Application for a New License
Major Project – Existing Dam

Visual Resource Management Plan

Security Level: Public

Yuba River Development Project
FERC Project No. 2246

April 2014

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None.

GLOSSARY – DEFINITIONS OF TERMS, ACRONYMS AND ABBREVIATIONS

EVC	Existing Visual Condition
FERC or Commission	Federal Energy Regulatory Commission
FERC Project Boundary	The FERC Project Boundary is shown in Exhibit G to YCWA's Application for New License and is subject to change.
Forest Service	United States Department of Agriculture, Forest Service
KOP	Key Observation Point
LRMP	Land and Resource Management Plan
NFS	National Forest System (used in association with land ownership, such as NFS land)
PNF	Plumas National Forest
Project	Yuba River Development Project
TNF	Tahoe National Forest
VQO	Visual Quality Objective
VRMP	Visual Resource Management Plan
YCWA	Yuba County Water Agency

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SECTION 1.0

INTRODUCTION

In April 2014, the Yuba County Water Agency (YCWA), pursuant to Section 5.18 of Title 18 of the Code of Federal Regulations (C.F.R.), files with the Federal Energy Regulatory Commission (FERC or Commission) an Application for a New License for Major Project – Existing Dam – for YCWA's 361.9 megawatt Yuba River Development Project (Project), FERC Project Number 2246. The initial License for the Project was issued by the Federal Power Commission, FERC's predecessor, to YCWA on May 16, 1963, effective on May 1, 1963. The Federal Power Commission's May 6, 1966, Order Amending License changed the License's effective date to May 1, 1966, for a term ending on April 30, 2016.

YCWA included in its Application for New License this Visual Resources Management Plan.

The United States Department of Agriculture, Forest Service's (Forest Service) Federal Power Act (FPA) Section 4(e) authority only applies in this Plan to Project facilities on National Forest System (NFS) land, and the United States Army Corps of Engineers' (USACE) FPA Section 4(e) authority only applies in this Plan to Project facilities on federal land administered by the USACE. The Forest Service administers the Plumas National Forest (PNF) in conformance with the PNF Land and Resource Management Plan (USDA 1988), as amended, and administers the Tahoe National Forest (TNF) in conformance with TNF Land and Resource Management Plan (USDA 1990), as amended.

1.1 Background

1.1.1 Yuba River Development Project

The Project is located in Yuba, Sierra and Nevada counties, California, on the main stems of the Yuba River, the North Yuba River and the Middle Yuba River, and on Oregon Creek, a tributary to the Middle Yuba River. Major Project facilities, which range in elevation from 280 feet to 2,049 feet,[1] include: 1) New Bullards Bar Dam and Reservoir; 2) Our House and Log Cabin diversion dams; 3) Lohman Ridge and Camptonville diversion tunnels; 4) New Colgate and Narrows 2 power tunnels and penstocks; 5) New Colgate, New Bullards Minimum Flow and Narrows 2 powerhouses; 6) 16 recreation areas on New Bullards Bar Reservoir; and 7) appurtenant facilities and features (e.g., roads and streamflow gages). The existing Project does not include any aboveground open water conduits (e.g., canals or flumes) or any transmission lines.

The Project includes 16 developed recreation facilities. These include: 1) Hornswoggle Group Campground; 2) Schoolhouse Campground; 3) Dark Day Campground; 4) Cottage Creek

[1] All elevation data in this exhibit are in United States Department of Commerce, National Oceanic and Atmospheric Association, National Geodetic Survey Vertical Datum of 1983, unless otherwise stated.

