type and line locations with the USFS during the design phase of any planned rebuild in the HCNRA
- incorporating vegetative design techniques such as feathering rights-of-way edges, screening structures, and following vegetation clearing guidelines to reduce visual impact
- identifying, developing, and implementing site-specific vegetation screening along the Imnaha River road in coordination with the USFS
- developing detailed vegetation management plans for Wild and Scenic sections of the Imnaha River and areas adjacent to the Wallowa Mountain Loop Scenic Byway

4.2.2 Aesthetic design standards and guidelines

DEA recommends that IPC develop comprehensive aesthetic design standards and guidelines for existing and future development in the Study Area. IPC should coordinate with BLM and USFS to develop them; these agencies should incorporate them into their existing and future developments in the Study Area as well.

The standards and guidelines should provide direction to IPC project operators and recreational managers regarding the desired appearance of existing (when being modified) and future physical structures and facilities in the Project area. Objectives should:

- define the aesthetic vision for the Hells Canyon Complex
- provide design direction so facilities blend in appearance with the natural and historical environment
- provide adequate circulation for visitors without excessive visual contrast
- minimize maintenance requirements of new and modified facilities

Design standards should address the design elements of form, line, color, and texture as well as these design concepts:

- *genus loci*: determining and embracing a site's "sense of place" in its design
- continuity: providing consistency in design elements and features throughout a site to provide a unified experience
- entry sequence: designing the experience of arriving at a particular location
- hide and reveal: building suspense into an experience by developing a view as the viewer moves across it (Simonds, 1998)
- sight lines: considering what is seen and not seen to maintain views for safety (such as at intersections), as well as to emphasize or de-emphasize certain views and view corridors
- designing with nature: addressing the role of ecology in site planning and design (McHarg, 1992)

Specific consideration may be given to:

- facility location and placement
- general architectural style(s) and theme(s) to provide consistency and continuity
- construction materials, colors, and details to provide consistency with the natural and historical landscape
- portal facilities to create a sense of arrival and departure, including the services and/or facilities that should be provided
- camping/recreation areas to provide a range of defined opportunities that are identified and provided with an appropriate level of development
- viewpoints to provide opportunities for interpretation and sightseeing
- information kiosks to assist visitors and provide useful information
- restrooms to address sanitation concerns and provide adequate facilities
- barriers to limit access and protect the general health, safety, and welfare of the public
- boat docks, ramps, and fish cleaning stations
- pathways, trails, and signage
- site furnishings such as picnic tables, benches, trash receptacles, fencing, walls, and fire rings
- public safety

The design standards and guidelines may also address landscaping and revegetation. Specific consideration should be given to:

- providing appropriate landscaping for the type and level of activity areas and water availability
- identifying appropriate plant materials for use in landscaping
- emphasizing the use of native (or natural-appearing) plant materials
- providing visual transitions of activity areas back into the natural landscape
- screening (i.e., visual buffers)
- managing weed infestations within activity areas
- restoring and sustaining native vegetation in Hells Canyon
- minimizing maintenance and irrigation demands while still providing adequate lawn and shade for visitors
- providing long-term operations and maintenance for landscaped and revegetated areas

4.2.3 Interpretive and educational plan

As discussed in **Section 4.1.7**, interpretive and educational programs may be used to mitigate Project effects in the Study Area, and IPC should therefore develop a plan to capitalize on interpretive and educational opportunities within the Hells Canyon area. See **Section 4.1.7** and **Table 17** for specific opportunities and sites. Interpretive and educational facilities should be consistent with the suggested design standards and guidelines (**Section 4.2.2**) and should also consider:

- need to interpret/educate
- type of facility
- location and placement of facility
- access and circulation
- public safety
- signage

4.2.4 Leased and permitted facility compliance with standards and guidelines

Finally, while IPC has direct control over its own facilities and operations, the company also issues permits, easements, and leases for portions of its properties in the Canyon. DEA recommends that IPC require leased and permitted private facilities (e.g., docks) on IPC property to comply with the proposed design standards and guidelines. Compliance should be required in lease agreements, new permits, and renewed permits. IPC should define timelines by which existing facilities must become compliant, inspect applicable lease and permit facilities within 12 months of the imposition of the requirement, and develop and enforce fines or other consequences for those not in compliance.

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Marshall Brown, IPC recreation planner, and his technical staff for providing visitor information at the reservoirs, including places considered special, and insight into why constituents liked or disliked a particular location.

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GLOSSARY

Access road	A public road that IPC also uses to access its facilities.
Aesthetics	The study, science, or philosophy dealing with beauty and with judgements concerning beauty.
BLM	U.S. Department of Interior Bureau of Land Management
Canyon	Hells Canyon
Constituent	A person who has visited the Study Area.
Current/Proposed Operations	The management regime under which the Project typically operates.
DEA	David Evans and Associates, Inc.
DF	See “effect”
DH	See “effect”
Drawdown effect	The result of the water-level fluctuations in the reservoirs; appears in the landscape as a distinct white- to buff-colored band along the perimeter of the reservoirs.
Effect	Visual impact of human activities on the natural landscape; may or may not be the result of Project facilities or operations. An effect can be a Direct Fact (DF), Direct Hypothetical (DH), Indirect Fact (IF), or Non-Project (NP).

DF (Direct Fact): Indisputably a result of Project facilities and operations and exists without question. A transmission line and tower silhouetted against the sky is an example of a DF.

DH (Direct Hypothetical): The identified effect, if it exists, may be a direct result of Project facilities and operations, but existing data is inconclusive or insufficient to determine whether the Project has actually caused it. The loss of sandy beaches at specific locations along the Snake River is an example of a DH.

IF (Indirect Fact): May be an indirect result of Project facilities and operations, and the effect exists without question. Damaged and/or destroyed vegetation resulting from increased recreational use is an example of an Indirect Fact. Whether or not the Project causes this effect may be in dispute since the link between the two are removed and uncertain.

NP (Non-Project): The visual or aesthetic contrast identified in the evaluation is not a result of Project facilities or operations.

FAA	Federal Aviation Administration
FERC	Federal Energy Regulatory Commission
Full Pool Run-of-River ...	Management regime under which the reservoirs are maintained at full-pool elevations and the volume of water entering the Project plus tributary inflow equal outflow from the Project.
Hardscape element	Constructed elements in the landscape. Examples are river gauging stations, campground shelters, sidewalks, picnic tables, light standards, trash receptacles, and toilet facilities.
HCNRA	Hells Canyon National Recreation Area
IF	See “effect”
IPC	Idaho Power Company
KOP	Key Observation Point: Point from which the Visual Contrast Rating is performed. KOPs are the most critical viewpoints (e.g., from communities and road crossings, typical views in representative landscapes) and must include Project facilities and/or operations (e.g., skyline crossings, river crossings, and substations). Used in the VRM protocol.
msl	mean sea level
NP	See “effect”
OP	Observed Point: Viewpoint that was removed from consideration as a KOP or SP because effects were not visible or the site had less historical and/or landscape character than had been originally thought.
Placer mining	Type of mining in which placer deposits are washed to separate gold or other valuable minerals. The term “placer” comes from a Spanish word that means “sand bank.” Placer deposits are formed by the concentration of small particles of heavy minerals in gravel or small sands. Common mining methods are panning, sluicing, and use of the rocker.
PM&E	Protection, mitigation, and enhancement measures. Methods or procedures designed to reduce the adverse impacts caused by management activities.
Project	IPC Hells Canyon Complex (FERC No. 1971) hydroelectric project
Project effect	See “effect”
Proposed/Current Operations	Management regime under which the Project typically operates and will be proposed to operate in IPC’s license application.

RA	Resource Area, an administrative division of BLM land.
River water-level fluctuation effect	The result of water-level fluctuations in the Snake River; appears as a buff-to-white band along the water line. This effect is classified as a DH.
RMP	Resource Management Plan: a protocol used by the BLM to determine VRM Class.
Service road.....	A road that is used exclusively by IPC to access its facilities.
SMS	Scenery Management System: a systematic method used by the USFS to determine the relative value and importance of scenery in a national forest and of managing the scenery.
Social trail	A trail that has been created by recreational users and that is not part of the planned trail network. Creation of a social trail usually results in trampled vegetation, erosion, and compacted soils.
SP	Special Place: A specific location or expanse in an outdoor setting to which people have formed an attachment. A place that is special to an individual is usually somehow connected to his or her beliefs, values, and feelings. Examples are traditional meeting places, historic places, and recreational, spiritual, cultural, and natural landscapes. Used in the SMS protocol.
Study Area	The Study Area includes the Project and adjacent lands, the HCNRA, and 14 transmission lines that cover approximately 658 miles and extend through northeastern Oregon and southwest and southern Idaho.
Subgroup	A group created by IPC to deal specifically with aesthetic issues in the relicensing process. The Subgroup consists of representatives from the USFS, BLM, National Park Service, Idaho Department of Parks and Recreation, and IPC.
Suggested PM&E	PM&E suggested by DEA as a means of reducing the adverse impacts caused by IPC facilities and operations. Suggested PM&E are analogous to tools in a toolbox; that is, they are intended to provide a variety of means for addressing impacts, and the most appropriate tool for the job must be selected. They must be considered on a case-by-case basis because certain suggested PM&E may be unreasonable in some applications. IPC will select which suggested PM&E to include in the FERC relicensing application.
USFS	United States Department of Agriculture Forest Service

Visual Contrast Rating ...	Used in the VRM system, the purpose of the rating is to protect the visual value of the land when surface-disturbing projects or developments (e.g., construction of a road) are proposed. The rating determines whether potential visual impacts from the activities will comply with VRM Class management objectives, or whether adjustments will be required. The assumption underlying the contrast rating is that the degree to which an activity will affect visual value depends on how much visual contrast there will be between the project and existing landscape.
VP	Viewpoint. A viewpoint is any of the points that were identified as potential KOPs or SPs. During the study, viewpoints were determined to be OPs, KOPs, or SPs. There are 59 viewpoints in the VRM Study Area and 93 viewpoints in the SMS Study Area.
VRI	Visual Resource Inventory: Part of the VRM system, used to identify visual values and help establish management objectives.
VRI Class	Based on scenic quality, visual sensitivity, and distance zone, landscapes are assigned a VRI Class from I to IV; Class I has the highest visual value and Class IV the lowest. Special Areas such as Wilderness Areas, Wilderness Study Areas, and Wild and Scenic Rivers are normally designated as Class I.
VRM	Visual Resource Management: protocol used by the BLM to identify and protect the visual value of public lands.
VRM Class	Ranges from I to IV; accompanied by standard management objectives. See Table 3 on page 16 for an explanation of the classes.

Viewpoint Summaries

This section contains specific information about the 152 viewpoints in the Study Area. Each viewpoint is presented on a single page. Viewpoints #1 – #59 are within the VRM Study Area (**Section 2.2** and **Figs. 3** and **8**), and Viewpoints #101 – #193 are within the SMS Study Area (**Section 3.2** and **Figs. 18** and **23**); there are no viewpoints numbered #60 through #100. Some of the Viewpoint Summaries include historical information, which has been drawn from *Snake River of Hells Canyon* (Carrey et al., 1979).

Information for Viewpoints #1 – #59 includes a locator map, Visual Contrast Rating, VRM Class, compatibility or non-compatibility of the Visual Contrast Rating with the VRM Class and, when applicable, proposed VRI Class, effects, suggested PM&E, comments, and for the KOPs only, a photo of the site. Information for Viewpoints #101 – #193 includes a locator map, existing and recommended landscape character statements, existing and recommended scenic integrity levels, existing ecological integrity, IPC Project effects, suggested PM&E, comments, and for the SPs and limited OPs, a photo of the site.

In the SMS summaries, considerable discussion occurs regarding existing and recommended desired conditions. This information was required in order to determine the effects of the Project and the type and extent of PM&E that might be undertaken to reduce or eliminate impacts. IPC is not necessarily responsible for achieving the desired landscape character or desired scenic integrity recommended here but is responsible for mitigating its Project's impacts. **It must be noted that for Viewpoints #101 – #193, IPC is responsible only for mitigating the effects listed in the section beginning with “IPC Facilities and Operations.”**

A synopsis of the information contained in the summaries is presented below, followed by an explanation of the terms and abbreviations used in the summaries.

Synopsis of information in the Viewpoint Summaries

Table VS-1 lists the viewpoints that were identified as KOPs in the VRM Study Area and SPs in the SMS Study Area. The remaining viewpoints, the OPs, are also listed in this table.

Table VS-1. Viewpoints identified as KOPs, SPs, and OPs in the Study Area.

KOPs (VRM)	SPs (SMS)	OPs
#5 US 93	#101 Hells Canyon Park	#1 Pipeline Recreation Site
#6 US 93	#102 Kleinschmidt Grade Overlook	#2 Eagle Rock Sportsman Access
#7 ID SR 46	#103 Big Bar	#3 Lake Walcott State Park
#8 ID SR 26	#104 Horse Mountain Lookout	#4 Near Dietrich, Idaho
#9 ID SR 26	#106 Eagle Bar and the Red Ledge Mine 7	#12 Hill City Road
#10 Road 2300	#107 Hells Canyon Dam	#14 Pioneer Reservoir
#11 ID SR 46 and Old Hwy 46	#108 Hells Canyon Visitor Information Center	#22 Rocky Canyon Road (FR 360)
#13 Clover Creek Road	#109 Stud Creek	#26 ID SR 52 near Clay Point Park
#15 Bennett Mountain Road	#110 Warm Springs	#27 US 95 near Cambridge
#16 Bennett Mountain Road	#111 Barton Cabin at Battle Creek	#28 ID SR 71 near Heath
#17 Centennial Trail		#29 ID SR 71 near Heath

Table VS-1 (cont.). Viewpoints identified as KOPs, SPs, and OPs in the Study Area.

KOPs (VRM)	SPs (SMS)	OPs
#18 Rattlesnake Station Historical Site and US 20	#113 Wild Sheep Rapids and Campsite	#32 OR SR 86
#19 US 20	#114 Wild Sheep Rapids	#105 Black Point
#20 Bonneville Point	#115 Granite Rapids	#112 Sand Dunes Pit Houses
#21 Discovery Unit, Lucky Peak State Park	#116 Saddle Creek	#117 Bernard Creek Trailhead
#23 Payette River and ID SR 52	#118 McGaffee Cabin	#119 Waterspout Place (Homestead)
#24 North Crane Road	#120 Bill's Creek	#122 Rush Creek Rapids and Hat Point
#25 Paddock Valley Reservoir	#121 Sluice Creek/Winniford Place	#124 Sheep Creek Ranch
#30 OR SR 86 near Richland, OR	#123 Johnson Bar and the Barton Bullock House	#126 Dry Diggins View and Eagles Nest
#31 OR SR 86 and Hole-in-the-Wall Interpretive Site	#125 Sheep Creek Campsite	#127 Salt Creek Cabin
#33 Oasis Park	#128 Pine Bar (campsite)	#129 Big Bar Airstrip and Campsite
#34 Weiser Dunes	#130 Temperance Creek Ranch	#131 Suicide Point
#35 Farewell Bend, Oregon State Park	#135 Upper Pittsburg Landing and Mexican Hat site	#132 Half Moon Bar
#36 Burnt River Confluence/Steck Park	#136 Lower Pittsburg Landing and Campground	#133 Kirkwood Ranch
#37 Spring Recreation Site	#142 Deep Creek (Chinese miner massacre site)	#134 Kirby Creek Lodge
#38 Railroad Tunnel Historical Site	#143 Nez Perce Crossing Site	#137 Circle C Ranch
#39 Mountain Man Resort	#144 Dug Bar Landing	#138 Pittsburg Administration Site
#40 Private Dudes Cove	#145 Mountain Chief Mine Tunnel	#139 Somers Creek
#41 John Holcomb Memorial Park	#147 Eureka Mine	#140 Tryon Creek Campsite
#42 Hewitt Park	#148 Confluence of Salmon and Snake Rivers	#141 Copper Creek Resort
#43 Brownlee Creek Arm	#149 Cherry Creek Falls and Ranch	#146 Imnaha Confluence
#44 Woodhead Park	#150 Jim Creek Ranch	#151 Coon Hollow
#45 Salmon Net Anchor Site	#152 Lower Cottonwood	#160 FS Rd #110
#46 Oxbow Bridge	#153 Cache Creek	#161 McGraw Trailhead
#47 McCormick park	#154 Wallowa Mountain Loop Road #1	#165 McGraw Fire Lookout
#48 Reflection Point	#155 Wallowa Mountain Loop Road #2	#166 Crazyman Creek and Trailhead
#49 Dead Man's Spot	#156 Wallowa Mountain Loop Road #3	#167 Buck Creek Trailhead
#50 Oxbow Dam	#157 Wallowa Mountain Loop Road #4	#168 P.O. Saddle
#51 Oxbow Spillway	#158 Wallowa Mountain Loop Road #5	#169 490 Road/Saulsberry Saddle
#52 Oxbow Plant	#159 Hells Canyon Overlook	#170 Imnaha River Woods
#53 Copperfield Park	#162 Ollokot Campground	#171 Lookout Mountain
#54 Boat Launch	#163 Black Horse Campground	#172 Freezeout Saddle Trailhead
#55 Westfall	#164 Ollokot Fish Trap	#173 Saddle Creek Campground
#56 Bob's Creek	#174 Granny Viewpoint	#175 College Creek
#57 Sixteen West	#182 Five Mile Viewpoint	#176 Memaloose Landing Strip
#58 Ashby Creek		#177 Helitack Base
#59 Copper Creek Trailhead Park		#178 Hat Point Lookout/Campground
		#179 Sacajewa Campground
		#180 Horse Creek Viewpoint
		#181 Wisnor Place
		#183 Somer's Point
		#184 Dorrance Cow Camp
		#185 Somer's Ranch
		#186 Thorn Creek Guard Station
		#187 FS Trail #1713
		#188 Dug Bar Road
		#189 Emerald Lake
		#190 Horse Heaven Cabin
		#191 Sawpit Saddle
		#192 Grave Point Lookout
		#193 Pittsburg Saddle

Table VS-2 lists all KOPs that exceed the acceptable level of visual contrast established by standard VRM Class objectives. All SPs include suggested PM&E to address Project effects.

Table VS-2. KOPs that exceed the acceptable level of visual contrast.

#10 Road 2300	#37 Spring Recreation Site	#49 Dead Man's Spot
#11 ID SR 46 and Old Highway 46	#38 Railroad Tunnel Historical Site	#50 Oxbow Dam
#15 Bennett Mountain Road – Line 906	#39 Mountain Man Resort	#51 Oxbow Spillway
#18 Rattlesnake Station Historical Site and US 20	#40 Private Dudes Cove	#52 Oxbow Plant
#19 US 20	#41 John Holcomb Memorial Park	#53 Copperfield Park
#20 Bonneville Point	#42 Hewitt Park	#54 Boat Launch Dispersed Recreation Site
#21 Discovery Unit, Lucky Peak State Park	#43 Brownlee Creek Arm	#55 Westfall Dispersed Recreation Site
#23 Payette River and ID SR 52	#44 Woodhead Park	#56 Bob's Creek
#24 North Crane Road	#45 Salmon Net Anchor Site	#57 Sixteen West Dispersed Recreation Site
#25 Paddock Valley Reservoir	#46 Oxbow Bridge	#58 Asby Creek Dispersed Recreation Site
#30 OR SR 86 near Richland, Oregon	#47 McCormick Park	#59 Copper Creek Trailhead Park
#36 Burnt River Confluence/Steck Park	#48 Reflection Point	

Table VS-3 lists the viewpoints that are recommended for visual simulation, which could be used to help determine if suggested PM&E are reasonable. If it is determined that reducing contrast or scenic detractors by modifying an IPC facility or operation is not reasonable, three other options for mitigation exist. First, IPC could interpret the effect for the user through an interpretive and education program. Viewpoints with opportunities for interpretive programming are listed in **Table VS-3**. These sites consider the opportunity for interpretive programming regardless of whether or not a Project effect is present. Second, IPC could partner with the BLM, USFS, Idaho Department of Parks and Recreation, Oregon Parks and Recreation Department, or Baker County, Oregon, to mitigate non-Project effects and improve other facilities in the Study Area. Viewpoints with opportunities for partnering are also listed in **Table VS-3**. Third, IPC could conduct mitigation and/or enhancement for areas other than KOPs and SPs.

Table VS-3. Viewpoints recommended for visual simulation and with opportunities for interpretation and partnering.

Viewpoints recommended for visual simulation	Viewpoints with opportunities for interpretation	Viewpoints with opportunities for partnering
#25 Paddock Valley Reservoir	#35 Farewell Bend State Park	#35 Farewell Bend State Park
#46 Brownlee Dam (and substation)	#44 Woodhead Park	#36 Burnt River Confluence/Steck Park
#51 Oxbow Spillway	#45 Salmon Net Anchor Site	#37 Spring Recreation Site
#107 Hells Canyon Dam	#47 McCormick Park	#41 John Holcomb Memorial Park
	#107 Hells Canyon Dam	#42 Hewitt Park
	#109 Stud Creek	#59 Copper Creek Trailhead Park
	#111 Barton Cabin at Battle Creek	#102 Kleinschmidt Grade Overlook
	#116 Saddle Creek	

Table VS-3 (cont.). Viewpoints recommended for visual simulation and with opportunities for interpretation and partnering.

Viewpoints recommended for visual simulation	Viewpoints with opportunities for interpretation	Viewpoints with opportunities for partnering
	#120 Bill’s Creek #121 Sluice Creek/Winniford Place #123 Johnson Bar and Barton Bullock House #130 Temperance Creek Ranch #135 Upper Pittsburg Landing and Mexican Hat Site #136 Lower Pittsburg Landing and Campground #142 Deep Creek (Chinese Miner Massacre Site) #143 Nez Perce Crossing #145 Mountain Chief Mine Tunnel #147 Eureka Mine	#103 Big Bar #108 Hells Canyon Visitor Information Center #109 Stud Creek #110 Warm Springs #111 Barton Cabin at Battle Creek #116 Saddle Creek #120 Bill’s Creek #121 Sluice Creek/Winniford Place #123 Johnson Bar and Barton Bullock House #130 Temperance Creek Ranch #131 Temperance Creek #133 Kirkwood Ranch #135 Upper Pittsburg Landing and Mexican Hat Site #136 Lower Pittsburg Landing and Campground #142 Deep Creek (Chinese Miner Massacre Site) #143 Nez Perce Crossing #144 Dug Bar #145 Mountain Chief Mine Tunnel #147 Eureka Mine #182 Five Mile Viewpoint

Terms and abbreviations used in the Viewpoint Summaries

- Current/Proposed Operations The management regime under which the Project typically operates.
- DF See “effect”
- DH See “effect”
- Drawdown effect The result of the water-level fluctuations in the reservoirs; appears in the landscape as a distinct white- to buff-colored band along the perimeter of the reservoirs.
- Ecological integrity (SMS)..... Ecological intactness and wholeness of a landscape in terms of how much negative deviation there is from a sustainable, resilient, healthy landscape.
- Effect Visual impact of human activities on the natural landscape; may or may not be the result of Project facilities or operations. An effect can

be a Direct Fact (DF), Direct Hypothetical (DH), Indirect Fact (IF), or Non-Project (NP).

DF (Direct Fact): Indisputably a result of Project facilities and operations and exists without question. A transmission line and tower silhouetted against the sky is an example of a DF.

DH (Direct Hypothetical): The identified effect, if it exists, may be a direct result of Project facilities and operations, but existing data is inconclusive or insufficient to determine whether the Project has actually caused it. The loss of sandy beaches at specific locations along the Snake River is an example of a DH.

IF (Indirect Fact): May be an indirect result of Project facilities and operations, and the effect exists without question. Damaged and/or destroyed vegetation resulting from increased recreational use is an example of an Indirect Fact. Whether or not the Project causes this effect may be in dispute since the link between the two are removed and uncertain.

NP (Non-Project): The visual or aesthetic contrast identified in the evaluation is not a result of Project facilities or operations.

Full Pool Run-of-River	Management regime under which the reservoirs are maintained at full-pool elevations and the volume of water entering the Project plus tributary inflow equal outflow from the Project.
IF	See “effect”
KOP	Key Observation Point: Point from which the Visual Contrast Rating is performed. KOPs are the most critical viewpoints (e.g., from communities and road crossings, typical views in representative landscapes) and must include Project facilities and/or operations (e.g., skyline crossings, river crossings, and substations). Used in the VRM protocol.
Landscape character statement	Positive landscape attributes in terms of people’s values, desires, and needs and provides an image of the area; includes a history of the landscape, existing scenic and other positive attributes, and existing land-cover types. Used in the SMS protocol.
NP	See “effect”
OP	Observed Point: Viewpoint that was removed from consideration as a KOP or SP because effects were not visible or the site had less historical and/or landscape character than had been originally thought.
PM&E	Protection, Mitigation, and Enhancement measures: Measure needed to achieve compatibility of Visual Contrast Rating with VRM Class

(VRM only) as a result of Project effects, or measure needed to achieve recommended landscape character and scenic integrity level for current/proposed operations scenario (SMS only) as a result of Project effects. Examples are moderating water-level fluctuations to reduce drawdown effect, painting towers to match natural landscape and reduce visual contrast, and replacing conductors (i.e., lines) with non-specular wire to reduce reflectivity.

- Proposed/Current Operations Management regime under which the Project typically operates and will be proposed to operate in IPC’s license application.
- RAA (SMS)..... Recreation Analysis Area
- Scenic integrity (SMS)..... Scenic intactness and wholeness of a landscape in terms of how much negative deviation there is from the existing landscape character.
- SMS Scenery Management System: A systematic method used by the USFS to determine the relative value and importance of scenery in a national forest and to manage the scenery.
- SP (SMS)..... Special Place: A specific location or expanse in an outdoor setting to which people have formed an attachment. A place that is special to an individual is usually somehow connected to his or her beliefs, values, and feelings. Examples are traditional meeting places, historic places, and recreational, spiritual, cultural, and natural landscapes.
- Visual Contrast Rating (VRM)..... Determined by comparing Project features with major features of the existing landscape (land/waterbody, vegetation, and structures) using the four basic design elements (form, line, color, and texture). The design elements are weighted. Scores can range from 0 (no contrast) to 90 (very high contrast). **Table VS-4** shows the rating system.

Table VS-4. Portion of the Visual Contrast Rating form that is used to compute the score. Examples of scores have been filled in to illustrate how the highest possible score (90) is attained.

Degree of Contrast		Features												Total
		Land/Water Body				Vegetation				Structures				
		Strong (3 pt)	Mod (2 pt)	Weak (1 pt)	None (0 pt)	Strong (3 pt)	Mod (2 pt)	Weak (1 pt)	None (0 pt)	Strong (3 pt)	Mod (2 pt)	Weak (1 pt)	None (0 pt)	
Elements	Form (x4)	12				12				12				36
	Line (x3)	9				9				9				27
	Color (x2)	6				6				6				18
	Texture (x1)	3				3				3				9
Total		30				30				30				90

- VRI (VRM) Visual Resource Inventory: Based on scenic quality, visual sensitivity, and distance zone, landscapes are assigned a VRI Class from I to IV; Class I has the highest visual value and Class IV the lowest. Special Areas such as Wilderness Areas, Wilderness Study Areas, and Wild and Scenic Rivers are normally designated as Class I. A VRI Class represents a categorical assessment of existing visual resources; a VRM class considers the VRI classification along with other resources to represent how an area will be managed (see also VRM Class).
- VRM Visual Resource Management: Protocol used by the BLM to identify and protect the visual value of public lands.
- VRM Class Assigned by the BLM, VRM Classes provide the standard for planning, designing, and evaluating future projects. VRI Class, wildlife habitat, riparian habitat, vegetation, forestry and vegetative products, watershed areas, livestock grazing, cultural resources, recreation, wilderness areas, rights-of-way, utility corridors, minerals (e.g., gold, silver, copper, oil, gas), fire management, and public input are considered in the determination of VRM Class. VRM Classes range from I to IV and are accompanied by standard management objectives (**Table VS-5**). Acceptable Visual Contrast Ratings for each VRM Class are shown in **Table VS-6**.

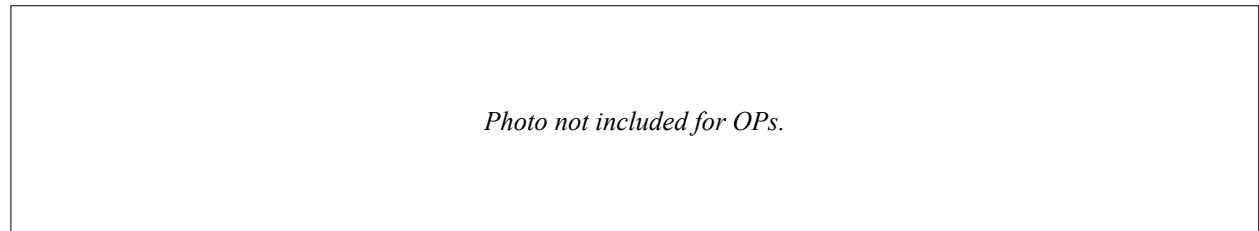
Table VS-5. VRM Classes and standard management objectives.

VRM Class	Standard management objective	Explanation
I	Preserve the existing character of the landscape	Natural ecological change and very limited management activity are allowed. Change resulting from management activity should be very low and must not attract attention.
II	Retain the existing character of the landscape	Change resulting from management activity should be low. Activities may be visible, but should not attract the attention of the casual observer.
III	Partially retain the existing character of the landscape	Change resulting from management activity should be moderate. Activities may attract attention but should not dominate the view of the casual observer.
IV	Provide for management activities that require major modification of the existing landscape	Change resulting from management activities can be high. Activities may dominate the view and be the major focus of viewer attention.

Table VS-6. Acceptable Visual Contrast Ratings for each VRM Class.

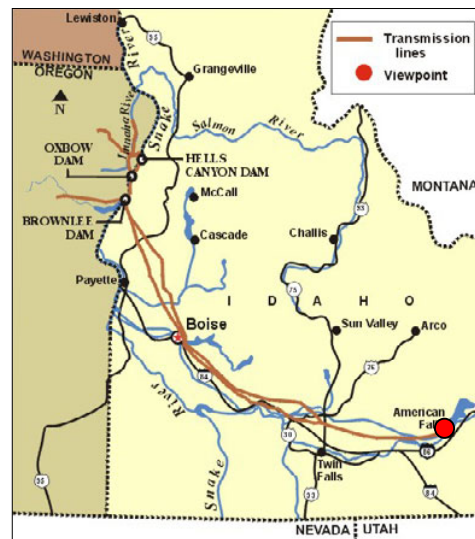
VRM Class	Acceptable Visual Contrast Rating	Description
I	0	No contrast allowed
II	1 to 10	Contrast can be seen but does not attract attention
III	11 to 20	Contrast attracts attention and begins to dominate scene
IV	21 to 90	Contrast demands attention and cannot be overlooked by the average observer

Viewpoint #1: Pipeline Recreation Site (OP)

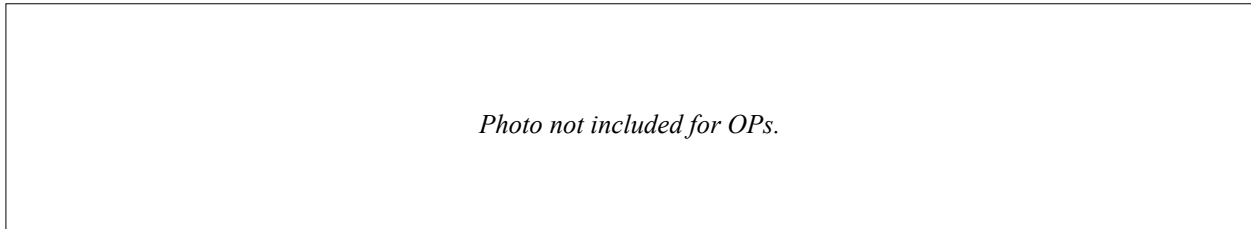


Visual Contrast Rating	Existing VRM Class	Is contrast rating acceptable for VRM Class?	Proposed VRI Class	Is contrast rating acceptable for proposed VRI Class?
Not rated	II / III / IV	Yes	N/A	N/A
IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River	
	Effects	Suggested PM&E		Effects
Line 923 (H-frame wood)	Negligible	No specific measures are proposed. ¹		N/A
Comments	Subject line in background. NP: Several non-subject lines augment effect.			

¹When conductors are replaced or updated, non-specular conductors will be used.

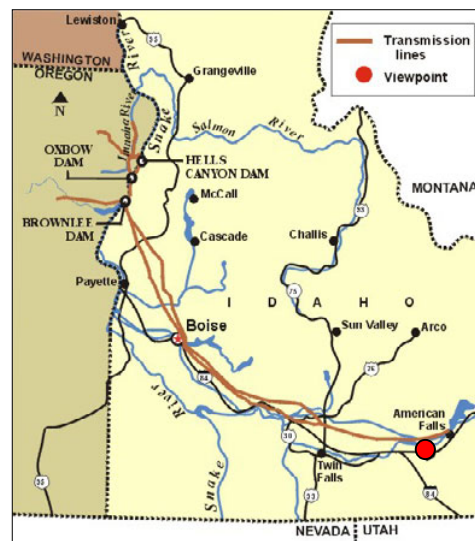


Viewpoint #2: Eagle Rock Sportsman Access (OP)

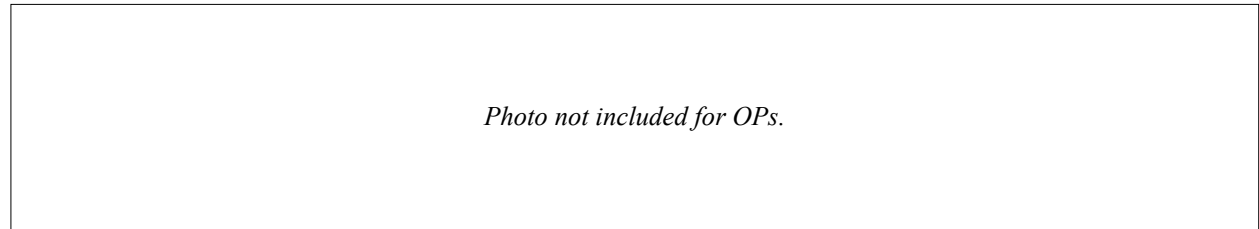


Visual Contrast Rating	Existing VRM Class	Is contrast rating acceptable for VRM Class?	Proposed VRI Class	Is contrast rating acceptable for proposed VRI Class?
Not rated	II / III	Yes	N/A	N/A
IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River	
	Effects	Suggested PM&E		Effects
Line 951 (H-frame wood)	None	No specific measures are proposed. ¹		N/A
Comments	Subject line not visible.			

