
TABLE OF CONTENTS

	Page
8.11 Aesthetic Resources Environmental Effects.....	8.11-1
8.11.1 Compatibility of Project Facilities with USDA-FS Visual Quality Objectives	8.11-2
8.11.1.1 Existing Visual Condition	8.11-2
8.11.2 Project Operations.....	8.11-3
8.11.3 Routine Maintenance.....	8.11-4
8.11.3.1 Facility Painting.....	8.11-4
8.11.3.2 Facility Maintenance	8.11-5
8.11.3.3 Sediment Management.....	8.11-5
8.11.4 Non-routine Recreation Facility Activities	8.11-7
8.11.4.1 Removal of Upper Hell Hole Campground.....	8.11-7
8.11.4.2 Recreation Facility Reductions	8.11-7
8.11.4.3 Recreation Facility Conversions	8.11-8
8.11.4.4 Recreation Facility Enhancements	8.11-8
8.11.4.5 Duncan Creek Diversion Primitive Use Site.....	8.11-8
8.11.4.6 Ralston Afterbay Sediment Removal Access Point Boat Launch	8.11-9
8.11.5 Existing Facility Modification and New Facility Construction	8.11-9
8.11.5.1 Hell Hole Reservoir Seasonal Storage Increase Improvement	8.11-10
8.11.5.2 Small Diversion Modifications	8.11-12
8.11.5.3 Outlet Works Modifications	8.11-13
8.11.6 Conclusions—Aesthetic Resources.....	8.11-13
8.11.7 Unavoidable Adverse Effects.....	8.11-13

List of Tables

Table 8.11-1. Existing Visual Condition of the Existing MFP Facilities and Consistency with USDA-FS Visual Quality Objectives.

List of Figures

Figure 8.11-1. Existing dam and spillway with current maximum normal operating WSE (No-Action Alternative).

Figure 8.11-2. Existing dam and spillway with 6-foot raise in current maximum normal operating WSE, plus new spillway gates, gatehouse and powerlines (Proposed Action).

List of Maps

Map 8.11-1. Facilities and Features Associated with the Hell Hole Reservoir Seasonal Storage Increase Improvement.

8.11 AESTHETIC RESOURCES ENVIRONMENTAL EFFECTS

This section describes potential impacts to aesthetic resources under the Proposed Action for the Middle Fork American River Project (MFP or Project). Section 4.0 – Proposed Action (including Tables 4-4, 4-5, and 4-6) provides a description of routine operation and maintenance activities to be implemented under the Proposed Action compared to the No-Action Alternative. Appendix A – Modified or New Facility Construction Activities and Concept Designs includes a description of facility modification and construction activities to be implemented under the Proposed Action.

Potential impacts to aesthetic resources were identified based on changes in Project operations, changes in routine Project maintenance activities, non-routine recreation facility activities, and modification of existing or construction of new Project facilities. Potential impacts to aesthetic resources consider whether the Proposed Action will modify visual conditions to the extent they are incompatible with United States Department of Agriculture-Forest Service (USDA-FS) visual quality objectives (VQO) and guidelines contained in the Eldorado National Forest (ENF) Land and Resource Management Plan (LRMP) and the Tahoe National Forest (TNF) LRMP. The VQOs are goals that describe the degree of alteration measured in terms of visual contrast with the surrounding natural landscape.

Potential impacts to aesthetic resources are evaluated as follows:

- Compatibility of the Project facilities with USDA-FS VQOs, standards, and guidelines.
- Potential impacts to visual resources from changes in Project operations affecting:
 - Reservoir water surface elevations.
- Potential impacts to visual resources from modification of routine Project maintenance activities including:
 - Facility painting;
 - Facility maintenance; and
 - Sediment management.
- Potential impacts to visual resources from implementation of non-routine recreation activities, including:
 - Removal of Upper Hell Hole Campground;
 - Recreation facility reductions;
 - Recreation facility conversion;
 - Recreation facility enhancements;
 - Improvements to dispersed recreational use areas; and
 - Development of the Ralston Afterbay Sediment Removal Access Point Boat Launch.

- Potential impacts to visual resources from modification of existing Project facilities or construction of new Project facilities including:
 - Hell Hole Reservoir Seasonal Storage Increase Improvement;
 - Small diversion modifications; and
 - Outlet works modifications.

A description of potential impacts to aesthetic resources from implementation of the Proposed Action, considering enhancement measures, is provided below. A conclusion of impacts to aesthetic resources, including any unavoidable adverse effects, is provided at the end of this section.

8.11.1 Compatibility of Project Facilities with USDA-FS Visual Quality Objectives

Placer County Water Agency (PCWA) conducted a visual quality assessment to evaluate the visual compatibility of the existing Project facilities with the surrounding landscapes, using the USDA-FS Visual Management System (VMS). As part of the assessment, PCWA compiled VMS information relevant to the MFP. Specifically, PCWA: (1) identified the USDA-FS-managed viewsheds in the vicinity of the MFP; (2) identified USDA-FS VQOs; (3) mapped the Project facilities and viewsheds with respect to the VQOs; and (4) conducted an existing visual condition (EVC) assessment of Project facilities and features that can be seen from the managed viewsheds. The methods and results of these efforts are discussed in Section 7.11 – Aesthetic Resources Affected Environment, and more detailed information is available in the REC 5 – Visual Quality Assessment Technical Study Report (TSR) (REC 5 – TSR) (PCWA 2011a; Supporting Document [SD] B).

The information compiled through these efforts was used to determine whether the existing MFP facilities are consistent with the USDA-FS VQOs and management direction contained in the current ENF LRMP (USDA-FS ENF 1988) and TNF LRMP (USDA-FS TNF 1990). The assessment focused on the Project facilities that can be seen from each viewshed. The results of this effort are discussed in the following subsection, with respect to changes that will occur under the Proposed Action.

8.11.1.1 Existing Visual Condition

The results of the EVC assessment are summarized on Table 8.11-1, organized by the specific viewsheds identified by the ENF and TNF. As indicated, the EVC of most of the MFP facilities are consistent with the VQOs. The VQO rating varies by viewshed; but, in general, the facilities and features that do not meet the VQOs are linear features such as powerlines, or large facilities such as dams and powerhouses that dominate the landscape due to their size or utilitarian form. These facilities and features are identified on Table 8.11-1, along with an explanation about why the facility or feature is inconsistent with the VQO.

Under the Proposed Action, the overall form and appearance of the existing Project facilities and features will generally remain unchanged relative to the No-Action Alternative.

The specific measures that will be implemented as part of the Proposed Action are identified in the Visual Resource Management Plan (VRMP) (PCWA 2011b; SD A). The overall goal of the VRMP is to improve the visual conditions of select Project facilities and features so that they are more consistent with the established VQOs, standards and guidelines contained in the ENF and TNF LRMPs. In some cases, meeting the VQO is infeasible due to the size or type of structure (i.e., dams, powerlines). The measures contained in the VRMP will improve the EVC of select Project facilities and features. Therefore, implementation of the Proposed Action will improve visual conditions as they relate to USDA-FS VQOs.

8.11.2 Project Operations

Changes in Project operations and minimum pool requirements that affect reservoir water surface elevations (WSE) are discussed in detail in Section 8.5 – Fish and Aquatic Resources Affected Environment. In addition, plots showing the reservoir WSE under the Proposed Action are included in Appendix C1c.

As shown on the WSE plots contained in Appendix C1c, implementation of the Proposed Action will not substantially affect WSE at any of the MFP reservoirs, particularly during the peak recreation season (Memorial Day through Labor Day) and during the fall-shoulder season (Labor Day through about November 1). During the recreation season, the minimum pool requirements at Hell Hole and French Meadows reservoirs will be the same or higher under the Proposed Action and the No-Action Alternative, depending upon water year type. The maximum flood pool will remain the same at both reservoirs under both the Proposed Action and No-Action Alternative. Therefore, both reservoirs will be operated within their historic range with minor changes occurring on a seasonal basis, depending upon water year type. The reservoirs will not be drawn down earlier in the season under the Proposed Action when compared to the No-Action Alternative, regardless of water year type. In fact, as shown on the plots in Appendix C1c, WSE will generally remain higher for a longer period of time at both Hell Hole and French Meadows reservoirs. This is particularly evident during dry and critical water year types (refer to plots C1c-4, C1c-6, C1c-10, and C1c-11).

The Hell Hole Reservoir Seasonal Storage Increase Improvement will seasonally increase the WSE of Hell Hole Reservoir by 6 feet. However, the WSE will remain within the existing flood pool. A 6-foot change in WSE will not be noticeable due to the small scale of the change relative to the large size of the reservoir.

Hell Hole Reservoir and the surrounding side slopes are characterized by steep and rocky slopes, with sparse vegetation. Near Hell Hole Dam, the slopes in the immediate vicinity of the reservoir are comprised mainly of upper, montane chaparral species, huckleberry oak, and annual grasses and forbs. Riparian species (primarily willows,

with a few alders and black cottonwoods) occur intermittently around the reservoir, primarily in the upper portion of the reservoir near the confluences of Five Lake Creek and the Rubicon River. As discussed in Section 8.6 – Botanical and Wildlife Resources Environmental Effects and in Section 8.8 – Riparian Resources Environmental Effects, a 6-foot change in WSE will not result in measurable losses of upland or riparian vegetation around the reservoir due to the timing and limited duration of inundation. Therefore, Hell Hole Reservoir will appear the same as viewed from on the reservoir or as viewed from nearby vantage points (e.g., Hell Hole Vista or Hell Hole Boat Ramp) under both the Proposed Action and No-Action Alternative. Accordingly, visual conditions as they relate to WSE will be similar under the Proposed Action and No-Action Alternative.

8.11.3 Routine Maintenance

The Proposed Action includes changes in routine Project maintenance activities that could affect visual quality including: (1) facility painting; (2) facility maintenance and (3) sediment management. These activities are discussed in the following subsections.

8.11.3.1 Facility Painting

PCWA will periodically paint the Project facilities as paint surfaces deteriorate. In addition, PCWA will paint the following Project facilities or features with a color that blends with the surrounding landscape, as specified in the VRMP (PCWA 2011b; SD A):

- Hell Hole – Middle Fork Tunnel Gatehouse;
- Operator Cottages and Shop;
- South Fork Long Canyon Diversion Dam (yellow safety railings);
- Ralston Powerhouse (white components);
- Middle Fork – Ralston Tunnel Surge Shaft and Tank (metal components, storage building doors);
- Passive Microwave Reflector Station above Ralston Afterbay;
- Ralston Powerhouse Butterfly Valve House;
- French Meadows Powerhouse and Penstock;
- French Meadows-Hell Hole Tunnel Gatehouse;
- French Meadows Dam Generator Building; and
- Ralston Afterbay Dam Generator Building.