Campground;[2] 5) Garden Point Boat-in Campground; 6) Madrone Cove Boat-in Campground; 7) Frenchy Point Boat-in Campground; 8) Dark Day Picnic Area; 9) Sunset Vista Point; 10) Dam Overlook; 11) Moran Road Day Use Area; 12) Cottage Creek Boat Launch;[3] 13) Dark Day Boat Launch, including the Overflow Parking Area; 14) Schoolhouse Trail; 15) Bullards Bar Trail; and 16) floating comfort stations.[4] All of the recreation facilities are located on NFS land, with the exception of the Dam Overlook, Cottage Creek Boat Launch and small portions of the Bullards Bar Trail, which are located on land owned by YCWA. All of the developed recreation facilities are located within the existing FERC Project Boundary, except for a few short segments of the Bullards Bar Trail to the east of the Dark Day Boat Launch. In addition, the Project includes two undeveloped recreation sites at Our House and Log Cabin diversion dams, both located on NFS land and within the existing FERC Project Boundary.

Figure 1.1-1 shows the Project Vicinity,[5] proposed Project and proposed FERC Project Boundary.

[2] Cottage Creek Campground was burned in 2010 and has not been rebuilt. YCWA is in discussions with the Forest Service regarding rebuilding the burned campground.

[3] Emerald Cove Marina provides visitor services at Cottage Creek Boat Launch, including houseboat and boat rentals, boat slips and moorings, fuel and a general store. The marina is operated under a lease from YCWA by a private company.

[4] The Project recreation facilities included one campground that is no longer part of the Project. Burnt Bridge Campground was closed initially by the Forest Service in 1979 due to low use levels. FERC, in an August 19, 1993 Order, which approved YCWA's Revised Recreation Plan, directed YCWA to remove all improvements and restore the Burnt Bridge Campground to the condition it was in prior to development of the facility. YCWA consulted with the Forest Service and all that remains of Burnt Bridge Campground today is the circulation road and vehicle spurs; all other facilities were removed.

[5] For the purpose of this Exhibit E, "Project Vicinity" refers to the area surrounding the proposed Project on the order of United States Geological Survey (USGS) 1:24,000 quadrangles.