¹When conductors are replaced or updated, non-specular conductors will be used.

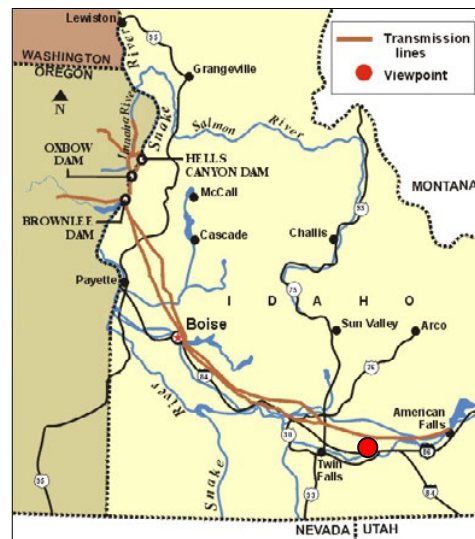


Viewpoint #3: Lake Walcott State Park (OP)

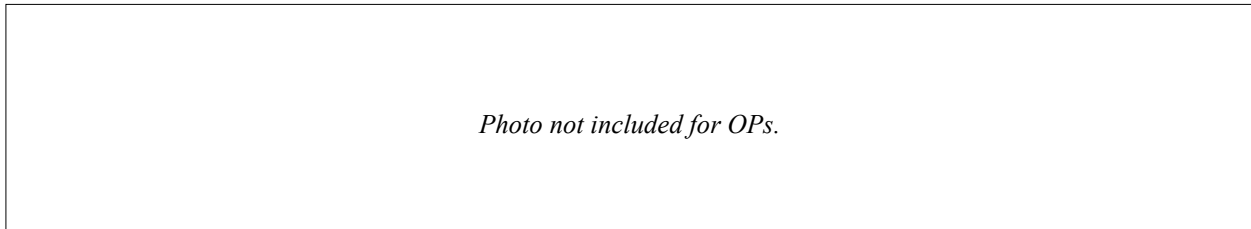


Visual Contrast Rating	Existing VRM Class	Is contrast rating acceptable for VRM Class?	Proposed VRI Class	Is contrast rating acceptable for proposed VRI Class?
Not rated	II / III	Yes	N/A	N/A
IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River	
	Effects	Suggested PM&E		Effects
Line 951 (H-frame wood)	None	No specific measures are proposed. ¹		N/A
Comments	Subject line not visible.			

¹ When conductors are replaced or updated, non-specular conductors will be used.



Viewpoint #4: Near Dietrich, ID (OP)



Visual Contrast Rating	Existing VRM Class	Is contrast rating acceptable for VRM Class?	Proposed VRI Class	Is contrast rating acceptable for proposed VRI Class?
Not rated	IV	Yes	N/A	N/A
IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River	
	Effects	Suggested PM&E		Effects
Line 951 (H-frame wood)	Negligible	No specific measures are proposed. ¹		N/A
Comments	Transmission line has minimal impact on this very low-usage travel route.			

¹ When conductors are replaced or updated, non-specular conductors will be used.



Viewpoint #5: US 93 near Midpoint Substation (KOP)



Looking north

Visual Contrast Rating	Existing VRM Class	Is contrast rating acceptable for VRM Class?	Proposed VRI Class	Is contrast rating acceptable for proposed VRI Class?
10	III	Yes	N/A	N/A

IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
Line 906 (H-frame wood); Line 912 (H-frame wood/laminate)	DF: Transmission line silhouetted on horizon.	No specific measures are proposed. ¹	N/A

Comments	NP: Multiple non-Project transmission lines visible and augment transmission line effect. Midpoint substation creates contrast in line and form. Substation most noticeable from southern approach.
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¹When conductors are replaced or updated, non-specular conductors will be used.



Viewpoint #6: US 93 near Midpoint Substation (KOP)



Looking south

Visual Contrast Rating	Existing VRM Class	Is contrast rating acceptable for VRM Class?	Proposed VRI Class	Is contrast rating acceptable for proposed VRI Class?
10	III	Yes	N/A	N/A

IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
Line 906 (H-frame wood); Line 912 (H-frame wood/ laminate)	DF: Transmission line silhouetted on horizon	No specific measures are proposed. ¹	N/A

Comments	NP: Multiple non-Project transmission lines visible and augment transmission line effect. Midpoint substation creates contrast in line and form. Substation most noticeable from southern approach.
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¹ When conductors are replaced or updated, non-specular conductors will be used.



Viewpoint #7: ID SR 46 near Gooding, Idaho (KOP)



Visual Contrast Rating	Existing VRM Class	Is contrast rating acceptable for VRM Class?	Proposed VRI Class	Is contrast rating acceptable for proposed VRI Class?
17	III	Yes	N/A	N/A

IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
Line 906 (H-frame wood)	DF: Transmission line silhouetted on horizon (in flat landscape)	No specific measures are proposed. ¹	N/A

Comments	IPC does not own steel lattice towers and associated lines.
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¹ When conductors are replaced or updated, non-specular conductors will be used.



Viewpoint #8: ID SR 26 near Shoshone, Idaho (KOP)



Looking west

Visual Contrast Rating	Existing VRM Class	Is contrast rating acceptable for VRM Class?	Proposed VRI Class	Is contrast rating acceptable for proposed VRI Class?
18	III	Yes	N/A	N/A
IPC Facilities/ Operations	Current / Proposed Operations			Full Pool/ Run-of-River
	Effects	Suggested PM&E		Effects
Line 912 (H-frame wood/laminate)	DF: Transmission line silhouetted on horizon	No specific measures are proposed. ¹		N/A
Comments	None			

¹When conductors are replaced or updated, non-specular conductors will be used.



Viewpoint #9: ID SR 26 near Shoshone, Idaho (KOP)



Looking east

Visual Contrast Rating	Existing VRM Class	Is contrast rating acceptable for VRM Class?	Proposed VRI Class	Is contrast rating acceptable for proposed VRI Class?
18	III	Yes	N/A	N/A
IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River	
	Effects	Suggested PM&E	Effects	
Line 912 (H-frame wood/laminate)	DF: Transmission line silhouetted on horizon	No specific measures are proposed. ¹	N/A	
Comments	None			

¹When conductors are replaced or updated, non-specular conductors will be used.



Viewpoint #10: Road 2300 (KOP)



Looking south southwest

Visual Contrast Rating	Existing VRM Class	Is contrast rating acceptable for VRM Class?	Proposed VRI Class	Is contrast rating acceptable for proposed VRI Class?
18	II	No	N/A	N/A

IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
Line 912 (H-frame wood/laminate)	DF: Transmission line silhouetted on horizon	Replace lines with non-specular wire in normal maintenance cycle.	N/A

Comments	Effect most noticeable from northern approach and is visible for very short period of time as motorists approach and pass under line. Relocating towers is not reasonable.
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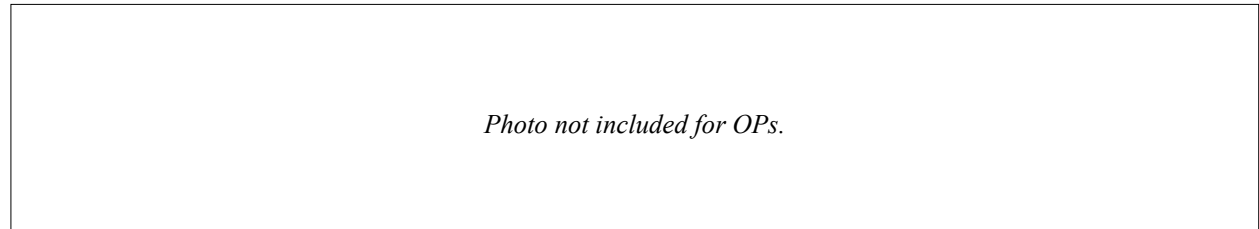
Viewpoint #11: ID SR 46 and Old Highway 46 (KOP)



Visual Contrast Rating	Existing VRM Class	Is contrast rating acceptable for VRM Class?	Proposed VRI Class	Is contrast rating acceptable for proposed VRI Class?
17	II	No	N/A	N/A
IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River	
	Effects	Suggested PM&E	Effects	
Line 912 (H-frame wood/laminate)	DF: Six towers silhouetted from southern approach	Replace lines with non-specular wire in normal maintenance cycle.	N/A	
Comments	Effect is visible for very short time period as motorists approach and pass under line. Relocating towers is not reasonable.			



Viewpoint #12: Hill City Road (OP)



Visual Contrast Rating	Existing VRM Class	Is contrast rating acceptable for VRM Class?	Proposed VRI Class	Is contrast rating acceptable for proposed VRI Class?
Not rated	II / IV	Yes	N/A	N/A
IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River	
	Effects	Suggested PM&E		Effects
Line 906 (H-frame wood)	Negligible	No specific measures are proposed. ¹		N/A
Comments	Transmission line has minimal effect on this very low-usage travel route.			

¹ When conductors are replaced or updated, non-specular conductors will be used.



Viewpoint #13: Clover Creek Road (KOP)



Visual Contrast Rating	Existing VRM Class	Is contrast rating acceptable for VRM Class?	Proposed VRI Class	Is contrast rating acceptable for proposed VRI Class?
13	IV	Yes	N/A	N/A

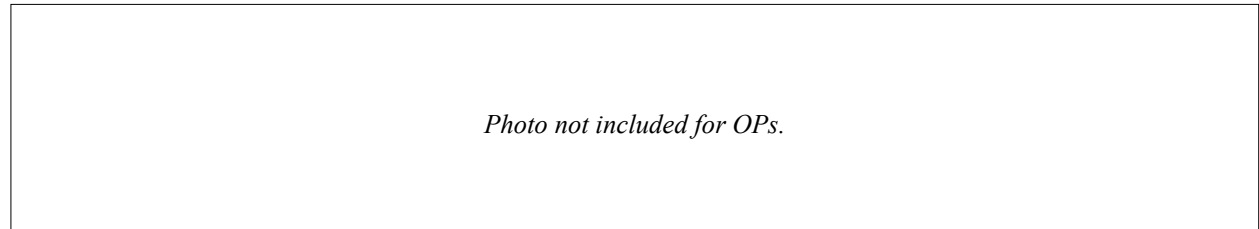
IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
Line 912 (H-frame wood/laminate)	DF: Four towers silhouetted on ridge to north in foreground/midground.	No specific measures are proposed. ¹	N/A

Comments	Gravel road parallels transmission line.
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¹ When conductors are replaced or updated, non-specular conductors will be used.

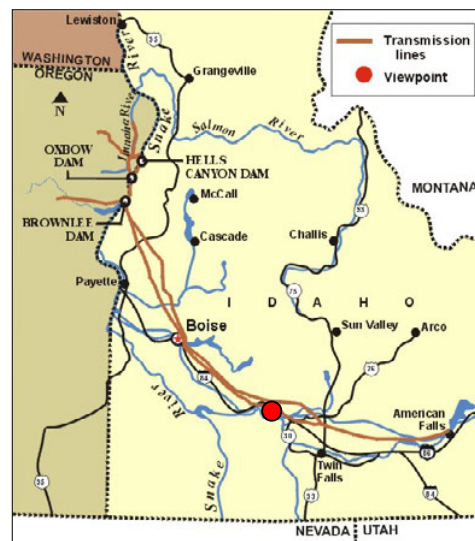


Viewpoint #14: Pioneer Reservoir (OP)



Visual Contrast Rating	Existing VRM Class	Is contrast rating acceptable for VRM Class?	Proposed VRI Class	Is contrast rating acceptable for proposed VRI Class?
Not rated	II	Yes	N/A	N/A
IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River	
	Effects	Suggested PM&E	Effects	
Line 906 (H-frame wood)	Negligible	No specific measures are proposed. ¹	N/A	
Comments	Transmission line has minimal impact on this very low-usage travel route.			

¹ When conductors are replaced or updated, non-specular conductors will be used.



Viewpoint #15: Bennett Mountain Road – Line 906 (KOP)



South of Blair Trail Reservoir

Visual Contrast Rating	Existing VRM Class	Is contrast rating acceptable for VRM Class?	Proposed VRI Class	Is contrast rating acceptable for proposed VRI Class?
17	I	No	N/A	N/A
IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River	
	Effects	Suggested PM&E	Effects	
Line 906 (H-frame wood)	DF: Transmission line crosses Bennett Mountain Road.	Replace lines with non-specular wire in normal maintenance cycle.	N/A	
Comments	Effect is visible for very short time period as motorists approach and pass under line. Relocating towers is not reasonable.			



Viewpoint #15

Viewpoint #16: Bennett Mountain Road – Line 912 (KOP)



North of Blair Trail Reservoir

Visual Contrast Rating	Existing VRM Class	Is contrast rating acceptable for VRM Class?	Proposed VRI Class	Is contrast rating acceptable for proposed VRI Class?
17	III	Yes	N/A	N/A
IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River	
	Effects	Suggested PM&E	Effects	
Line 912 (H-frame wood/laminate)	DF: Five towers silhouetted on horizon.	No specific measures are proposed. ¹	N/A	
Comments	Effect is visible for very short time period as motorists approach and pass under line.			

¹ When conductors are replaced or updated, non-specular conductors will be used.



Viewpoint #17: Centennial Trail (KOP)



Visual Contrast Rating	Existing VRM Class	Is contrast rating acceptable for VRM Class?	Proposed VRI Class	Is contrast rating acceptable for proposed VRI Class?
8	II	Yes	N/A	N/A
IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River	
	Effects	Suggested PM&E	Effects	
Line 912 (H-frame wood/Laminate)	DF: Transmission line in middle-ground and well below ridgeline; towers mimic patterns of fence posts.	No specific measures are proposed. ¹	N/A	
Comments	None			

¹ When conductors are replaced or updated, non-specular conductors will be used.



Viewpoint #18: Rattlesnake Station Historical Site and US 20 (KOP)



Looking south

Visual Contrast Rating	Existing VRM Class	Is contrast rating acceptable for VRM Class?	Proposed VRI Class	Is contrast rating acceptable for proposed VRI Class?
14	I	No	N/A	N/A

IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
Line 912 (H-frame wood/laminate)	DF: Three towers silhouetted.	Replace lines with non-specular wire in normal maintenance cycle.	N/A

Comments	Road crossing is good example of reduced effect with long span. Relocating towers is not reasonable.
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Viewpoint #19: US 20 (KOP)



Visual Contrast Rating	Existing VRM Class	Is contrast rating acceptable for VRM Class?	Proposed VRI Class	Is contrast rating acceptable for proposed VRI Class?
22	III	No	N/A	N/A

IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
Line 906 (H-frame wood)	DF: Six towers silhouetted to west in middleground/ background.	Replace lines with non-specular wire in normal maintenance cycle.	N/A

Comments	Effect is visible for very short time period as motorists approach and pass under line. Relocating towers is not reasonable.
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Viewpoint #20: Bonneville Point (KOP)



Visual Contrast Rating	Existing VRM Class	Is contrast rating acceptable for VRM Class?	Proposed VRI Class	Is contrast rating acceptable for proposed VRI Class?
17	I	No	N/A	N/A
IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River	
	Effects	Suggested PM&E	Effects	
Line 906 (H-frame wood); Line 912 (H-frame wood/laminate, steel lattice)	DF: Four steel lattice towers silhouetted on adjacent ridge.	Replace lines with non-specular wire in normal maintenance cycle. ¹	N/A	
Comments	<p>NP: Multiple non-subject lines in valley and nearby radio towers moderate effect. Because IPC's line is in the background view and many other lines are in the vicinity, the cumulative view would be improved little by the suggested mitigation. Viewpoint clearly occurs in Class I due to proximity to Oregon Trail. BLM mapping is unclear as to whether impact occurs in I, II, or III.</p>			

¹ Subgroup concurs with DEA that relocating towers is not reasonable.

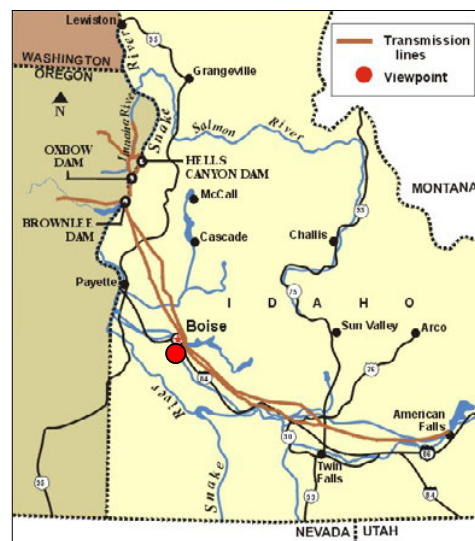


Viewpoint #21: Discovery Unit, Lucky Peak State Park (KOP)



Visual Contrast Rating	Existing VRM Class	Is contrast rating acceptable for VRM Class?	Proposed VRI Class	Is contrast rating acceptable for proposed VRI Class?
17	II	No	N/A	N/A
IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River	
	Effects	Suggested PM&E	Effects	
Line 912 (H-frame wood/laminate, steel lattice)	DF: Three steel lattice towers are silhouetted on adjacent ridge.	Replace lines with non-specular wire in normal maintenance cycle. ¹	N/A	
Comments	Impact occurs in Class I but is viewed from Class II. NP: The nearby dam and related facilities have much more significant aesthetic impact than the Project transmission line. The cumulative effect would not be substantially improved by the suggested mitigation measures.			

¹ Subgroup concurs with DEA that relocating towers is not reasonable.



Viewpoint #22: Rocky Canyon Road (FR 360) (OP)



Visual Contrast Rating	Existing VRM Class	Is contrast rating acceptable for VRM Class?	Proposed VRI Class	Is contrast rating acceptable for proposed VRI Class?
Not rated	II	Yes	N/A	N/A
IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River	
	Effects	Suggested PM&E		Effects
Line 911 (steel lattice)	Negligible	No specific measures are proposed. ¹		N/A
Comments	Topography and vegetation screen the transmission line.			

¹ When conductors are replaced or upgraded, non-specular conductors will be used.



Viewpoint #23: Payette River and ID SR 52 (KOP)



Visual Contrast Rating	Existing VRM Class	Is contrast rating acceptable for VRM Class?	Proposed VRI Class	Is contrast rating acceptable for proposed VRI Class?
21	II	No	N/A	N/A
IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River	
	Effects	Suggested PM&E	Effects	
Line 911 (steel lattice)	DF: Steel lattice tower transmission line crosses Payette River and ID SR 52; towers silhouetted to south middle-ground/background.	Replace lines with non-specular wire in normal maintenance cycle.	N/A	
Comments	Effect is visible for very short time period as motorists approach and pass under line. Relocating towers is not reasonable.			



Viewpoint #23

Viewpoint #24: North Crane Road (KOP)



Visual Contrast Rating	Existing VRM Class	Is contrast rating acceptable for VRM Class?	Proposed VRI Class	Is contrast rating acceptable for proposed VRI Class?
25	III	No	N/A	N/A

IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
Line 911 (steel lattice)	DF: Six steel lattice towers silhouetted from viewpoint.	Replace lines with non-specular wire in normal maintenance cycle.	N/A

Comments	Very low-usage travel route. Relocating towers not reasonable.
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Viewpoint #25: Paddock Valley Reservoir (KOP)



Visual Contrast Rating	Existing VRM Class	Is contrast rating acceptable for VRM Class?	Proposed VRI Class	Is contrast rating acceptable for proposed VRI Class?
23	II	No	N/A	N/A
IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River	
	Effects	Suggested PM&E		Effects
Line 904 (steel lattice)	DF: Transmission line silhouetted along east side of reservoir. Maintenance road visible across slope.	Replace lines with non-specular wire in normal maintenance cycle. Paint towers below ridgeline to match landscape colors. Bring formal spur down from maintenance road to access reservoir. ¹ Prepare visual simulation to determine benefits of suggested PM&E.		N/A
Comments	Consider if user type (e.g., fishermen) warrants mitigation. BLM suggested road access spur would result in higher visual impact than existing conditions.			

¹BLM Cascade Resource Area (now Four Rivers Resource Area) suggested improving informal reservoir access road and culverting through springs or bringing improved road spur down to reservoir from maintenance road.



Viewpoint #26: ID SR 52 near Clay Point Park (OP)



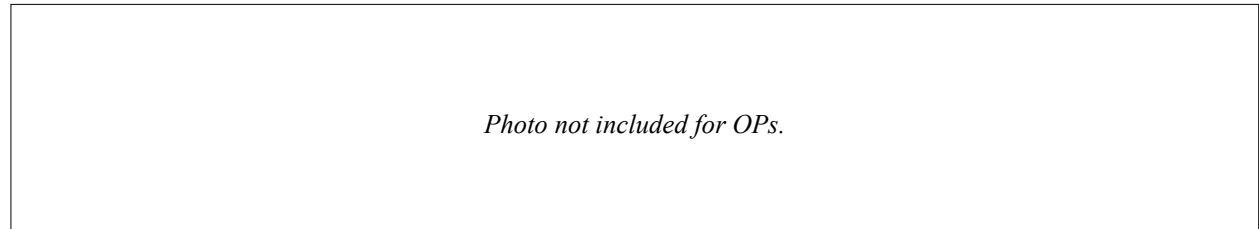
Visual Contrast Rating	Existing VRM Class	Is contrast rating acceptable for VRM Class?	Proposed VRI Class	Is contrast rating acceptable for proposed VRI Class?
N/A	II	N/A	N/A	N/A

IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
Line 904 – Paddock Tap (steel lattice)	N/A	N/A	N/A

Comments	This line will be removed from the Project prior to IPC’s FERC submittal. It is no longer considered part of the study.
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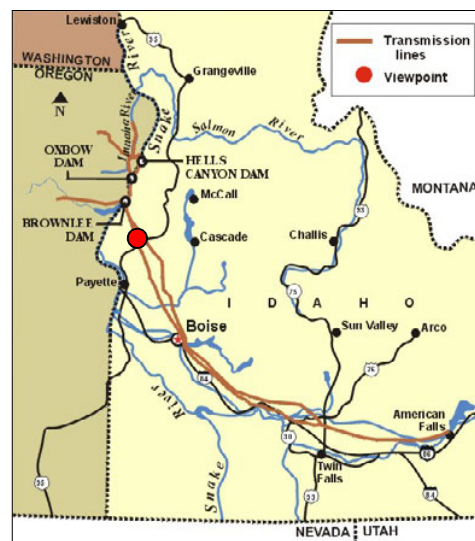


Viewpoint #27: US 95 near Cambridge, ID (OP)

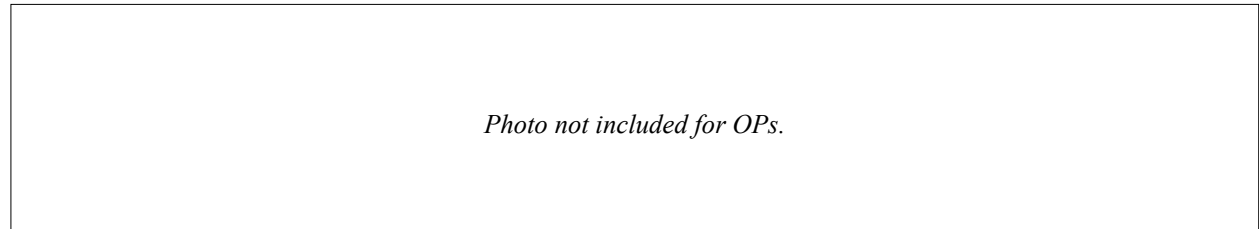


Visual Contrast Rating	Existing VRM Class	Is contrast rating acceptable for VRM Class?	Proposed VRI Class	Is contrast rating acceptable for proposed VRI Class?
Not rated	IV	Yes	N/A	N/A
IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River	
	Effects	Suggested PM&E		Effects
Line 911 (steel lattice)	Negligible	No specific measures are proposed. ¹		N/A
Comments	Sight line drawn to adjacent riparian corridor; topography minimizes effect.			

¹ When conductors are replaced or upgraded, non-specular conductors will be used.



Viewpoint #28: ID SR 71 near Heath, ID (OP)

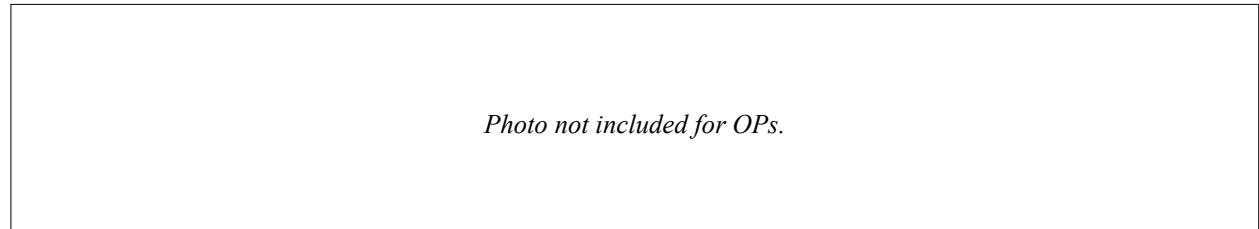


Visual Contrast Rating	Existing VRM Class	Is contrast rating acceptable for VRM Class?	Proposed VRI Class	Is contrast rating acceptable for proposed VRI Class?
Not rated	II	Yes	N/A	N/A
IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River	
	Effects	Suggested PM&E		Effects
Line 911 (steel lattice)	Negligible	No specific measures are proposed. ¹		N/A
Comments	Transmission line screened by topography and vegetation. View is focused on twisting road alignment.			

¹ When conductors are replaced or upgraded, non-specular conductors will be used.



Viewpoint #29: ID SR 71 near Heath, ID (OP)



Visual Contrast Rating	Existing VRM Class	Is contrast rating acceptable for VRM Class?	Proposed VRI Class	Is contrast rating acceptable for proposed VRI Class?
Not rated	II	Yes	N/A	N/A
IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River	
	Effects	Suggested PM&E	Effects	
Line 904 (steel lattice)	DF: Safety balls (required by FAA) on transmission line briefly silhouetted against sky.	No specific measures are proposed. ¹	N/A	
Comments	Topography screens effect.			

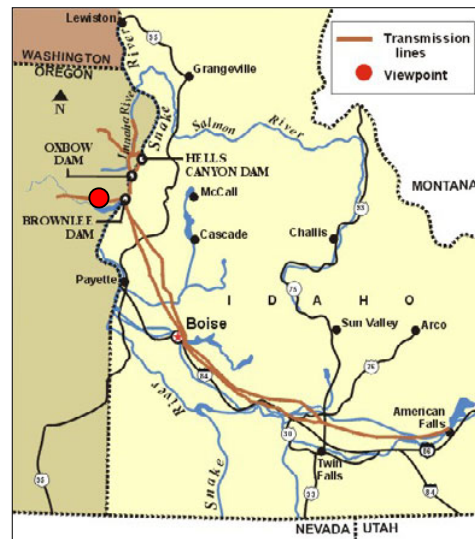
¹ When conductors are replaced or upgraded, non-specular conductors will be used.



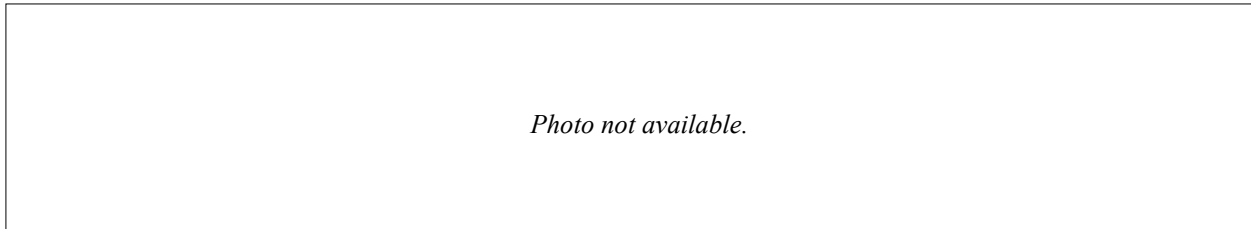
Viewpoint #30: OR SR 86 near Richland, Oregon (KOP)



Visual Contrast Rating	Existing VRM Class	Is contrast rating acceptable for VRM Class?	Proposed VRI Class	Is contrast rating acceptable for proposed VRI Class?
24	III	No	N/A	N/A
IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River	
	Effects	Suggested PM&E	Effects	
Line 903 (H-frame wood)	DF: Transmission line crosses Scenic Byway at right angle. Major structural tower silhouetted immediately adjacent to road.	Replace line with non-specular wire in normal maintenance cycle.	N/A	
Comments	No visual standards exist for Scenic Byway. Site conditions limit ability to modify location and type of tower. Effect is visible for very short time period as motorists approach and pass under line.			



Viewpoint #31: OR SR 86 and Hole-in-the-Wall Interpretive Site (KOP)



Visual Contrast Rating	Existing VRM Class	Is contrast rating acceptable for VRM Class?	Proposed VRI Class	Is contrast rating acceptable for proposed VRI Class?
8	N/A	Yes	N/A	N/A

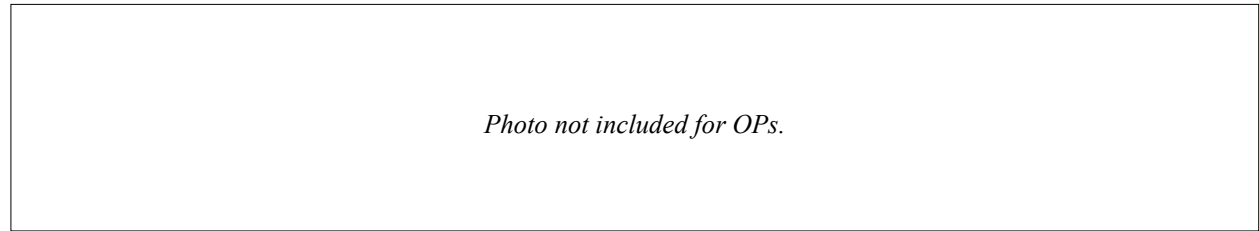
IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
Line 903 (H-frame wood)	DF: Two towers silhouetted on ridge in background.	No specific measures are proposed. ¹	N/A

Comments	Distance to transmission line minimizes effect. Viewpoint is within public right-of-way; impact is on private land. There is no VRM Class assigned to this area.
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¹ When conductors are replaced or upgraded, non-specular conductors will be used.



Viewpoint #32: OR SR 86 (OP)

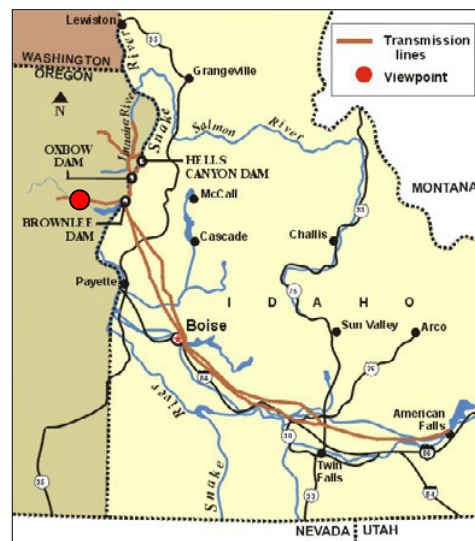


Visual Contrast Rating	Existing VRM Class	Is contrast rating acceptable for VRM Class?	Proposed VRI Class	Is contrast rating acceptable for proposed VRI Class?
Not rated	N/A	Yes	N/A	N/A

IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
Line 903 (H-frame wood)	DF: Single H-frame tower visible in background.	No specific measures are proposed. ¹	N/A

Comments	Viewpoint is within public right-of-way; impact is on private land. There is no VRM Class assigned to this area.
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¹ When conductors are replaced or upgraded, non-specular conductors will be used.



Viewpoint #33: Oasis Park on Brownlee Reservoir (KOP)



Visual Contrast Rating	Existing VRM Class (Oregon/Idaho)	Is contrast rating acceptable for VRM Class?	Proposed VRI Class	Is contrast rating acceptable for proposed VRI Class?
0	III / II	Yes	IV	Yes
IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River	
	Effects	Suggested PM&E	Effects	
Brownlee Reservoir	Water level at time of contrast rating reveals no effect from IPC operations.	None required.	Drawdown effect eliminated by full pool.	
Comments	Drawdown effect may increase contrast at lower water levels.			



Viewpoint #34: Weiser Dunes (KOP)



Looking north

Visual Contrast Rating	Existing VRM Class (Oregon/Idaho)	Is contrast rating acceptable for VRM Class?	Proposed VRI Class	Is contrast rating acceptable for proposed VRI Class?
8	III / II	Yes	IV	Yes

IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
Brownlee Reservoir	DF: High level of noxious weeds present in drawdown zone. Drawdown effect not obtrusive at time of contrast rating (May 2000).	None required (see comments).	Noxious weeds and drawdown effect eliminated by full pool.

Comments
Drawdown effect may increase contrast at lower water levels. Trail network highly visible resulting from high contrast between vegetation and bare ground. IPC not responsible for trail network impacts at this site. Although no PM&E is required, opportunity exists to coordinate with the BLM to manage weeds at this site.



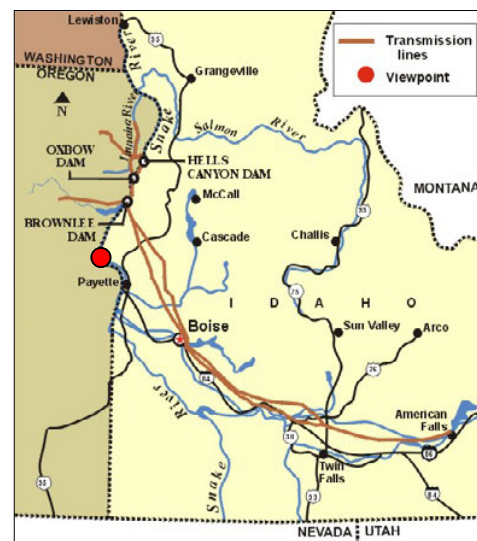
Viewpoint #35: Farewell Bend, Oregon State Park (KOP)



Looking east

Visual Contrast Rating	Existing VRM Class (Oregon/Idaho)	Is contrast rating acceptable for VRM Class?	Proposed VRI Class	Is contrast rating acceptable for proposed VRI Class?
9	III / II	Yes	IV	Yes
IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River	
	Effects	Suggested PM&E	Effects	
Brownlee Reservoir	DF: Drawdown effect not obtrusive at time of contrast rating (May 2000).	None required (see comments).	Drawdown effect eliminated by full pool.	
Comments	Drawdown effect may increase contrast at lower water levels. Park facilities (dock, ramp, and pump house) increase visual contrast. Park is not included in existing VRM boundary. Nearest VRM class extrapolated to include park for purposes of evaluating acceptable level of contrast. Although no PM&E is required, consider interpretive signage near overlook explaining drawdown effect and water level fluctuations. ¹ Opportunity exists to coordinate with Oregon Department of Parks to develop and implement site plan.			