Under the Proposed Action, PCWA will consult with the USDA-FS on the selection of appropriate colors. This consultation does not occur under the No-Action Alternative. Painting the facilities a color that blends with the surrounding landscape will improve visual conditions relative to the USDA-FS VQOs. Therefore, implementation of the Proposed Action will enhance visual quality compared to the No-Action Alternative.

8.11.3.2 Facility Maintenance

Over the license term, PCWA will implement a variety of measures that will improve the existing visual condition of select MFP facilities, as follows. These measures are specified in the VRMP and include:

- Replacing the Hell Hole Dormitory roof with a roof that is dark in color, to be selected in consultation with, and approved by the USDA-FS;
- Replacing the galvanized fencing that currently encloses Middle Fork – Ralston Tunnel Surge Shaft and Tank with black, plastisol fencing;
- Relocate unconsolidated items stored within the Middle Fork – Ralston Tunnel Surge Shaft and Tank fenceline in a neat manner, placed as out-of-site as possible when viewed from Forest Road 14N25; and
- Developing a Landscape Rehabilitation Plan for the French Meadows Dam Staging Area to reduce visual impacts.

In addition, PCWA will develop project-specific Visual Resource Protection Plans for any new, relocated, or significantly modified MFP facility or other Project-related disturbance that has the potential to affect visual resources on National Forest Service (NFS) land on an as-needed basis, as determined through consultation with the USDA-FS.

Implementing these measures will help ensure that the MFP facilities and features blend with the surrounding landscape to the extent possible. Furthermore, implementation of these measures will improve visual conditions of the MFP facilities relative to the USDA-FS VQOs. These measures would not be implemented under the No-Action Alternative. Therefore, implementation of the Proposed Action will enhance visual quality compared to No-Action Alternative.

8.11.3.3 Sediment Management

The Proposed Action includes changes in sediment management activities. These changes are described in detail in the Sediment Management Plan (SMP) (PCWA 2011c; SD A). The development and use of sediment augmentation areas to facilitate natural sediment transport could potentially affect visual quality. The Proposed Action includes three sediment augmentation areas, as discussed in the following.

Middle Fork Interbay Augmentation Areas

Sediment of suitable size to benefit the aquatic ecosystem will be removed during sediment management activities from Middle Fork Interbay and will be placed in two downstream augmentation areas. Sediment augmentation into the Middle Fork American River downstream of Middle Fork Interbay is extremely challenging due to the steep canyon walls and limited access. As such, sediment augmentation will be accomplished by releasing material from the Middle Fork Interbay Dam and Powerhouse Road, just downstream of the dam's north abutment, allowing it to accumulate in the river channel. The two augmentation areas are located on the north side of the river, approximately 150 feet downstream of the dam.

The sediment augmentation areas are located in an area that is managed to meet a VQO of Modification. The Modification VQO allows for management activities that visually dominate the original characteristic landscape, provided they are compatible with the natural surroundings. The sediment augmentation areas will not be visible from any USDA-FS managed viewshed. In addition, they will not be noticeable from Middle Fork Interbay or the adjacent road due to the steepness of the canyon. Implementation of the Proposed Action will not substantially alter the visual character of this area compared to the No-Action Alternative. The visual condition of the sediment augmentation area will be consistent with the Modification VQO. Therefore, the desired VQO will be met under the Proposed Action.

Indian Bar Augmentation Area

The Indian Bar Augmentation Area is an existing augmentation area that will be incorporated into the MFP to enhance sediment delivery and transport under the Proposed Action. The augmentation area is located immediately downstream of Ralston Afterbay Dam, adjacent to the Oxbow Powerhouse. Under the Proposed Action, sediment removed from Ralston Afterbay during routine sediment management activities will be placed on the existing gravel/cobble bar and then graded to the river's edge in a manner that maximizes sediment transport during high-flow events, as it is under the No-Action Alternative.

This sediment augmentation area will be located in an area that is managed to meet a VQO of Partial Retention. The Partial Retention VQO allows for management activities that are visually subordinate to the characteristic landscape. The area will be visible from the Indian Bar Rafter Access and from the Middle Fork American River, which are USDA-FS managed viewsheds. However, the shape and general character of the augmentation area and the material placed in this augmentation area will be similar in form, color, and texture to the existing gravel/cobble bar and surrounding landscape. In addition, it will be visually subordinate to the adjacent and nearby facilities. Implementation of the Proposed Action will not substantially alter the visual character of this area compared to the No-Action Alternative. Furthermore, the visual condition of the sediment augmentation area will be consistent with the Partial Retention VQO. Therefore, the desired VQO will be met under the Proposed Action.

Junction Bar Augmentation Area

Under the Proposed Action, a portion of Junction Bar will also be used for sediment augmentation associated with sediment management activities at Ralston Afterbay. Junction Bar is a large gravel/cobble bar located immediately downstream of Ralston Afterbay on the south side of the Middle Fork American River that has been previously disturbed by historical mining activities. Augmentation material will be placed close to the river's edge in a manner that will maximize sediment transport during high-flow events.

Junction Bar is located in an area with a Retention VQO, which allows for management activities that are not visually evident. The area will be visible from the Indian Bar Rafter Access and from the Middle Fork American River, which are USDA-FS managed viewsheds. However, the shape and general character of the augmentation area and the material placed in this augmentation area will be similar in form, color, and texture to the existing gravel/cobble bar and surrounding landscape. Natural erosion of the augmentation area will help shape the area to blend with the surrounding landscape. The Proposed Action will not substantially alter the visual character of this area compared to the No-Action Alternative. Furthermore, the visual condition of the sediment augmentation area will be consistent with the Retention VQO. Therefore, the desired VQO will be met under the Proposed Action.

8.11.4 Non-routine Recreation Facility Activities

The Proposed Action includes a variety of non-routine activities at Project recreation facilities, as discussed in the following. Additional information about these activities is available in the Recreation Plan (PCWA 2011d; SD A).

8.11.4.1 Removal of Upper Hell Hole Campground

Under the Proposed Action, Upper Hell Hole Campground will be removed due to low use and to protect nearby sensitive biological and cultural resources. As a recreation facility, Upper Hell Hole Campground is managed to meet the Partial Retention VQO. The surrounding landscape is managed to meet a more stringent VQO of Retention. Under the Proposed Action, all of the amenities at Upper Hell Hole Campground will be removed and previously disturbed areas will be allowed to revegetate. Removal of this facility will eliminate features that are visually evident relative to the surrounding landscape. After removal, the area will meet the more stringent VQO of Retention.

8.11.4.2 Recreation Facility Reductions

Under the Proposed Action, Hell Hole Campground, Poppy Campground, and Ralston Picnic Area will be reduced in size due to low use. Previously disturbed areas will be allowed to revegetate. These facilities are managed to meet the Partial Retention VQO and will continue to meet this VQO after they are reduced in size. However, reduction and conversion of these facilities will reduce the overall size and scale of these facilities, making them more compatible with the characteristics of the surrounding landscape. Revegetation of previously disturbed areas will further improve visual quality. Under the

Proposed Action, Hell Hole Campground, Poppy Campground, and Ralston Picnic Area will continue to meet the Partial Retention VQO assigned to recreation facilities.

8.11.4.3 Recreation Facility Conversions

Under the Proposed Action, McGuire Picnic Area will be converted to a group campground. The existing picnic tables and associated features will be removed and the area will be reconfigured to support group camping opportunities. As a recreation facility, McGuire Picnic Area is managed to meet a VQO of Partial Retention. When converted to a group campground, the facility will continue to meet the Partial Retention VQO.

French Meadows Reservoir and the area surrounding French Meadows Reservoir are managed to meet a VQO of Retention, which provides for management activities that are not visually evident. The existing picnic area is not noticeable from the reservoir due to the small size of facility and the presence of trees and other understory vegetation. Therefore, the existing picnic area meets the desired VQO of Retention as viewed from the reservoir. If improperly designed, the group campground may be more noticeable from the reservoir than the existing picnic area. Accordingly, the group campground will be designed in consultation with USDA-FS landscape architects to ensure that views from the reservoir continue to meet the Retention VQO. Removal of trees and other vegetation will be minimized to ensure that the presence of a group campground is not visually evident from the reservoir.

8.11.4.4 Recreation Facility Enhancements

The Proposed Action includes enhancements to Ahart Campground, Indian Bar Rafter Access, Hell Hole Boat Ramp, and French Meadows Boat Ramp. The enhancements at Ahart Campground and Indian Bar Rafter Access will occur within the existing facility footprints. The boat ramps will be extended into the reservoirs to facilitate boat launching at lower WSEs. All of the features associated with these enhancements will be designed and situated to blend with the existing facility features in terms of form, line, color, and texture. The recreation facility enhancements will meet the Partial Retention VQO assigned to recreation facilities.

8.11.4.5 Duncan Creek Diversion Primitive Use Site

Duncan Creek Diversion Primitive Recreation Site will be developed under the Proposed Action to address sanitation issues in the Duncan Creek Diversion area and to reduce potential resource impacts related to dispersed recreation. Development of the site will include installation of one single-unit accessible vault toilet, barrier rocks, and a bear-resistant garbage container.

The Duncan Creek Diversion lies within an area that is managed for the Modification VQO, which allows for the development of features such as the Duncan Creek Diversion Primitive Use Site. The features associated with this site will be selected and placed in consultation with USDA-FS landscape architects to ensure that the features are compatible with the surrounding landscape. The Duncan Creek Diversion Primitive

Use Site will meet the more stringent VQO of partial retention assigned to recreation facilities.

8.11.4.6 Ralston Afterbay Sediment Removal Access Point Boat Launch

Under the Proposed Action, the existing Ralston Afterbay Sediment Removal Access Point will be formalized as a public boat launch area. The Ralston Afterbay Sediment Removal Access Point is located within the boundaries of the ENF, along the Rubicon River arm of Ralston Afterbay, in the immediate vicinity of the Middle Fork American River confluence. The ENF manages this area to meet a VQO of Retention, which provides for management activities that are not visually evident. Currently the site is not readily noticeable from any managed viewshed due its small size and lack of improvements. Therefore, the site meets the Retention VQO.

Improving the Ralston Afterbay Sediment Removal Access Point will involve grading the existing ramp, installing barrier rock, and signage. This access point is already graded and used informally as a boat launch by the public. The improvements will not substantially alter the characteristics of the site relative to the existing condition. Furthermore, barrier rock will be selected to match the local native rock and signage will be designed and placed to blend with the natural surroundings. Therefore, the improvements will not be visually evident and will meet the Retention VQO.