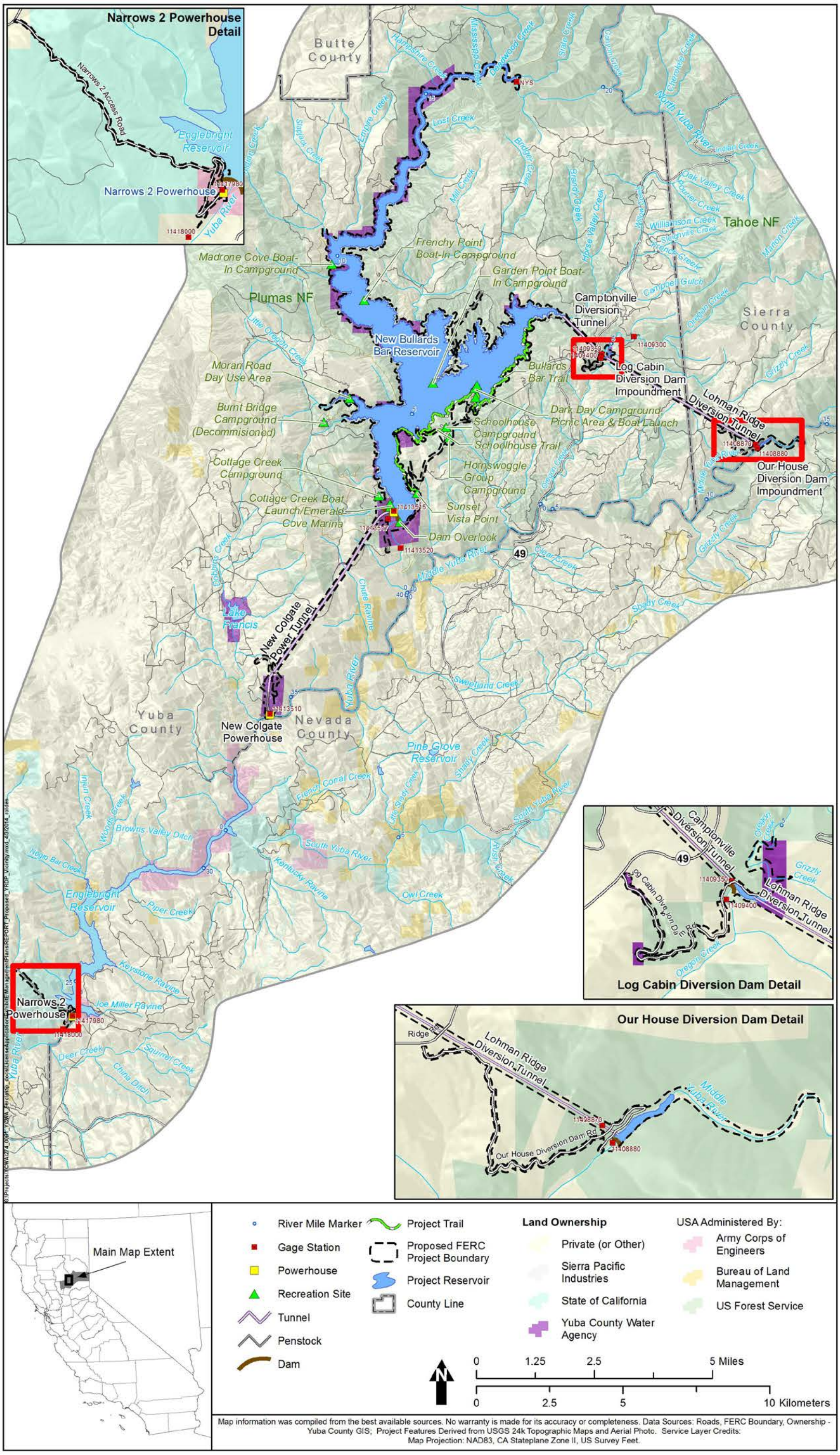

Figure 1.1-1. Yuba County Water Agency's Yuba River Development Project and Project Vicinity.

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1.1.2 Forest Service Management Directions

The TNF Land and Resource Management Plan (LRMP), as amended, established Visual Quality Objectives (VQOs) under Forest Standards and Guidelines and Management Area direction that require land management activities meet specific VQOs on various areas of NFS land within the TNF. The VQOs are displayed on a map provided in the TNF LRMP identified as the Recreation Element, Visual Quality Objective Map, dated 1989. The VQOs are defined under the TNF LRMP Standards and Guidelines. For the Project, the pertinent VQOs are "Retention," "Partial Retention" and "Modification." The Retention VQO allows management activities that are not visually evident. The Partial Retention VQO allows management activities that remain visually subordinate to the characteristic landscape. The Modification VQO allows management that may visually dominate the original characteristic landscape, but activities that alter vegetative and land form must borrow from naturally established form, line, color, or texture and at such a scale that the visual characteristics are those of natural occurrences within the surrounding area or character type. The VQO's and their definitions are primarily focused on forest land management activities, but they also apply to existing facilities and proposed facilities.

In a similar fashion, NFS land managed by the PNF is guided by the PNF LRMP. VQOs established under the Forest Standards and Guidelines and Management Area direction require land management activities meet a specific VQO on various areas of NFS land within the PNF. The VQOs are displayed on a map provided in the PNF LRMP identified as the Recreation Element, Visual Quality Objective Map, dated 1988. The VQOs are defined under the PNF LRMP Standards and Guidelines. The definitions of the VQOs are the same as the TNF described above since they are part of a National Visual Management System.

1.2 Purpose of the Visual Resource Management Plan

This Plan provides guidance for the management of visual resources within the FERC Project Boundary, with special emphasis on visual resources on NFS land.[6]

YCWA will coordinate, to the extent appropriate, the efforts required under this Plan with other Project resource efforts, including implementation of other resource management plans and measures included in the new license.

1.3 Objectives of the Visual Resource Management Plan

The objectives of this Plan are as follows:

- Improve the visual quality of the Project.
- Bring Project facilities into compliance with the VQOs of the TNF and PNF LRMP to the extent possible.