¹Site is suggested for interpretation. Project Interpretation and Education Plan will determine locations for interpretation.



Viewpoint #36: Burnt River Confluence/Steck Park (KOP)



Looking east

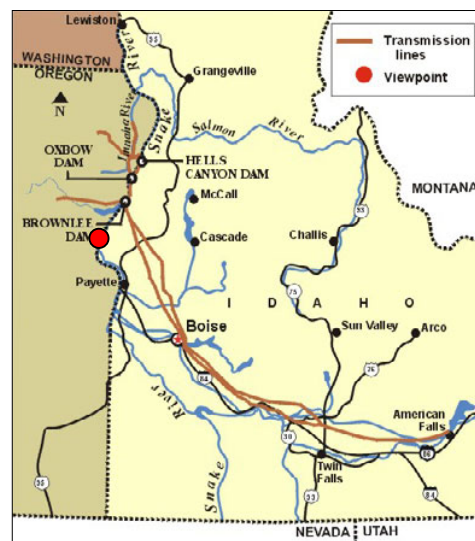
Visual Contrast Rating	Existing VRM Class (Oregon/Idaho)	Is contrast rating acceptable for VRM Class?	Proposed VRI Class	Is contrast rating acceptable for proposed VRI Class?
17	IV / II	No	III	Yes
IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River	
	Effects	Suggested PM&E	Effects	
Brownlee Reservoir	DF: Drawdown effect creates high contrast.	Moderate water level fluctuations to reduce drawdown effect.	Drawdown effect eliminated by full pool.	
Comments	NP: BLM facilities (access, parking, and ramp) across river at Steck Park create high contrast. IPC not responsible for BLM facilities at this site. Opportunity exists to coordinate with BLM to develop master plan for this site.			



Viewpoint #37: Spring Recreation Site (KOP)



Visual Contrast Rating	Existing VRM Class (Oregon/Idaho)	Is contrast rating acceptable for VRM Class?	Proposed VRI Class	Is contrast rating acceptable for proposed VRI Class?
15	II / II	No	III	Yes
IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River	
	Effects	Suggested PM&E	Effects	
Brownlee Reservoir	DF: Drawdown effect creates high contrast.	Moderate water level fluctuations to reduce drawdown effect.	Drawdown effect eliminated by full pool.	
Comments	Vehicle control well suited to site. Opportunity exists to coordinate with BLM to develop master plan using desirable plants (native species if feasible) to provide screening.			



Viewpoint #38: Railroad Tunnel Historical Site (KOP)



Looking northeast

Visual Contrast Rating	Existing VRM Class (Oregon/Idaho)	Is contrast rating acceptable for VRM Class?	Proposed VRI Class	Is contrast rating acceptable for proposed VRI Class?
27	II / II	No	III	No

IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
Brownlee Reservoir	DF: Reservoir color is unsightly brown. Drawdown effect creates high contrast. Nearby dock is white and produces high contrast.	Moderate water level fluctuations to reduce drawdown effect. Incorporate compliance with the proposed aesthetic and design standards and guidelines into IPC permit system. Require color change of nearby dock to blend with natural surroundings when permits are renewed.	Drawdown effect eliminated by full pool.

Comments	This site is typical for river corridor between Cool Cabin and Spring Recreation Site. Reduced water temperature would improve water color but is an overall water-quality problem, not solely IPC's.
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Viewpoint #39: Mountain Man Resort (KOP)



Looking east

Visual Contrast Rating	Existing VRM Class (Oregon/Idaho)	Is contrast rating acceptable for VRM Class?	Proposed VRI Class	Is contrast rating acceptable for proposed VRI Class?
12	II / II	No	III	Yes
IPC Facilities/ Operations	Current / Proposed Operations			Full Pool/ Run-of-River
	Effects	Suggested PM&E		Effects
Brownlee Reservoir	DF: Drawdown effect creates high contrast.	Moderate water-level fluctuations to reduce drawdown effect.		Drawdown effect eliminated by full pool.
Comments	Transmission line visible from KOP is not a Project line and therefore not subject to the study.			

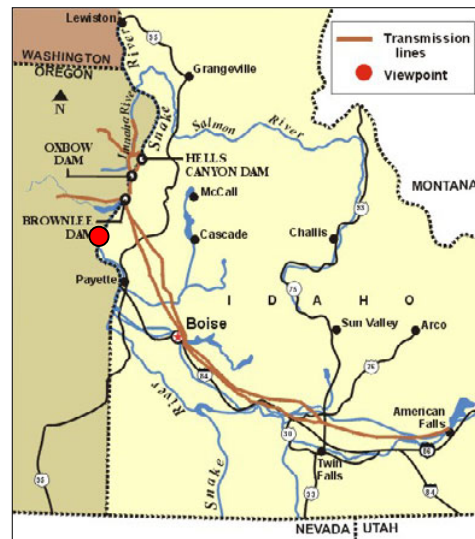


Viewpoint #40: Private Dudes Cove (KOP)



Looking east

Visual Contrast Rating	Existing VRM Class (Oregon/Idaho)	Is contrast rating acceptable for VRM Class?	Proposed VRI Class	Is contrast rating acceptable for proposed VRI Class?
12	II / II	No	III	Yes
IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River	
	Effects	Suggested PM&E	Effects	
Brownlee Reservoir	DF: Drawdown effect creates high contrast.	Moderate water-level fluctuations to reduce drawdown effect.	Drawdown effect eliminated by full pool.	
Comments	None			



Viewpoint #41: John Holcomb Memorial Park (KOP)



Looking south

Visual Contrast Rating	Existing VRM Class (Oregon/Idaho)	Is contrast rating acceptable for VRM Class?	Proposed VRI Class	Is contrast rating acceptable for proposed VRI Class?
12	II / II	No	III	Yes
IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River	
	Effects	Suggested PM&E	Effects	
Brownlee Reservoir – Powder River Arm	DF: Drawdown effect not obtrusive at time of contrast rating (June 2000).	Moderate water-level fluctuations to reduce drawdown effect.	Drawdown effect eliminated by full pool.	
Comments	NP: Developed adjacent private land and park facilities augment IPC facility effect. Drawdown effect will increase contrast at lower water levels. Opportunity exists to coordinate with Baker County, Oregon, to improve facilities at this site.			



Viewpoint #42: Hewitt Park (KOP)



Looking south

Visual Contrast Rating	Existing VRM Class (Oregon/Idaho)	Is contrast rating acceptable for VRM Class?	Proposed VRI Class	Is contrast rating acceptable for proposed VRI Class?
12	II / II	No	III	Yes

IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
Brownlee Reservoir – Powder River Arm	DF: Drawdown effect not obtrusive at time of contrast rating (June 2000).	Moderate water-level fluctuations to reduce drawdown effect.	Drawdown effect eliminated by full pool.

Comments	NP: Park facilities create high contrast. Drawdown effect will increase contrast at lower water levels. Opportunity exists to coordinate with Baker County, Oregon, to improve facilities at this site.
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Viewpoint #43: Brownlee Creek Arm (KOP)



Looking northwest

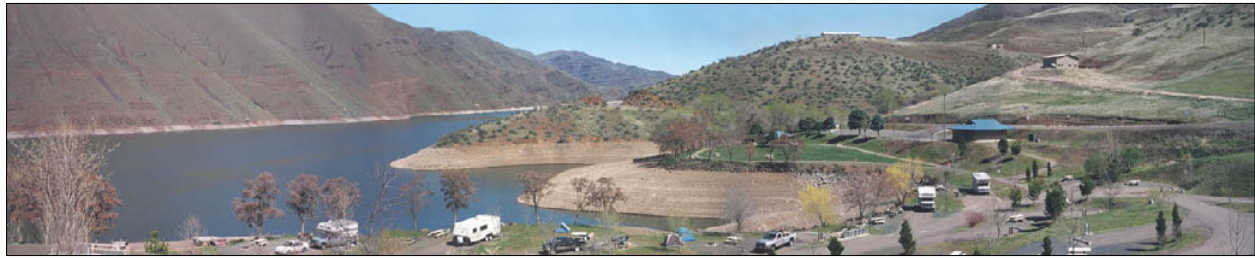
Visual Contrast Rating	Existing VRM Class (Oregon/Idaho)	Is contrast rating acceptable for VRM Class?	Proposed VRI Class	Is contrast rating acceptable for proposed VRI Class?
15	II / II	No	III	Yes

IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
Brownlee Reservoir	DF: Drawdown effect creates high contrast.	Moderate water-level fluctuations to reduce drawdown effect.	Drawdown effect eliminated by full pool.

Comments
None



Viewpoint #44: Woodhead Park (KOP)



Looking north

Visual Contrast Rating	Existing VRM Class (Oregon/Idaho)	Is contrast rating acceptable for VRM Class?	Proposed VRI Class	Is contrast rating acceptable for proposed VRI Class?
70	II / II	No	III	No

IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
Brownlee Reservoir	DF: Drawdown effect creates high contrast as do forms and colors of hardscape elements.	Provide interpretive signage to explain drawdown effect and/or management strategy that results in water-level fluctuations. Moderate water-level fluctuations to reduce drawdown effect. Modify colors and dull reflective surfaces of hardscape elements including paving, roofs, and site furnishings. Modify species, location, and form of landscape planting to be more consistent with a natural community. Improve caretaker's residence and program elements (e.g., walls, walkways, shelters) to be more consistent in shape, form, and color with natural landform and vegetation.	DF: Forms and colors of hardscape elements create high contrast. Draw-down effect eliminated by full pool.

Comments	Modifications to landscape planting can still be functional — to provide shade, windbreaks, to screen, to direct viewsheds. Cumulative effects of many contrasts result in a very high contrast rating. Contrast varies based on viewer's position and therefore perspective of the impact.
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Viewpoint #45: Salmon Net Anchor Site (KOP)



Visual Contrast Rating	Existing VRM Class (Oregon/Idaho)	Is contrast rating acceptable for VRM Class?	Proposed VRI Class	Is contrast rating acceptable for proposed VRI Class?
31	II / II	No	III	No
IPC Facilities/ Operations	Current / Proposed Operations			Full Pool/ Run-of-River
	Effects	Suggested PM&E		Effects
Brownlee Reservoir, Line 904 (steel lattice); Line 911 (steel lattice)	DF: Three towers silhouetted on east ridge. Drawdown effect also adds high color contrast.	Provide interpretive signage explaining net anchors. Moderate water-level fluctuations to reduce drawdown effect.		DF: Three towers silhouetted on east ridge. Drawdown effect eliminated by full pool.
Comments	Concrete net anchors do not dominate the scene. Silhouetted towers on east ridge are most significant impact.			



Viewpoint #46: Oxbow Bridge (KOP)



Looking south

Visual Contrast Rating	Existing VRM Class (Oregon/Idaho)	Is contrast rating acceptable for VRM Class?	Proposed VRI Class	Is contrast rating acceptable for proposed VRI Class?
52	II / II	No	III	No

IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
Brownlee Dam and substation; Line 904 (steel lattice); Line 905 (steel lattice); Line 911 (steel lattice)	DF: Approximately 30 towers and substation in view. Brownlee Dam, road cut, and “cage” to keep rocks off road and IPC property add to cumulative contrast.	Moderate water-level fluctuations to reduce drawdown effect. Develop aesthetic improvement plan for this site that will include improving the overall orderliness of yard area and modifying the road cut and “the cage” to reduce visual impacts. Screen facilities with desirable vegetation (native species if feasible) wherever possible. Replace lines with non-specular wire in normal maintenance cycle. Paint towers to match natural landscape. Prepare visual simulation to determine positive effects of suggested PM&E.	DF: Approximately 30 towers and substation in view. Brownlee Dam, road cut, and “cage” to keep rocks off road and IPC property add to cumulative contrast. Drawdown effect eliminated by full pool.

Comments	None
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Viewpoint #47: McCormick Park (KOP)



Looking west

Visual Contrast Rating	Existing VRM Class (Oregon/Idaho)	Is contrast rating acceptable for VRM Class?	Proposed VRI Class	Is contrast rating acceptable for proposed VRI Class?
41	II / II	No	III	No

IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
Oxbow Reservoir; Line 905 (steel lattice), McCormick Park	DF: Drawdown effect creates contrast. Use of non-native vegetation in landscape, Jersey barriers, and rock berm along creek augment cumulative contrast. Entrance poorly defined and unattractive.	Provide interpretive signage to explain drawdown effect and water-level fluctuations. Develop aesthetic improvement plan for this site with special attention given to enhancing the entrance, eliminating the Jersey barriers, softening the flood control efforts to augment plantings with additional desirable vegetation (native species if feasible).	Drawdown effect eliminated by full pool. DF: Use of non-native vegetation in landscape, Jersey barriers, and rock berm along creek augment cumulative contrast.

Comments	Drawdown effect is noticeable. Although score is high, this site demonstrates generally good use of color and vegetation to blend site into landscape. Cumulative effects of many contrasts result in high contrast rating. Existing natural vegetation helps blend site into surrounding landscape. Use of gravel parking, as opposed to concrete, also reduces contrast.
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Viewpoint #48: Reflection Point (KOP)



Looking north (left) and south (right)

Visual Contrast Rating	Existing VRM Class (Oregon/Idaho)	Is contrast rating acceptable for VRM Class?	Proposed VRI Class	Is contrast rating acceptable for proposed VRI Class?
34	II / II	No	III	No

IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
Oxbow Reservoir; Line 905 (steel lattice)	DF: Drawdown effect, service road and lattice tower on east ridge create high contrast.	None proposed (see comments).	Drawdown effect eliminated by full pool. DF: Service road and lattice tower on east ridge creates high contrast.

Comments	Removed from consideration for mitigation and enhancement since not believed to be a significant viewpoint by Subgroup.
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**Viewpoint #49:
Dead Man's Spot
(KOP)**



Looking south

Visual Contrast Rating	Existing VRM Class (Oregon/Idaho)	Is contrast rating acceptable for VRM Class?	Proposed VRI Class	Is contrast rating acceptable for proposed VRI Class?
26	II / II	No	III	No
IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River	
	Effects	Suggested PM&E	Effects	
Oxbow Reservoir; Line 905 (steel lattice)	DF: Drawdown effect and road color create high contrast. Three towers are silhouetted.	None proposed (see comments).	Drawdown effect eliminated by full pool. DF: Road color and silhouetted towers create contrast.	
Comments	Removed from consideration for mitigation and enhancement since not believed to be a significant viewpoint by Subgroup.			



**Viewpoint #50:
Oxbow Dam (KOP)**



Oxbow Dam intake structure

Visual Contrast Rating	Existing VRM Class	Is contrast rating acceptable for VRM Class?	Proposed VRI Class	Is contrast rating acceptable for proposed VRI Class?
38	II	No	III	No

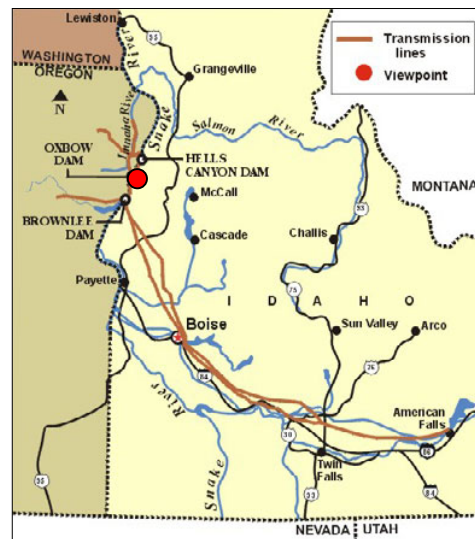
IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
Oxbow Reservoir, Oxbow Dam	DF: Dam, access road, light poles, and fencing creates high contrast. Drawdown effect creates minor contrast.	During normal maintenance cycle, modify colors and dull reflective surfaces of hardscape elements including concrete walls, to be consistent with the proposed aesthetic and design standards and guidelines. Modify road color to be consistent with surrounding landscape colors. Moderate water-level fluctuations to reduce drawdown effect. Replace lines with non-specular wire in normal maintenance cycle.	Drawdown effect eliminated by full pool. DF: Dam, access road, light poles, and fencing creates high contrast.
Comments	None		



Viewpoint #51: Oxbow Spillway (KOP)



Visual Contrast Rating	Existing VRM Class	Is contrast rating acceptable for VRM Class?	Proposed VRI Class	Is contrast rating acceptable for proposed VRI Class?
43	II	No	III	No
IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River	
	Effects	Suggested PM&E	Effects	
Oxbow Spillway	DF: Spillway, access road, and parking area create high contrast.	Modify color and texture of concrete spillway structure and color of access road to be more consistent with surrounding landscape. Prepare visual simulation to determine positive effects of suggested PM&E.	DF: Spillway, access road, and parking area create high contrast.	
Comments	None			



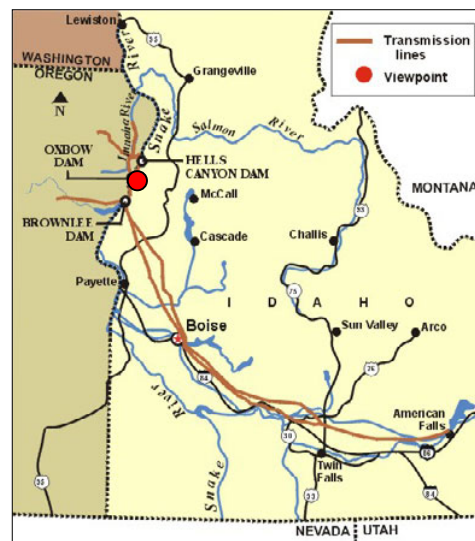
**Viewpoint #52:
Oxbow Plant (KOP)**



Oxbow Plant (at lower left)

Visual Contrast Rating	Existing VRM Class	Is contrast rating acceptable for VRM Class?	Proposed VRI Class	Is contrast rating acceptable for proposed VRI Class?
39	II	No	III	No

IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
Hells Canyon Reservoir, power house, substation, Line 905 (steel lattice)	DF: Powerhouse, substation, roads, and appurtenant facilities create high contrast. Drawdown effect creates minor contrast.	During normal maintenance cycle, modify colors and dull reflective surfaces of hardscape elements including powerhouse, maintenance, and appurtenant facilities to be consistent with the proposed aesthetic and design standards and guidelines. Screen substation with desirable vegetation (native species if feasible). Moderate water-level fluctuations to reduce drawdown effect. Replace lines with non-specular wire in normal maintenance cycle.	Drawdown effect eliminated by full pool. DF: Powerhouse, substation, roads, and appurtenant facilities create high contrast.
	None		



Viewpoint #53: Copperfield Park (KOP)



Visual Contrast Rating	Existing VRM Class	Is contrast rating acceptable for VRM Class?	Proposed VRI Class	Is contrast rating acceptable for proposed VRI Class?
32	II	No	III	No

IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
Hells Canyon Reservoir, Copperfield Village, Oxbow Substation, Line 905 (steel lattice)	DF: Maintenance structures, employee housing, substation, and transmission line create high contrast.	During normal maintenance cycle, modify colors and dull reflective surfaces of hardscape elements including IPC housing, maintenance and appurtenant facilities, and access roads to be consistent with the proposed aesthetic and design standards and guidelines. Screen substation with desirable vegetation (native species if feasible). Replace lines with non-specular wire in normal maintenance cycles.	DF: Modular housing, substation, and transmission line all create high contrast.

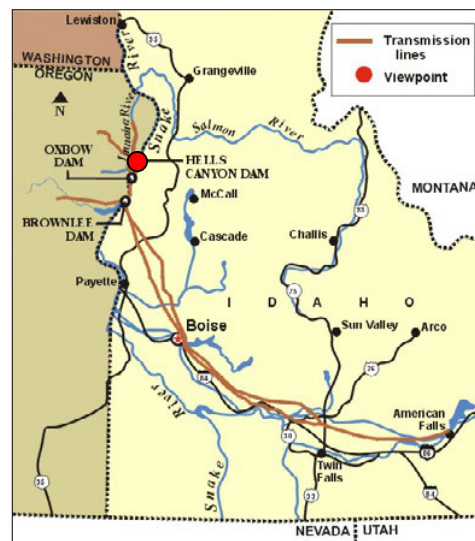
Comments	Drawdown effect is negligible. Existing vegetation creates “oasis” from summer heat and screens certain undesirable views of project facilities. Opportunity exists to develop interpretive facility for hydropower generation.
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Viewpoint #54: Boat Launch Dispersed Recreation Site (KOP)



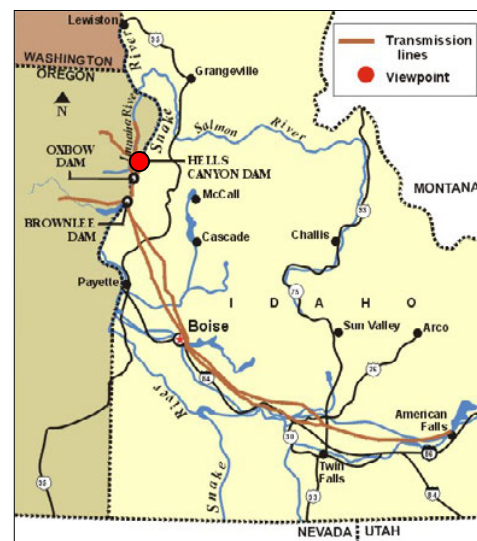
Visual Contrast Rating	Existing VRM Class	Is contrast rating acceptable for VRM Class?	Proposed VRI Class	Is contrast rating acceptable for proposed VRI Class?
15	II	No	II	No
IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River	
	Effects	Suggested PM&E	Effects	
Hells Canyon Reservoir	DF: Drawdown effect creates minor contrast.	Moderate water-level fluctuations to reduce drawdown effect.	Drawdown effect eliminated by full pool.	
Comments	None			



**Viewpoint #55:
Westfall Dispersed
Recreation Site (KOP)**



Visual Contrast Rating	Existing VRM Class	Is contrast rating acceptable for VRM Class?	Proposed VRI Class	Is contrast rating acceptable for proposed VRI Class?
20	II	No	II	No
IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River	
	Effects	Suggested PM&E	Effects	
Hells Canyon Reservoir; Line 905 (steel lattice)	DF: Three towers silhouetted. Drawdown effect creates minor contrast.	Replace lines with non-specular wire in normal maintenance cycle. Moderate water-level fluctuations to reduce drawdown effect.	Drawdown effect eliminated by full pool. DF: Three towers silhouetted.	
Comments	Relocating towers is not reasonable.			



**Viewpoint #56:
Bob's Creek (KOP)**

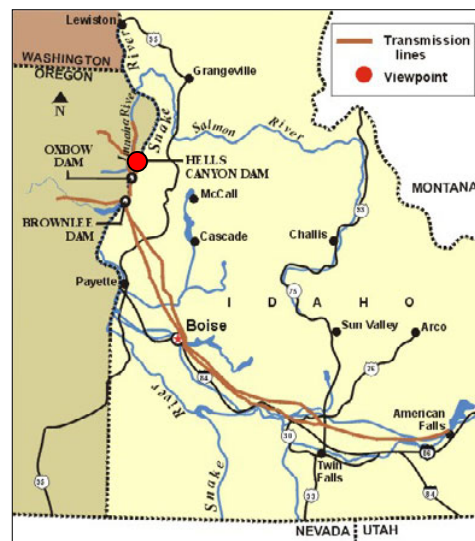


Looking east

Visual Contrast Rating	Existing VRM Class	Is contrast rating acceptable for VRM Class?	Proposed VRI Class	Is contrast rating acceptable for proposed VRI Class?
23	II	No	II	No

IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
Hells Canyon Reservoir; Line 905 (steel lattice); airfield	DF: Three towers silhouetted. Drawdown effect creates minor contrast. Airfield fencing creates moderate contrast.	Replace lines with non-specular wire in normal maintenance cycle. Moderate water-level fluctuations to reduce drawdown effect. Paint or replace airfield fencing with color better suited to surroundings.	Drawdown effect eliminated by full pool. DF: Airfield fencing creates moderate contrast. Three towers silhouetted.

Comments	Relocating towers is not reasonable.
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Viewpoint #57: Sixteen West Dispersed Recreation Site (KOP)



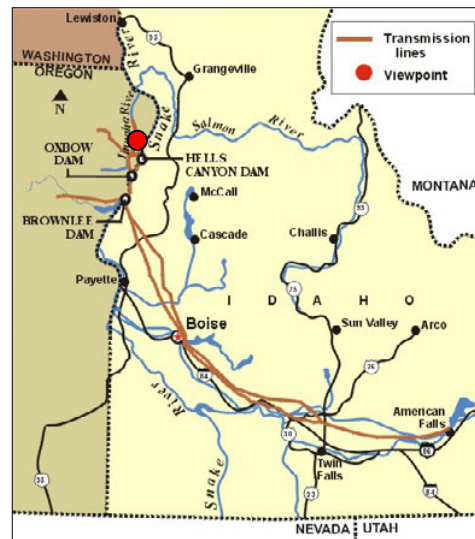
Visual Contrast Rating	Existing VRM Class	Is contrast rating acceptable for VRM Class?	Proposed VRI Class	Is contrast rating acceptable for proposed VRI Class?
15	II	No	II	No
IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River	
	Effects	Suggested PM&E	Effects	
Hells Canyon Reservoir	DF: Drawdown effect creates minor contrast.	Moderate water-level fluctuations to reduce drawdown effect.	Drawdown effect eliminated by full pool.	
Comments	None			



**Viewpoint #58:
Ashby Creek Dispersed
Recreation Site (KOP)**



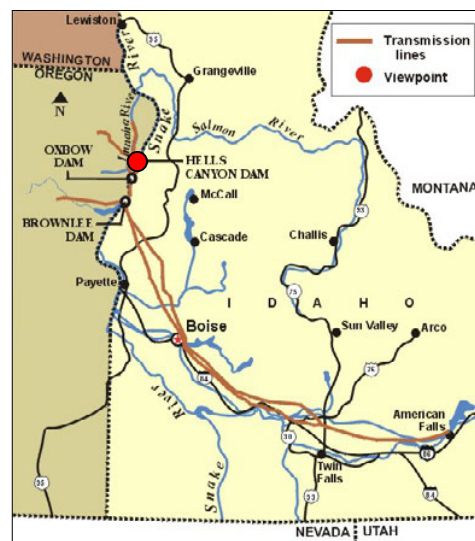
Visual Contrast Rating	Existing VRM Class	Is contrast rating acceptable for VRM Class?	Proposed VRI Class	Is contrast rating acceptable for proposed VRI Class?
15	II	No	II	No
IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River	
	Effects	Suggested PM&E		Effects
Hells Canyon Reservoir	DF: Drawdown effect creates minor contrast.	Moderate water-level fluctuations to reduce drawdown effect.		Drawdown effect eliminated by full pool.
Comments	None			



Viewpoint #59: Copper Creek Trailhead Park (KOP)



Visual Contrast Rating	Existing VRM Class	Is contrast rating acceptable for VRM Class?	Proposed VRI Class	Is contrast rating acceptable for proposed VRI Class?
15	II	No	II	No
IPC Facilities/ Operations	Current / Proposed Operations			Full Pool/ Run-of-River
	Effects	Suggested PM&E		Effects
Hells Canyon Reservoir	DF: Drawdown effect creates minor contrast.	Moderate water-level fluctuations to reduce drawdown effect.		Drawdown effect eliminated by full pool.
Comments	<p>NP: Restroom buildings' color, line, and form create contrast and are BLM facilities. Parking and day-use area are not well defined.</p> <p>Opportunity exists to coordinate with BLM on master plan to be compatible with the proposed aesthetic and design standards and guidelines.</p>			



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Viewpoint #101: Hells Canyon Park (SP)



Looking east

Watershed/subwatershed: N/A	RAA no. & name: N/A	Watershed/RAA scenic integrity: N/A
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EXISTING



Landscape character: This very popular campground with large ornamental shade trees, irrigated lawn, and recreational facilities provides an oasis from the heat of Hells Canyon. The rugged canyon walls are rounded ridges that extend to the reservoir below. Canyon walls are covered predominantly with grass and large patches of widely spaced brush and some basalt outcrops. Deciduous trees and a few pine trees grow with some brush in the draws.

Scenic integrity: Low – The color and reflectivity of the campground buildings and boat docks and the security fence are all negative elements to most people. The irrigated lawn and ornamental plantings are inconsistent with the surroundings to some but a welcome relief to others.

Ecological integrity: Low – This park consists mostly of irrigated lawns and ornamental shrubs and trees that compete with native plants and alter the ecological processes for the site. Landscaping does provide limited habitat for wildlife, although it favors opportunistic species.

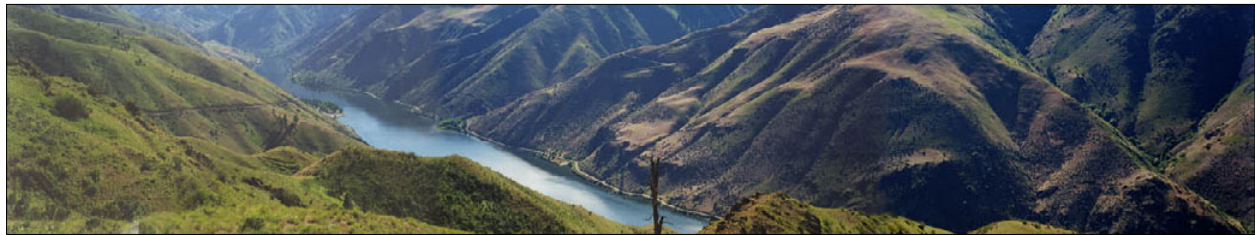
RECOMMENDED

Desired landscape character: Create transition from the irrigated grass and ornamental plantings to the surrounding natural landscape using native plant materials and rocks. Select new colors for the buildings and docks to better match the surrounding landscape. Remove as much fence as possible or screen with vegetation where not possible. Manage noxious weeds.

Desired scenic integrity: Moderate

IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
Structures and landscaping	DF: Color and form of hardscape elements are inconsistent with natural colors and forms.	Develop site improvement plan that is consistent with the proposed standards and guidelines. Modify structures to reflect the architectural character of the canyon. Paint and dull buildings and appurtenances to minimize color contrasts with the environment. Utilize native plant material.	Same
Dock and ramp	DF: The dock's formation and light color of the dock and large parking area draws attention.	Replace boat docks with structures that reflect the architectural character of the canyon. Utilize materials that are not reflective and minimize color contrasts with the environment. Add planting islands to the parking lot.	Same
Hell Canyon Reservoir	DF: Drawdown effect	Moderate water-level fluctuations to reduce drawdown effect.	Drawdown effect eliminated by full pool
Comments	None		

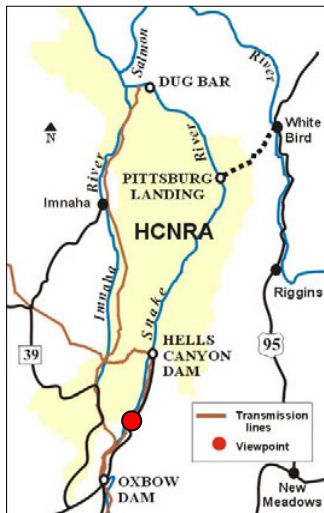
Viewpoint #102: Kleinschmidt Grade Overlook (SP)



Looking southwest

Watershed/subwatershed: N/A	RAA no. & name: N/A	Watershed/RAA scenic integrity: N/A
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EXISTING



Landscape character: Rugged canyon walls are rounded ridges that extend to the reservoir below, covered mostly with grass and large patches of widely spaced brush and some basalt rock outcrops. Deciduous trees and a few pine trees grow with some brush in the draws. Grassland tends to be bluebunch wheatgrass. Shrubland is net leaf hackberry. Most upland sites along the roadway are very steep and dry; they are harsh sites for vegetation establishment.

Historical information (Carrey et al., 1979, p. 138): Albert Kleinschmidt built the 22-mile Kleinschmidt Grade to carry copper ore down from the Peacock Mine in the Seven Devils area to the Snake River. From there the ore was ferried by steamboat to Olds Ferry and Huntington, the closest railheads. Built largely by hand, the road was completed in 1891 at a cost of \$20,000.

Scenic integrity: Low to Moderate — Transmission line towers and service roads are primary negative elements.

Ecological integrity: Low to Moderate — Disturbance to upland habitats by introduced annual grasses and negative effects of fire and grazing on current vegetation.

RECOMMENDED

Desired landscape character: Move plant assemblages towards a late seral or climax stage of succession where feasible, i.e., if such successional pathways have not been altered by current abundance of highly competitive introduced annual grasses.

Desired scenic integrity: High

IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
Line 945 (Single pole, wood)	DF: Form, line and color inconsistent; uppermost tower sky-lined	Screen views of transmission line. Replace lines with non-specular wire during normal maintenance cycle.	Same
Transmission line service roads	DF: Line, color	Darken road surface and road cuts.	Same
Hells Canyon Reservoir	DF: Drawdown effect	Moderate water-level fluctuations.	Drawdown effect eliminated by full pool.
Comments	Opportunity exists to coordinate with USFS to construct interpretive viewpoint and turn-around.		

Viewpoint #103: Big Bar (SP)



Watershed/subwatershed: Lower Snake	RAA no. & name: 13 Kirkwood	Watershed/RAA scenic integrity: High
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EXISTING



Landscape character: Considerable evidence of use during Hells Canyon Dam construction remains today. Vegetation is primarily in the drainage channels and along the shore line. Dominant woody species include syringa, net leaf hackberry, water birch, blackberry, white alder, and poison ivy. Many apricot trees from historic times still exist. Upland plant assemblages are dominated by bluebunch wheatgrass. This is an important wintering area for elk, mule deer, and big horn sheep that frequent the nearby limestone cliffs.

Historical information (Carrey et al., 1979, p. 144): Archaeological studies reveal there was an Indian village on the bar from about 1600 A.D. to the time of the first Euro-American contact. In the 1890s, settlers raised fruit and vegetables to sell to miners.

Scenic integrity: Moderate to High — on north end where considerable evidence of terraces and borrow sites from days of dam construction exist. Low to Moderate — on the south end where power substation and helicopter landing pad used by IPC exist.

Ecological integrity: Moderate to High — There is a moderate abundance of weedy plants, but past and ongoing control efforts by the USFS have been effective in reducing negative impacts to native vegetation.

RECOMMENDED

Desired landscape character: Historic and prehistoric parts of the site should be preserved and interpreted at a semi-primitive level. Consider Level 3 (i.e., roaded natural) campground with short spurs for the north end. Develop accommodations so they are subordinate to the drainages of dry land natural vegetation. Minimize/avoid irrigated turf. Consider minimal development of the beach area and walk-in sites at semi-primitive level. Consider boat trailer parking and enhanced boat launch at south end. Continue efforts to reestablish native plant species and control noxious weeds.