8.11.5 Existing Facility Modification and New Facility Construction

Under the Proposed Action, modification or construction projects will be implemented to improve operations and maintenance of the Project, enhance environmental resources, and/or meet the requirements specified in new environmental programs and measures. These projects are described in Section 4.0 – Proposed Action, and include:

- Hell Hole Reservoir Seasonal Storage Increase Improvement;
- Small Diversion Modifications; and
- Outlet Works Modifications.

These elements of the Proposed Action are discussed in the following subsections with respect to visual quality.

Note that the Proposed Action also includes modification of existing gages and construction of new gages to monitor flows for compliance with the new license and collect flow data for real-time flow dissemination to the public. Modifications to existing gages will occur at existing Project facilities (i.e., dam outlet works, spillways, diversion tunnels, and penstocks) and will not alter the physical or visual character of these features. Modifications to the existing gages will meet the requirements of the VRMP.

The precise location of the new gages and associated features has not yet been determined. Project-specific National Environmental Policy Act (NEPA) analysis will be

conducted at a later date for these gages and all necessary permits and approvals will be obtained prior to implementation of any construction activities.

8.11.5.1 Hell Hole Reservoir Seasonal Storage Increase Improvement

The Proposed Action includes construction of the Hell Hole Reservoir Seasonal Storage Increase Improvement. The purpose of this improvement is to seasonally increase the storage capacity of Hell Hole Reservoir by approximately 7,600 acre-feet. The improvement will utilize a portion of the existing flood pool, above the present normal maximum operating water level, to store additional water during the spring and summer after the peak of the runoff period. This increase will be achieved by installing 6-foot-high crest gates on the existing dam spillway. Operation of the crest gates will seasonally increase the reservoir's inundation area, within the existing flood pool, by approximately 36 acres.

This improvement requires construction of three new Project facilities in addition to the 6-foot-high crest gates including:

- Hell Hole Dam Spillway Crest Gates Control Building—a small control building and perimeter fence adjacent to the spillway to house equipment to power the new spillway crest gates;
- Hell Hole Dam Spillway Crest Gates Control Building Powerline—a short spur line (approximately 525 feet) from the control building to an existing Project powerline to provide power to the control building for operation of the spillway crest gates; and
- Hell Hole Dam Spillway Gates Road—a road providing access to the new spillway gates.

In addition, implementation of this improvement will require the construction of temporary staging areas and work areas in the vicinity of Hell Hole Dam.

The locations of these components are shown on Map 8.11-1 with respect to the existing Project facilities and VQOs. As indicated, the components associated with this improvement are located in the immediate vicinity of Hell Hole Dam, in previously disturbed areas. These components are discussed further in the following subsections with respect to visual resources.

Hell Hole Dam Spillway Crest Gates

PCWA prepared photo simulations showing the Hell Hole Dam and Spillway area under the No-Action Alternative (Figure 8.11-1) and the Proposed Action (Figure 8.11-2), as viewed from one Key Observation Point (KOP) selected in consultation with an ENF landscape architect. This KOP is located at the Hell Hole Vista, from which most of the reservoir, the dam, and spillway are visible. Figure 8.11-1 shows the existing structures with the current maximum normal operating WSE as viewed from Hell Hole Vista (No-Action Alternative). Figure 8.11-2 shows the existing structures with a 6-foot raise in the

maximum normal operating WSE, plus the new spillway gates, the new control building, and the new powerline (Proposed Action).

As shown in Figure 8.11-2, the crest gates would not be noticeable from Hell Hole Vista (or anywhere on the reservoir) when in operation because they would be covered or nearly covered by water. The gates would be lowered when the reservoir level recedes and would lay flat (horizontal) on the spillway when not in use. Similarly, the gates would not be visible from Hell Hole Reservoir, or from the Hell Hole Boat Ramp and associated parking, both USDA-FS managed viewsheds. Therefore, installation of the Hell Hole Dam Spillway Crest Gates would not change the existing visual conditions relative to the No-Action Alternative.

Hell Hole Dam Spillway Crest Gates Control Building and Powerline

As shown on Map 8.11-1, the Hell Hole Dam Spillway Crest Gates Control Building will be situated on a bedrock outcrop that separates Hell Hole Dam and the spillway. The powerline will extend from the west end of the spillway, southwest up a bedrock embankment to an existing powerline.

The new control building and powerline are shown on Figure 8.11-2. As indicated, the control building will be visible from Hell Hole Vista, but will not be noticeable due to the viewing distance and due to the small size of the feature relative to the dam and spillway. The powerline will traverse relatively barren bedrock and will not be noticeable from Hell Hole Vista due to the distance between the vista and powerline, and because the powerline will be obscured by bedrock outcrops and shadows.

The control building and powerline will be more evident when viewed from closer distances. Specifically, the building and the powerline will be visible from some locations on Hell Hole Reservoir, and potentially from the Hell Hole Boat Ramp access road and parking area. However, neither feature will dominate the landscape relative to the surrounding features, which include Hell Hole Dam and spillway.

Hell Hole Dam and spillway are located in an area that is managed by the USDA-FS to meet a VQO of retention. The retention VQO provides for management activities that are not visually evident. As indicated on Table 8.11-1, neither Hell Hole Dam nor the spillway meet the VQO of retention from any of the managed viewsheds due to their size and form. The new control building and powerline will be situated in areas that are already substantially disturbed and do not meet the USDA-FS VQO. Therefore, implementation of the Proposed Action will not substantially change visual conditions relative to the No-Action Alternative.

To minimize visual impacts, the new control building will be painted a color that is compatible with the surrounding landscape. The exact color will be determined in consultation with the USDA-FS, as specified in the VRMP. Visual impacts of the powerline will be minimized by utilizing non-specular materials that blend with the surrounding environment when possible, and by minimizing vegetation clearing.

Hell Hole Dam Spillway Gates Road

Implementation of this improvement will require construction of a new road referred to as the Hell Hole Dam Spillway Gates Road. This road will provide access to the spillway area during and after construction. The location of this road is shown on Map 8.11-1. As indicated, the road will be constructed in a previously disturbed area, in the immediate vicinity of the dam and spillway. Accordingly, the road will be visually subordinate to the surrounding features and will not be noticeable from the Hell Hole Vista or from any USDA-FS managed viewshed. Therefore, implementation of the Proposed Action will not substantially change visual conditions relative to the No-Action Alternative.

Temporary Features

Implementation of this improvement will require construction of the following temporary features:

- Hell Hole Dam Spillway Crest Gates Construction Work Area;
- Hell Hole Dam Spillway Crest Gates and Control Building Construction Staging Area; and
- Hell Hole Dam Spillway Crest Gates Control Building Powerline Construction Staging Area.

The locations of these features are shown on Map 8.11.1. As indicated, these features will be situated in barren or sparsely vegetated, previously disturbed areas, in the immediate vicinity of the dam and spillway. Accordingly, these features will be visually subordinate to the surrounding structures and will not be noticeable. Furthermore, these features are temporary. Upon completion of construction activities, these areas will be returned to their original condition. Therefore, implementation of the Proposed Action will not change visual conditions relative to the No-Action Alternative.

8.11.5.2 Small Diversion Modifications

Under the Proposed Action, the Duncan Creek, North Fork and South Fork diversion dams will be modified to allow for more natural transport of sediment past the diversion structures, and to reduce the need for future sediment removal activities. Modifying the small diversions will include installation of self-cleaning wedge-wire screens at the dams; modification of the low-level outlets to release the required instream flows; and modification or installation of gages.

The modifications will result in diversion pools that are slightly shallower and more riverine in nature, consistent with the adjacent landscape. Otherwise, none of the modifications to the small diversions will substantially alter the physical or visual character of the dams or ancillary structures. Accordingly, the visual condition of the diversion dams will be similar under the No-Action Alternative and the Proposed Action.

The Duncan Creek Diversion Dam will continue to meet the Modification VQO and the North and South Fork Diversions will continue to meet the Partial Retention VQOs.

8.11.5.3 Outlet Works Modifications

The Proposed Action includes modification of the outlet works at French Meadows Dam, Hell Hole Dam, and Middle Fork Interbay Dam. The purpose of these modifications is to enhance the ability of the outlet works to release new instream flow requirements, and, where appropriate, install new gages to collect flow data necessary for documenting compliance under the new license. French Meadows Dam and Hell Hole Dam are located in areas managed to meet a VQO of Retention. As indicated on Table 8.11-1, these features can be seen from various USDA-FS managed viewsheds and do not meet the desired VQO of Retention due to their large size and form. Middle Fork Interbay Dam spans the ENF and the TNF boundary. On the TNF side, the area is managed to meet a VQO of Modification. On the ENF side, the area is managed to meet a VQO of Partial Retention. Middle Fork Interbay Dam cannot be seen from any USDA-FS managed viewshed and meets the desired VQOs.

None of the outlet works modifications will alter the physical or visual character of the dams or ancillary structures. In addition, the new gages associated with these modifications will be contained within the outlet works. Therefore, implementation of the Proposed Action will not change existing visual conditions relative to the No-Action Alternative. Furthermore, implementation of the Proposed Action will not change visual conditions relative to the USDA-FS VQOs.

8.11.6 Conclusions—Aesthetic Resources

The Proposed Action includes a VRMP that specifies a variety of measures that will improve the overall visual condition of select Project facilities and features relative to USDA-FS objectives, standards and guidelines. In addition, the VRMP includes a provision that requires PCWA to consult and coordinate with the USDA-FS when implementing future projects that have the potential to affect visual resources on NFS lands, including modification of existing MFP facilities or the construction of new MFP facilities. Compared the No-Action Alternative, the measures included in the VRMP will improve the visual conditions of select Project facilities and features so that they are more consistent with the established VQOs. The measures contained in the VRMP would not be implemented under the No-Action Alternative. Therefore, the Proposed Action will enhance visual quality relative to the No-Action Alternative.

8.11.7 Unavoidable Adverse Effects

There are no unavoidable adverse effects to aesthetic resources under the Proposed Action.

LITERATURE CITED

Placer County Water Agency (PCWA). 2011a. REC 5 – Visual Quality Assessment Technical Study Report. Available in PCWA's Application for New License – Supporting Document B.

_____. 2011b. Visual Management Plan. Available in PCWA's Application for New License – Supporting Document A.

_____. 2011c. Sediment Management Plan. Available in PCWA's Application for New License – Supporting Document A.

_____. 2011d. Recreation Plan. Available in PCWA's Application for New License – Supporting Document A.

USDA-FS. 1988. Eldorado National Forest. Land and Resource Management Plan. USDA Forest Service, Pacific Southwest Region, San Francisco, CA.