[6] The FERC Project Boundary is shown in Exhibit G to YCWA's Application for New License, and may change from time to time over the term of the new license.

- Identify how to address Project facility building materials, colors, landscaping, screening along with clearings and spoil piles at the Project so that they meet the TNF's and PNF's VQOs.
- Use mitigation measures such as, but not limited to, the following to meet the TNF's and PNF's objectives to help the Project better integrate into its visual environment on NFS land:
  - Use surface treatments with colors and materials that are in harmony with the surrounding landscape
  - Use native plant species, where appropriate, to screen facilities from view. Reshape and re-vegetate disturbed areas so that they blend in with their surroundings
  - Remove Project-induced debris piles that detract from visual quality

1.4 Contents of the Visual Resource Management Plan

This Visual Resource Management Plan includes the following:

- Section 1.0. Introduction. This section includes introductory information, including the purpose and goal of the Visual Resource Management Plan.
- Section 2.0. Identifying Mitigation Measures. This section includes information on how visual resources were evaluated and mitigation measures identified.
- Section 3.0. Proposed Mitigation Measures. This section includes a description of proposed mitigation measures.
- Section 4.0. Schedule for Implementation. This section includes information on the schedule for implementing mitigation measures.
- Section 5.0. Future Projects. This section describes the various steps required between YCWA and the Forest Service to ensure future projects will not impact existing visual resources on NFS land. This includes development of project-specific Visual Resource Protection Plans.
- Section 6.0. Reporting, Consultation and Plan Revisions. This section details consultation between YCWA and the Forest Service before a mitigation task is implemented on the ground.
- Section 7.0. References Cited. This section provides a list of the references cited in the Visual Resource Management Plan.

SECTION 2.0

IDENTIFYING MITIGATION MEASURES

This section addresses how mitigation measures were identified for specific facilities. The three steps in the process were:

- Use the Visual Resource Evaluations to identify facilities needing mitigation
- Identify mitigation measures and visual enhancement for facilities
- Review mitigation measures and visual enhancement for feasibility

2.1 Visual Resource Evaluations

In spring 2012, YCWA conducted a visual resource evaluation of all facilities and features associated with the Project on NFS land. The results of this evaluation are documented in Technical Memorandum 10-1, *Visual Quality on Federal Land* (YCWA 2012). The primary purpose of the visual resource evaluation was to describe the existing visual condition (EVC) of all facilities on federal land, as well as on non-federal land, within the FERC Project Boundary, and compare that to the visual quality objectives set in the TNF and PNF LRMPs. Where the EVC for a Project facility or feature did not meet the VQOs, the facility or feature was identified as one where mitigation should be considered. The evaluation of facilities and features and whether they met VQOs is presented in Table 2.1-1.

Table 2.1-1 Existing visual condition assessment of Our House Diversion Dam and Impoundment, Log Cabin Diversion Dam and Impoundment, and New Bullards Bar Dam and Reservoir.