Desired scenic integrity: High

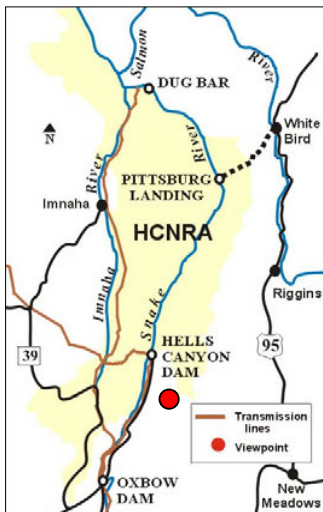
IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
Hells Canyon Reservoir	DF: Drawdown effect	Moderate water-level fluctuations.	Drawdown effect eliminated by full pool.
Comments	Opportunity exists to coordinate with USFS to develop and implement site development plan.		

Viewpoint #104: Horse Mountain Lookout (SP)



Watershed/subwatershed: N/A	RAA no. & name: N/A	Watershed/RAA scenic integrity: N/A
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EXISTING



Landscape character: The breath-taking 360 degree views from this vantage point were recognized many years ago as a key location for scouting fires in Hells Canyon, the adjacent Payette and Wallowa-Whitman National Forests as well as the Seven Devils Wilderness. The tower is set above a tranquil meadow of wild flowers and adjacent patches of evergreen stands. The only evidence of human activity is the lookout structure and winding native dirt road leading to it.

Scenic integrity: Very High	Ecological integrity: High
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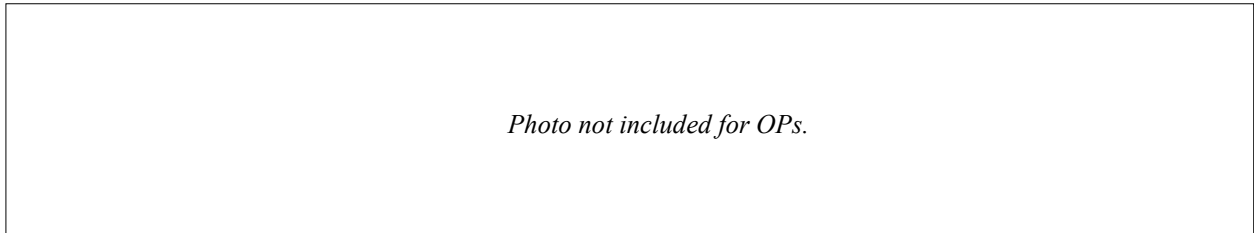
RECOMMENDED

Desired landscape character: Provide diverse stands of common species found in the plant associations with a variety of densities, spaces, colors and textures. Provide variety in texture and color, spatial arrangement, and depth of view.

Desired scenic integrity: Very High

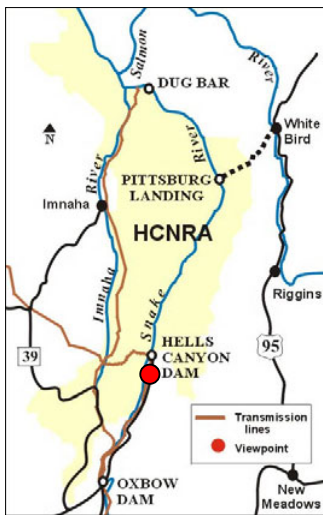
IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
Hells Canyon Reservoir	DF: Reservoir draw-down effect	Moderate water levels to reduce drawdown effect.	Drawdown effect eliminated by full pool.
Comments	The drawdown effect is minimally noticeable at this site.		

Viewpoint #105: Black Point (OP)



Watershed/subwatershed: Lower Snake	RAA no. & name: 39 32/Bunch Creek	Watershed/RAA scenic integrity: High
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EXISTING



Landscape character: N/A

Scenic integrity: High

Ecological integrity: Moderate to High

RECOMMENDED

Desired landscape character: N/A

Desired scenic integrity: N/A

IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
N/A	N/A	N/A	N/A
Comments	Not considered an SP because other sites with similar characteristics provide adequate representation.		

Viewpoint #106: Eagle Bar and the Red Ledge Mine (SP)



Watershed/subwatershed: Lower Snake	RAA no. & name: 39 32/Bunch Creek	Watershed/RAA scenic integrity: N/A
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EXISTING



Landscape character: A wide, cleared area between the road and the reservoir is all that is left of Eagle Bar. The rugged canyon walls are steep and covered with large openings of grass/shrub mosaic, basalt rock outcrops and areas of loose rock. Hackberry trees grow primarily on the eastern side of the reservoir and along the flat bench. A few scattered pine trees grow at low elevations. The shrub component includes serviceberry. The grassland is primarily introduced species of bulbous bluegrass and cheatgrass-bluebunch wheatgrass. As Hells Canyon Dam is approached from the south, the dam and facilities are largely concealed by the reservoir. The appearance of the dam is a very low structure on the horizon.

Historical information (Carrey et al., 1979, pp. 148-149): The first claims at the Red Ledge Mine were staked in 1894 by Tom Heady. He and others prospected intensively until work was temporarily halted by World War I. Though nearly a million dollars has been spent drilling, none of the low-grade ore has yet been recovered. Nothing remains of the Eagle Bar mining effort. The site was later “used for trailer offices, tool shops, and a first aid station by Idaho Power during construction of Hells Canyon Dam.”

Scenic integrity: Low – Negative elements include transmission lines and towers and red handrail.

Ecological integrity: Low – Very little native vegetation left on site. Most of site has been bladed for vehicle access and structures during dam construction. Site provides little benefit to wildlife in current condition.

RECOMMENDED

Desired landscape character: Define and document the role of this site’s character in establishing the gateway to Hells Canyon National Recreation Area. Reestablish native plant assemblages after mitigation of negative elements is complete. Manage noxious weeds.

Desired scenic integrity: Moderate

IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
Lines 910, 945 (steel lattice, single pole wood)	DF: Structures not consistent with form, line, color and texture of desired landscape	Screen views of transmission line. Paint/dull tower structures to minimize visual contrasts. Replace lines with non-specular wire in normal maintenance cycle.	Same
Dam and appurtenances	DF: Not consistent with form, line, color and texture of desired landscape	Remove abandoned concrete pads.	Same
Hells Canyon Reservoir	DF: Reservoir drawdown	Moderate water levels to reduce drawdown effect.	Drawdown effect eliminated by full pool.
Comments	<p>NP: Red handrail creates contrast in color and line.</p> <p>High scenic integrity is desirable but may not be attainable due to presence of Hells Canyon Dam and appurtenances.</p>		

Viewpoint #107: Hells Canyon Dam (SP)



View from north looking south

Watershed/subwatershed: Lower Snake	RAA no. & name: 38 Lookout Mountain	Watershed/RAA scenic integrity: Very High
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EXISTING



Landscape character: Arriving from the south and looking north, as most visitors do, the dam appears utilitarian and unimpressive. It is the gateway to the deepest gorge in North America and of national importance, yet gives no recognition of this. Looking south at the dam, the rushing water and soft, light green colors of riparian vegetation in the adjacent Deep Creek provide a pleasant contrast to the dark basalt columns and talus slopes of the narrow canyon. The magnitude of the dam and canyon in relationship to the viewer below is very dramatic.

Scenic integrity: Very Low – Power lines, chain link fences, stop log dams, Jersey barriers, and a diversion tunnel are the most dominant of the negative elements. Instead of welcoming visitors, the dam seems to be a barrier.

Ecological integrity:
High

RECOMMENDED

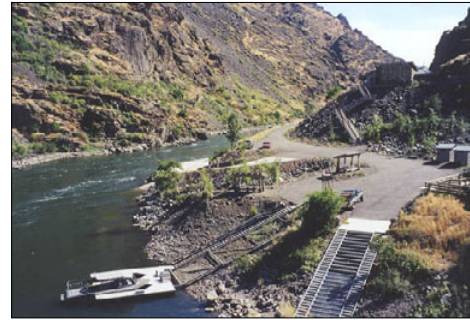
Desired landscape character: The goal should be to redesign the approach to the dam and the roadway across it to make it more inviting and aesthetically pleasing. The design should recognize the national importance of this gateway to Hells Canyon.

Desired scenic integrity: Moderate

IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
Dam and spillway	DF: Large form, light color, strong horizontal and vertical lines	Develop a site plan for the complex that is consistent with the proposed design guidelines and standards. Develop Hells Canyon Dam Interpretive Site. Remove or interpret the stop blocks. Paint or dull the dam's buildings, light standards and appurtenances to minimize color contrast. Retain the dark stains on the face of the dam.	Same
Diversion tunnel	DF: Large form, light color, and lines. Metal wall's ragged top draws attention.	Modify color and texture to reduce color contrasts with surroundings. Remove ragged top of metal wall.	Same
Hells Canyon Reservoir	DF: Reservoir drawdown effect	Moderate water levels to reduce drawdown effect.	Drawdown effect eliminated by full pool.

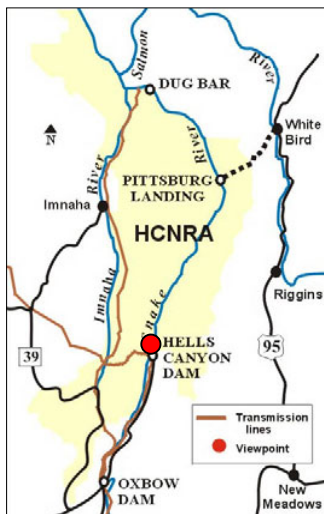
Comments	This is a tremendous opportunity for IPC to provide an exciting and dramatic gateway to the HCNRA. A new design should involve the services of a highly skilled architect and landscape architect. Opportunity exists for interpreting electric power generation. Recommend visual simulation to determine benefits of suggested PM&E.
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Viewpoint #108: Hells Canyon Visitor Information Center (SP)



Watershed/subwatershed: Lower Snake	RAA no. & name: 38 Lookout Mountain	Watershed/RAA scenic integrity: Very High
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EXISTING



Landscape character: Viewpoint is an attractive feature in a natural landscape. It borrows angles and colors from the adjacent canyon rock forms. Kiosks and stairs fit in well. The parking area is tucked in around the corner, initially hidden from view. The narrow canyon walls focus the view downstream to a bend where the rushing water disappears behind it. Cliff talus slopes surround the site, with a band of scrub-shrub wetland and forested wetland following Hells Canyon Creek. A highly visited, shallow depression nearby is remnant of a historic pit house.

Scenic integrity: Moderate – Negative elements include the dock and counter-weight structures, face of the large fill slope, dominant weeds and rock, and poor condition of signage.

Ecological integrity: High – Most assemblages are dominated by native species. The riparian habitat is recovering well from a 1997 flood event primarily with white alder, syringa, and poison ivy. Though the site is well designed, the presence of asphalt, concrete, structures and large concentrations of people may interfere with ecological processes and thus detract from its integrity.

RECOMMENDED

Desired landscape character: The goal should include redesign of the dock and counter-weight structures using the same architectural design themes used in the shelters and stairways. Redesign plantings and signage. Move existing plant assemblages towards late seral or climax stage of succession. Consider construction of a historic pit house as one might have existed in the past.

Desired scenic integrity: High

IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
Snake River fluctuation	DH: River water-level fluctuation	Moderate water-level fluctuations to reduce effect.	Daily fluctuations eliminated. Seasonal fluctuation increased.
Comments	Opportunity exists to coordinate with USFS to improve aesthetics of boat-launch facilities and develop interpretive site for pit house.		

Viewpoint #109: Stud Creek (SP)

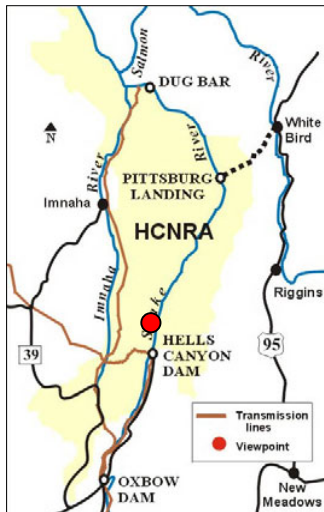


Looking south

Looking west

Watershed/subwatershed: Lower Snake	RAA no. & name: 50 Snake River	Watershed/RAA scenic integrity: N/A
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EXISTING



Landscape character: The canyon walls are dominated by basalt outcrops. Benches are covered with bluebunch wheatgrass-annual brome and an overstory of ponderosa pine and hackberry. Ponderosa pine is unique at this low elevation. Plants along the riparian zones include net leaf hackberry, syringa, coyote willow, hemp dogbane, and common chokecherry. The Stud Creek trail, which is accessed from the Hells Canyon Visitor Center, is probably more important than the site described above.

Historical information (Carrey et al., 1979, p. 154): The creek takes its name from Gabe Teeple's horse, which "wandered off and successfully eluded recapture. It fathered colts along the Summit Ridge country until" it died during a severe winter. A cabin was located on the bar and Teeple's wintered there in 1910-11.

Scenic integrity: Moderate – This site is impacted by foot traffic causing some disturbance to vegetation.

Ecological integrity: High – Most plant assemblages are dominated by native species. This is a rocky alluvial fan, with little soil development that has escaped grazing and recreational disturbance.

RECOMMENDED

Desired landscape character: Make the Stud Creek trail an interpretive trail. The existing plant assemblages are currently in what might be considered a late seral or climax stage of succession for this site. Maintain these conditions to the degree feasible. The existing ponderosa pine trees should be protected from negative impacts (such as overgrazing), as these provide habitat diversity and potential roosting/nesting sites for bald eagles. These are a much-treasured aesthetic feature. Plant pine seedlings to provide eventual replacement trees. Manage noxious weeds found on the site.

Desired scenic integrity: High

IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
Snake River fluctuation	DH: Possible loss of sandy beach	If loss is documented and a Project effect, coordinate appropriate mitigation with USFS.	Unknown
Snake River fluctuation	DH: River water-level fluctuation	Moderate water-level fluctuations to reduce effect.	Daily fluctuations eliminated. Seasonal fluctuation increased.
Comments	Opportunity exists to coordinate with USFS to develop and implement interpretive trail plan.		

**Viewpoint #110:
Warm Springs (SP)**



Watershed/subwatershed: Lower Snake	RAA no. & name: 50 Snake River	Watershed/RAA scenic integrity: N/A
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EXISTING



Landscape character: There is a large sandy beach with scattered rock outcrops (cliff talus slopes) at the back of this site. Ponderosa pine and net leaf hackberry overstory is the primary vegetative cover. Plant associations in the riparian zone include net leaf hackberry, coyote willow, common chokeberry, and syringa. This is a popular site for overnight use with many social trails.

Scenic integrity: Moderate – This site is highly impacted from foot traffic causing denuded sites, trampled vegetation, compacted soils and soil erosion.

Ecological integrity: Moderate to High – Most plant assemblages are dominated by native species. The recreational impacts described above allow noxious weeds to invade. There has been an invasion of horsetail grass.

RECOMMENDED

Desired landscape character: Provide improvements to resolve impact problems from visitors. Consider limiting site use by means such as reservations. Replant the site to move the vegetation towards the plant associations of stable communities. Manage noxious weed. See also *Wild and Scenic Snake River Management Plan* (USFS, 1999b).

Desired scenic integrity: High

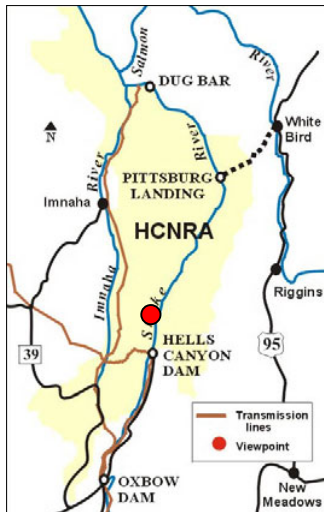
IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
Snake River fluctua- tion	DH: River water-level fluctuation	Moderate water-level fluctuations to reduce effect.	Daily fluctua- tions elimi- nated. Sea- sonal fluctua- tion increased.
Comments	IF: High visitor use detracts from scenic integrity as noted above. Opportunity exists to coordinate with USFS to rehabilitate compacted soils and social trails, revegetate with native species, and provide well-defined camp sites.		

**Viewpoint #111:
Barton Cabin at
Battle Creek (SP)**



Watershed/subwatershed: Lower Snake	RAA no. & name: 50 Snake River	Watershed/RAA scenic integrity: N/A
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EXISTING



Landscape character: Ralph Barton’s single-room cabin remains on this river bench with remnants of an orchard and rusted farm implements. Rock piles are scattered throughout. The site is characterized by an abundance of net leaf hackberry and staghorn sumac. Only the mine tunnel, ore bucket cable, and a section of the iron mill ring remain at the mine site up Battle Creek.

Historical information (Carrey et al., 1979, pp. 159, 164): Ralph Barton built a cabin at the mouth of Battle Creek in 1909, after staking a mining claim. A short way up Battle Creek, Sherman Winchester built a sawmill. Buildings eventually included “two bunk-houses, a blacksmith shop, a mill building and tool shed.” A second cabin was built in 1932 along with a barn and root cellar. That cabin and parts of the original cabin were eventually dismantled and used for firewood.

Scenic integrity: Moderate – The site has been impacted from visitor use resulting in compacted soils and denuded vegetation.

Ecological integrity: High – The site is recovering well from past mining and grazing disturbances. Excessive recreational impacts are still a problem.

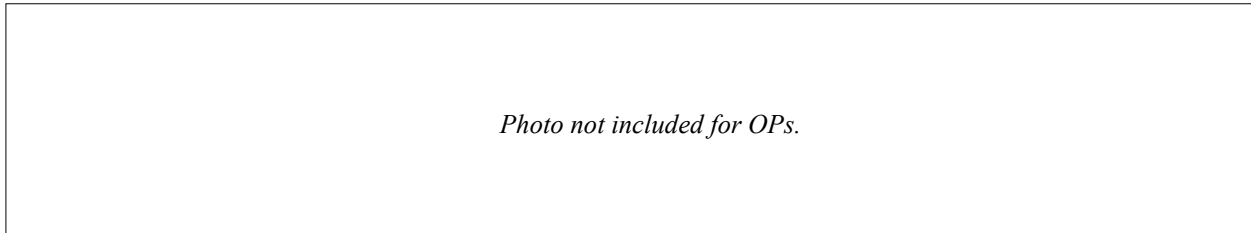
RECOMMENDED

Desired landscape character: Consider designing and constructing an interpretive trail up Battle Creek to the old mine site so visitors can experience what remains of the historic character. Address visitor impact problems. Continue protection from grazing and excessive recreation impacts to allow increased cover of net leaf hackberry and bluebunch wheatgrass. Manage noxious weeds.

Desired scenic integrity: High

IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
Snake River fluctua- tion	DH: River water-level fluctuation	Moderate water-level fluctuations to reduce effect.	Daily fluctua- tions elimi- nated. Sea- sonal fluctua- tion increased.
Comments	IF: High visitor use detracts from scenic integrity as noted above. Opportunity exists to coordinate with USFS to rehabilitate compacted soils, revegetate with native species, and develop interpretive trail to mine site.		

Viewpoint #112: Sand Dunes Pit Houses (OP)



Watershed/subwatershed: Lower Snake	RAA no. & name: 50 Snake River	Watershed/RAA scenic integrity: N/A
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EXISTING



Landscape character: Site includes a sandy beach and rocky shoreline. Hackberry trees and rock outcrops are also common.

Scenic integrity: Moderate

Ecological integrity: N/A

RECOMMENDED

Desired landscape character: N/A

Desired scenic integrity: N/A

IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
N/A	N/A	N/A	N/A

Comments	Herbaceous vegetation is trampled. Not considered an SP due to lack of historical significance and because other sites with similar characteristics provide adequate representation.
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Viewpoint #113: Wild Sheep Rapids Campsite (SP)



Watershed/subwatershed: Lower Snake (Hat Point)	RAA no. & name: 50 Snake River	Watershed/RAA scenic integrity: N/A
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EXISTING



Landscape character: Hackberry trees and blue bunch wheatgrass, an annual brome, dominate the upper bench. Rushing water of Sheep Creek Rapids is an exciting, pleasant sound. Vegetation has little disturbance. View of river fluctuation effect is screened in part by vegetation. Trail development and use, as a result of scouting the rapids, has little negative effect on plant communities and ecological processes.

Historical information: See Viewpoint #114 below.

Scenic integrity: Moderate – A view of the water-level fluctuation effect is a negative element.

Ecological integrity: High – Most of the plant assemblages are dominated by native species.

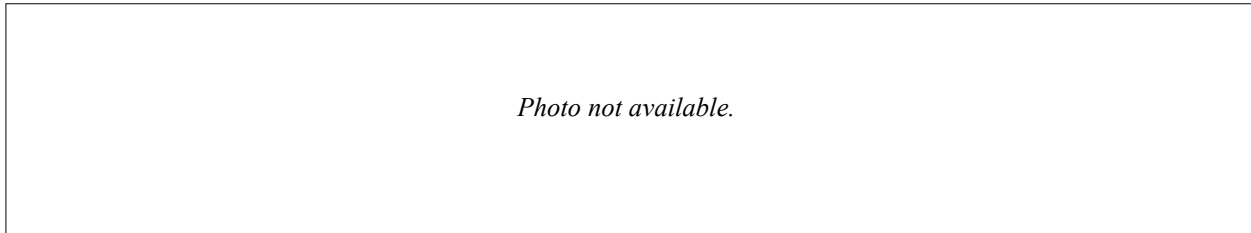
RECOMMENDED

Desired landscape character: The site is currently in a desirable ecological and aesthetic condition. Continued protection from grazing in the canyon will help maintain the existing condition.

Desired scenic integrity: High

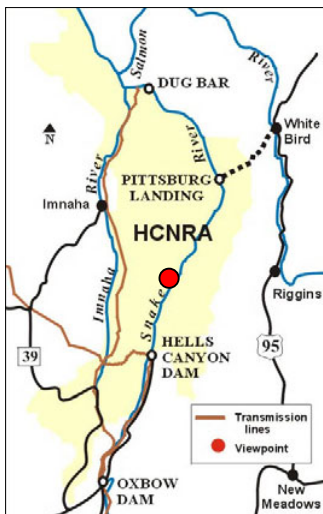
IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
Snake River fluctuation	DH: River water-level fluctuation	Moderate water-level fluctuations to reduce effect.	Daily fluctuations eliminated. Seasonal fluctuation increased.
Comments	IF: Impacts to vegetation resulting from recreational use are minimal and focused on the few trails used for scouting the rapids.		

Viewpoint #114: Wild Sheep Rapids (SP)



Watershed/subwatershed: Lower Snake (Hat Point)	RAA no. & name: 50 Snake River	Watershed/RAA scenic integrity: N/A
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EXISTING



Landscape character: This site is very special to most people floating the river primarily because it is the first of the challenging rapids. The site is primarily one of shrub species, net leaf hackberry and blue bunch wheatgrass. Boaters use a campsite on the Idaho side among the hackberry. The campsite is described in Viewpoint #113.

Historical information (Carrey et al., 1979, p. 166): There was a bald eagle nest atop a Ponderosa pine; however, nest, eagle and tree are now gone.

Scenic integrity: Moderate – A view of the water-level fluctuation effect is the primary negative element.

Ecological integrity: High – Most of the plant assemblages are dominated by native species.

RECOMMENDED

Desired landscape character: The site is currently in a desirable ecological and aesthetic condition. Continued protection from grazing in the canyon will help maintain the existing condition.

Desired scenic integrity: High

IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
Snake River fluctuation	DH: River water-level fluctuation	Moderate water-level fluctuations to reduce effect.	Daily fluctuations eliminated. Seasonal fluctuation increased.
Comments	IF: Impacts to vegetation resulting from recreational use are minimal and focused on the few trails used for scouting the rapids.		

**Viewpoint #115:
Granite Rapids (SP)**



Watershed/subwatershed: Lower Snake (Hat Point)	RAA no. & name: 50 Snake River	Watershed/RAA scenic integrity: N/A
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EXISTING



Landscape character: Today one can find only remnants of the historic landscape character described below. Fruit trees and farm machinery are still visible. The lower hay field on the south bench is used as a camp site today. The primary SP at Granite Creek today is the series of rapids. Vegetation is primarily net leaf hackberry and cheatgrass-bluebunch wheatgrass. Remnant alfalfa plants from historic landscape remain near the bridge over Granite Creek.

Historical information (Carrey et al., 1979, pp. 170, 176): Martin Hibbs and his wife Ellen homesteaded in 1911. They planted a garden, fruit trees, and hay. After Ellen died in 1926, Martin and his son Earl continued to farm until 1935, when Earl was killed and the cabin burned to the ground.

Scenic integrity: High – Water-level fluctuation effect detracts from scenic integrity.

Ecological integrity: Moderate to High – Threats to integrity come primarily from excessive recreational pressure. Trampling of vegetation for campsites has denuded vegetation in portions of the site nearest the river.

RECOMMENDED

Desired landscape character: Ecologically this site is currently in a desirable condition. Most plant assemblages are dominated by native species. Protect remaining alfalfa plants as feasible.

Desired scenic integrity: High

IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
Snake River fluctuation	DH: River water-level fluctuation	Moderate water-level fluctuations to reduce effect.	Daily fluctuations eliminated. Seasonal fluctuation increased.
Comments	None		

Viewpoint #116: Saddle Creek (SP)



Looking downriver from Saddle Creek

Watershed/subwatershed: Lower Snake (Hat Point)	RAA no. & name: 50 Snake River	Watershed/RAA scenic integrity: N/A
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EXISTING



Landscape character: Remnants of the historic landscape described below can still be seen. The lower field includes a walking plow, spring tooth harrow, mower, and a hay wagon. Vegetation includes net leaf hackberry and cheatgrass-bluebunch wheatgrass.

Historical information (Carrey et al., 1979, pp. 188-194): Fred Jensen settled at the mouth of Saddle Creek in 1895 and built a cabin. In 1916, he was joined by his stepson Pete and Pete’s wife Ethel. After a fire, the Wilsons replaced the cabin “with a spacious lumber house.” They planted a large vegetable garden “plus apple, apricot and peach trees. There was a root cellar, store house, chicken house and blacksmith shop as well.” The Wilson house burned to the ground in 1939 and was not replaced.

Scenic integrity: Very High

Ecological integrity: High – Most plant assemblages are dominated by native species. There is some threat to integrity from recreation pressure and thus an increased potential for noxious weeds.

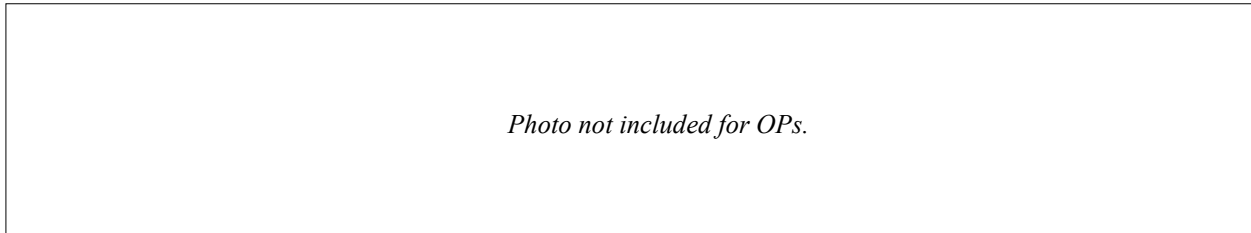
RECOMMENDED

Desired landscape character: Consider designing and constructing an interpretive trail highlighting the historical remnants. Ecologically and aesthetically the site is currently in a desirable condition. Continue protection from grazing and excessive recreation pressure. Manage noxious weeds.

Desired scenic integrity: Very High

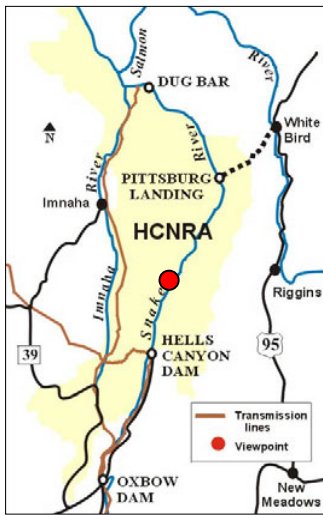
IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
Snake River fluctuation	DH: River water-level fluctuation	Moderate water-level fluctuations to reduce effect.	Daily fluctuations eliminated. Seasonal fluctuation increased.
Comments	Opportunity exists to coordinate with USFS to develop interpretive trail.		

Viewpoint #117: Bernard Creek Trailhead (OP)



Watershed/subwatershed: Lower Snake	RAA no. & name: 50 Snake River	Watershed/RAA scenic integrity: N/A
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EXISTING



Landscape character: N/A

Scenic integrity: N/A

Ecological integrity: N/A

RECOMMENDED

Desired landscape character: N/A

Desired scenic integrity: N/A

IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
N/A	N/A	N/A	N/A

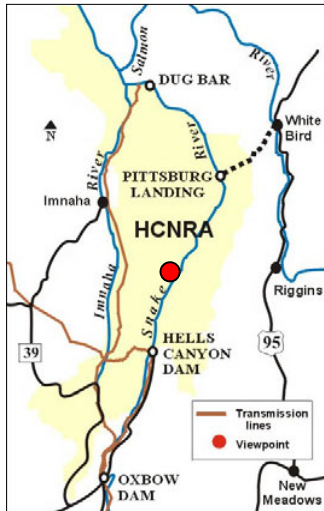
Comments	Not considered an SP due to lack of historical significance and because other sites with similar characteristics provide adequate representation.
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Viewpoint #118: McGaffee Cabin (SP)



Watershed/subwatershed: Lower Snake	RAA no. & name: 50 Snake River	Watershed/RAA scenic integrity: N/A
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EXISTING



Landscape character: The historic cabin remains as described below. It sits on a grassy river bench with remnants of the stone root cellar, water ditch, orchard and rusted farm implements. Black locust trees, grape vines and cherry trees remain from the days of occupancy. The unique interior wall paper is a wonderful aesthetic and nostalgic treat. Increased visitor use has had minimal impact. An established trail and bridge cross the creek.

Historical information (Carrey et al., 1979, pp. 196-197, 199): William Hiltley, with his family, came in 1901 and built a log bunkhouse. The second cabin, which is still present, was “constructed of board and batten,” with two rooms and front and back porches. When the McGaffees bought the property in 1915, they replaced the burlap on the interior walls with “Hells Canyon wallpaper,” pages from magazines of the day.

Scenic integrity: Moderate – Water-level fluctuation effect detracts from scenic integrity. The bridge does not reflect the historical character of the cabin site.

Ecological integrity: High – Most plant assemblages are dominated by native species. Threats to integrity include increased recreation pressure that in turn denudes vegetation and increases potential for noxious weeds.

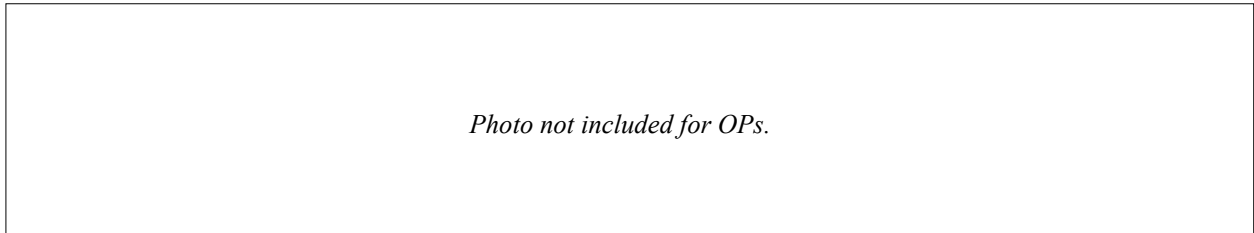
RECOMMENDED

Desired landscape character: The trail bridge should be redesigned and rebuilt to be more in character with the period (e.g., use undimensioned lumber). The historic remnants mentioned above should be stabilized and maintained as part of the landscape character, including the remaining alfalfa plants.

Desired scenic integrity: High

IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
Snake River fluctuation	DH: River water-level fluctuation	Moderate water-level fluctuations to reduce effect.	Daily fluctuations eliminated. Seasonal fluctuation increased.
Comments	<p>IF: Impacts to vegetation resulting from recreational use are minimal and focused on the trail to the cabin.</p> <p>NP: Construction debris from recent cabin rehabilitation remains on site and detracts from scenic integrity.</p>		

Viewpoint #119: Waterspout Place (Homestead) (OP)



Watershed/subwatershed: N/A	RAA no. & name: N/A	Watershed/RAA scenic integrity: N/A
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EXISTING

Landscape character: N/A

Scenic integrity: N/A

Ecological integrity: N/A

RECOMMENDED

Desired landscape character: N/A

Desired scenic integrity: N/A



IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
N/A	N/A	N/A	N/A

Comments	Not considered an SP due to lack of historical significance and because other sites with similar characteristics provide adequate representation.
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**Viewpoint #120:
Bill's Creek (SP)**



Si Bullock Cabin remnants at Bill's Creek

Watershed/subwatershed: Lower Snake (Hat Point)	RAA no. & name: 50 Snake River	Watershed/RAA scenic integrity: N/A
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EXISTING



Landscape character: The skilled work of Si Bullock can be seen in the remnant rock walls of his cabin which still stand on the river side of the trail. The other rock structure along the path is the remnants of his corral. His garden was 50 feet down river from the house. Vegetation on the site is primarily cheatgrass-bluebunch wheat grass with islands of cliff talus slopes. The riparian area of Bill's Creek includes net leaf hack berry, common choke cherry, poison ivy and syringa.

Historical information (Carrey et al., 1979, pp. 201-203): Bert Weinheimer filed a homestead in 1905, built a cabin and planted alfalfa. Silas Bullock, a bricklayer, built a stone cabin in 1912, chipping the stones "so that they fitted like bricks. He built a rectangle about 12 by 20 with walls two feet thick."

Scenic integrity: High – Water-level fluctuation effect detracts from scenic integrity along the river.

Ecological integrity: High – Most plant assemblages are dominated by native species.

RECOMMENDED

Desired landscape character: The remains of Si Bullock's homestead should be stabilized. Ecologically the site is currently in a desirable condition. Protect the site from and limit recreation use to reduce visitor pressure. Protect rare plants including bartonberry and shining flatsedge.

Desired scenic integrity: High

IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
Snake River fluctuation	DH: River water-level fluctuation	Moderate water-level fluctuations to reduce effect.	Daily fluctuations eliminated. Seasonal fluctuation increased.
Comments	IF: Impacts to vegetation resulting from recreational use are minimal. Opportunity exists to coordinate with USFS to develop interpretive program for Si Bullock cabin remnants.		