USDA-FS. 1990. Tahoe National Forest Land and Resource Management Plan. USDA Forest Service, Pacific Southwest Region, San Francisco, CA.

TABLES

Table 8.11-1. Existing Visual Condition of the Existing MFP Facilities and Consistency with USDA-FS Visual Quality Objectives.

Project Area	Middle Fork Project Facilities	Project Facility Type	EVC Viewshed Rating*	Forest Plan VQOs	Visibility from Viewshed	Consistent with Forest Plan	Discussion/Explanation
TNF Managed Viewsheds							
Mosquito Ridge Road Viewshed (FR 96)							
French Meadows Reservoir Area	French Meadows Dam and Outlet Works	Large Dam	IV	R	Seen	No	FR 96 crosses top of dam. Travelers experience immediate foreground views of downstream dam face for a short distance (less than 0.5 mi) when approaching dam from the west. Outlet works are not seen due to view angle and intervening terrain. Dam appears as major disturbance seen in foreground distance zone.
	French Meadows Reservoir & Shoreline	Large Reservoir	II-IV	R	Seen	Dependent on water surface elevation	Reservoir and shoreline are not seen until FR 96 nears the spillway structure. Views are of short duration while crossing the spillway area and dam. Expansive panoramic views of the reservoir and shoreline are experienced when crossing the dam. There are limited, filtered views of the reservoir and shoreline through trees when traveling east along the reservoir. Reservoir appears near-natural at full pool, and visual quality declines with reservoir surface elevation and increased exposure of shoreline. Very low pool elevations dominate visual experience.
	French Meadows Reservoir Staff Gage	Reservoir Gage	II	R	Not noticed	Yes	Not noticed from FR 96 due to small scale of gage, speed of travel on road and location of gage near north shoreline.
	French Meadows Reservoir Gage (USGS Gage No. 11427400)	Reservoir Gage	II	R	Not noticed	Yes	
	French Meadows Dam Leakage Weirs Nos. 1-6	Leakage Weir	II	R	Not noticed	Yes	
	French Meadows Dam Generator Building	Ancillary Facility	IV	R	Seen	No	Seen in immediate foreground, foreground and middleground from FR 96. Industrial appearance of structure in combination with spillway facilities and chain link fencing dominate view when seen in immediate foreground. Small scale and light color of building result in facilities being not readily noticed when seen in the middleground distance zone.
	French Meadows Dam Staging Area	Ancillary Facility	III-IV	R	Seen	No	Seen in immediate foreground and middleground from FR 96. The moderate scale, and spoil-pile-character of staging area is seen in the immediate foreground when entering the reservoir viewshed. The staging area contrasts in form and texture with the surrounding characteristic landscape.
	French Meadows Dam Generator Building to French Meadows Dam Spillway Gates Powerline	Powerline	III	R	Seen	No	Poles seen in immediate foreground from segment of FR 96 near spillway area. Small scale features add incrementally to industrial character of area.
	French Meadows Dam Generator Building to French Meadows Dam Outlet Works Powerline	Powerline	III	R	Seen	No	Poles seen in immediate foreground from segment of FR 96 near spillway area. Small scale features add incrementally to industrial character of area.
	Duncan Creek – Middle Fork Tunnel Portal Road	Project Road	II-III	R	Seen	No	Horizontal line created by road alignment is visible from Westbound FR 96 when crossing dam. Bed of road not seen. Note that this road was improved in 2010 in association with the French Meadows Dam Spillway widening project.
	French Meadows – Hell Hole Tunnel Gatehouse Road	Project Road	II-III	R	Not noticed	Yes	Brief view of entrance while traveling FR 96 eastbound.
	French Meadows Dam Outlet Works and South Leakage Weir Road	Project Road	II-III	R	Not noticed	Yes	Road is not readily noticeable due to low color contrasts and partial screening from vegetation.
	French Meadows Dam Staging Area and Spillway West Access Road	Project Road	II	R	Not noticed	Yes	Entrance seen from road. Not readily noticed.
	French Meadows Spillway East Access Road	Project Road	II	R	Not noticed	Yes	Area is disturbed and road is not readily noticeable.
	French Meadows Dam North Leakage Weir Road	Project Road	II	R	Not noticed	Yes	Area is disturbed and road is not readily noticeable.
Middle Fork Interbay Area	Middle Fork Powerhouse Penstock and Butterfly Valve House Road	Project Road	II	R	Not noticed	Yes	
	Middle Fork Powerhouse Penstock and Butterfly Valve House	Water Conveyance	IV	PR	Seen	No/Yes	Exposed soil associated with penstock is noticeable in background from FR 96. Butterfly valve house not seen.
	Middle Fork Powerhouse Butterfly Valve House Road	Project Road	IV	PR	Seen	Yes	Road alignment not readily seen due to vegetative screening. However exposed soils associated with road cut can be seen from FR 96 (in background distance zone of road).
	Middle Fork Powerhouse to Middle Fork Powerhouse Butterfly Valve House Communication Line/Powerline	Communication and Powerline	II-III	PR/M	Seen/Not noticed	Yes	Exposed soil associated with ROW creates contrasts in color with surrounding landscape. Exposed soil seen from Mosquito Ridge Road near Dutch Flat. Visibility of actual powerline from FR 96 is not readily noticed.
Ralston Afterbay Area	Ralston Afterbay Dam and Outlet Works	Medium Dam	III	R/PR	Seen	No/Yes	Views of the dam are limited from the road due to rugged terrain and vegetative screening. Angular form and light color of dam contrasts with surrounding vegetation and water.
	Ralston Afterbay	Medium Reservoir	II-III	R/PR	Seen	Yes	Views of the reservoir are limited due to rugged terrain and vegetative screening. Reservoir is moderate in scale and blends with the surrounding characteristic landscape and therefore meets the Retention VQO.
	Middle Fork – Ralston Tunnel Surge Shaft and Tank	Water Conveyance	II	R	Not noticed	Yes	Middleground views from above Ralston Afterbay and near intersection with 14N25. Tank is not noticeable due earth color, nearby vegetation, and viewing distance from road (in background distance zone of road).
	Ralston Afterbay Dam Generator Building	Ancillary Facility	III	PR	Seen	Yes	Limited views of area from road due to terrain and vegetative screening. Small scale of building minimizes visual effects. Light color of building blends with exposed soil of roads and dam. Angular form of building blends with form of dam.
	Storage Building at Middle Fork – Ralston Tunnel Surge Shaft and Tank	Ancillary Facility	II	R	Not noticed	Yes	Middleground views from above Ralston Afterbay and near intersection with 14N25. Due to small scale of building and distance it is not readily noticeable. Light white color of building does increase visibility since it contrasts with surrounding vegetation.
	Oxbow Powerhouse and Switchyard	Powerhouse/ Switchyard	III	PR	Seen	Yes	Opening in vegetation above powerhouse and dam area provides a near view of Ralston Afterbay Area. Exposed soil areas associated with roads is and the dam dominate the view. The powerhouse and switchyard are tucked into the hillside and partially screened by vegetation. The small scale of the powerhouse and neutral to dark colors reduce the contrasts of the building with the surrounding landscape.
	Ralston Powerhouse and Switchyard	Powerhouse/ Switchyard	II-III	R	Seen	No	Brief view rounding bend at junction with Blacksmith Flat Road (14N25). Facilities not readily noticed due to distance (0.5 mi) and relatively small scale of facilities as seen in context of Rubicon River corridor.

Table 8.11-1. Existing Visual Condition of the Existing MFP Facilities and Consistency with USDA-FS Visual Quality Objectives (continued).

Project Area	Middle Fork Project Facilities	Project Facility Type	EVC Viewshed Rating*	Forest Plan VQOs	Visibility from Viewshed	Consistent with Forest Plan	Discussion/Explanation
TNF Managed Viewsheds (continued)							
Mosquito Ridge Road Viewshed (FR 96) (continued)							
Ralston Afterbay Area (continued)	Passive Microwave Reflector Station above Ralston Afterbay	Microwave Reflector	II	R	Not noticed	Yes	Brief view up Rubicon canyon near intersection with 14N25. Due to distance and small scale of facility relative to view of canyon, the reflector would not be noticed to most travelers on FR 96. May be more noticeable at certain times of day due to reflection. Contrast in color with surrounding vegetation enhances visibility.
	Ralston Ridge Sediment Disposal Area	Disposal Area	IV	R	Seen	No	Limited middleground views across river canyons to Ralston Ridge. Exposed soils and moderately large spoil area combine with exposed soil from roads and cleared transmission line corridor to create a disturbed appearance not characteristic to the surrounding landscape. Spoil pile creates contrasts primarily in color with surrounding landscape.
	Ralston Afterbay Dam Access Road	Project Road	II-III	PR	Seen	Yes	
	Ralston Powerhouse Butterfly Valve House Road	Project Road	IV	R	Seen	No	Brief view of exposed soil associated with road alignment when rounding bend near road intersection with 14N25. Exposed light soil contrasts with surrounding dark green vegetation.
	Oxbow Powerhouse Road	Project Road	II-III	PR	Seen	Yes	Exposed soil associated with road surface and nearby features (parking areas) attracts attention and is in contrast to the dark color of the surrounding vegetation.
	Indian Bar Access Road	Project Road	II-III	PR	Seen	Yes	
	Ralston Afterbay Dam and Access Point Road	Project Road	II-III	R	Not noticed	Yes	Brief, near view of Ralston Area from above. Road is not readily noticed since it is well integrated into the dam structure, and there are no expansive areas of exposed soil associated with it.
Soda Springs-Riverton Road Viewshed (FR 22)							
French Meadows Reservoir Area	French Meadows Dam and Outlet Works	Large Dam	IV	R	Seen	No	FR 22 intersects with FR 96 on south side of dam. Travelers experience immediate foreground views of dam near intersection with FR 96. Outlet works are not seen from FR 22.
	French Meadows Reservoir & Shoreline	Large Reservoir	II-IV	R	Seen	Dependent on water surface elevation	Reservoir and shoreline are not seen until near the intersection of FR 22 with FR 96. Immediate foreground views are of the access road to the dam base, downstream dam face, FR 96 road across dam and reservoir and shoreline. More distant foreground views (about 1 mile) are of the spillway, staging area and gatehouse structures which are not readily noticed due to the moderate scale of the features, similar colors to the surrounding characteristic landscape, and the partial screening provided by trees. Reservoir appears near-natural at full pool, and visual quality declines with reservoir surface elevation and increased exposure of shoreline. Very low pool elevations dominate visual experience.
	French Meadows Dam Leakage Weirs Nos. 1-6	Leakage Weir	II	R	Not noticed	Yes	
	French Meadows Dam Generator Building	Ancillary Facility	II	R	Not noticed	Yes	Building is generally not noticeable due to small scale and low height of building, and because light color of building is similar to surrounding exposed rock.
	French Meadows Dam Staging Area	Ancillary Facility	II	R	Not noticed	Yes	Seen in middleground from FR 22 at the intersection with FR 96. Due to viewing distance and relatively small size of staging area, it appears integrated into the characteristic landscape due to the similar colors as the surrounding granite rock.
	Duncan Creek – Middle Fork Tunnel Portal Road	Project Road	II-III	R	Not noticed	Yes	Horizontal line created by road alignment not readily noticed due to middleground viewing distance and trees near rock outcropping breaking up horizontal line.
	French Meadows Dam Outlet Works and South Leakage Weir Road	Project Road	III	R	Seen	No	Road is seen in vicinity of intersection with FR 96. Road is not readily noticed due to low contrasts in color and partial screening from vegetation.
Western States Trail Viewshed							
French Meadows Reservoir Area	French Meadows Dam and Outlet Works	Large Dam	IV	R	Seen	No	Most likely filtered views periodically. Dam ranges from immediate foreground to foreground.
	French Meadows Reservoir & Shoreline	Large Reservoir	II - IV	R	Seen	Dependent on water surface elevation	Reservoir appears near-natural at full pool and visual quality declines with reservoir surface elevation and increased exposure of shoreline. Very low pool elevations dominate visual experience.
	French Meadows-Hell Hole Tunnel Gatehouse	Water Conveyance	III	R	Seen	No	Gatehouse may be seen in middleground, across reservoir depending on screening from vegetation between trail and reservoir and screening from trees at gatehouse area.
	Middle Fork American River at French Meadows (USGS Gage No. 11427500)	Stream Gage and Weir	II	R	Not noticed	Yes	
	French Meadows Reservoir Staff Gage	Reservoir Gage	II	R	Not noticed	Yes	
	French Meadows Reservoir (USGS Gage No. 11427400)	Reservoir Gage	II	R	Not noticed	Yes	
	French Meadows Dam Generator Building	Ancillary Facility	III	R	Seen	No	May be seen in immediate foreground of trail, although most views from trail appear partially screened by vegetation.
	French Meadows Dam Staging Area	Ancillary Facility	II-III	R	Seen	No	May be seen in immediate foreground of trail, although most views from trail appear to be partially screened by vegetation.
	French Meadows Dam Generator Building to French Meadows Dam Spillway Gates Powerline	Powerline	III	R	Seen	No	May be seen in immediate foreground of trail, although most views from trail appear to be partially screened by vegetation.
French Meadows Dam Generator Building to French Meadows Dam Outlet Works Powerline	Powerline	III	R	Seen	No	May be seen in foreground of trail, although most views from trail appear to be partially screened by vegetation.	