Viewpoint #121: Sluice Creek/Winniford Place (SP)



Watershed/subwatershed: Lower Snake (Hat Point)	RAA no. & name: 50 Snake River	Watershed/RAA scenic integrity: N/A
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EXISTING



Landscape character: Only one cabin of those described below remains and represents the construction and architectural appearance of log cabins. Vegetation is primarily cheat-grass-blue bunch wheat grass with islands and fingers of net leaf hackberry. Along Sluice Creek are some large riparian areas of net leaf hackberry, water birch/white alder/syringa and a grove of planted black locust.

Historical information (Carrey et al., 1979, pp. 210-212): “Alex Warnock had a cow camp on Sluice Creek in the early 1880s.” Brothers named Marks “ran sheep and cattle in the area in the early 1900s.” They constructed “twin cabins which faced each other beneath a common roofed entryway.” Later owners, the Winnifords, planted black locust trees for shade.

Scenic integrity: Moderate to High – The grove of black locust has a number of leaning jackstrawed trees that leave an unkempt appearance to some. To others it adds the appearance of being old and historic.

Ecological integrity: Moderate to High – Most assemblages are dominated by native species. The planted black locusts are not really a threat to integrity, but the seasonal heavy use by pack stock is a threat.

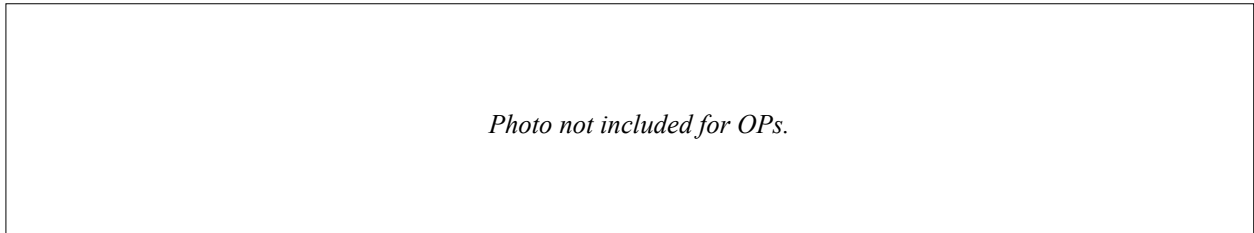
RECOMMENDED

Desired landscape character: This semi primitive experience should be kept intact. Stabilize and maintain the cabin. Appropriate interpretation of the history should be provided. Protect the site from grazing and limit recreation use, especially use by pack stock.

Desired scenic integrity: High

IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
Snake River fluctuation	DH: River water-level fluctuation	Moderate water-level fluctuations to reduce effect.	Daily fluctuations eliminated. Seasonal fluctuation increased.
Comments	<p>IF: Impacts to vegetation resulting from recreational use, especially pack stock, detract from ecological integrity.</p> <p>Opportunity exists to coordinate with USFS to develop interpretive program for Winniford Place.</p>		

Viewpoint #122: Rush Creek Rapids and Hat Point (OP)



Watershed/subwatershed: N/A	RAA no. & name: N/A	Watershed/RAA scenic integrity: N/A
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EXISTING



Landscape character: N/A

Scenic integrity: N/A

Ecological integrity: N/A

RECOMMENDED

Desired landscape character: N/A

Desired scenic integrity: N/A

IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
N/A	N/A	N/A	N/A
Comments	Not considered an SP due to lack of historical significance and because other sites with similar characteristics provide adequate representation.		

Viewpoint #123: Johnson Bar and Barton Bullock House (SP)



Johnson Bar

Watershed/subwatershed: Lower Snake	RAA no. & name: 50 Snake River	Watershed/RAA scenic integrity: N/A
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EXISTING



Landscape character: The ruins of the Barton Bullock house can still be seen on the bar, as well as the cellar hole for the Glenn Hibbs house. A campsite at the river bend north of the beach is used by boaters. It is bounded by steep slopes covered in cheatgrass-bluebunch wheat grass. Large areas of net leaf hackberry in shrub form make the latter appear to be dominant. Riparian areas along the river have net leaf hackberry and Eaton’s aster.

Historical information (Carrey et al., 1979, pp. 213-215): “Johnson Bar was probably named after Johnny Johnston” who placer mined “in the early 1900s.” In 1914, Ralph Barton and Silas Bullock built “a rock and mortar house” cut out of the hillside that had “a corner fireplace and sod roof.” The Bartons added fences, a garden, and a rock corral. In 1916, Glenn Hibbs built “a one-and-a-half story frame house with a ‘lean-to’ kitchen.” In 1935, Ralph and Mary Stickney began running cattle, later replaced by sheep, for several years.

Scenic integrity: Low to Moderate – The negative elements include the drawdown effect, possible loss of sandy beach, and the weather/gauging station across the river.

Ecological integrity: High – Most plant assemblages are dominated by native species.

RECOMMENDED

Desired landscape character: Consider design and construction of an interpretive trail to access historic remnants mentioned above. Stabilize the remnants for interpretive purposes. Manage noxious weeds found in shrubland and protect rare plants including bartonberry. Screen the gauging station across the river with native vegetation.

Desired scenic integrity: High

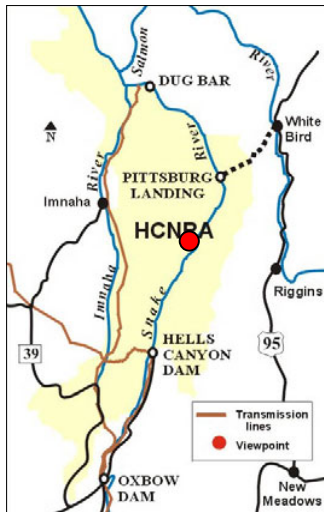
IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
Snake River fluctuation	DH: River water-level fluctuation	Moderate water-level fluctuations to reduce effect.	Daily fluctuations eliminated. Seasonal fluctuation increased.
Snake River fluctuation	DH: Possible loss of sandy beach	If loss is documented and is Project effect, coordinate appropriate mitigation with USFS.	Unknown
Comments	<p>NP: The weather station located across the river is inconsistent with architectural character of the canyon and should be screened.</p> <p>Opportunity exists to coordinate with USFS to develop interpretive program for Barton Bullock house.</p>		

**Viewpoint #124:
Sheep Creek Ranch (OP)**



Watershed/subwatershed: Lower Snake (Hat Point)	RAA no. & name: 50 Snake River	Watershed/RAA scenic integrity: N/A
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EXISTING



Landscape character: Bill and Mabel McGaffee’s cabin is located on an irrigated grassy bench amongst mature poplars. It is used as a historical rental facility. Bill McLeod’s stone house, cut out of the river bank, was later converted to a blacksmith shop. It still exists just above Sheep Creek on the north side.

Historical information (Carrey et al., 1979, pp. 216-218): William McLeod arrived the spring of 1884, building a stone cabin cut into the river bank. In 1925, Billy McGaffee built a lumber constructed house that occupies the site today.

Scenic integrity: Low – Lawn chairs, picnic tables and other modern facilities detract from the landscape character of the historical setting.

Ecological integrity: Moderate – Factors that negatively effect integrity include dominance of introduced ornamentals that compete with native plants and alter natural ecological functions for the site.

RECOMMENDED

Desired landscape character: Consider retaining the cabin as an historical rental giving the renters the feel of being immersed into the life during the late 19th century and early 20th century. Remove modern obtrusive facilities. Limit ornamental landscaping or reduce its negative effect as much as possible. Manage noxious weeds found on the site. USFS should examine its administration of the cabin permit in terms of the non-historical yard furnishings.

Desired scenic integrity: High

IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
No Project effects visible from site.	N/A	N/A	N/A
Comments	NP: Lawn chairs, picnic tables and modern facilities detract from the historical setting. Not considered an SP because no Project effects are visible.		

**Viewpoint #125:
Sheep Creek Campsite
(SP)**



Watershed/subwatershed: Lower Snake	RAA no. & name: 50 Snake River	Watershed/RAA scenic integrity: N/A
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EXISTING



Landscape character: The group campsite above the cabin provides shelter for the camp kitchen and a large high bench for tents. There is little shelter on the bench, but the view up river to Johnson Bar is spectacular. Other characteristics include angular rock faces, grasses, and rushing water sounds.

Scenic integrity: Moderate – Negative elements include denuded sites with trampled grass cover. Fluctuation effect can be seen at times.

Ecological integrity: Moderate – Factors that negatively effect integrity include dominance of introduced ornamentals that compete with native plants and alter natural ecological functions for the site. High recreational use may lead to invasion of noxious weeds.

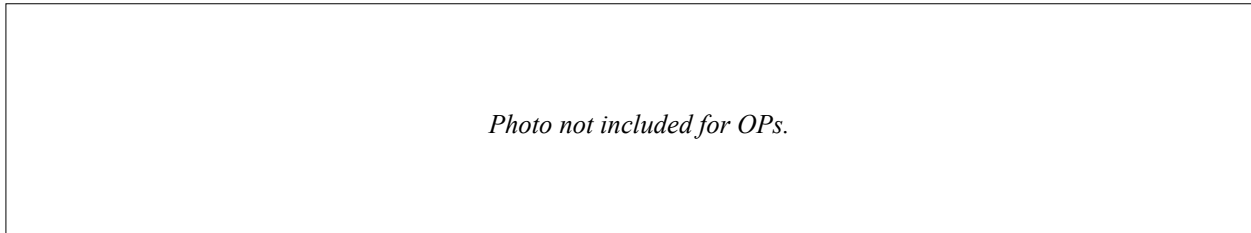
RECOMMENDED

Desired landscape character: Develop the role of this site in concert with the cabin site. Decisions about the interrelationships between these two sites need to be made before desired character statements can be developed. Include solving recreation impact problems and eradication of noxious weeds found on the site.

Desired scenic integrity: High

IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
Snake River fluctuation	DH: River water-level fluctuation	Moderate water-level fluctuations to reduce effect.	Daily fluctuations eliminated. Seasonal fluctuation increased.
Comments	IF: User impacts consist of trampled vegetation on the bench and at cooking sites. Develop management controls and improve designated trail.		

Viewpoint #126: Dry Diggins View and Eagles Nest (OP)



Watershed/subwatershed: N/A	RAA no. & name: N/A	Watershed/RAA scenic integrity: N/A
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EXISTING



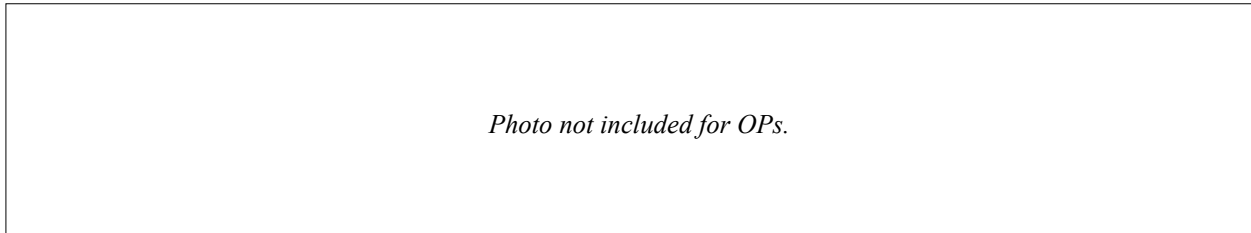
Landscape character: N/A	
Scenic integrity: N/A	Ecological integrity: N/A

RECOMMENDED

Desired landscape character: N/A
Desired scenic integrity: N/A

IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
No Project effects visible.	N/A	N/A	N/A
Comments	Not considered an SP because no Project effects are visible.		

Viewpoint #127: Salt Creek Cabin (OP)



Watershed/subwatershed: N/A	RAA no. & name: N/A	Watershed/RAA scenic integrity: N/A
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EXISTING

Landscape character: N/A

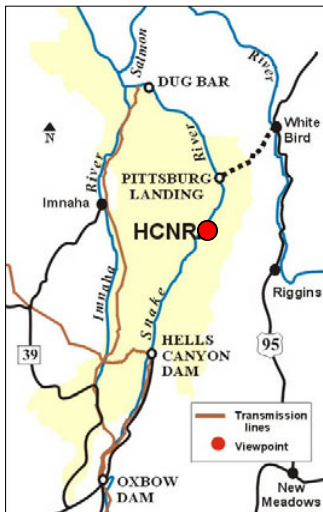
Scenic integrity: N/A

Ecological integrity: N/A

RECOMMENDED

Desired landscape character: N/A

Desired scenic integrity: N/A



IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
N/A	N/A	N/A	N/A
Comments	Not considered an SP due to lack of historical significance and because other sites with similar characteristics provide adequate representation.		

**Viewpoint #128:
Pine Bar (SP)**



Watershed/subwatershed: Lower Snake	RAA no. & name: 50 Snake River	Watershed/RAA scenic integrity: N/A
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EXISTING



Landscape character: This site provides a sheltered eddy that is an excellent swimming area with a sandy bottom. The large grove of Ponderosa Pine to the east is rare along the river corridor and creates an oasis in a linear landscape of rugged rock outcrops, grass, shrubs and churning water. Grassy areas are mostly cheatgrass-bluebunch wheat grass. The forested upland is Ponderosa Pine with common snow berry and a few stands of net leaf hackberry.

Historical information (Carrey et al., 1979, pp. 223-224): “A sand beach extended almost to the pair of rocks in the eddy off Pine Bar, before the dams were built.” During the 1960s, Floyd Harvey operated a camp that included “a main lodge and tent cabins.” After an arsonist’s fire in 1974 destroyed the buildings, the special use permit for the camp was not reissued.

Scenic integrity: Low – The change in sandy beach and denuded vegetation in the campsite are negative elements.

Ecological integrity: Moderate – A recent fire killed a number of pine trees and left the highly erodible soil vulnerable. Denuded campsites have opened this site to invasion of noxious weeds.

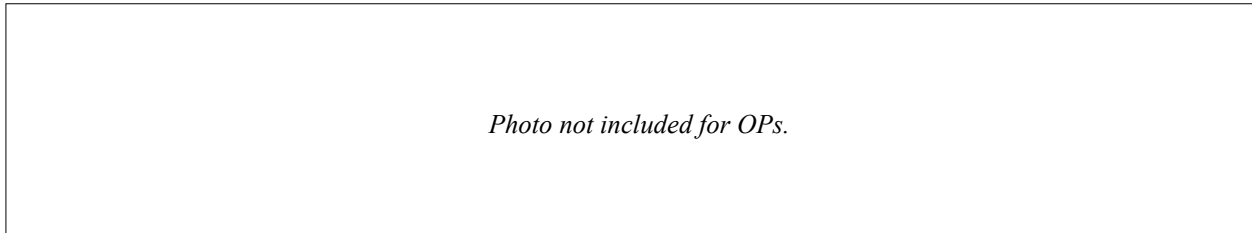
RECOMMENDED

Desired landscape character: It is highly desirable to maintain and/or replace the sand beach. Explore options within the limitations of the Wild and Scenic River designation and sustainable ecology for the site. Limit recreation use as necessary to solve the user impact problems. Manage noxious weeds. Ensure that there are enough different age classes of Ponderosa Pine on the site to sustain the open park like character over time. Stabilize erodible soils to the degree feasible.

Desired scenic integrity: High (long term); Moderate (short term)

IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
Snake River fluctuation	DH: Possible loss of sandy beach	If loss is documented and is Project effect, coordinate appropriate mitigation with USFS.	Unknown
Snake River fluctuation	DH: River water-level fluctuation	Moderate water-level fluctuations to reduce effect.	Daily fluctuations eliminated. Seasonal fluctuation increased.
Comments	None		

Viewpoint #129: Big Bar Airstrip & Campsite (OP)



Watershed/subwatershed: N/A	RAA no. & name: N/A	Watershed/RAA scenic integrity: N/A
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EXISTING

Landscape character: N/A

Scenic integrity: N/A

Ecological integrity: N/A

RECOMMENDED

Desired landscape character: N/A

Desired scenic integrity: N/A



IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
N/A	N/A	N/A	N/A

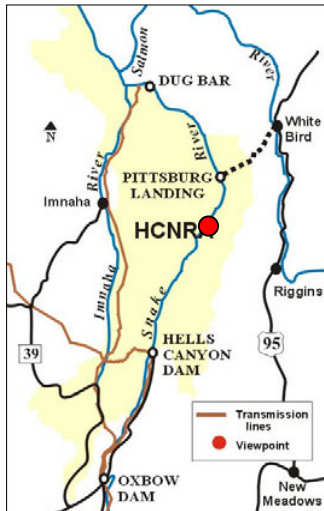
Comments Not considered an SP due to lack of historical significance and because other sites with similar characteristics provide adequate representation.

Viewpoint #130: Temperance Creek Ranch (SP)



Watershed/subwatershed: N/A	RAA no. & name: N/A	Watershed/RAA scenic integrity: N/A
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EXISTING



Landscape character: A barn, shearing sheds, airstrip, and hangar stand on the upper bench. A modern frame house and several outbuildings area located below nearer the boat dock. The ranch is now used by an outfitter and guide for hunting and jet boat trips. The plant assemblages for the grassland include cheatgrass-bluebunch wheatgrass. There are several irrigated and non-irrigated pastures in the area. Many are weedy and include noxious weeds. Net leaf hackberry and bluebunch wheatgrass occur in the Shrub Savanna.

Historical information (Carrey et al., 1979, pp. 234, 236, 241-242): In the mid-1880s, “while bringing in their winter supplies,” placer miners Alex and Bob Warnock lost “a packhorse with their quota of whiskey. As a result, their winter camp was dry as buffalo jerky and the creek’s name is a reminder of that memorable drought.” In 1904, the Warnocks sold out to Frank “Bow” Wyatt who added the property to an extensive cattle operation. In the 1930s, the Johnson family purchased the holdings. Ken and Hazel Johnson ran about 3,600 sheep, raised alfalfa, and added buildings, eventually selling to the Forest Service in 1974.

Scenic integrity: Low – due to weedy appearance and impact of stock animals.

Ecological integrity: Low to Moderate – Due to the extensive grazing of cattle and sheep in the early years, and pack stock more recently. Many noxious weeds are found in the riparian areas.

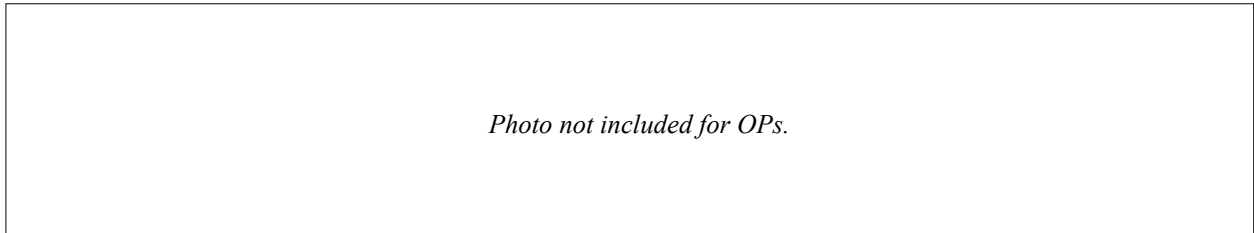
RECOMMENDED

Desired landscape character: The road from the boat docks to the house could use improvements to make it more attractive. The historic barn and shearing sheds should be stabilized. Limit the handling of pack stock to improve ecological and scenic integrity. Manage noxious weeds and protect rare plants on the site.

Desired scenic integrity: High

IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
Snake River fluctuation	DH: River water-level fluctuation	Moderate water-level fluctuations to reduce effect.	Daily fluctuations eliminated. Seasonal fluctuation increased.
Comments	Opportunity exists to coordinate with USFS and develop interpretive program for ranch and facilities.		

Viewpoint #131: Suicide Point (OP)



Watershed/subwatershed: N/A	RAA no. & name: N/A	Watershed/RAA scenic integrity: N/A
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EXISTING

Landscape character: N/A

Scenic integrity: N/A

Ecological integrity: N/A

RECOMMENDED

Desired landscape character: N/A

Desired scenic integrity: N/A



IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
N/A	N/A	N/A	N/A

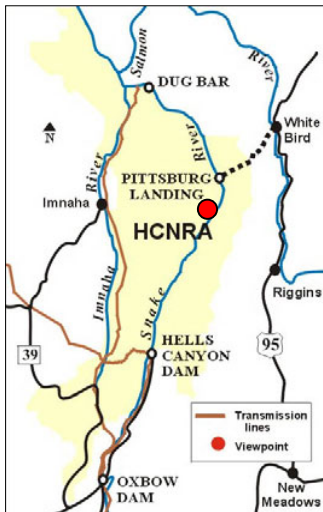
Comments	Not considered an SP due to lack of historical significance and because other sites with similar characteristics provide adequate representation.
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Viewpoint #132: Half Moon Bar (OP)



Watershed/subwatershed: N/A	RAA no. & name: N/A	Watershed/RAA scenic integrity: N/A
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EXISTING



Landscape character: N/A

Scenic integrity: N/A

Ecological integrity: N/A

RECOMMENDED

Desired landscape character: N/A

Desired scenic integrity: N/A

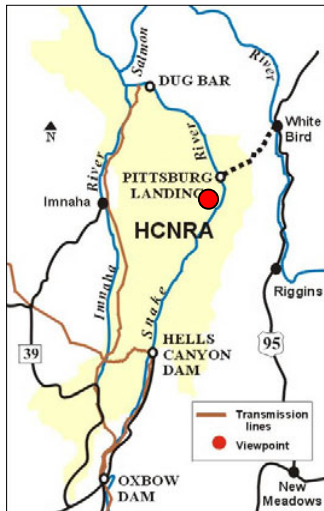
IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
N/A	N/A	N/A	N/A
Comments	Not considered an SP due to lack of historical significance and because other sites with similar characteristics provide adequate representation.		

**Viewpoint #133:
Kirkwood Ranch (OP)**



Watershed/subwatershed: Snake River – Pittsburg	RAA no. & name: 50 Snake River	Watershed/RAA scenic integrity: N/A
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EXISTING



Landscape character: This much-visited site is one of the most important, historically, in the canyon. Len Jordon’s house is very much intact on the bar. Sterling’s impressive bunkhouse has become a museum and Carl Hanna’s house is just across the creek in the middle of a small corral. Surrounding these buildings is a Kentucky bluegrass lawn with irrigated ornamentals. Upland vegetation includes cheatgrass-bluebunch wheatgrass and net leaf hackberry. The riparian area along the river contains purslane, net leaf hackberry, Eaton’s astor, and hemp dog bane.

Historical information (Carrey et al., 1979, pp. 249, 252): Dr. Jay Kirkwood and his family “squatted on the bar,” building two cabins from salvaged lumber. They left for Lewiston in 1885. Various families of ranchers occupied the site until Leonard and Kenneth Johnson bought Kirkwood Bar. They built a “two-story white frame house that faces the river,” which they sold to Len Jordan in 1932. Jordan and his wife remodeled the home extensively. In 1943, the property was sold to Bud and Helen Wilson who ran sheep.

The log bunkhouse was built by Dick Sterling. The cabin built by Carl Hanna in 1912 was later moved to Kirkwood Bar from half mile up the Kirkwood Road.

Scenic integrity: Low to Moderate – The arrival experience could be enhanced considerably. The farm implements, bone wreaths and barbed wire around the new toilet building are negative.

Ecological integrity: Moderate – The negative factors effecting integrity include heavy recreation use, dominance of ornamental plants and agricultural cover types that compete with native plants and alter ecological functions of the site.

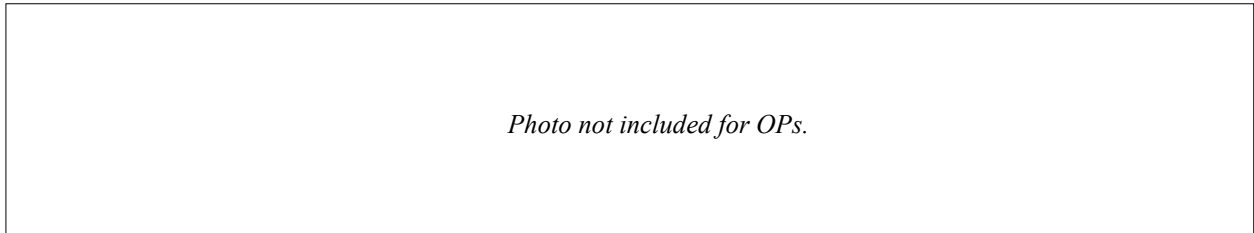
RECOMMENDED

Desired landscape character: A new site plan should be developed for Kirkwood Ranch to make the arrival and approach more aesthetically pleasing to the senses and to minimize the visitor impacts. Stabilize the historic buildings. Move the plants toward more native associations, keeping in mind that the irrigated lawn is a very positive feature to many visitors. Maintain or reduce size of lawn area to reduce negative influence on the site’s ecology. Manage noxious weeds and protect rare plants on the site.

Desired scenic integrity: High

IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
No Project effects visible.	N/A	N/A	N/A
Comments	Not considered an SP because no Project effects are visible.		

Viewpoint #134: Kirby Creek Lodge (OP)



Watershed/subwatershed: N/A	RAA no. & name: N/A	Watershed/RAA scenic integrity: N/A
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EXISTING



Landscape character: N/A	
Scenic integrity: N/A	Ecological integrity: N/A

RECOMMENDED

Desired landscape character: N/A	
Desired scenic integrity: N/A	

IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
N/A	N/A	N/A	N/A

Comments | Not considered an SP due to lack of historical significance and because site is privately owned.

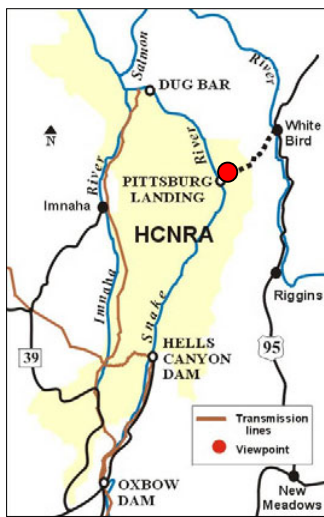
Viewpoint #135: Upper Pittsburg Landing and Mexican Hat Site (SP)



Interpretive features at Mexican Hat Site

Watershed/subwatershed: Snake River – Pittsburg	RAA no. & name: 51 Snake River	Watershed/RAA scenic integrity: N/A
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EXISTING



Landscape character: The row of osage orange trees still exists as do some of the fruit trees. The petroglyphs, including the “Mexican Hat” are interpreted with a wayside exhibit and are served by an access road and parking area. The rustic features of the restroom building complement the landscape. Rock formations with areas of shrubs and grasses dominate the foreground and middleground views. Patches and stringers of evergreen trees dominate the background. The upper slopes have grasses and shrubs as an understory. The shoreline has a rocky/cobble edge with hackberry being the dominant vegetation.

Historical information (Carrey et al., 1979, pp. 278-279): Henry Kurry and his family occupied the site in 1877. They built rock houses “that were a local landmark” until removed. The osage orange trees they planted still grow on the site. In 1896, George Wood built “a large hewed-log house with cellar, a wagon shed and tenant house.” The Wood family irrigated hay, a garden, and some two hundred fruit trees.

Scenic integrity: High	Ecological integrity: Moderate to High – Threats to integrity include potential of disturbance from increased visitor traffic, which can cause invasion of noxious weeds. Many already exist in the uplands including yellow star thistle and St. Johnswart.
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RECOMMENDED

Desired landscape character: Include this site in the plan outlined for Viewpoint #136 Lower Pittsburg Landing. Manage noxious weeds.

Desired scenic integrity: High

IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
Snake River fluctua- tion	DH: River water-level fluctuation	Moderate water-level fluctuations to reduce effect.	Daily fluctua- tions elimi- nated. Sea- sonal fluctua- tion increased.
Comments	Opportunity exists to coordinate with USFS to augment existing interpretive program.		

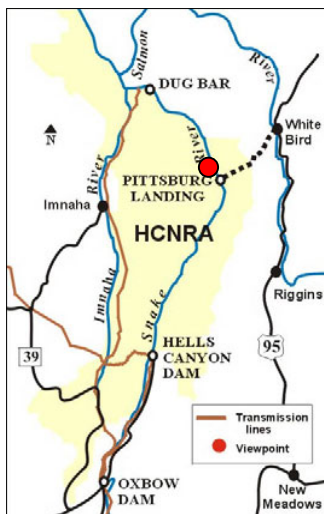
Viewpoint #136: Lower Pittsburg Landing and Campground (SP)



Lower Pittsburg Landing boat ramp

Watershed/subwatershed: Lower Snake	RAA no. & name: 51 Snake River	Watershed/RAA scenic integrity: N/A
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EXISTING



Landscape character: Dramatic granite slopes with grass surround this site. Shrubs and grasses dominate the middleground and lower and mid-slopes. Patches and stringers of evergreen trees dominate background and upperslopes with grasses and shrubs as an understory. The shoreline has a rocky/cobble edge with hackberry being the dominant vegetation. The recreation facility consists of a boat launch and associated parking facilities, campground and administration buildings. The rustic features and earthtones of the administrative building and restroom and their location within the tallest vegetation complements the landscape.

Historical information: See Viewpoint #135, Upper Pittsburg Landing and Mexican Hat site.

Scenic integrity: Low to Moderate – The roofs on the administration building across the river are white and highly reflective. The antennas are also negative. The campground shade shelters are poorly designed and appear completely out of place. Materials and design are not consistent with architectural character of canyon.

Ecological integrity: Moderate to High. See Viewpoint #135 Upper Pittsburg Landing and Mexican Hat site

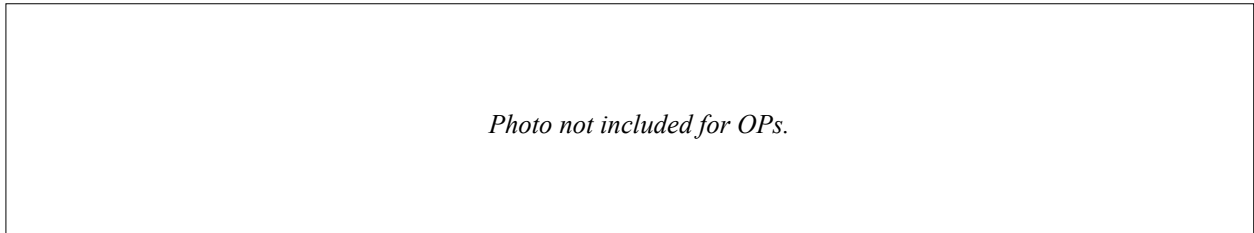
RECOMMENDED

Desired landscape character: A site plan for both Upper and Lower Pittsburg Landing should be developed to correct the negative elements and enhance the positive features mentioned above. Plan should include steps to address visitor impact problems, unsightly picnic shelters, and potential noxious weed invasion, particularly yellow star thistle.

Desired scenic integrity: High

IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
Snake River fluctuation	DH: River water-level fluctuation	Moderate water-level fluctuations to reduce effect.	Daily fluctuations eliminated. Seasonal fluctuation increased.
Comments	Opportunity exists to coordinate with USFS to augment existing interpretive program. NP: Several hardscape elements (picnic shelters, USFS administrative buildings across river) are not consistent with architectural character of canyon.		

Viewpoint #137: Circle C Ranch (OP)



Watershed/subwatershed: Lower Snake	RAA no. & name: 51 Snake River	Watershed/RAA scenic integrity: N/A
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EXISTING

Landscape character: N/A

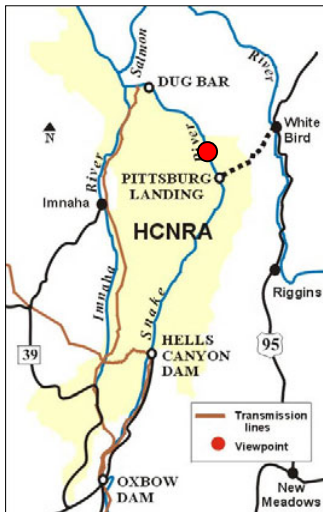
Scenic integrity: N/A

Ecological integrity: N/A

RECOMMENDED

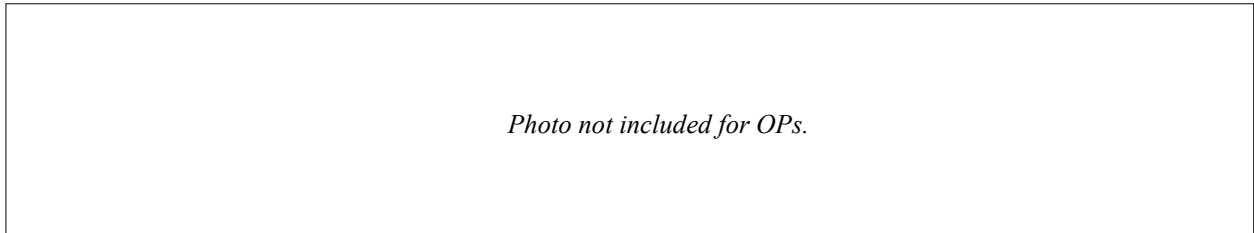
Desired landscape character: N/A

Desired scenic integrity: N/A



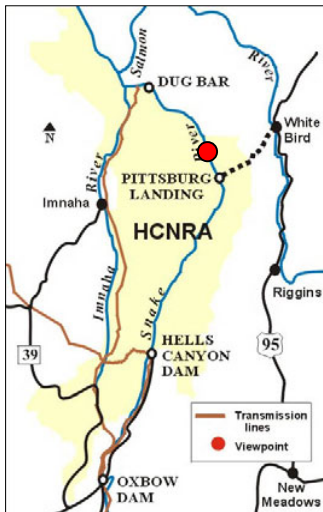
IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
N/A	N/A	N/A	N/A
Comments	Not considered an SP due to lack of historical significance and because effects occur on private land.		