Table 8.11-1. Existing Visual Condition of the Existing MFP Facilities and Consistency with USDA-FS Visual Quality Objectives (continued).

Project Area	Middle Fork Project Facilities	Project Facility Type	EVC Viewshed Rating*	Forest Plan VQOs	Visibility from Viewshed	Consistent with Forest Plan	Discussion/Explanation
TNF Managed Viewsheds (continued)							
Western States Trail Viewshed (continued)							
French Meadows Reservoir Area (continued)	Radio Communications Tower near French Meadows – Hell Hole Tunnel Gatehouse	Radio Tower	II	R	Not noticed	Yes	Seen in middleground, across reservoir. Screening between trail and shoreline and near radio tower may result in tower being not noticed.
	Duncan Creek – Middle Fork Tunnel Portal Road	Project Road	III	R	Seen	No	May be seen in immediate foreground of trail due to close proximity of road to trail.
	French Meadows Dam Outlet Works and South Leakage Weir Road	Project Road	III	R	Seen	No	May be seen in foreground of trail, although most views from trail appear to be partially screened by vegetation.
	French Meadows Dam Staging Area and Spillway West Access Road	Project Road	III	R	Seen	No	May be seen in immediate foreground of trail, although most views from trail appear to be partially screened by vegetation.
	French Meadows Spillway East Access Road	Project Road	II	R	Not noticed	Yes	Road is not visually evident relative to the surrounding features.
French Meadows Dam North Leakage Weir Road	Project Road	II	R	Not noticed	Yes	Road is not visually evident relative to the surrounding features.	
Tevis Cup Trail Viewshed							
French Meadows Reservoir Area	French Meadows Dam and Outlet Works	Large Dam	IV	R	Seen	No	Assume dam is seen in middleground from Red Star Ridge above north side of reservoir. From middleground dam is visually evident, but does not dominate due to similarity to exposed shoreline.
	French Meadows Reservoir & Shoreline	Large Reservoir	II-III	R	Seen	Dependent on water surface elevation	Assume reservoir appears near-natural from middleground views of trail. Reservoir would appear near-natural at full pool. Visual quality would decline with reservoir surface elevation and increased exposure of shoreline. Very low pool elevations would be visually evident but not dominate the visual experience from the middleground distance zone.
	French Meadows-Hell Hole Tunnel Gatehouse	Water Conveyance	III	R	Seen	No	Assume gatehouse can be seen in middleground. Due to small scale of feature, assume area appears as a minor disturbance.
	French Meadows Dam Staging Area	Ancillary Facility	II	R	Not noticed	Yes	Assume feature blends in with characteristic landscape as seen from middleground.
	French Meadows Dam Generator Building to French Meadows Dam Outlet Works Powerline	Powerline	II	R	Not noticed	Yes	
	French Meadows Dam Generator Building to French Meadows Dam Spillway Gates Powerline	Powerline	II	R	Not noticed	Yes	
	Photovoltaic Pole and Powerline at Middle Fork American River Gage at French Meadows	Photovoltaic Pole and Powerline	II	R	Not noticed	Yes	
	Radio Communications Tower near French Meadows – Hell Hole Tunnel Gatehouse	Radio Tower	II	R	Not noticed	Yes	
	French Meadows Dam Outlet Works and South Leakage Weir Road	Project Road	II-III	R	Not noticed	Yes	Road segment near FR 22 is screened from view by vegetation. The remainder of the road is at the base of FM dam and would not be visible from the Tevis trail due to the distance between the trail and the road and viewing angle.
French Meadows Reservoir Viewshed							
French Meadows Reservoir Area	French Meadows Dam and Outlet Works	Large Dam	III-IV	R	Seen	No	Long duration views of dam due to recreational activities. Views range from immediate foreground to middleground views for water-based recreation and middleground views for land-based recreation. The dam creates contrasts in form, line and texture that vary in strength depending on water surface elevation and the degree of exposure of the dam. Outlet works are not seen.
	French Meadows Reservoir & Shoreline	Large Reservoir	II - IV	R	Seen	Dependent on water surface elevation	
	French Meadows-Hell Hole Tunnel Gatehouse	Water Conveyance	III-IV	R	Seen	No	Area is set back from reservoir shoreline. Area seen primarily from nearby reservoir. Views include abandoned rusting equipment and other project related materials scattered about site.
	Duncan Creek – Middle Fork Tunnel Portal	Water Conveyance	II	R	Not noticed	Yes	
	French Meadows Dam Generator Building	Ancillary Facility	III	R	Seen	No	Seen in foreground and middleground from reservoir. Small scale and light color of building and fencing result in facilities not dominating the view especially when seen in context with the dam face.
	French Meadows Dam Generator Building to French Meadows Dam Outlet Works Powerline	Powerline	II	R	Not noticed	Yes	Not noticed or seen from most of the reservoir, except immediate foreground views.
	Radio Communications Tower near French Meadows – Hell Hole Tunnel Gatehouse	Radio Tower	III	R	Seen	No	Small scale feature seen from reservoir area near gate house area.
	French Meadows – Hell Hole Tunnel Gatehouse Road	Project Road	II	R	Not noticed	Yes	Views of road obscured by vegetation
Duncan Creek – Middle Fork Tunnel Portal Road	Project Road	II-III	R	Seen	No	Horizontal line created by road alignment is visible from reservoir locations within the immediate foreground of the dam, but is not readily noticeable from more distant locations.	

Table 8.11-1. Existing Visual Condition of the Existing MFP Facilities and Consistency with USDA-FS Visual Quality Objectives (continued).

Project Area	Middle Fork Project Facilities	Project Facility Type	EVC Viewshed Rating*	Forest Plan VQOs	Visibility from Viewshed	Consistent with Forest Plan	Discussion/Explanation
TNF Managed Viewsheds (continued)							
Middle Fork American River Viewsheds							
French Meadows Reservoir Area	French Meadows Dam and Outlet Works	Large Dam	IV	R	Seen	No	Immediate foreground views of dam and outlet works due to location next to river. Dam dominates view due to large scale and engineered form.
	Middle Fork American River at French Meadows (USGS Gage No. 11427500)	Stream Gage and Weir	II-III	R	Seen	No	Immediate foreground view from the river. Small scale feature would not readily detract from the surrounding landscape character.
	French Meadows Dam Leakage Weirs Nos. 1-6	Leakage Weir	II-III	R	Not noticed	Yes	Small features that are located in the immediate vicinity of the dam and outlet works.
	French Meadows Dam Generator Building to French Meadows Dam Outlet Works Powerline	Powerline	III	R	Seen	No	Seen in immediate foreground. Multicolor line enhances visibility. Small scale feature seen against backdrop of dam adds visual clutter to area.
	Photovoltaic Pole and Powerline at Middle Fork American River Gage at French Meadows Dam	Photovoltaic Pole and Powerline	III	R	Seen	No	Small scale feature seen in immediate foreground of river.
	French Meadows Dam Outlet Works and South Leakage Weir Road	Project Road	III	R	Seen	No	Road seen in immediate vicinity of dam. Road is not readily noticed due to low contrasts in color and partial screening from vegetation.
French Meadows Reservoir Developed Recreation Sites Viewsheds (Ahart, French Meadows, Lewis, and Poppy CGs, Gates and Coyote Group CGs, French Meadows Picnic Area and Boat Ramp, and McGuire Picnic Area and Boat Ramp)							
French Meadows Reservoir Area	French Meadows Dam and Outlet Works	Large Dam	III-IV	R	Seen	No	Long duration, middleground views of the dam face are experienced by visitors to French Meadows Picnic Area, French Meadows Boat Ramp and French Meadows Campground. Outlet works are not seen. Dam blends well in color and texture with surrounding exposed shoreline and is not readily distinguishable from the shoreline as seen in middleground.
	French Meadows Reservoir & Shoreline	Large Reservoir	II-III	R	Seen	Dependent on water surface elevation	Reservoir and shoreline seen from French Meadows Picnic Area, Boat Ramp and Campground, McGuire Boat Ramp and Poppy Campground. Views from boat ramps are open and expansive. Views from campgrounds and picnic areas are partially to completely screened depending on the camp or picnic site.
	French Meadows-Hell Hole Tunnel Gatehouse	Water Conveyance	III	R	Seen	No	Not seen from developed recreation sites except Poppy Campground. Views from Poppy Campground are middleground and partially screened by vegetation. Area is not readily noticed from campground.
Ralston Afterbay Developed Recreation Sites Viewsheds (Ralston Picnic Area, Ralston Picnic Area Cartop Boat Ramp, and Indian Bar Rafting Access and General Parking Area)							
Ralston Afterbay Area	Oxbow Powerhouse and Switchyard	Powerhouse/ Switchyard	IV	PR	Seen	No	Indian Bar Rafting Access and General Parking Recreation Site - near views of moderate duration during raft staging & loading activities. Powerhouse is of moderate scale and nestled into canyon wall. Switchyard, powerhouse and associated landform alterations introduce angular forms and textures in contrast to the characteristic landscape. Powerhouse colors are somewhat similar to surrounding landscape.
	Oxbow Powerhouse (USGS Gage No. 11433212)	Powerhouse Gage	II-III	PR	Seen	Yes	Indian Bar Rafting Access and General Parking Recreation Site - minor structure not readily noticed compared to powerhouse and switchyard, but contributes to visual contrasts associated with the powerhouse.
	Oxbow Powerhouse Slope Fence	Fence	II-III	PR	Seen	Yes	Indian Bar Rafting Access and General Parking Recreation Site. Fencing is discernable on hillsides under some lighting conditions. Metallic color contrasts with native rock enhancing visibility of the fencing.
	Oxbow Powerhouse Road	Project Road	III	PR	Seen	No	Indian Bar Rafting Access and General Parking Recreation Site – immediate foreground views of road experienced by rafters to access the rafting access site.
	Indian Bar Access Road	Project Road	II-III	PR	Seen	Yes	Road provides access to recreation facility.
	Oxbow Powerhouse to Ralston Afterbay Dam Generator Building Communication Line/Powerline	Project Communication Line	II-III	PR	Not noticed	Yes	Indian Bar Rafting Access and General Parking Recreation Site. Line is discernable in hillsides. Metallic color contrasts with native rock enhancing visibility of the line.
ENF Managed Viewsheds							
Eleven Pines Road Viewshed (Forest Road 14N08)							
No Project facilities or features are visible from this viewshed.							
Old Icehouse Road Viewshed (Forest Road 17N02) - Extends from Eleven Pines Road (14N08) Northwest to ENF/TNF Boundary							
No Project facilities or features are visible from this viewshed.							
Old Icehouse Road Viewshed (Forest Road 17N02) - Extends from Eleven Pines Road (14N08) East to Hell Hole Dam							
North Fork Long Canyon Diversion Area	North Fork Long Canyon Diversion Drop Inlet Road	Project Road	II	PR	Not noticed	Yes	Road crosses FR 2 nearly perpendicular to it. Not readily noticed due to road alignment and forested setting.
	North Fork Long Canyon Crossing Removable Section North Road	Project Road	II	PR	Not noticed	Yes	Road crosses FR 2 nearly perpendicular to it. Not readily noticed due to road alignment and forested setting.
South Fork Long Canyon Diversion Area	South Fork Long Canyon Diversion Dam and Pool	Small Diversion Dam and Pool	III	PR	Seen	Yes	Brief views of yellow railings when traveling on FR 2.
	South Fork Long Canyon Diversion and Drop Inlet Road	Project Road	III	PR	Seen	Yes	Brief view of road, entrance sign and cleared area. Road segment down to drop inlet not seen.
	South Fork Long Canyon Diversion and Drop Inlet Cutoff Road	Project Road	II	PR	Not noticed	Yes	

Table 8.11-1. Existing Visual Condition of the Existing MFP Facilities and Consistency with USDA-FS Visual Quality Objectives (continued).

Project Area	Middle Fork Project Facilities	Project Facility Type	EVC Viewshed Rating*	Forest Plan VQOs	Visibility from Viewshed	Consistent with Forest Plan	Discussion/Explanation
ENF Managed Viewsheds (continued)							
Old Icehouse Road Viewshed (Forest Road 17N02) - Extends from Eleven Pines Road (14N08) East to Hell Hole Dam (continued)							
Hell Hole Reservoir Area	Hell Hole Dam and Outlet Works	Large Dam	IV	R	Seen	No	Foreground views of upstream end of dam seen from southern terminus of road. Large scale feature dominates the view and contrasts in form and texture with the surrounding landscape.
	Hell Hole Reservoir & Shoreline	Large Reservoir	II-III	R	Seen	Dependent on water surface elevation	Short term expansive views from above Hell Hole Boat Ramp, and brief view from along ¼ mile section of road that is north of the Dormitory and Cottage Water Supply Tank. EVC rating moves from II to III as water surface elevation lowers and more shoreline
	Hell Hole – Middle Fork Tunnel Gatehouse	Water Conveyance	III-IV	R	Seen	No	Foreground views of gatehouse f. Moderately small, light colored structure is highly noticed due to color contrasts with surrounding cut slopes that are moderately dark in color.
	French Meadows Powerhouse Penstock and Butterfly Valve House	Water Conveyance	II	R	Not noticed	Yes	Penstock not noticed from road due to dark color that blends with surrounding landscape. Butterfly Valve House is not noticed due to the small scale and light color that blends in with the surrounding landscape.
	French Meadows Powerhouse and Switchyard	Powerhouse/ Switchyard	III-IV	R	Seen	No	Powerhouse seen from road segment above boat ramp. Not seen from other road locations. Powerhouse is in middle-ground distance zone from road. Exposed soil adjacent to the powerhouse and switchyard attracts attention to the powerhouse. Powerhouse contrasts
	Dormitory and Cottages Water Supply Tank	Ancillary Facility	II-III	R	Seen	No	Minor facilities located adjacent to road. Seen in immediate foreground for a brief duration. Dark siding on tank blends well with surrounding landscape. Roof of structure contrasts due to light reflective color/material.
	French Meadows Powerhouse and Switchyard to Hell Hole — Middle Fork Tunnel Gatehouse, Dormitory Facility, Operator's Cottages, and Hell Hole Powerhouse Communication Line/Powerline	Communication and Powerline	II-III	R	Seen	No	Power lines and poles are in the immediate foreground of the road near the cottage and dormitory. In combination with the roads and other features they are somewhat noticed. The powerline is not seen from other road locations.
	Operator Cottages and Shop	Ancillary Facility	II-III	R	Not noticed	Yes	Brief foreground views of cottage and workshop from road above boat ramp. Light tan color of buildings contrasts with surrounding forested landscape. Road entrance and gate are more noticeable than structures.
	French Meadows-Hell Hole Tunnel Portal Road	Project Road	II	R	Not noticed	Yes	Seen in middle-ground. Blends well with surrounding landscape.
	French Meadows Powerhouse Road	Project Road	II-III	R	Not noticed	Yes	Road blends well with surrounding landscape due to narrow road width, minor road cuts, and highly textured landscape surrounding the road.
	Hell Hole-Middle Fork Tunnel Gatehouse Road	Project Road	II	R	Not noticed	Yes	Road blends well with surrounding landscape due to narrow road width, minor road cuts, and highly textured landscape surrounding the road.
	Dormitory Facility Road	Project Road	II-III	R	Seen	No	Road entrance seen. Narrow road bed with vegetation close to road bed reduces visual effect of road.
	Operator Cottages and Shop Road	Project Road	II	R	Not noticed	Yes	Brief view of road when in the immediate vicinity of road.
	Spur on North Side of Operator Cottages	Project Road	II	R	Not noticed	Yes	Brief view of road when in the immediate vicinity of road.
Spur on South Side of Operator Cottages	Project Road	II	R	Not noticed	Yes	Brief view of road when in the immediate vicinity of road.	
Hell Hole Dam Spillway Northern Access Point Road	Project Road	II	R	Not noticed	Yes	Blends in well with surrounding landscape.	
Blacksmith Flat Road Viewshed (14N25, also referred to as FR 23)							
Ralston Afterbay Area	Ralston Afterbay and Shoreline	Medium Reservoir	III	R/PR	Seen	Yes	Open, near views Ralston Afterbay upper reaches on Middle Fork and Rubicon rivers. Afterbay blend with natural environment and therefore meets Retention VQO.
	Ralston Afterbay Dam Access Road	Project Road	III	PR	Seen	Yes	
	Ralston Afterbay Sediment Removal Access Point	Ancillary Facility	II	R	Not noticed	Yes	Small feature, not readily noticeable.
	Ralston-Oxbow Tunnel Intake to Ralston Powerhouse Communication Line	Project Communication Line	III	R/PR	Seen	No	Seen in immediate foreground of road for a moderate duration of time. Seen from Middle Fork American River to Ralston Powerhouse. Cleared area of ROW increases visual contrasts associated with the power line.
	Ralston Powerhouse and Switchyard	Powerhouse and Switchyard	IV	R	Seen	No	Facilities seen in foreground and immediate foreground where road parallels Rubicon River. Views are short to moderate in duration. Exposed views, no screening. Facilities dominate and contrast strongly with surrounding landscape due to large scale and an
	Passive Microwave Reflector Station above Ralston Afterbay	Microwave Reflector	III	R	Seen	No	Station is visible from the road under certain lighting conditions. Trail not noticeable from the road.
	Ralston Powerhouse Butterfly Valve House Road	Project Road	II	R	Not noticed	Yes	Road appears as part of Ralston Afterbay Ridge Sediment Disposal Area and is not readily noticeable from 14N25.
Blacksmith Flat Road Viewshed (14N25, also referred to as FR 23) (continued)							
Ralston Afterbay Area (continued)	Ralston Powerhouse to Ralston Powerhouse Butterfly Valve House Communication Line/Powerline	Project Communication Line	III	R	Seen	No	Seen for a short duration from road along Rubicon River. Highly textured hillside reduces visual contrast of power line. Exposed soil of ROW increases visual contrasts associated with the power line.
	Ralston Powerhouse Slope Fence	Project Fence	II	R	Not noticed	Yes	Not noticeable from road.
	Ralston Powerhouse Penstock and Butterfly Valve House Slope Fences	Project Fence	II-III	R	Seen	No	Moderate scale feature noticeable due to immediate foreground views from the road and visual contrasts in color and texture.
	Ralston Powerhouse Penstock and Butterfly Valve House	Water Conveyance	III	R	Seen	No	Open view of lower portion of penstock seen in immediate foreground of road along river near Ralston Powerhouse. Dark color of penstock reduces contrasts with surrounding landscape.
	Storage Building at Middle Fork - Ralston Tunnel Surge Shaft and Tank	Ancillary Facility	III	R	Seen	No	Small feature seen as part of Surge Shaft and Tank. Immediate foreground views of storage facility from road for a short duration of time.
	Middle Fork - Ralston Tunnel Surge Shaft and Tank	Water Conveyance	IV	R	Seen	No	Immediate foreground view for short duration of large scale feature.
	Ralston Ridge Sediment Disposal Area	Disposal Area	IV	R	Seen	No	Large scale feature dominates view from the road for a short duration. Foreground views of open, exposed soil areas with engineered land contours.