Viewpoint #138: Pittsburg Administration Site (OP)



Watershed/subwatershed: N/A	RAA no. & name: N/A	Watershed/RAA scenic integrity: N/A
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EXISTING



Landscape character: N/A	
Scenic integrity: N/A	Ecological integrity: N/A

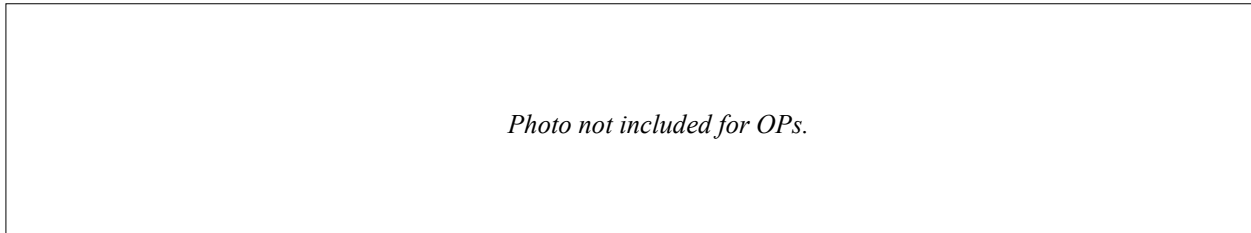
RECOMMENDED

Desired landscape character: N/A	
Desired scenic integrity: N/A	

IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
N/A	N/A	N/A	N/A

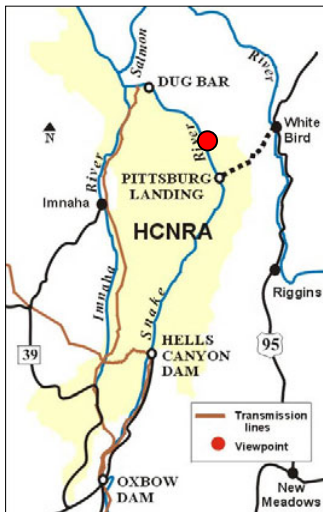
Comments	<p>Not considered an SP because effects are documented at Viewpoint #136.</p> <p>NP: The USFS administration buildings create high contrast; roofs are white/reflective and antennas stand out.</p>
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Viewpoint #139: Somers Creek (OP)



Watershed/subwatershed: Lower Snake	RAA no. & name: 51 Snake River	Watershed/RAA scenic integrity: N/A
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EXISTING



Landscape character: Benches contain hackberry scrub, and large rock outcrops amongst bunch grass. Burdock grows along river's edge.

Scenic integrity: Moderate	Ecological integrity: N/A
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RECOMMENDED

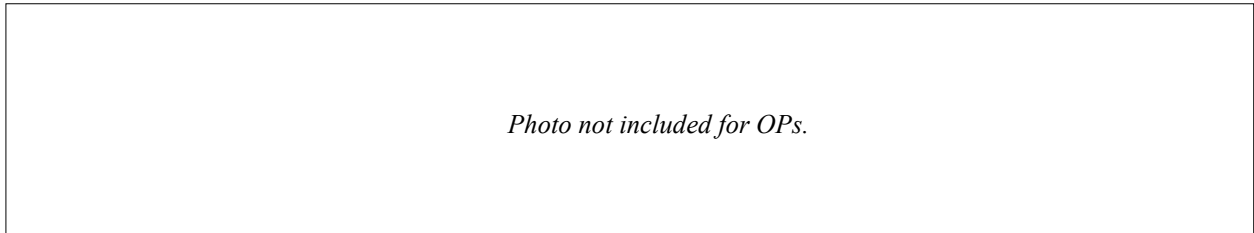
Desired landscape character: N/A

Desired scenic integrity: N/A

IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
N/A	N/A	N/A	N/A

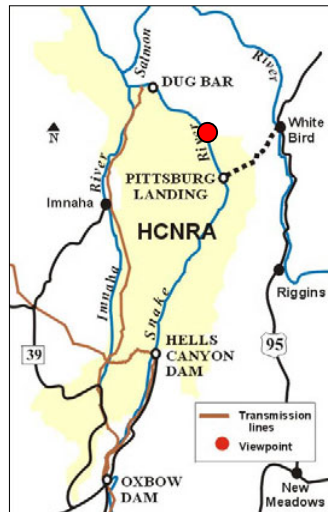
Comments	Not considered an SP due to lack of historical significance and because other sites with similar characteristics provide adequate representation.
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Viewpoint #140: Tryon Creek Campsite (OP)



Watershed/subwatershed: N/A	RAA no. & name: N/A	Watershed/RAA scenic integrity: N/A
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EXISTING



Landscape character: N/A

Scenic integrity: N/A

Ecological integrity: N/A

RECOMMENDED

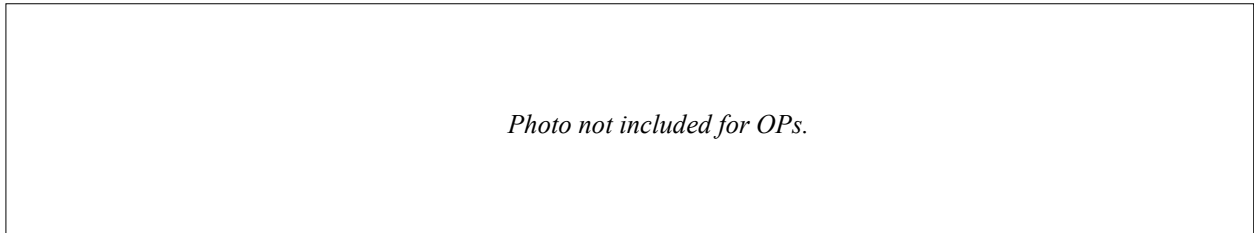
Desired landscape character: N/A

Desired scenic integrity: N/A

IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
N/A	N/A	N/A	N/A

Comments	Not considered an SP due to lack of historical significance and because other sites with similar characteristics provide adequate representation.
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Viewpoint #141: Copper Creek Resort (OP)



Watershed/subwatershed: N/A	RAA no. & name: N/A	Watershed/RAA scenic integrity: N/A
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EXISTING

Landscape character: N/A

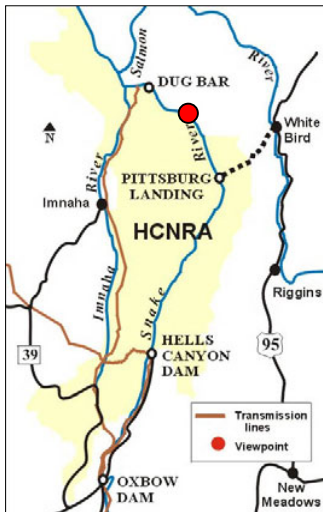
Scenic integrity: N/A

Ecological integrity: N/A

RECOMMENDED

Desired landscape character: N/A

Desired scenic integrity: N/A



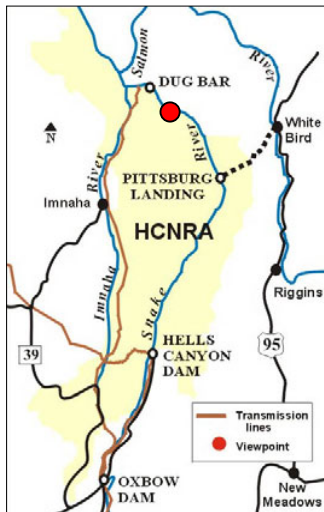
IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
N/A	N/A	N/A	N/A
Comments	Not considered an SP due to lack of historical significance and because other sites with similar characteristics provide adequate representation.		

**Viewpoint #142:
Deep Creek (Chinese Miner
Massacre Site) (SP)**



Watershed/subwatershed: Lower Snake (Pittsburg)	RAA no. & name: 51 Snake River	Watershed/RAA scenic integrity: N/A
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EXISTING



Landscape character: Horizontal rock bluffs rise above the river from which the massacre occurred. This area is an important stage from which river users can re-live the tragic story described below. One of the few sandy beaches exists at this site. The plant assemblages include net leaf hackberry/bluebunch wheat grass. The riparian area along the river includes net leaf hackberry, Eaton’s astor and hemp dog bane.

Historical information (Carrey et al., 1979, p. 304, 308): “...at the mouth of the tributary in 1887 – 31 Chinese miners were murdered for their gold,” by a band of drifters and horse thieves who hid in the rock bluffs above the river and shot and mutilated the miners. Although the crime was investigated and arrests made, no one was ever convicted. For this and other crimes against Chinese immigrants, the U.S. government paid a sum to the Chinese government; however, the families of the victims were never directly compensated.

Scenic integrity:
Very High

Ecological integrity: High – There is little trampling from visitor use. Previously healthy stands of bluebunch wheat grass are recovering well from a recent fire. Encroachment of weedy annual grasses is expected to be minor.

RECOMMENDED

Desired landscape character: This story should be told in the form of a brochure obtained at contact points outside Deep Creek. Do not encourage recreational visits on the site. Experience the drama from the river. Ecologically this site is in very good condition and the recommended approach of experiencing the site from the river should help maintain that condition.

Desired scenic integrity: Very High

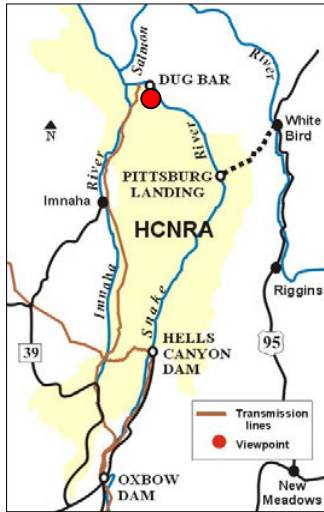
IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
Snake River fluctuation	DH: River water-level fluctuation	Moderate water-level fluctuations to reduce effect.	Daily fluctuations eliminated. Seasonal fluctuation increased
Comments	Opportunity exists to coordinate with appropriate party to develop interpretive program for this site.		

Viewpoint #143: Nez Perce Crossing Site (SP)



Watershed/subwatershed: Lower Snake (Pittsburg)	RAA no. & name: 51 Snake River	Watershed/RAA scenic integrity: N/A (adjacent to private land)
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EXISTING



Landscape character: For many visitors, this is the most poignant historical site in the canyon. The existing landscape is one of dominant columnar basalt outcrops with grassland of cheatgrass-bluebunch wheat grass, shrubs of net leaf hackberry, and riparian area of net leaf hackberry, Eaton’s astor, coyote willow and hemp dogbane. A sign commemorating the Nez Perce crossing is located near the river. There is little else done to interpret the crossing.

Historical information (Carrey et al., 1979, pp. 314-321): During several decades of pressure from Euro-American settlement, as treaties were negotiated, broken and re-negotiated, most of the Nez Perce were moved to reservations under ungenerous terms. Chief Joseph’s band were among the last. In the spring of 1874, General Howard gave them only 30 days to move to the Lapwai reservation. The band managed to gather their livestock from the canyon and cross at Dug Bar, with “the river in full spring flood,” on hand-made rafts “without loss of life.”

Scenic integrity: Very High – Except for the negative aspects of the interpretive sign.

Ecological integrity: High – There is little impact from visitor use. Plant assemblages are dominated by native species.

RECOMMENDED

Desired landscape character: An imaginative interpretive plan should be done in collaboration with the Nez Perce National Park. Visitors should be able to relive the tale from boats in the river. The existing vegetation is in what might be considered a stable state. Control noxious weeds and protect rare plants in the area.

Desired scenic integrity: Very High

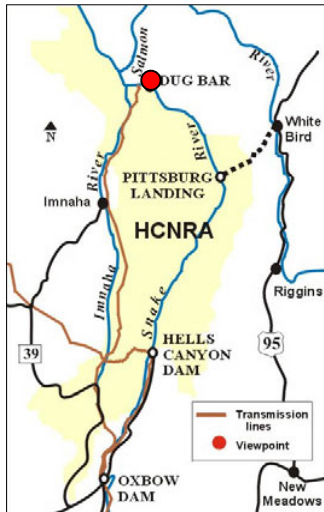
IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
Snake River fluctuation	DH: River water-level fluctuation	Moderate water-level fluctuations to reduce effect.	Daily fluctuations eliminated. Seasonal fluctuation increased.
Comments	Opportunity exists to coordinate with USFS to develop interpretive program for this site.		

**Viewpoint #144:
Dug Bar Land-
ing (SP)**



Watershed/subwatershed: Lower Snake	RAA no. & name: 51 Snake River	Watershed/RAA scenic integrity: N/A
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EXISTING



Landscape character: On the east side of river, columnar basalt outcrops, a tall rock spire, and mixed vegetation near high water mark dominate the landscape Dug Bar Ranch is of early homestead architecture with a barn and corral. The plant assemblages include cheatgrass-bluebunch wheatgrass and net leaf hackberry. A very large area of cultivated crops defines the ranch with net leaf hackberry around the perimeter.

Historical information (Carrey et al., 1979, p. 315): “Ancestors of the Nez Perce occupied portions of Hells Canyon and the Middle Snake River 6,000–8,000 years ago.”

Scenic integrity: Low – Visiting the site either by car or boat is a visually negative experience for most people. The vegetation is badly denuded by vehicular traffic that is undefined in its pattern. The lodge house is a contemporary style architecture. Restroom building doesn't fit with lodge architecture.

Ecological integrity: Low to Moderate – Disturbance from the vehicle traffic has destroyed much vegetation near the boat ramp and camping site. This has altered and degraded the ecological processes on the site.

RECOMMENDED

Desired landscape character: The goal should be to provide a new site plan for the ranch and public area. It should be developed to provide a pleasant arrival for visitors by car and from the river and to solve some of the ecological problems outlined above. Define vehicle and pedestrian traffic and parking patterns. Redesign the signage to be more functional and attractive. Move existing degraded plant associations towards late seral or climax stage of succession. Manage noxious weeds and protect rare plants on the site.

Desired scenic integrity: High

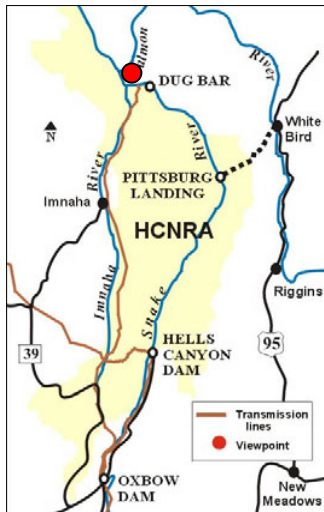
IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
Snake River fluctua- tion	DH: River water-level fluctuation	Moderate water-level fluctuations to reduce effect.	Daily fluctua- tions elimi- nated. Sea- sonal fluctua- tion increased.
Comments	<p>NP: Existing hardscape elements including parking and signage, and existing structures are not consistent with architectural character of the canyon.</p> <p>Opportunity exists to coordinate with USFS to develop an improvement plan for this site. Meeting a high scenic integrity level may be difficult due to impacts of non-Project effects.</p>		

Viewpoint #145: Mountain Chief Mine Tunnel (SP)



Watershed/subwatershed: Lower Snake (Pittsburg)	RAA no. & name: 51 Snake River	Watershed/RAA scenic integrity: N/A
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EXISTING



Landscape character: In 1979 visitors could walk all the way through the tunnel, portal to portal, as long as they had good flashlights. Today one can only walk a short way in from each portal. The middle portions have become unsafe. Plant assemblages include cheatgrass-bluebunch wheatgrass and net leaf hackberry. There are scattered patches of cliff talus slopes.

Historical information (Carrey et al., 1979, pp. 350-352): Extensive mining development occurred in the area near the Snake-Imnaha confluence during the short-lived Eureka copper spree, beginning in 1898 and closing in 1903. The Mountain Chief Mine is one of the best and most accessible examples of these enterprises. The tunnel for the mine “runs 600 feet through the [eastern] point that separates the Imnaha River from the Snake River.”

Scenic integrity: High

Ecological integrity: High – Vegetation is not notably degraded by weedy annual plants or noxious weeds with the exception of a few sand bur plants which can be painful to recreationists.

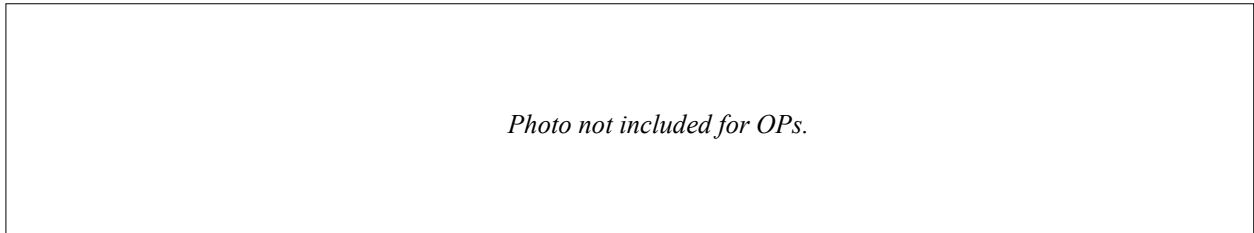
RECOMMENDED

Desired landscape character: Experiencing the touch, smell, and sight of this old mine tunnel should be part of an overall interpretive plan prepared for this site. Consider rebuilding the mine’s interior (at least the portal). Protect existing bat habitat. The existing vegetation is in a stable climax stage. Manage noxious weeds and protect rare plants in the area.

Desired scenic integrity: High

IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
Snake River fluctuation	DH: River water-level fluctuation	Moderate water-level fluctuations to reduce effect.	Daily fluctuations eliminated. Seasonal fluctuation increased
Comments	Opportunity exists to coordinate with USFS to develop interpretive program for this site.		

Viewpoint #146: Imnaha Confluence (OP)



Watershed/subwatershed: N/A	RAA no. & name: N/A	Watershed/RAA scenic integrity: N/A
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EXISTING

Landscape character: N/A

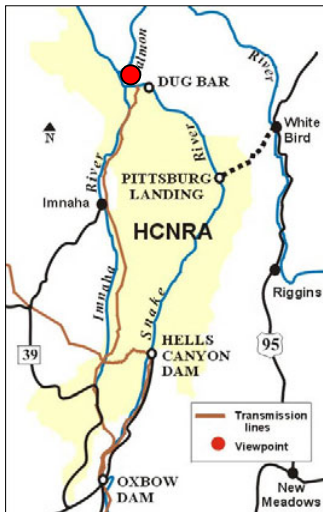
Scenic integrity: N/A

Ecological integrity: N/A

RECOMMENDED

Desired landscape character: N/A

Desired scenic integrity: N/A



IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
N/A	N/A	N/A	N/A

Comments Not considered an SP due to lack of historical significance and because other sites with similar characteristics provide adequate representation.

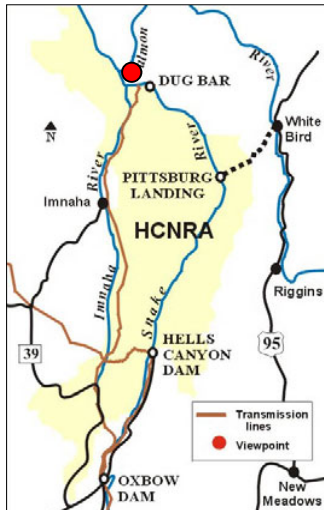
**Viewpoint #147:
Eureka Mine
(SP)**



Eureka Mine foundations (top right)

Watershed/subwatershed: Lower Snake (Pittsburg)	RAA no. & name: 51 Snake River	Watershed/RAA scenic integrity: N/A
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EXISTING



Landscape character: The massive rock mine foundations are all that is left of the Eureka mine in this landscape of rock outcrops and very steep grassy slopes. Boulder fields line the river bank. The plant cover matrix of this site is really a grassland of cheatgrass-bluebunch wheatgrass, but from the river appears to be a shrubland of net leaf hackberry and many rock outcrops of cliff talus slopes.

Historical information (Carrey et al., 1979, pp. 344-352): The Eureka Mining Company was organized in 1902 “with Capital of \$2,000,000.” By 1903, there was a mill, post office, hotel, office building, stores, and steamboat landing. However, misfortune struck in November 1903 when the steamship *Imnaha* broke apart in the swift current and dumped expensive mining equipment into the river. The news encouraged rumors that effected the collapse of the mining company. Assays performed decades later “failed to find more than a trace of copper.”

Scenic integrity: High	Ecological integrity: High – Vegetation is not notably degraded by undesirable species.
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RECOMMENDED

Desired landscape character: This is another important landscape feature to be enjoyed from the river. A brochure might be the best vehicle to allow the visitor to relive the tale of this boom and bust town and the sinking of the steamship *Imnaha*. The existing vegetation is in a stable state. Manage noxious weeds and protect rare plants on the site.

Desired scenic integrity: High

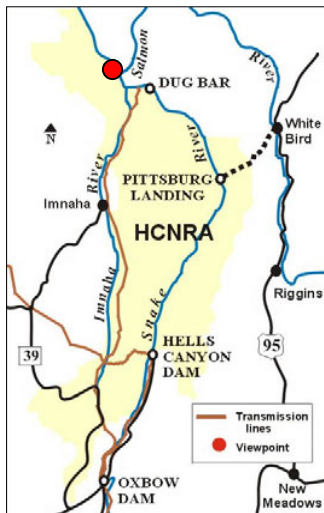
IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
Snake River fluctuation	DH: River water-level fluctuation	Moderate water-level fluctuations to reduce effect.	Daily fluctuations eliminated. Seasonal fluctuation increased.
Comments	Opportunity exists to coordinate with USFS to develop interpretive program for this site.		

**Viewpoint #148:
Confluence of
Salmon and Snake
Rivers (SP)**



Watershed/subwatershed: Lower Snake	RAA no. & name: 51 Snake River	Watershed/RAA scenic integrity: N/A
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EXISTING



Landscape character: Boulder outcroppings and grassland of cheatgrass-bluebunch wheat grass dominate the site. Mine tailings are still visible from the Snake River. Some mining equipment is still situated at the mouth of the mine and can be seen close up.

Historical information (Carrey et al., 1979, pp. 359-361): Frank “Bow” Wyatt began cattle operations in 1883 and, by “1895, the outfit had 2,000 head in the forks of the Snake and Salmon.” However, bad weather in 1919 curtailed the venture. “Looking up the Salmon from the Snake, one can see mine tailings on the Salmon side of the rocky point that divides the two rivers.” “The copper load was worked in the 1920s; a few loads of ore were shipped to Lewiston.”

Scenic integrity: High	Ecological integrity: High – Vegetation is not notably degraded by undesirable species.
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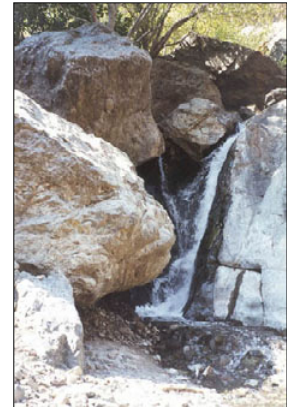
RECOMMENDED

Desired landscape character: Stabilize historic remnants. The existing vegetation is in a stable climax state. Control noxious weeds and protect rare plants on the site.

Desired scenic integrity: High

IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
Snake River fluctua- tion	DH: River water-level fluctuation	Moderate water-level fluctuations to reduce effect.	Daily fluctua- tions elimi- nated. Sea- sonal fluctua- tion increased.
Comments	Several members of the focus groups felt this was one of the most important landscapes in the entire Study Area. They would like to see it maintained in its near-natural state.		

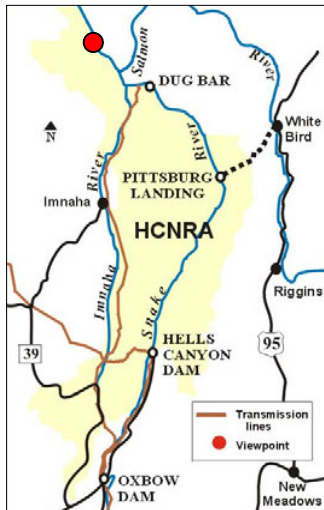
Viewpoint #149: Cherry Creek Falls and Ranch (SP)



Cherry Creek Falls

Watershed/subwatershed: Lower Snake	RAA no. & name: 51 Snake River	Watershed/RAA scenic integrity: N/A
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EXISTING



Landscape character: A beautiful waterfall adjacent to the river is created where the tributary stream drops between a pair of large boulders. Visitors can cool off in the small pools and shower beneath the scenic waterfall.

Historical information (Carrey et al., 1979, p. 363): The tributary got its name “because choke cherries grew profusely there. The men [Duncan, Thomason and Basin] built a cabin on this creek in 1888 or ’89 and wintered their horses nearby.” “Cherry Creek Ranch was part of Jay Dobbin’s land until 1948, when he sold the extensive ranch to three of his Basque shepherders: Seberino ‘Silver’ Egana, Gus Malaxa and Toney Martiartu. During the Depression, they had told him, ‘You take our money for your business. If you go broke we won’t have a job.’ ”

Scenic integrity: High	Ecological integrity: Not available
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RECOMMENDED

Desired landscape character: Maintain as an SP to cool off during hot summer days. Include history of the site in brochure obtained at contact points. Manage noxious weeds and protect rare plants on the site.

Desired scenic integrity: High

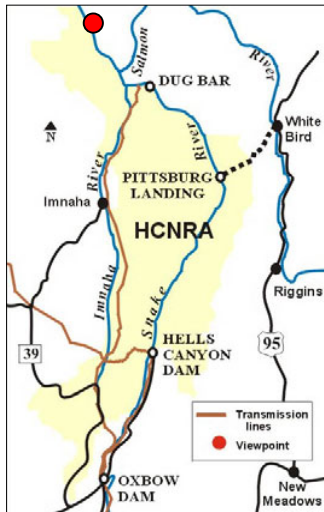
IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
Snake River fluctuation	DH: River water-level fluctuation	Moderate water-level fluctuations.	Daily fluctuations eliminated. Seasonal fluctuation increased.
Comments	None		

**Viewpoint #150:
Jim Creek Ranch (SP)**



Watershed/subwatershed: Lower Snake	RAA no. & name: 51 Snake River	Watershed/RAA scenic integrity: N/A
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EXISTING



Landscape character: This historic brown building still exists on the bench as discussed below. The surrounding landscape is one of steep slopes, rock boulder outcrops, vegetated with grasses and hackberry with riparian vegetation. Jim Creek is beyond the boundary of IPC’s vegetative studies so that existing plant assemblages and ecological conditions are unknown.

Historical information (Carrey et al., 1979, p. 364): The stream is named for French-American homesteader Jim Gaillard who settled about two miles from the river. Later, “this site was the location of the Treasure Group copper claims, active at the same time as Eureka Bar.” “The brown board building on the down river side of the creek is a grain and supply storage shed for the Jim Creek ranch.”

Scenic integrity: Moderate

Ecological integrity: Not available

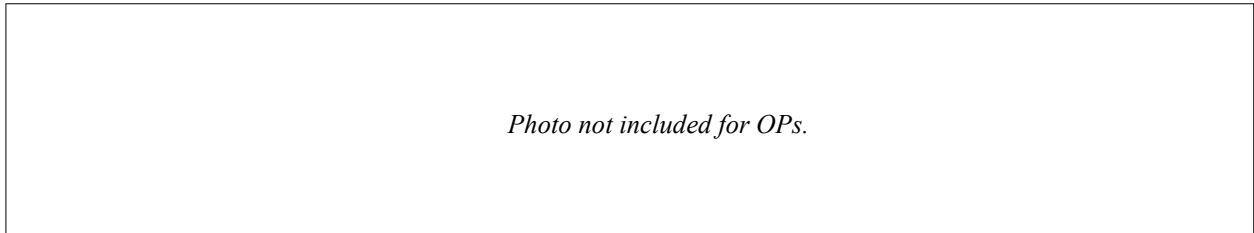
RECOMMENDED

Desired landscape character: It is highly desirable to stabilize and restore, as necessary, this historic landscape feature. Manage noxious weeds and protect rare plants on the site.

Desired scenic integrity: High

IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
Snake River fluctuation	DH: Possible loss of sandy beach	If loss is documented and a Project effect, coordinate appropriate mitigation with USFS.	Unknown
Snake River fluctuation	DH: River water-level fluctuation	Moderate water-level fluctuations.	Daily fluctuations eliminated. Seasonal fluctuation increased.
Comments	None		

Viewpoint #151: Coon Hollow (OP)



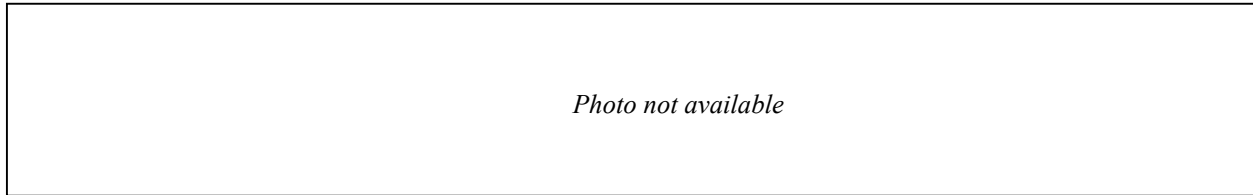
Watershed/subwatershed: N/A	RAA no. & name: N/A	Watershed/RAA scenic integrity: N/A
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EXISTING	
Landscape character: N/A	
Scenic integrity: N/A	Ecological integrity: N/A
RECOMMENDED	
Desired landscape character: N/A	
Desired scenic integrity: N/A	

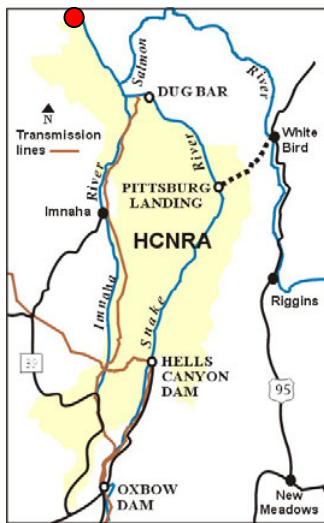
IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
N/A	N/A	N/A	N/A
Comments	Not considered an SP due to lack of historical significance.		

Viewpoint #152: Lower Cottonwood (SP)



Watershed/subwatershed: Lower Snake (Rogersburg)	RAA no. & name: 51 Snake River	Watershed/RAA scenic integrity: N/A (adjacent to private property)
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EXISTING



Landscape character: The landscape is one of very large boulders with poplars and other deciduous trees overhead.

Scenic integrity: Low – Large white survey numbers were painted onto boulders very near the water’s edge in preparation for building one of the Project dams. Although numbers detract from scenic integrity, they have historical significance due to involvement of state and federal government in constructing the dams.

Ecological integrity: Not available.

RECOMMENDED

Desired landscape character: Use brochure to interpret the survey numbers.

Desired scenic integrity: High

	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
Snake River fluctuation	DH: Possible loss of sandy beach	If loss is documented and is Project effect, coordinate appropriate mitigation with USFS.	Unknown
Snake River fluctuation	DH: River water-level fluctuation	Moderate water-level fluctuations to reduce effect.	Daily fluctuations eliminated. Seasonal fluctuation increased.
Comments	NP: Painted survey numbers detract from scenic integrity but cannot be altered. Therefore, it may be difficult to achieve recommended desired scenic integrity level.		

Viewpoint #153: Cache Creek (SP)



Watershed/subwatershed: Lower Snake	RAA no. & name: 51 Snake River	Watershed/RAA scenic integrity: N/A
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EXISTING



Landscape character: Dramatic rocky hills with partial grass cover, some recently burned, dominate the landscape. Mixed riparian vegetation is moderately dense. The river disappears around bend with denser riparian vegetation. Shoreline is cobble with minimal beach areas. Access from the river to the visitor center and other important facilities is by means of a narrow trail that switches back up the river bank to a small orchard of fruit trees and irrigated grass lawn. The stone house appears beside the USFS Cache Creek Visitors Center. The Cache Creek structures have some historic significance.

Historical information (Carrey et al., 1979, p. 367): The creek was named for “some Indian caches [found] on the bar near the mouth of the creek. The Indians often cached dried salmon in a chalky place where water wouldn’t soak it. This bar was one of the main Indian crossings to Lapwai.” A stone house built by homesteaders is located “about 300 yards from the river.”

Scenic integrity: Low to Moderate – Historic structures are somewhat uninviting and unattractive.

Ecological integrity: Not available, but it is assumed that the irrigated lawn and ornamental shrubs negatively affect the ecological integrity of the site similarly to other sites.

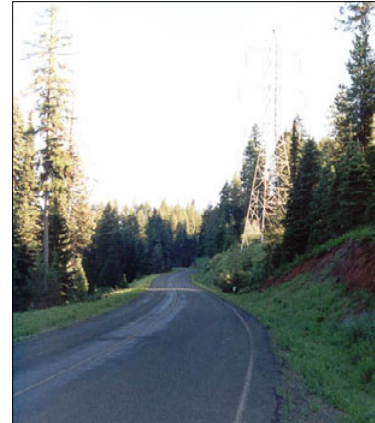
RECOMMENDED

Desired landscape character: The goal should be to improve the entrance to the visitor center by designing and building a wide deck or porch. Reduce negative effects on ecological integrity.

Desired scenic integrity: High

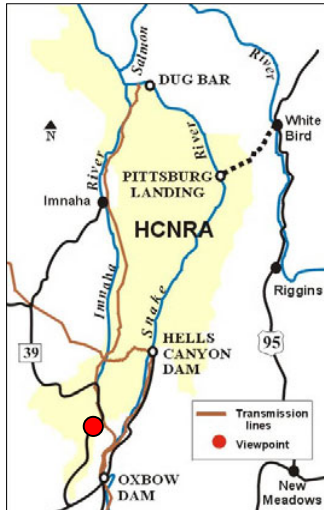
IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
Snake River fluctuation	DH: River water-level fluctuation	Moderate water-level fluctuations to reduce effect.	Daily fluctuations eliminated. Seasonal fluctuation increased
Comments	Opportunity exists to coordinate with USFS to improve facilities at Visitors Center.		

**Viewpoint #154:
Wallowa Mountain Loop Road #1 (SP)**



Watershed/subwatershed: Imnaha (warm/dry)	RAA no. & name: 40 McGraw	Watershed/RAA scenic integrity: Moderate
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EXISTING



Landscape character: Travel along this Scenic Byway winds through a large fir stand that creates an almost closed canopy with small grassy meadows on occasion. Grand vistas of the canyon are revealed at the highest elevations.

Scenic integrity: Low – Transmission line structure and conductors are strong negative elements in the foreground adjacent to the road shoulder and cross the Scenic Byway at a right angle.

Ecological integrity: Moderate – Warm/dry community type.

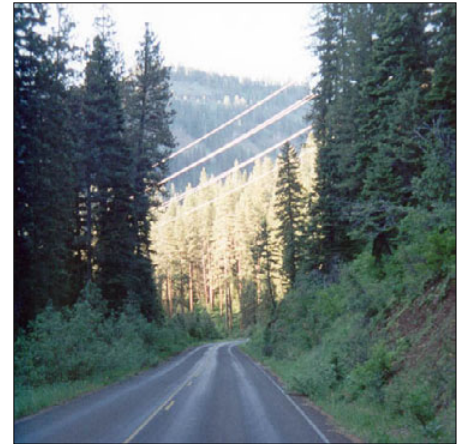
RECOMMENDED

Desired landscape character: The goal should be to provide mitigation of negative elements described in summary of effects. Recreate the long stretches of open, park-like, large diameter ponderosa pine stands with forest floor of sedges and pine grasses. Pockets of dense stands of Douglas fir and grand fir would break up these long stretches where seeps or north aspects create cool/moist biophysical conditions. At the edges of these stands, shrubs and forbs would add variety to color and texture.