Table 8.11-1. Existing Visual Condition of the Existing MFP Facilities and Consistency with USDA-FS Visual Quality Objectives (continued).

Project Area	Middle Fork Project Facilities	Project Facility Type	EVC Viewshed Rating*	Forest Plan VQOs	Visibility from Viewshed	Consistent with Forest Plan	Discussion/Explanation
ENF Managed Viewsheds (continued)							
Chipmunk Ridge Road Viewshed (14N09, also referred to as FR 24)							
No Project facilities or features are visible from this viewshed.							
Hunters Trail Viewshed (trail near spur trail from FR 96 visited only)							
No Project facilities or features are visible from this viewshed.							
Hell Hole Reservoir Viewshed							
Hell Hole Reservoir Area	Hell Hole Dam and Outlet Works	Large Dam	IV	R	Seen	No	Foreground and middleground views of dam from most reservoir locations, except boat ramp area and upper reservoir area. Large scale feature creates contrasts in form, line and texture depending on the extent of exposure (water surface elevation). Outlet works not seen because they are located on downstream side of dam.
	Hell Hole Reservoir & Shoreline	Large Reservoir	II-IV	R	Seen	Dependent on water surface elevation	Meets retention at full pool/ partial retention at moderate drawdown. Modification at low reservoir elevations due to dominance of exposed shoreline and color contrasts with surrounding forested landscape.
	Hell Hole – Middle Fork Tunnel Gatehouse	Water Conveyance	III-IV	R	Seen	No	Foreground and middleground views of gatehouse from most reservoir locations, except upper reservoir area. Moderately small, light colored structure is highly noticed due to color contrasts with surrounding moderately dark rock walls.
	French Meadows Powerhouse Penstock and Butterfly Valve House	Water Conveyance	III	R	Seen	No	Penstock readily noticed from foreground distance zone of reservoir, but not readily noticed from middleground viewing locations. Dark colored penstock blends well with surrounding terrain. Butterfly house may be noticed in foreground but not readily noticed from middleground due to small scale and light color of building which blends well with surrounding rock walls. Tunnel muck next to the penstock and powerhouse dominates views of the area. Area seen from foreground and middleground reservoir locations. The large area covered by the muck, and form and texture of the material create a strong contrast to the surrounding characteristic landscape.
	French Meadows Powerhouse and Switchyard	Powerhouse/ Switchyard	IV	R	Seen	No	Powerhouse and switchyard noticed in the foreground and middleground distance zones. Color of powerhouse and switchyard similar to surrounding terrain, reducing color contrasts. Moderate contrasts in form and texture. Tunnel muck next to the powerhouse dominates views of the area. Area seen from foreground and middleground reservoir locations. The large area covered by the muck, and form and texture of the material create a strong contrast to the surrounding characteristic landscape.
	French Meadows Powerhouse (USGS Gage No. 11427200)	Powerhouse Gage	II	R	Not noticed	Yes	Small scale feature not seen from the reservoir except in the immediate foreground of the gage.
	Hell Hole Reservoir Staff Gage	Reservoir Gage	II	R	Not noticed	Yes	Small scale feature not seen except in the immediate foreground of the gage.
	French Meadows Powerhouse to French Meadows Powerhouse Penstock and Butterfly Valve House Communication Line/Powerline	Communication and Powerline	II-III	R	Not noticed	Yes	Upper portion of poles and some line segments can be seen from foreground locations. However, feature is not readily noticeable from most locations due to small scale of feature and screening of the feature by topography and vegetation.
	French Meadows Powerhouse and Switchyard to Hell Hole — Middle Fork Tunnel Gatehouse, Dormitory Facility, Operator's Cottages, and Hell Hole Powerhouse Communication Line/Powerline	Communication and Powerline	II-III	R	Seen	No	Seen in foreground from western half of reservoir. Powerline is not readily noticeable in most locations due to vegetative screening.
	Hell Hole Substation	Substation	II-III	R	Not noticed	Yes	Substation is screened by vegetation and is not readily noticeable as seen from the south shore of the reservoir.
	Dormitory Facility	Ancillary Facility	II-III	R	Seen	No	Visible from some areas of reservoir but not readily noticeable.
	French Meadows Powerhouse Penstock Rock Fence	Fence	II	R	Not noticed	Yes	
	French Meadows Powerhouse Slope Fence	Fence	II-III	R	Not noticed	Yes	Small scale feature seen only from immediate foreground of powerhouse area. Not discernable from most other reservoir locations.
	French Meadows-Hell Hole Tunnel Portal Road	Project Road	II-III	R	Not noticed	Yes	Cut slope associated with road seen in foreground and middleground. Road cut is not visually evident because feature blends in with the surrounding rock reducing color contrasts.
	French Meadows Powerhouse Road	Project Road	II-III	R	Not noticed	Yes	Road seen in foreground, creates a line on hillside. However, it is not visually evident due to a lack of road cuts, good vegetative screening and the highly textured character of the surrounding landscape.
Hell Hole-Middle Fork Tunnel Gatehouse Road	Project Road	II-III	R	Not noticed	Yes	Road can be seen in foreground from the west end of the reservoir. However, minimal road cuts and partial vegetative screening results in road being not readily noticeable.	
Hell Hole Reservoir Viewshed (continued)							
Hell Hole Reservoir Area (continued)	Hell Hole Dam and Powerhouse Road	Project Road	IV	R	Seen	No	Upper portion road can be seen from most reservoir locations. Road is integrated part of dam and spillway.
	Hell Hole Dam Spillway Northern Access Point Road	Project Road	II-III	R	Not noticed	Yes	Upper portion road can be seen from most reservoir locations. However, road is integrated part of dam and spillway so it is not noticeable.

Table 8.11-1. Existing Visual Condition of the Existing MFP Facilities and Consistency with USDA-FS Visual Quality Objectives (continued).

Project Area	Middle Fork Project Facilities	Project Facility Type	EVC Viewshed Rating*	Forest Plan VQOs	Visibility from Viewshed	Consistent with Forest Plan	Discussion/Explanation
ENF Managed Viewsheds (continued)							
Middle Fork American River Viewshed							
Ralston Afterbay Area	Ralston Afterbay Dam and Outlet Works	Medium Dam	IV	R/PR	Seen	No	Due to immediate foreground views from river, dam would dominate the characteristic landscape due to contrasts in form, and color.
	Oxbow Powerhouse and Switchyard	Powerhouse/ Switchyard	IV	PR	Seen	No	Short term viewing by whitewater boaters putting in at Indian Bar Rafter Put-in, and by other visitors using this access point.
	Middle Fork American River near Foresthill (USGS Gage No. 11433300)	Stream Gage	III	PR	Seen	Yes	Short term viewing by rafters or anglers. Staff plate and pipe is adjacent to river and visible from river. Metal stairs are mounted on bedrock above the river. Small scale object, visually unobtrusive.
	Oxbow Powerhouse (USGS Gage No. 11433212)	Powerhouse Gage	II	PR	Not noticed	Yes	
	Photovoltaic Pole and Powerline at Middle Fork American River Gage near Foresthill	Photovoltaic Pole and Powerline	II	PR	Not noticed	Yes	Short term viewing of isolated gage in river by rafters. Due to the small scale of the object, it is visually unobtrusive.
	Oxbow Powerhouse Slope Fence	Fence	II	PR	Not noticed	Yes	Slope fence is visible in certain lighting conditions but otherwise not noticeable due to color and texture of adjacent bedrock.
Rubicon River Wild and Scenic River Viewshed							
Hell Hole Reservoir Area	Hell Hole Dam and Outlet Works	Large Dam	IV	R	Seen	No	Foreground views of dam from river downstream of dam. Views of the dam dominate. Dam contrasts in scale, form, and texture with the characteristic landscape.
	Hell Hole Powerhouse	Powerhouse	III	R	Seen	No	Seen in immediate foreground at base of dam. Small scale structure blends in color with surrounding characteristic landscape, low contrasts in form, line and texture.
	Rubicon River below Hell Hole Dam (USGS Gage No. 11428800)	Stream Gage and Weir	II-III	R	Seen	No	
	Hell Hole Dam Leakage Weir	Leakage Weir	II-III	R	Not noticed	Yes	Not distinguishable from dam.
	French Meadows Powerhouse and Switchyard to Hell Hole — Middle Fork Tunnel Gatehouse, Dormitory Facility, Operator's Cottages, and Hell Hole Powerhouse Communication Line/Powerline	Communication and Powerline	III	R	Seen	No	Poles and lines seen in immediate foreground of the river, and ascending the north slope of the canyon. Features contribute to existing visual disturbance.
	Hell Hole Powerhouse to Rubicon River Gage below Hell Hole Dam Communication Line/Powerline	Communication and Powerline	III	R	Seen	No	Foreground views of line and poles at river and ascending open rock slope. Poles and line are visually evident due to no vegetative screening and contribute to visually cluttered appearance of area below dam.
	Hell Hole Dam Leakage Weir Road	Project Road	III	R	Seen	No	In foreground of river, in immediate vicinity of dam.
	Hell Hole Dam and Powerhouse Road	Project Road	IV	R	Seen	No	Road seen in immediate foreground from river below dam. Road contributes to the disturbed character of the area.
	Rubicon River Gage below Hell Hole Dam Road	Project Road	III	R	Seen	No	Road seen in immediate foreground from river below dam. Lack of road cuts minimizes visual effects but contributes to disturbed character of the area.
	Hell Hole Dam Spillway Discharge Channel Road	Project Road	IV	R	Seen	No	Road seen in immediate foreground from river below dam. Road contributes to the disturbed character of the area.
Ralston Afterbay Area	Ralston Afterbay	Medium Reservoir	II-III	R/PR	Seen	Yes	Upper end of reservoir is visible from Rubicon River but meets Retention VQO.
	Ralston Powerhouse Penstock and Butterfly Valve House	Water Conveyance	IV	R	Seen	No	Penstock creates solid line on hillside in contrast to highly textured hillside. Appurtenant facilities at base add visual clutter. Penstock
	Ralston Powerhouse and Switchyard	Powerhouse/ Switchyard	IV	R	Seen	No	Near views of moderate duration while traveling along Rubicon river. Facilities dominate and contrast strongly with surrounding landscape character due to large scale, angular forms and smooth man-made textures created by building and switchyard facilities.
	Ralston Powerhouse (USGS Gage No. 11427765)	Powerhouse Gage	III	R	Seen	No	Minor structure not readily noticed compared to powerhouse and switchyard, but contributing to visual contrasts associated with the powerhouse.
	Ralston Powerhouse to Ralston Powerhouse Butterfly Valve House Communication Line/Powerline	Communication and Powerline	III	R	Seen	No	Powerline is not readily discernable. Visibility of exposed soils associated with the penstock dominates.
	Ralston-Oxbow Tunnel Intake to Ralston Powerhouse Communication Line	Communication Line	III	R/PR	Seen	No/Yes	Powerline seen from Rubicon River along 14N25.
	Passive Microwave Reflector Station above Ralston Afterbay	Microwave Reflector	II-III	R	Not noticed	Yes	This feature could be seen by river users, although it may not be readily noticeable depending upon the viewing angle and time of day.
	Ralston Powerhouse Penstock and Butterfly Valve House Slope Fences	Fence	II	R	Not noticed	Yes	
	Ralston Powerhouse Slope Fence	Fence	III	R	Seen	No	Fencing is discernable on hillsides. Metallic color contrasts with native rock enhancing visibility of the fencing.
Ralston Afterbay Sediment Removal Access Point	Ancillary Facility	II-III	R	Seen	No	Area can be seen from the river when entering the upstream tail of Ralston Afterbay. Access point appears as a put-in or ramp area and	
South Fork Long Canyon Creek Viewshed							
South Fork Long Canyon Diversion Area	South Fork Long Canyon Diversion Dam and Pool	Small Diversion Dam and Pool	IV	PR	Seen	No	Project features dominate Immediate foreground views from stream locations immediately upstream and downstream of the diversion. Built features contrast in form, line, colors and textures with the characteristic landscape. Due to the relatively small scale of the features they are not readily seen beyond the immediate foreground.
	South Fork Long Canyon Diversion Pipe and Drop Inlet	Water Conveyance	III	PR	Seen	Yes	Project feature seen in immediate foreground view of stream. Due to the relatively small scale of the features they are not readily seen beyond the immediate foreground.

Table 8.11-1. Existing Visual Condition of the Existing MFP Facilities and Consistency with USDA-FS Visual Quality Objectives (continued).

Project Area	Middle Fork Project Facilities	Project Facility Type	EVC Viewshed Rating*	Forest Plan VQOs	Visibility from Viewshed	Consistent with Forest Plan	Discussion/Explanation
ENF Managed Viewsheds (continued)							
South Fork Long Canyon Creek Viewshed (continued)							
South Fork Long Canyon Diversion Area (continued)	South Fork Long Canyon Creek below Diversion Dam (USGS Gage No. 11433065)	Stream Gage/Weir	III	PR	Seen	Yes	Gage and weir seen in immediate foreground of stream below diversion.
	South Fork Long Canyon Creek Diversion Tunnel (USGS Gage No. 11433060)	Diversion Gage	III	PR	Seen	Yes	Gage seen in immediate foreground of stream upstream of the diversion.
	Photovoltaic Pole and Powerline at South Fork Long Canyon Creek Gage below Diversion Dam	Photovoltaic Pole and Powerline	III	PR	Seen	Yes	Seen from immediate foreground of stream upstream of the diversion.
	South Fork Long Canyon Diversion and Drop Inlet Road	Project Road	III	PR	Not noticed	Yes	Features seen in immediate foreground of stream downstream of the diversion only.
	South Fork Long Canyon Diversion and Drop Inlet Cutoff Road	Project Road	II	PR	Not noticed	Yes	
	South Fork Long Canyon Diversion Drop Inlet Access Road	Project Road	II	PR	Not noticed	Yes	
North Fork Long Canyon Diversion Area	North Fork Long Canyon Diversion Pipe and Drop Inlet	Water Conveyance	III	PR	Seen	Yes	Seen in immediate foreground of stream bed, otherwise not seen.
	North Fork Long Canyon Diversion Drop Inlet Road	Project Road	III	PR	Seen	Yes	May be seen, area not visited.
Hell Hole Reservoir Developed Recreation Sites Viewsheds (Big Meadows CG, Hell Hole CG, Hell Hole Boat Ramp and Parking Area, Hell Hole General Parking Area, Hell Hole Vista, and Upper Hell Hole CG)							
Hell Hole Reservoir Area	Hell Hole Dam and Outlet Works	Large Dam	III-IV	R	Seen	Dependent on water surface elevation	A portion of the dam is seen in foreground from the Hell Hole General Parking area and in midlegground from Hell Hole Vista and some sites from Hell Hole Campground.
	Hell Hole Reservoir & Shoreline	Large Reservoir	II - III	R	Seen	Dependent on water surface elevation	Reservoir seen from Hell Hole Boat Ramp, parking area, general parking area, Hell Hole Vista, and campsites nearest the reservoir at Hell Hole Campground and from Upper Hell Hole Campground.
	Hell Hole – Middle Fork Tunnel Gatehouse	Water Conveyance	III	R	Seen	No	Foreground views of gatehouse from Hell Hole Boat Ramp, parking area and general parking area. Moderately small, light colored structure is highly noticed due to color contrasts with surrounding moderately dark rock walls.
	French Meadows Powerhouse Penstock and Butterfly Valve House	Water Conveyance	II - III	R	Seen	No	Seen in foreground, at an oblique angle from Hell Hole Vista. Seen in midlegground from Hell Hole Boat Ramp, parking area and general parking area. Penstock and butterfly valve house are not readily noticed due to visual dominance of tunnel muck from all locations.
	French Meadows Powerhouse and Switchyard	Powerhouse/ Switchyard	III	R	Seen	No	Seen in foreground, at an oblique angle from Hell Hole Vista. Seen in midlegground from Hell Hole Boat Ramp, parking area and general parking area. Powerhouse and switchyard are visually evident, but do not dominate the view as does the tunnel muck.
	French Meadows Powerhouse to French Meadows Powerhouse Penstock and Butterfly Valve House Communication Line/Powerline	Communication and Powerline	II - III	R	Seen	No	Seen in foreground from Hell Hole Vista and foreground and midlegground from Hell Hole Boat Ramp area. However, poles and line are not readily noticeable.
	French Meadows Powerhouse and Switchyard to Hell Hole — Middle Fork Tunnel Gatehouse, Dormitory Facility, Operator's Cottages, and Hell Hole Powerhouse Communication Line/Powerline	Communication and Powerline	II - III	R	Seen	No	Foreground views from above of some of the line from Hell Hole Vista. Foreground and midlegground views from Hell Hole Boat Ramp, Parking Area, and General Parking Area of the powerline are not readily noticeable due to vegetative screening.
	Hell Hole Substation	Substation	II - III	R	Not noticed	Yes	
	French Meadows Powerhouse Penstock Rock Fence	Fence	II	R	Not noticed	Yes	
	French Meadows Powerhouse Slope Fence	Fence	II	R	Not noticed	Yes	
	French Meadows-Hell Hole Tunnel Portal Road	Project Road	II - III	R	Not noticed	Yes	Road cut in hillside seen, but not readily noticeable. Road blends well in color and texture with surrounding characteristic landscape. Road not noticeable from Boat Ramp, Parking, and General Parking areas, and not seen from other recreation sites.
	French Meadows Powerhouse Road	Project Road	II - III	R	Not noticed	Yes	Road seen in foreground, creates a line on hillside. Otherwise, is not visually evident due to a lack of road cuts, good vegetative screening and the highly textured character of the surrounding landscape.
	Hell Hole-Middle Fork Tunnel Gatehouse Road	Project Road	II - III	R	Not noticed	Yes	Road seen in foreground from the Boat Ramp, Parking Area, and General Parking Area. Minimal road cuts and partial vegetative screening results in road being not readily noticeable.
	Hell Hole Dam and Powerhouse Road	Project Road	IV	R	Seen	No	Southern access road is visible in background from Hell Hole Vista but is not readily noticeable due to the viewing distance and due to the presence of the dam and associated structures.
Hell Hole Dam Spillway Northern Access Point Road	Project Road	II - III	R	Not noticed	Yes	Northern access road is not noticeable from any recreation facility.	
Middle Meadows Group Campground Viewshed							
No Project facilities or features are visible from this viewshed.							

Table 8.11-1. Existing Visual Condition of the Existing MFP Facilities and Consistency with USDA-FS Visual Quality Objectives (continued).

Project Area	Middle Fork Project Facilities	Project Facility Type	EVC Viewshed Rating*	Forest Plan VQOs	Visibility from Viewshed	Consistent with Forest Plan	Discussion/Explanation
ENF Managed Viewsheds (continued)							
Big Crater Special Interest Area Viewshed (area not visited, information based on consultation with USDA-FS landscape architect)							
Middle Fork Interbay Area	Passive Microwave Reflector Station above Middle Fork Interbay	Microwave Reflector	III	PR	Seen	Yes	Likely view across canyon from rim of Big Crater. Small scale object, light color contrasts with surrounding vegetation.
	Middle Fork Powerhouse Penstock and Butterfly Valve House Road	Project Road	III	PR	Seen	Yes	Possible views of exposed slopes and road bed due to viewing angle and foreground viewing distance.
	Middle Fork Powerhouse Butterfly Valve House Road	Project Road	III	PR	Seen	Yes	Possible views of exposed slopes and road bed due to viewing angle and foreground viewing distance.
	Middle Fork Interbay Dam Road	Project Road	III	R/PR/M	Seen	Yes	Most likely road is fairly well screened due to heavily vegetated slope, middleground distance, and viewing angle.
Little Crater Interest Area Viewshed (area not visited, information based on consultation with USDA-FS landscape architect)							
No Project facilities or features are visible from this viewshed.							

FIGURES

Hell Hole Dam and Spillway Area as seen from Hell Hole Vista



Figure 8.11-1. Existing dam and spillway with current maximum normal operating WSE (No-Action Alternative).



Figure 8.11-2. Existing dam and spillway with 6-foot raise in current maximum normal operating WSE, plus new spillway gates, gatehouse and powerlines (Proposed Action).

Note that the existing power lines are not discernable under the No-Action Alternative. Similarly, neither the existing nor the new power lines are discernable under the Proposed Action.

MAPS