Desired scenic integrity: Moderate to High

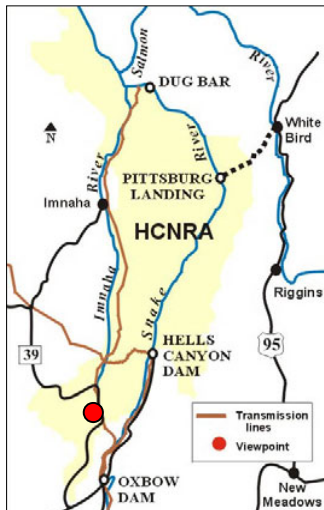
IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
Line 907, steel lattice	DF – Conductor has contrasting form, line and color	Replace lines with non-specular wire in normal maintenance cycle.	Same
Line 907, steel lattice	DF – Lattice tower has contrasting form, line and color	Screen views of tower structures with vegetation where practical. Paint/dull tower structures to minimize the visual contrasts. Modify vegetation management within right-of-way to achieve additional screening and softening.	Same
Comments	Tower is immediately adjacent to roadside and dominates view. Effect is visible for a short period of time as motorists approach and pass under line.		

**Viewpoint #155:
Wallowa Mountain Loop Road #2 (SP)**



Watershed/subwatershed: Imnaha (warm/dry)	RAA no. & name: 40 McGraw	Watershed/RAA scenic integrity: Moderate
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EXISTING



Landscape character: Travel along this Scenic Byway winds through a large fir stand that creates an almost closed canopy with small grassy meadows on occasion. Grand vistas of the canyon are revealed at the highest elevations.

Scenic integrity: Moderate – Transmission conductors cross Scenic Byway at right angle. The highly reflective conductors create contrast in form, line, and color in the foreground and are negative elements.

Ecological integrity: Moderate – Warm/dry community type.

RECOMMENDED

Desired landscape character: The goal should be to provide mitigation of negative elements described in summary of effects. Recreate the long stretches of open, park-like, large diameter ponderosa pine stands with forest floor of sedges and pine grasses. Pockets of dense stands of Douglas fir and grand fir would break up these long stretches where seeps or north aspects create cool/moist biophysical conditions. At the edges of these stands, shrubs and forbs will add variety to color and texture.

Desired scenic integrity: Moderate to High

IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
Line 907, steel lattice	DF – Conductor has contrasting form, line and color	Replace lines with non-specular wire in normal maintenance cycle.	Same
Comments	Effect is visible for a short period of time as motorists approach and pass under line.		

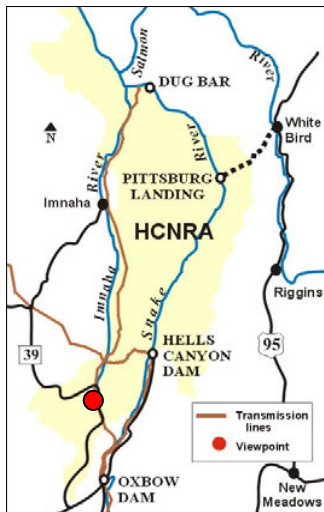
**Viewpoint #156:
Wallowa Mountain Loop Road #3 (SP)**



Transmission tower

Watershed/subwatershed: Imnaha (warm/dry)	RAA no. & name: 40 McGraw Hill	Watershed/RAA scenic integrity: Moderate
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EXISTING



Landscape character: Travel along this Scenic Byway winds through a large fir stand that creates an almost closed canopy with small grassy meadows on occasion. Grand vistas of the canyon are revealed at the highest elevations. Stringers on steep slopes dominate the background.

Scenic integrity: Moderate – Transmission line structure and conductors are visible in the foreground and cross the Scenic Byway at a right angle. The lattice tower is set back from the shoulder and therefore less obtrusive.

Ecological integrity: Moderate – Warm/dry community type.

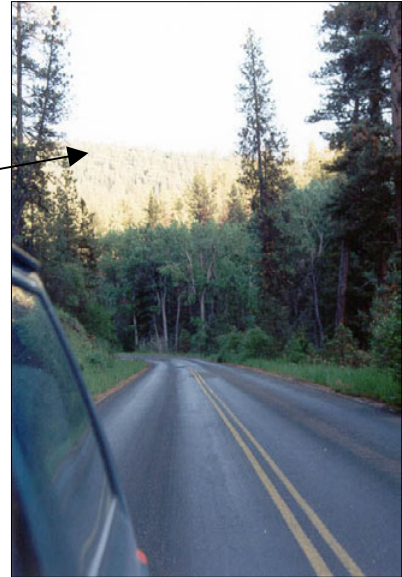
RECOMMENDED

Desired landscape character: The goal should be to provide mitigation of negative elements described in summary of effects. Recreate the long stretches of open, park-like, large diameter ponderosa pine stands with forest floor of sedges and pine grasses. Pockets of dense stands of Douglas fir and grand fir would break up these long stretches where seeps or north aspects create cool/moist biophysical conditions. At the edges of these stands, shrubs and forbs will add variety to color and texture.

Desired scenic integrity: Moderate to High

IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
Line 907, steel lattice	DF: Conductor has contrasting form, line and color	Replace lines with non-specular wire in normal maintenance cycle.	Same
Line 907, steel lattice	DF – Lattice tower has contrasting form, line and color	Screen views of tower structures with vegetation. Paint/dull tower structures to minimize the visual contrasts. Modify vegetation management within right-of-way to achieve additional screening and softening.	Same
Comments	Effect is visible for a short period of time as motorists approach and pass under line. Transmission tower is not readily visible in photograph.		

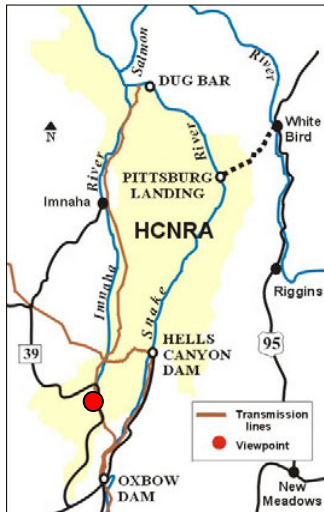
**Viewpoint #157:
Wallowa Mountain Loop Road #4 (SP)**



Conductors

Watershed/subwatershed: Imnaha (warm/dry)	RAA no. & name: 40 McGraw	Watershed/RAA scenic integrity: Moderate
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EXISTING



Landscape character: Travel along this Scenic Byway winds through a large fir stand that creates an almost closed canopy with small grassy meadows on occasion. Grand vistas of the canyon are revealed at the highest elevations.

Scenic integrity: Moderate – Transmission line crosses Scenic Byway in foreground at right angle. Conductors are highly reflective and create contrast in form, line, and color. Lattice tower is partially masked by existing vegetation.

Ecological integrity: Moderate – Warm/dry community type.

RECOMMENDED

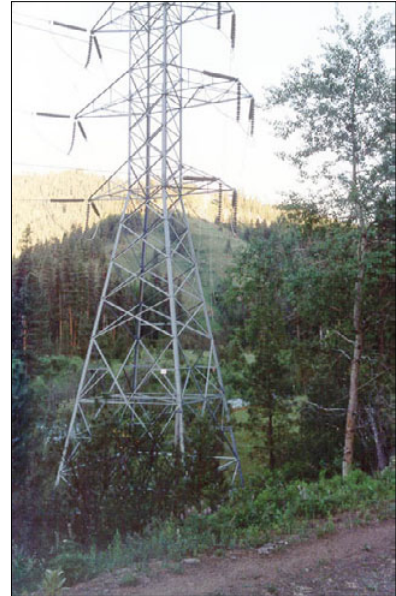
Desired landscape character: The goal should be to provide mitigation of negative elements described in summary of effects. Recreate the long stretches of open, park-like, large diameter ponderosa pine stands with forest floor of sedges and pine grasses. Pockets of dense stands of Douglas fir and grand fir would break up these long stretches where seeps or north aspects create cool/moist biophysical conditions. At the edges of these stands, shrubs and forbs will add variety to color and texture.

Desired scenic integrity: Moderate to High

IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
Line 907, steel lattice	DF – Conductor has contrasting form, line and color	Replace lines with non-specular wire in normal maintenance cycle.	Same
Line 907, steel lattice	DF – Lattice tower has contrasting form, line and color	Screen views of tower structures. Paint/dull tower structures to minimize the visual contrasts. Modify vegetation management within right-of-way to achieve additional screening and softening.	Same

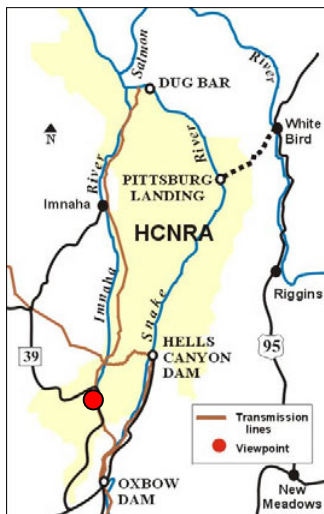
Comments Effect is visible for a short period of time as motorists approach and pass under line.

**Viewpoint #158:
Wallowa Mountain Loop Road #5 (SP)**



Watershed/subwatershed: Imnaha (warm/dry)	RAA no. & name: 40 McGraw	Watershed/RAA scenic integrity: Moderate
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EXISTING



Landscape character: At the beginning of this Scenic Byway, travel proceeds through a pastoral setting along the Imnaha River, green grassy pastures, barbed wire fences and a rising hillside on one side. The foreground, middleground, and background include a mixed deciduous and conifer stand.

Scenic integrity: Low – Transmission line corridor is very visible, immediately adjacent to roadway. Conductors are in view at eye-level. Lattice tower is located adjacent to road shoulder and creates high contrast.

Ecological integrity: Moderate – Warm/dry community type.

RECOMMENDED

Desired landscape character: The goal should be to provide mitigation of negative elements described in summary of effects. Recreate the long stretches of open, park-like, large diameter ponderosa pine stands with forest floor of sedges and pine grasses. Pockets of dense stands of Douglas fir and grand fir would break up these long stretches where seeps or north aspects create cool/moist biophysical conditions. At the edges of these stands, shrubs and forbs will add variety to color and texture.

Desired scenic integrity: Moderate to High

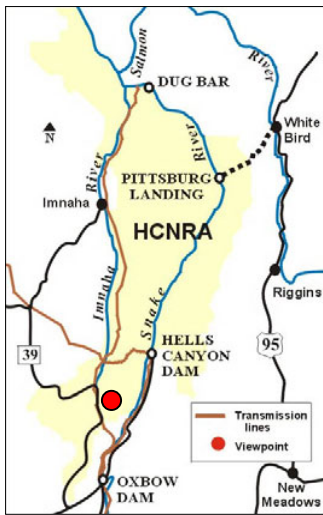
IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
Line 907, steel lattice	DF – Conductor has contrasting form, line and color	Replace lines with non-specular wire in normal maintenance cycle.	Same
Line 907, steel lattice	DF – Lattice tower has contrasting form, line and color	Screen views of tower structures with vegetation. Paint/dull tower structures to minimize the visual contrasts. Modify vegetation management within right-of-way to achieve additional screening and softening.	Same
Comments	Transmission line corridor is very visible. Effects are visible for extended period upon approach.		

Viewpoint #159: Hells Canyon Overlook (SP)



Watershed/subwatershed: Imnaha/ Upper Imnaha (cool/moist, cold/moist, cold/dry)	RAA no. & name: 40 McGraw	Watershed/RAA scenic integrity: Moderate
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EXISTING



Landscape character: Fir and grasses dominate steeply sloped foreground. Strong landform with outcrops, open-space and stringers dominate middleground. Open ridges with stringers dominate background.

Scenic integrity: High – Transmission line is located in the middleground/background and is relatively unobtrusive from this viewpoint.

Ecological integrity: High – Cool/moist community type.

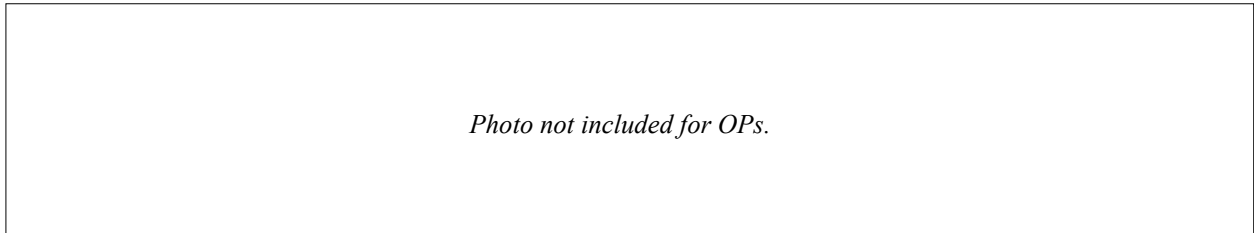
RECOMMENDED

Desired landscape character: The recommended desired landscape character of these high elevation areas is a diverse mosaic of densities, open spaces, textures, and species. Much of the area has non-vegetative attributes, such as rock outcrops, and scenic vistas into the canyon and Wallowa Mountains. The canopy is somewhat open, allowing sunlight to reach the forest floor and enhance the shrub/forb understory.

Desired scenic integrity: High

IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
Line 910, steel lattice	DF – Conductor has minimal contrast in middle-ground/background.	Replace lines with non-specular wire in normal maintenance cycle.	Same
Line 910, steel lattice	DF – Lattice tower has minimal contrast in middle-ground/background.	Paint/dull tower structures to minimize the visual contrasts.	Same
Comments	Lattice towers located on ridgeline are more visible when viewed under bright light conditions. They are not readily identified in the photograph.		

Viewpoint #160: Viewpoint FS RD #110 (OP)



Watershed/subwatershed: N/A	RAA no. & name: N/A	Watershed/RAA scenic integrity: N/A
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EXISTING



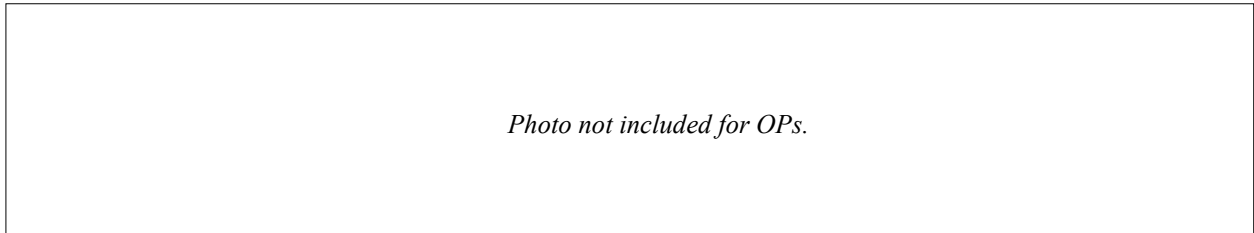
Landscape character: N/A	
Scenic integrity: N/A	Ecological integrity: N/A

RECOMMENDED

Desired landscape character: N/A
Desired scenic integrity: N/A

IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
No Project effects visible	N/A	N/A	N/A
Comments	Not considered an SP because no Project effects are visible.		

Viewpoint #161: McGraw Trailhead (OP)



Watershed/subwatershed: Imnaha/ Upper Imnaha (cool/moist, cold/moist, cold/dry)	RAA no. & name: N/A	Watershed/RAA scenic integrity: N/A
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EXISTING



Landscape character: N/A

Scenic integrity: N/A

Ecological integrity: High – Cool/moist community type)

RECOMMENDED

Desired landscape character: N/A

Desired scenic integrity: N/A

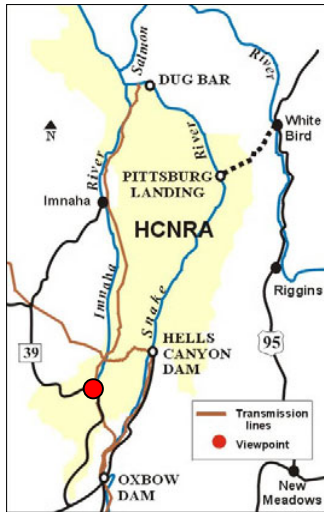
IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
No Project effects visible.	N/A	N/A	N/A
Comments	Not considered an SP because no Project effects are visible.		

**Viewpoint #162:
Ollokot Campground (SP)**



Watershed/subwatershed: Imnaha (warm/dry)	RAA no. & name: 40 McGraw	Watershed/RAA scenic integrity: Moderate
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EXISTING



Landscape character: This campground is located within the Imnaha River plain, at low elevations. Large ponderosa pine with classic orange bark, grass and grassy meadows create a park-like setting in the foreground, complete with wandering deer. The pine stand dominates the middleground and blocks out much of the background. When visible, the background is strong ridgelines with stringers. The sound of rushing water in the adjacent stream is pleasing.

Scenic integrity: Moderate – Transmission line structure and conductors create contrast in form, line, and color in the middleground. Vegetation and topography screen portions of the line and towers.

Ecological integrity: Moderate – Warm/dry community type.

RECOMMENDED

Desired landscape character: The goal should be to provide mitigation of negative elements described in summary of effects. Recreate the long stretches of open, park-like, large diameter ponderosa pine stands with forest floor of sedges and pine grasses. Pockets of dense stands of Douglas fir and grand fir would break up these long stretches where seeps or north aspects create cool/moist biophysical conditions. At the edges of these stands, shrubs and forbs will add variety to color and texture.

Desired scenic integrity: High

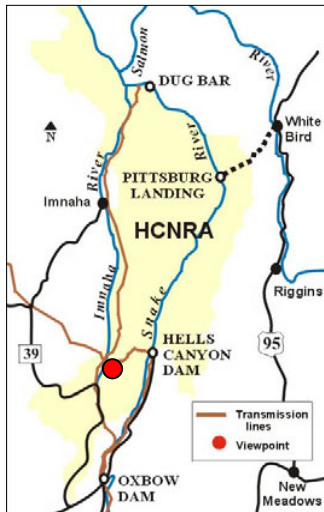
IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
Line 907, steel lattice	DF – Conductor has contrasting form, line and color	Screen views of transmission lines with vegetation. Replace lines with non-specular wire in normal maintenance cycle.	Same
Line 907, steel lattice	DF – Lattice tower has contrasting form, line and color	Screen views of tower structures with vegetation. Paint/dull tower structures to minimize the visual contrasts.	Same
Comments	Transmission line is visible in middleground where ridgelines do not block views. Line is not visible in the photograph.		

Viewpoint #163: Black Horse Campground (SP)



Watershed/subwatershed: Imnaha (warm/dry)	RAA no. & name: 40 McGraw	Watershed/RAA scenic integrity: N/A
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EXISTING



Landscape character: This campground is located within the Imnaha River plain, at low elevations. Large ponderosa pine with classic orange bark, grass and grassy meadows create a park-like setting in the foreground, complete with wandering deer. The pine stand dominates the middleground and blocks out much of the background. When visible, the background is strong ridgelines with stringers. The sound of rushing water in the adjacent stream is pleasing.

Scenic integrity: Moderate – Transmission line structure and conductors create contrast in form, line, and color in the middleground. Vegetation and topography screen portions of the line and towers.

Ecological integrity: Moderate – Warm/dry community type.

RECOMMENDED

Desired landscape character: The goal should be to provide mitigation of negative elements described in summary of effects. Recreate the long stretches of open, park-like, large diameter ponderosa pine stands with forest floor of sedges and pine grasses. Pockets of dense stands of Douglas fir and grand fir would break up these long stretches where seeps or north aspects create cool/moist biophysical conditions. At the edges of these stands, shrubs and forbs will add variety to color and texture.

Desired scenic integrity: High

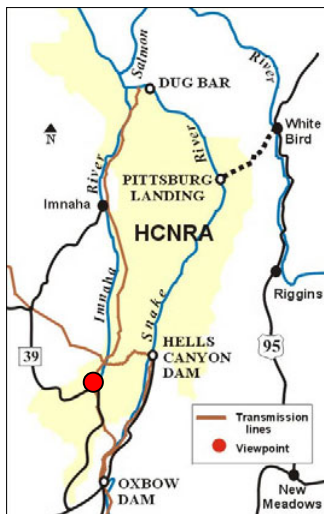
IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
Line 907, steel lattice	DF – Conductor has contrasting form, line and color	Screen views of transmission lines with vegetation. Replace lines with non-specular wire in normal maintenance cycle.	Same
Line 907, steel lattice	DF – Lattice tower has contrasting form, line and color	Screen views of tower structures with vegetation. Paint/dull tower structures to minimize the visual contrasts.	Same
Comments	Transmission line is visible in middleground where ridgelines do not block views. Line is not visible in the photograph.		

**Viewpoint #164:
Ollokot Fish Trap (SP)**



Watershed/subwatershed: Imnaha (warm/dry)	RAA no. & name: 40 McGraw	Watershed/RAA scenic integrity: Moderate
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EXISTING



Landscape character: The fish-trap facility is located within a barbed-wire fence and grassy lawn immediately adjacent to the free flowing Imnaha River. The hillsides include grassy meadows and pine and fir stands. The rushing water sounds are pleasing. The buildings and fence colors blend in with the environment to the extent possible.

Scenic integrity: Very low – The lattice towers and reflective conductors dominate the foreground, immediately adjacent to the river. The fish trap facility is industrial in appearance and has a negative effect on scenic quality.

Ecological integrity: Moderate – Warm/dry community type.

RECOMMENDED

Desired landscape character: The goal should be to provide mitigation of negative elements described in summary of effects. Recreate the long stretches of open, park-like, large diameter ponderosa pine stands with forest floor of sedges and pine grasses. Pockets of dense stands of Douglas fir and grand fir would break up these long stretches where seeps or north aspects create cool/moist biophysical conditions. At the edges of these stands, shrubs and forbs will add variety to color and texture.

Desired scenic integrity: Moderate

IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
Line 907, steel lattice	DF: Conductor has contrasting form, line and color	Replace lines with non-specular wire in normal maintenance cycle.	Same
Line 907, steel lattice	DF: Lattice tower has contrasting form, line and color	Screen views of tower structures. Paint/dull tower structures to minimize the visual contrasts. Modify vegetation management within right-of-way to achieve additional screening and softening.	Same
Comments	On-site personnel are very effective in explaining the story of the salmon’s yearly journey. They are interested in providing information to visitors regarding the positive contributions by IPC. Opportunity exists to develop an interpretive and education program at this site.		

Viewpoint #165: McGraw Fire Lookout (OP)



Watershed/subwatershed: Imnaha/ Upper Imnaha (cool/moist, cold/moist, cold/dry)	RAA no. & name: 40 McGraw	Watershed/RAA scenic integrity: Moderate
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EXISTING



Landscape character: Open ridge top and grasses/ bordered by fir stand dominate the foreground. In the middleground, fir stands dominate with some open spaces at ridgetops. In the background, strong landforms dominate with some stringers adding color, breaking up linear rock layering. Openings borrow well from existing landscape character in scale and shape. Note: this site is very near the Wilderness Boundary, so views eastward rank very high.

Scenic integrity: Moderate

Ecological integrity: High – cool/moist, cold/moist, cold/dry community type.

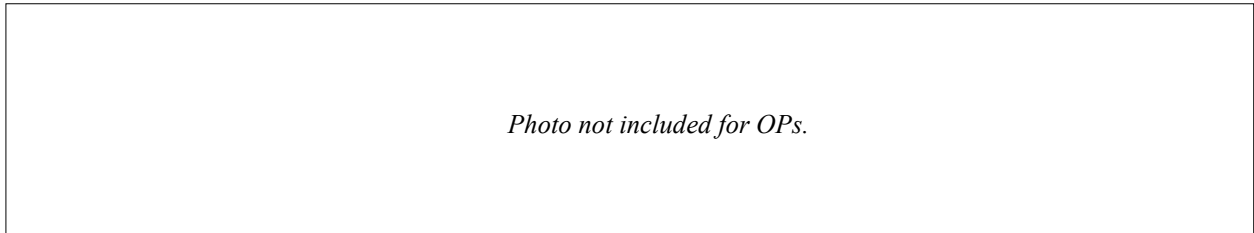
RECOMMENDED

Desired landscape character: The recommended desired landscape character of these high-elevation areas is a diverse mosaic of densities, open spaces, textures, and species. Much of the area has non-vegetative attributes, such as rock outcrops, and scenic vistas into the canyon and Wallowa Mountains. The canopy is somewhat open, allowing sunlight to reach the forest floor and enhance the shrub/forb understory.

Desired scenic integrity: High

IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
No Project effects visible.	N/A	N/A	N/A
Comments	Not considered an SP because no Project effects are visible.		

Viewpoint #166: Crazyman Creek & Trailhead (OP)



Watershed/subwatershed: N/A	RAA no. & name: N/A	Watershed/RAA scenic integrity: N/A
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EXISTING

Landscape character: N/A

Scenic integrity: N/A

Ecological integrity: N/A

RECOMMENDED

Desired landscape character: N/A

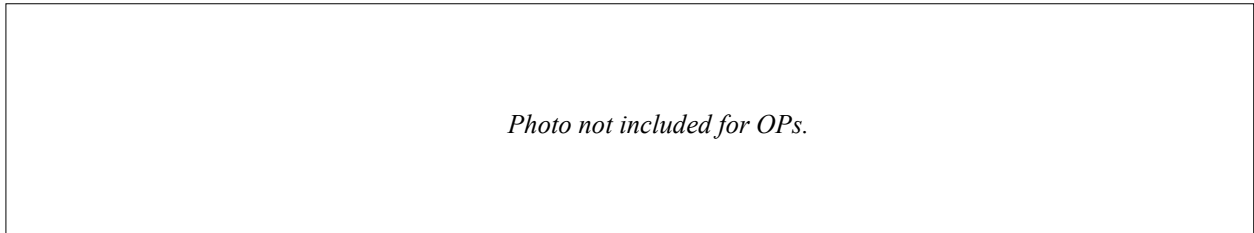
Desired scenic integrity: N/A



IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
N/A	N/A	N/A	N/A

Comments | Not considered an SP because Project effects occur on private land and USFS has no jurisdiction.

Viewpoint #167: Buck Creek Trailhead (OP)



Watershed/subwatershed: N/A	RAA no. & name: N/A	Watershed/RAA scenic integrity: N/A
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EXISTING

Landscape character: N/A

Scenic integrity: N/A

Ecological integrity: N/A

RECOMMENDED

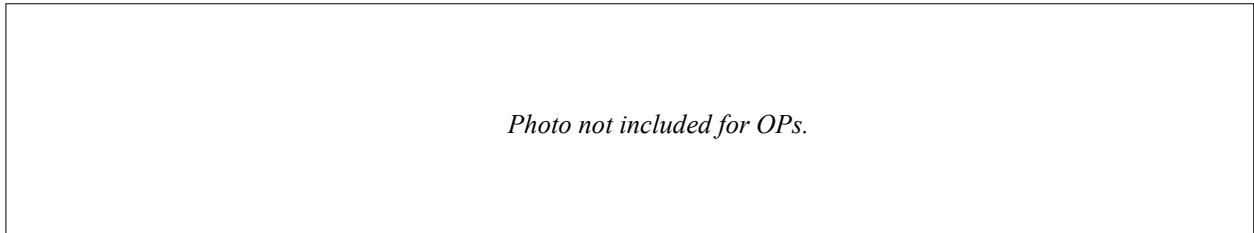
Desired landscape character: N/A

Desired scenic integrity: N/A



IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
N/A	N/A	N/A	N/A
Comments	Not considered an SP because no Project effects are visible.		

Viewpoint #168: P.O. Saddle (OP)



Watershed/subwatershed: N/A	RAA no. & name: N/A	Watershed/RAA scenic integrity: N/A
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EXISTING

Landscape character: N/A

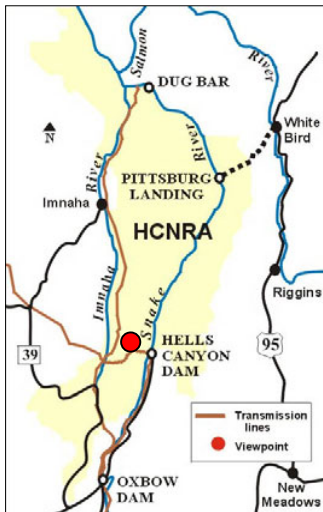
Scenic integrity: N/A

Ecological integrity: N/A

RECOMMENDED

Desired landscape character: N/A

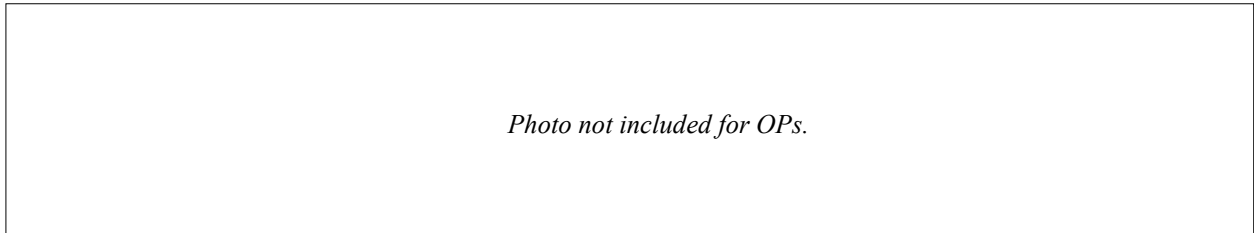
Desired scenic integrity: N/A



IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
N/A	N/A	N/A	N/A

Comments	Not considered an SP due to lack of historical significance and because other sites with similar characteristics provide adequate representation.
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Viewpoint #169: 490 Road/Saulsberry Saddle (OP)



Watershed/subwatershed: N/A	RAA no. & name: N/A	Watershed/RAA scenic integrity: N/A
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EXISTING

Landscape character: N/A	
Scenic integrity: N/A	Ecological integrity: N/A

RECOMMENDED

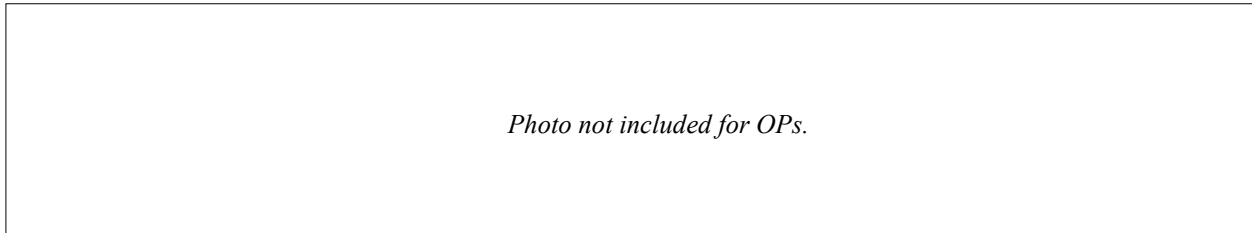
Desired landscape character: N/A	
Desired scenic integrity: N/A	



IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
N/A	N/A	N/A	N/A

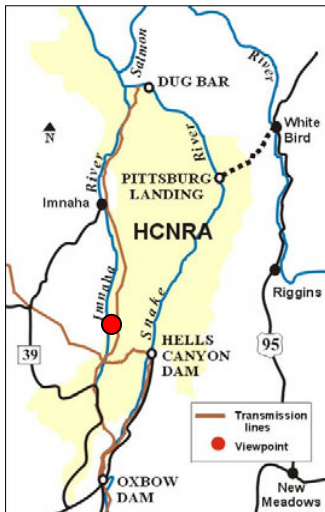
Comments	Not considered an SP due to lack of historical significance and because other sites with similar characteristics provide adequate representation.
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Viewpoint #170: Imnaha River Woods (OP)



Watershed/subwatershed: N/A	RAA no. & name: N/A	Watershed/RAA scenic integrity: N/A
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EXISTING



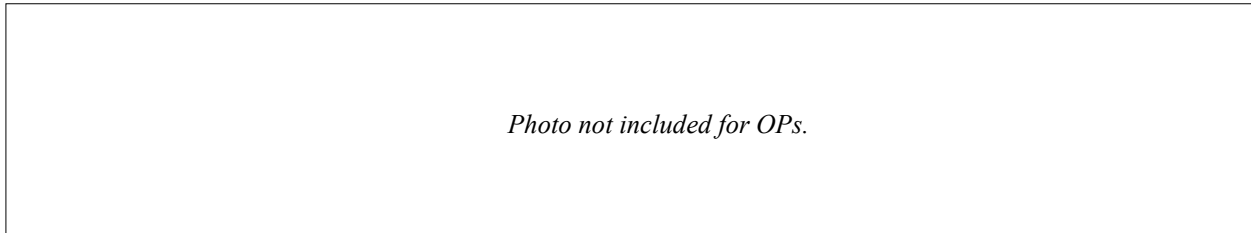
Landscape character: N/A	
Scenic integrity: N/A	Ecological integrity: N/A

RECOMMENDED

Desired landscape character: N/A
Desired scenic integrity: N/A

IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
N/A	N/A	N/A	N/A
Comments	Not considered an SP because Project effects occur on private land and USFS has no jurisdiction.		

Viewpoint #171: Lookout Mountain (OP)



Watershed/subwatershed: N/A	RAA no. & name: N/A	Watershed/RAA scenic integrity: N/A
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EXISTING

Landscape character: N/A

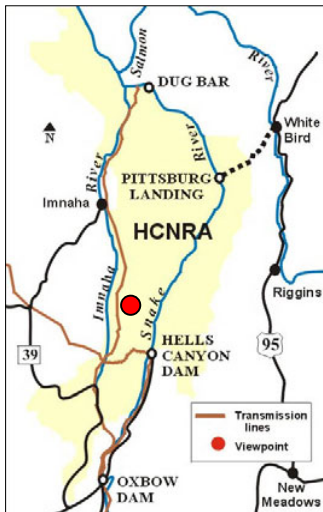
Scenic integrity: N/A

Ecological integrity: N/A

RECOMMENDED

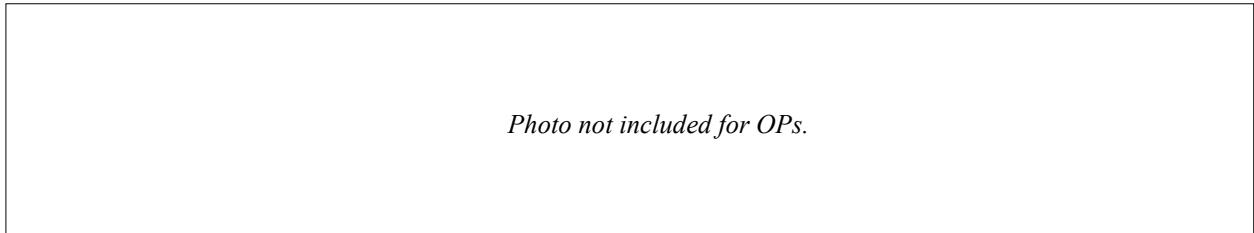
Desired landscape character: N/A

Desired scenic integrity: N/A



IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
N/A	N/A	N/A	N/A
Comments	Not considered an SP due to lack of historical significance and because other sites with similar characteristics provide adequate representation.		

Viewpoint #172: Freezeout Saddle Trailhead (OP)



Watershed/subwatershed: N/A	RAA no. & name: N/A	Watershed/RAA scenic integrity: N/A
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EXISTING



Landscape character: N/A	
Scenic integrity: N/A	Ecological integrity: N/A

RECOMMENDED

Desired landscape character: N/A	
Desired scenic integrity: N/A	

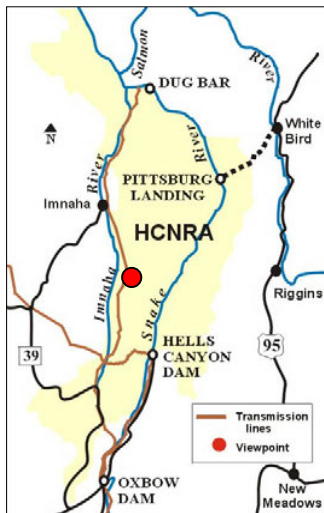
IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
N/A	N/A	N/A	N/A
Comments	Not considered an SP because no Project effects are visible.		

**Viewpoint #173:
Saddle Creek
Campground (OP)**



Watershed/subwatershed: Imnaha/ Upper Imnaha (cool/dry)	RAA no. & name: 36 Hat Point	Watershed/RAA scenic integrity: High
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EXISTING



Landscape character: West – foreground/midground dominated by fire-kill stand. East – foreground/midground dominated by stringers. Background dominated by landform (Seven Devils) with stringers.

Scenic integrity: High	Ecological integrity: Low – cool/dry community type
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RECOMMENDED

Desired landscape character: The recommended desired landscape character is diverse stands of common species found in the plant associations with a variety of densities, spaces, colors, and textures. The area is very diverse due to rock outcrops, steep slopes, narrow drainages, and springs. Provide variety in texture and color, spatial arrangement, and depth of view.

Desired scenic integrity: High

IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
N/A	N/A	N/A	N/A
Comments	Not considered an SP because no Project effects are visible.		

**Viewpoint #174:
Granny Viewpoint (SP)**



Watershed/subwatershed: Imnaha/ Upper Imnaha (cool/dry)	RAA no. & name: 36 Hat Point	Watershed/RAA scenic integrity: High
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EXISTING



Landscape character: Foreground dominated by grasses/wildflowers. Middleground dominated by stringers. Background has strong landforms, rock outcrops with some stringers.

Scenic integrity: Moderate – Transmission line conductors in middleground are highly reflective in bright conditions.

Ecological integrity: Low – cool/dry community type.

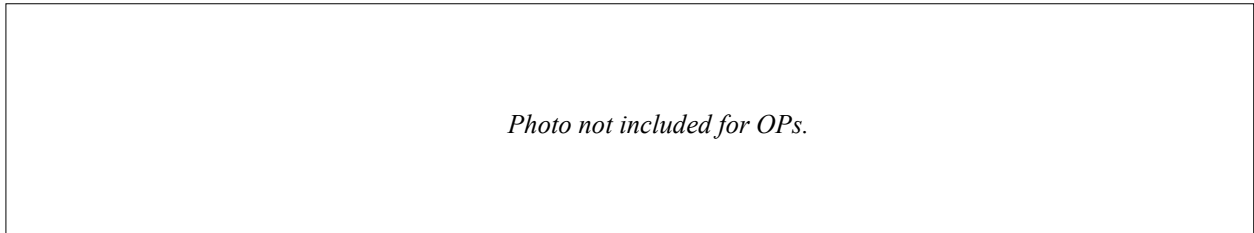
RECOMMENDED

Desired landscape character: The recommended desired landscape character is diverse stands of common species found in the plant associations with a variety of densities, spaces, colors, and textures. The area is very diverse due to rock outcrops, steep slopes, narrow drainages, and springs. Provide variety in texture and color, spatial arrangement, and depth of view.

Desired scenic integrity: High

IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
Line 908, H- Frame Wood	DF – Conductor has contrasting form, line and color	Replace lines with non-specular wire in normal maintenance cycle.	Same
Comments	The line is not evident in the photograph but is located on the valley floor.		

Viewpoint #175: College Creek (OP)



Watershed/subwatershed: N/A	RAA no. & name: N/A	Watershed/RAA scenic integrity: N/A
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EXISTING

Landscape character: N/A

Scenic integrity: N/A

Ecological integrity: N/A

RECOMMENDED

Desired landscape character: N/A

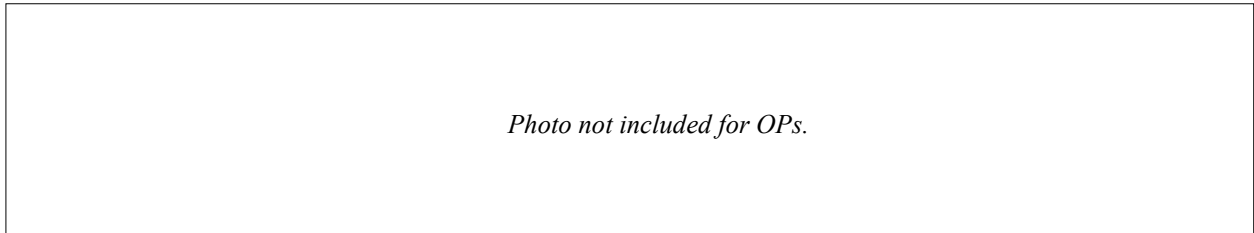
Desired scenic integrity: N/A



IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
N/A	N/A	N/A	N/A

Comments	Not considered an SP due to lack of historical significance and because other sites with similar characteristics provide adequate representation.
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Viewpoint #176: Memaloose Landing Strip (OP)



Watershed/subwatershed: N/A	RAA no. & name: N/A	Watershed/RAA scenic integrity: N/A
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EXISTING

Landscape character: N/A

Scenic integrity: N/A

Ecological integrity: N/A

RECOMMENDED

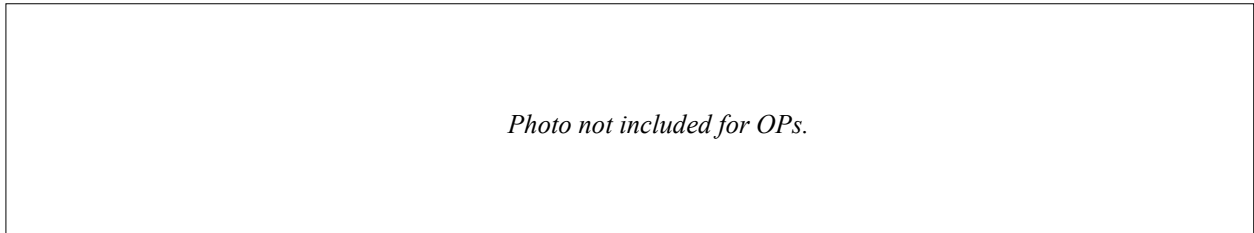
Desired landscape character: N/A

Desired scenic integrity: N/A



IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
N/A	N/A	N/A	N/A
Comments	Not considered an SP because no Project effects are visible.		

Viewpoint #177: Helitack Base (OP)



Watershed/subwatershed: N/A	RAA no. & name: N/A	Watershed/RAA scenic integrity: N/A
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EXISTING

Landscape character: N/A

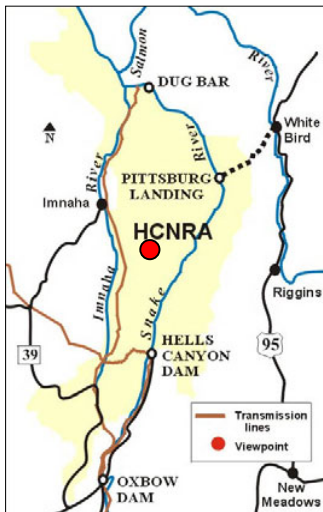
Scenic integrity: N/A

Ecological integrity: N/A

RECOMMENDED

Desired landscape character: N/A

Desired scenic integrity: N/A



IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
N/A	N/A	N/A	N/A
Comments	Not considered an SP because no Project effects are visible.		

Viewpoint #178: Hat Point Lookout/Campground (OP)



Watershed/subwatershed: Imnaha/ Upper Imnaha (cold/dry)	RAA no. & name: 36 Hat Point	Watershed/RAA scenic integrity: High
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EXISTING

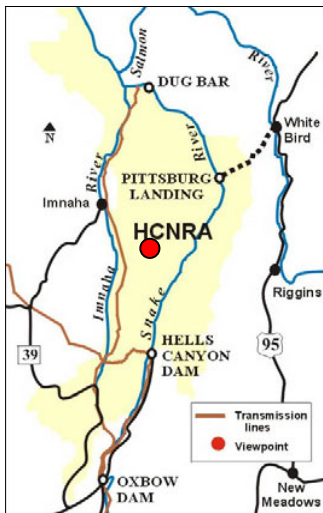
Landscape character: Fire-kill dominates foreground/midground to west. Some stringer patches remain in middleground. To East, stringers dominate foreground/midground with Seven Devils dominating background and some stringers, strong landforms to East.

Scenic integrity: No change. **Ecological integrity:** Low – cool/dry community type

RECOMMENDED

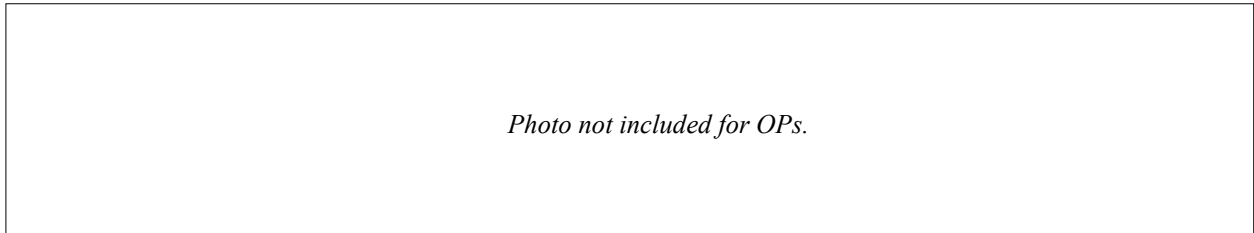
Desired landscape character: The recommended desired landscape character is diverse stands of common species found in the plant associations with a variety of densities, spaces, colors, and textures. The area is very diverse due to rock outcrops, steep slopes, narrow drainages, and springs. Provide variety in texture and color, spatial arrangement, and depth of view. Color, scale and texture of interpretive signage, restroom, trail and boardwalk blend well with landscape. Fallen dead trees cover much of the site. Reduce the quantity of fallen dead trees to reduce the visual impact.

Desired scenic integrity: N/A



IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
No Project effects visible	N/A	N/A	N/A
Comments	Not considered an SP because no Project effects are visible.		

Viewpoint #179: Sacajewa Campground (OP)



Watershed/subwatershed: N/A	RAA no. & name: N/A	Watershed/RAA scenic integrity: N/A
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EXISTING

Landscape character: N/A

Scenic integrity: N/A

Ecological integrity: N/A

RECOMMENDED

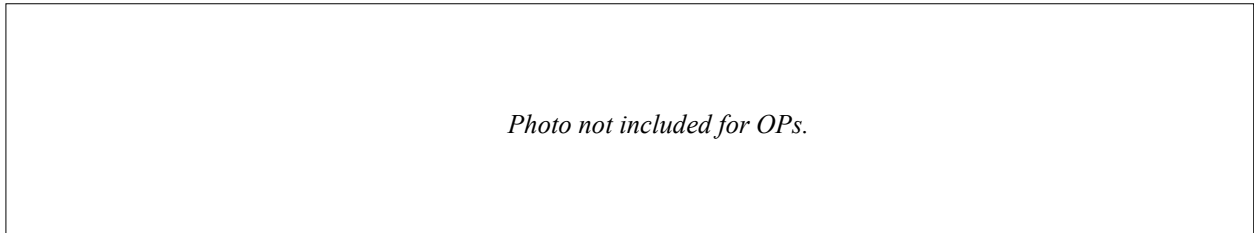
Desired landscape character: N/A

Desired scenic integrity: N/A



IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
N/A	N/A	N/A	N/A
Comments	Not considered an SP because no Project effects are visible.		

Viewpoint #180: Horse Creek Viewpoint (OP)



Watershed/subwatershed: N/A	RAA no. & name: N/A	Watershed/RAA scenic integrity: N/A
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EXISTING

Landscape character: N/A

Scenic integrity: N/A

Ecological integrity: N/A

RECOMMENDED

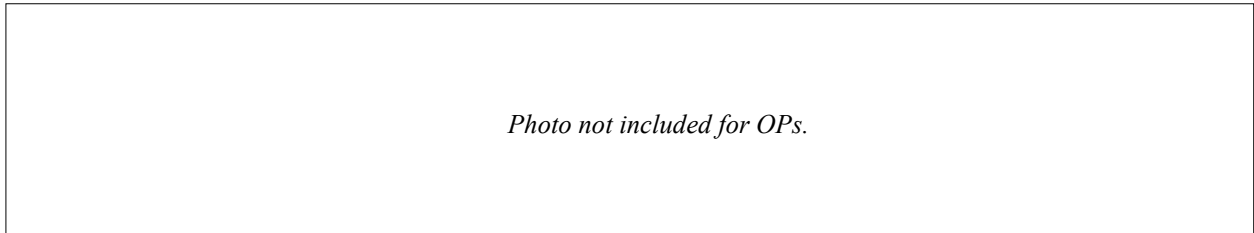
Desired landscape character: N/A

Desired scenic integrity: N/A



IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
N/A	N/A	N/A	N/A
Comments	Not considered an SP because no Project effects are visible.		

Viewpoint #181: Wisnor Place (OP)



Watershed/subwatershed: N/A	RAA no. & name: N/A	Watershed/RAA scenic integrity: N/A
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EXISTING

Landscape character: N/A

Scenic integrity: N/A

Ecological integrity: N/A

RECOMMENDED

Desired landscape character: N/A

Desired scenic integrity: N/A



IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
N/A	N/A	N/A	N/A
Comments	Not considered an SP because no Project effects are visible.		

Viewpoint #182: Five Mile Viewpoint (SP)



Watershed/subwatershed: Imnaha/ Upper Imnaha (warm/dry)	RAA no. & name: 36 Hat Point	Watershed/RAA scenic integrity: High
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EXISTING



Landscape character: Grasses and landforms dominate foreground/middleground. Strong landforms dominate background w/ some stringers visible; rock outcrops and landforms dominate, and agricultural land use visible but not dominant.

Scenic integrity: Moderate – Transmission conductors are visible in middleground and highly reflective in bright conditions. Wood towers are less obtrusive than lattice. Topography screens the line in several places along the canyon floor.

Ecological integrity: Moderate – Warm/dry community type.

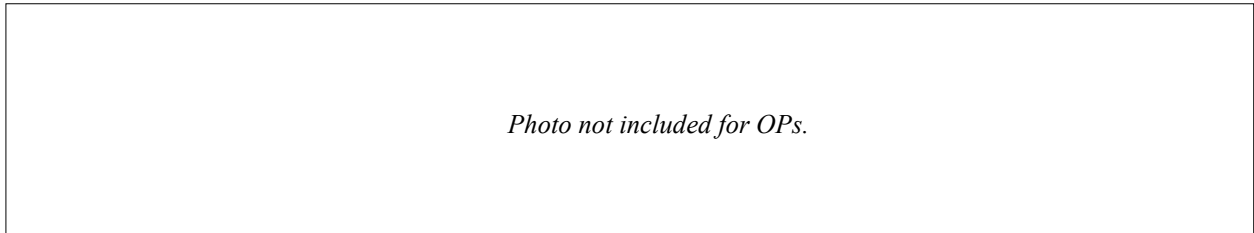
RECOMMENDED

Desired landscape character: The goal should be to provide mitigation of negative elements described in summary of effects. Recreate the long stretches of open, park-like, large diameter ponderosa pine stands with forest floor of sedges and pine grasses. Pockets of dense stands of Douglas-fir and grand fir would break up these long stretches where seeps or north aspects create cool/moist biophysical conditions. At the edges of these stands, shrubs and forbs will add variety to color and texture.

Desired scenic integrity: High

IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
Line 908, H-Frame Wood	DF: Conductor has contrasting form, line and color	Replace lines with non-specular wire in normal maintenance cycle.	Same
Line 908, H-Frame Wood	DF: Wood tower has contrasting form, line and color	Paint/dull tower hardware to minimize the visual contrasts.	Same
Comments	NP: Hat Point Road is visible with contrasting line and color across landscape. Opportunity exists to coordinate with USFS to treat road and road cuts to reduce color and line contrasts. The line is not evident in the photograph but is located on the valley floor.		

Viewpoint #183: Somer's Point (OP)



Watershed/subwatershed: N/A	RAA no. & name: N/A	Watershed/RAA scenic integrity: N/A
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EXISTING

Landscape character: N/A

Scenic integrity: N/A

Ecological integrity: N/A

RECOMMENDED

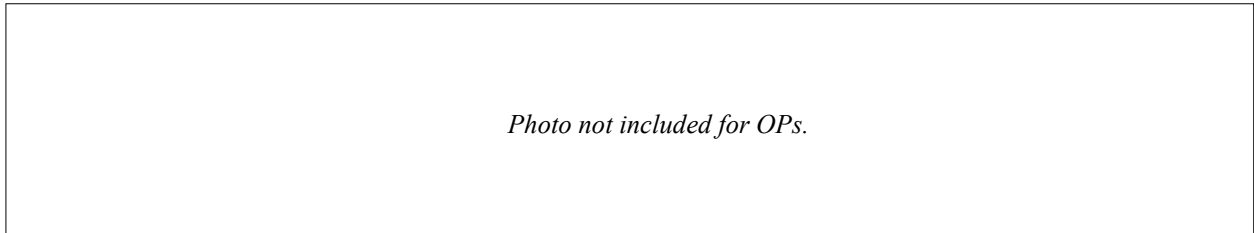
Desired landscape character: N/A

Desired scenic integrity: N/A



IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
N/A	N/A	N/A	N/A
Comments	Not considered an SP because no Project effects are visible.		

Viewpoint #184: Dorrance Cow Camp (OP)



Watershed/subwatershed: N/A	RAA no. & name: N/A	Watershed/RAA scenic integrity: N/A
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EXISTING

Landscape character: N/A

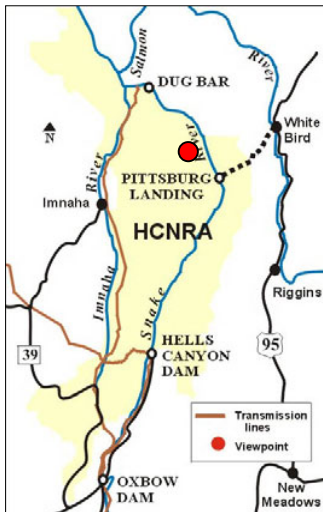
Scenic integrity: N/A

Ecological integrity: N/A

RECOMMENDED

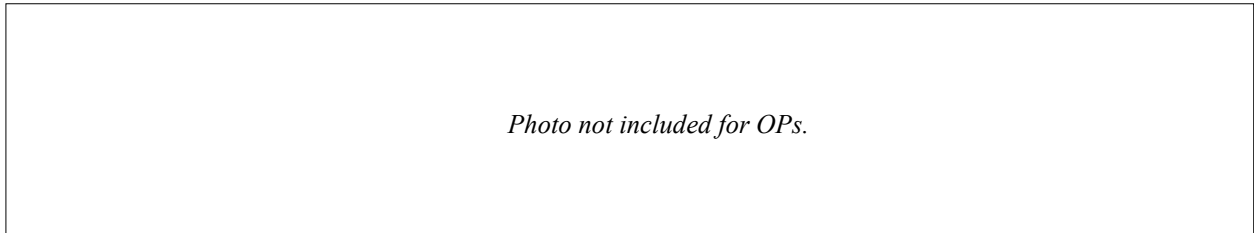
Desired landscape character: N/A

Desired scenic integrity: N/A



IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
N/A	N/A	N/A	N/A
Comments	Not considered an SP because no Project effects are visible.		

Viewpoint #185: Somer's Ranch (OP)



Watershed/subwatershed: N/A	RAA no. & name: N/A	Watershed/RAA scenic integrity: N/A
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EXISTING

Landscape character: N/A

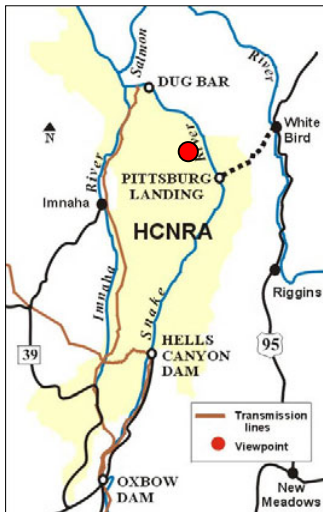
Scenic integrity: N/A

Ecological integrity: N/A

RECOMMENDED

Desired landscape character: N/A

Desired scenic integrity: N/A



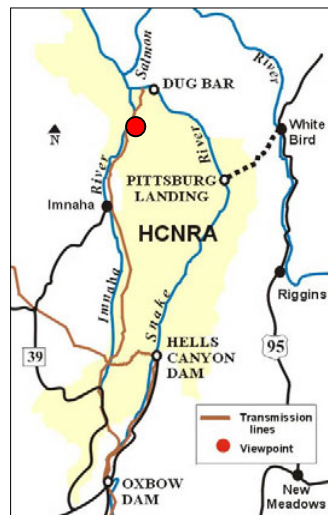
IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
N/A	N/A	N/A	N/A
Comments	Not considered an SP because no Project effects are visible.		

Viewpoint #186: Thorn Creek Guard Station (OP)



Watershed/subwatershed: Imnaha	RAA no. & name: 29 Lower Imnaha	Watershed/RAA scenic integrity: Moderate
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EXISTING



Landscape character: Adjacent to the Imnaha River, human elements (guard station buildings, fence, signage, remnants of orchard, etc.) dominates foreground. Deciduous trees and understory dominate middleground at top of slope with grassy open rocky slopes behind. Background is open rocky landforms with very sparse vegetation other than grass.

Scenic integrity: Moderate

Ecological integrity: Moderate

RECOMMENDED

Desired landscape character: N/A

Desired scenic integrity: N/A

IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
N/A	N/A	N/A	N/A

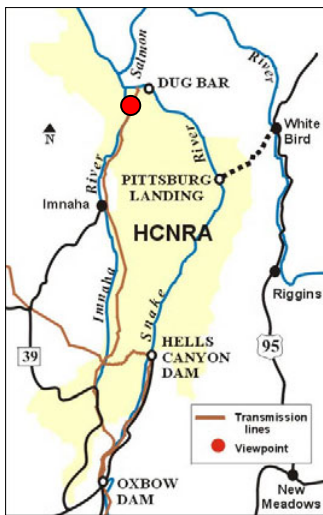
Comments | IPC sold Line 909 during the study. Therefore, viewpoint was removed from additional consideration.

Viewpoint #187: FS Trail #1713 (OP)



Watershed/subwatershed: Imnaha/ Lower Imnaha	RAA no. & name: 29 Lower Imnaha	Watershed/RAA scenic integrity: Moderate
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EXISTING



Landscape character: Shrubs and understory dominate foreground/midground low-mid slopes. Grasses and rock outcrops dominate foreground/midground mid-upper slopes. Rock slopes & grasses dominate background (but usually not visible due to visual corridor constraints in canyon.)

Scenic integrity: Moderate

Ecological integrity: Moderate

RECOMMENDED

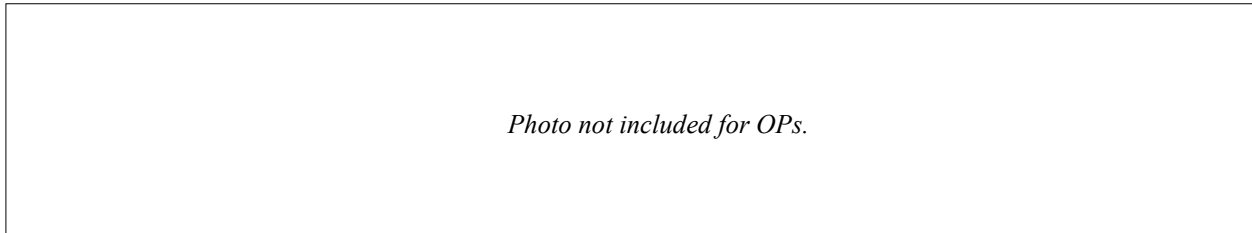
Desired landscape character: N/A

Desired scenic integrity: N/A

IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
N/A	N/A	N/A	N/A

Comments	IPC sold Line 909 during the study. Therefore, viewpoint was removed from additional consideration.
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Viewpoint #188: Dug Bar Road (OP)



Watershed/subwatershed: Imnaha/ Lower Imnaha	RAA no. & name: 29 Lower Imnaha	Watershed/RAA scenic integrity: Moderate
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EXISTING



Landscape character: Travel along Dug Bar Road provides many vistas overlooking the Snake River Canyon and large open ridges. Powerline towers and lines dominate the foreground with grasses on steep slopes. Landforms with grasses dominate the middleground. Large open ridges with some stringers and grasses dominate the background.

Scenic integrity: Low	Ecological integrity: N/A
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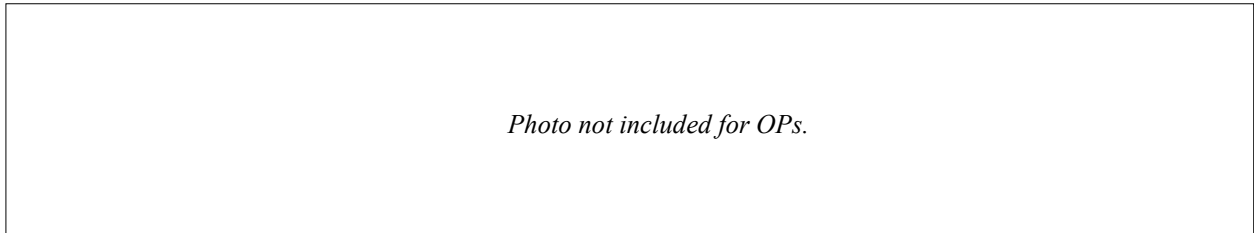
RECOMMENDED

Desired landscape character: N/A

Desired scenic integrity: N/A

IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
N/A	N/A	N/A	N/A
Comments	IPC sold Line 909 during the study. Therefore, viewpoint was removed from additional consideration.		

Viewpoint #189: Emerald Lake (OP)



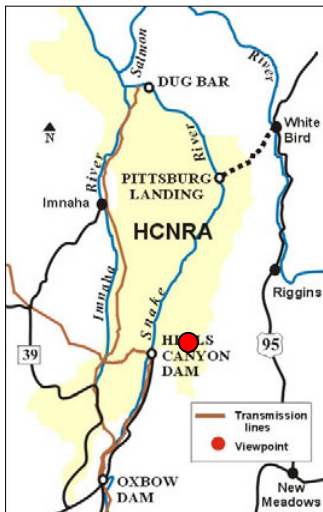
Watershed/subwatershed: N/A	RAA no. & name: N/A	Watershed/RAA scenic integrity: N/A
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EXISTING

Landscape character: N/A	
Scenic integrity: N/A	Ecological integrity: N/A

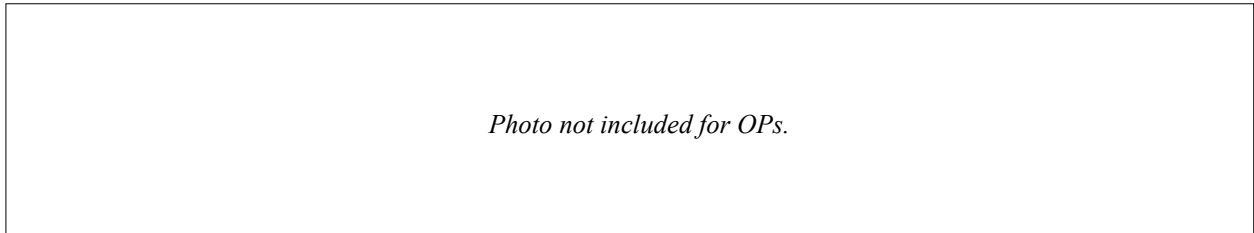
RECOMMENDED

Desired landscape character: N/A	
Desired scenic integrity: N/A	



IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
N/A	N/A	N/A	N/A
Comments	Not considered an SP because no Project effects are visible.		

Viewpoint #190: Horse Heaven Cabin (OP)



Watershed/subwatershed: N/A	RAA no. & name: N/A	Watershed/RAA scenic integrity: N/A
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EXISTING

Landscape character: N/A	
Scenic integrity: N/A	Ecological integrity: N/A

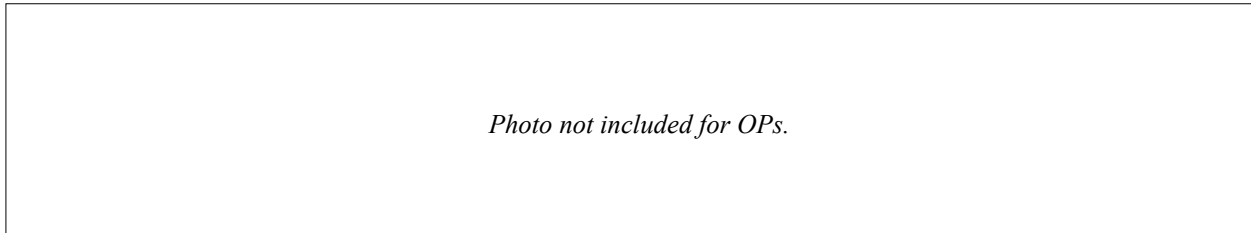
RECOMMENDED

Desired landscape character: N/A	
Desired scenic integrity: N/A	



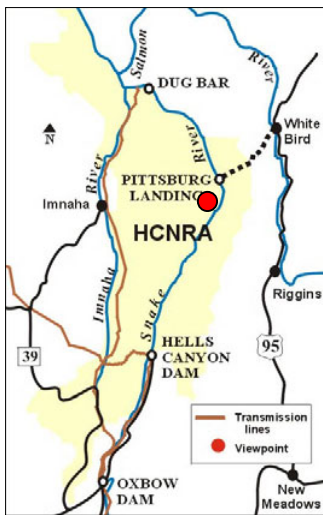
IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
N/A	N/A	N/A	N/A
Comments	Not considered an SP because no Project effects are visible.		

Viewpoint #191: Sawpit Saddle (OP)



Watershed/subwatershed: (Payette N.F. cool/dry)	RAA no. & name: (Payette N.F. cool/dry)	Watershed/RAA scenic integrity: N/A
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EXISTING



Landscape character: N/A

Scenic integrity: N/A

Ecological integrity: N/A

RECOMMENDED

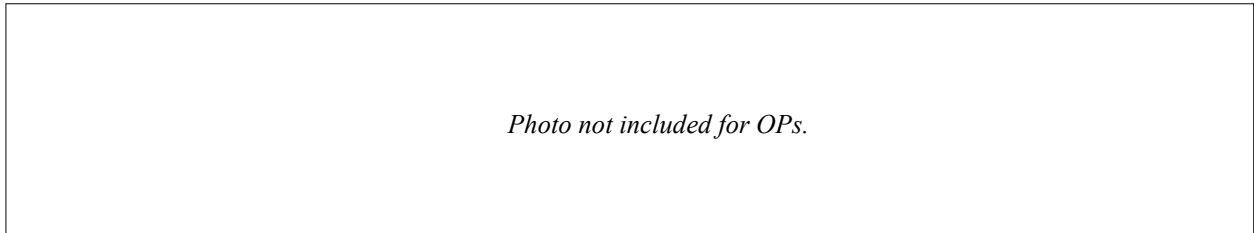
Desired landscape character: N/A

Desired scenic integrity: N/A

IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
N/A	N/A	N/A	N/A

Comments	Not considered an SP because no Project effects are visible.
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Viewpoint #192: Grave Point Lookout (OP)



Watershed/subwatershed: N/A	RAA no. & name: N/A	Watershed/RAA scenic integrity: N/A
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EXISTING

Landscape character: N/A

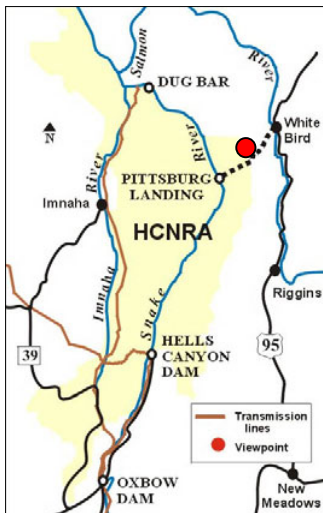
Scenic integrity: N/A

Ecological integrity: N/A

RECOMMENDED

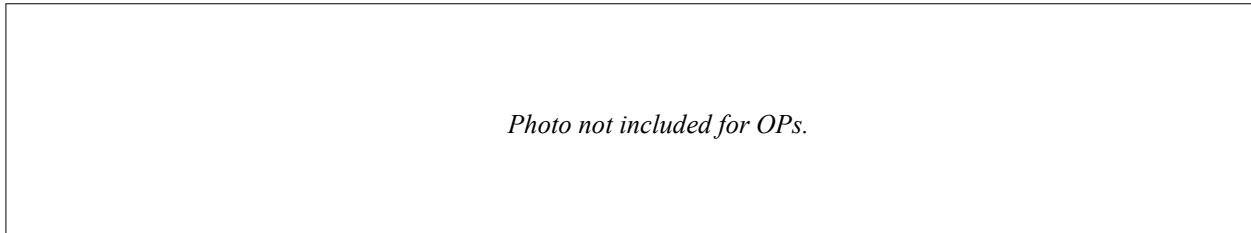
Desired landscape character: N/A

Desired scenic integrity: N/A



IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
N/A	N/A	N/A	N/A
Comments	Not considered an SP because no Project effects are visible.		

Viewpoint #193: Pittsburg Saddle (OP)



Watershed/subwatershed: N/A	RAA no. & name: N/A	Watershed/RAA scenic integrity: N/A
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EXISTING

Landscape character: N/A

Scenic integrity: N/A

Ecological integrity: N/A

RECOMMENDED

Desired landscape character: N/A

Desired scenic integrity: N/A



IPC Facilities/ Operations	Current / Proposed Operations		Full Pool/ Run-of-River
	Effects	Suggested PM&E	Effects
N/A	N/A	N/A	N/A
Comments	Not considered an SP because no Project effects are visible.		

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