Project Facilities Viewing Location	KOP or PP[1]	LRMP VQO[2]	EVC Rating[3]	Consistent with LRMP[4]	Land Ownership	Discussion and Explanation
OUR HOUSE DIVERSION DAM AND IMPOUNDMENT						
Our House Diversion Dam, Impoundment, and Diversion Tunnel	PP 1	M	Not applied (NA)	Yes, these views are from Sensitivity Level 3	NFS	The dam and impoundment are not seen from identified highways and recreation use areas due to their remote location deep in a canyon. Access is by a one-lane paved road down to the Middle Yuba River. Access to the dam is through a locked gate. However, the public may walk around the gate. Views at the site are foreground. The facilities meet the TNF VQO of Modification.
LOG CABIN DIVERSION DAM AND IMPOUNDMENT						
Log Cabin Diversion Dam, Impoundment, and Diversion Tunnel	PP 2	R/PR	NA	Yes, these views are from Sensitivity Level 3	NFS	The dam and impoundment are not seen from identified highways and recreation use areas due to their location in a deep canyon. Access is by a two-lane paved road down to Oregon Creek. Access to the dam is through a locked gate. However, the public may walk around the gate approximately 0.6 mile down to Oregon Creek. Views at the site are foreground. The facilities meet the TNF VQOs because the facilities are not seen from any identified public roads or use areas. Both topographic and vegetative screening block views of this facility.
NEW BULLARDS BAR DAM AND RESERVOIR						
Madrone Cove Boat-In Campground	KOP 1	R	II to IV	Yes, except for drawdown impact	YCWA	New Bullards Bar Reservoir is seen in the foreground from a neutral viewer position from the Madrone Cove Boat-In Campground shoreline. View duration is long because campers occupy the campground overnight and have long periods available to view the reservoir. Views from the campground are to the north and northeast. At high water, the reservoir looks quite natural with no visual contrast visible. As the water level drops, visual contrast will start emerging and become a moderate and then strong contrast due to the reddish soils and total lack of vegetation compared to the surrounding native forest.
Frenchy Point Boat-In Campground	KOP 2	R	II to IV	Yes, except for drawdown impact	NFS	New Bullards Bar Reservoir is seen in the foreground from a superior viewer position from Frenchy Point Boat-In Campground. Views are partially screened by native forest vegetation. View duration is long because campers occupy the campground overnight and have long periods available to view the reservoir. Views from the campground are to the north, east, south and west due to the site being on a peninsula. At high water, the reservoir looks quite natural and there is no visual contrast visible. As the water level drops, visual contrast will start appearing and will become a moderate and then strong contrast due to the reddish soils and total lack of vegetation compared to the surrounding native forest.
Garden Point Boat-In Campground	KOP 3	R	II to IV	Yes, except for drawdown impact	NFS	New Bullards Bar Reservoir is seen in foreground from a neutral viewer position from Garden Point shoreline. View duration is long because campers occupy the campground overnight and have long periods available to view the reservoir from the shoreline. Views from the campground are to the southeast, south and southwest. At high water, the reservoir looks quite natural and there is no visual contrast visible. As the water level drops, visual contrast will start appearing and will become a moderate and then strong contrast due to the reddish soils and total lack of vegetation compared to the surrounding native forest.

Table 2.1-1. (continued)

Project Facilities Viewing Location	KOP or PP[1]	LRMP VQO[2]	EVC Rating[3]	Consistent with LRMP[4]	Land Ownership	Discussion and Explanation
NEW BULLARDS BAR DAM AND RESERVOIR (continued)						
Moran Road Day Use Area	KOP 4	R	II to IV	Yes	YCWA	New Bullards Bar Reservoir is seen in the foreground from a neutral viewer position located at the terminus of Moran Road at the water's edge. The view from Moran Road is to the southeast. The view duration is long (minutes or longer) for recreation users launching their boats or using the road terminus as a day use site. At high pool, the reservoir looks very attractive and natural. Later in the summer, the drawdown leaves exposed banks of reddish soils and tree stumps. The visual contrast is high due to the strong visual contrast of the red clay banks and tree stumps compared to the native green forest. No major facilities are visible from this KOP. At high pool, one floating comfort station is just visible in the middle ground on the reservoir.
Dark Day Campground	KOP 5	R	II to IV	Yes, except for drawdown impact	NFS	New Bullards Bar Reservoir is seen in the foreground and middle ground from a partially screened superior viewer position located along the first parking area in the campground past the overflow boat launch parking area. Views of the reservoir are to the north and northwest. Views of New Bullards Bar Dam or Cottage Creek Marina do not exist because they are located over 3 miles to the southwest and blocked from view topographically. In the late spring with a full pool, the reservoir provides a natural look with no visual contrast. Later in the summer, the drawdown zone around the reservoir presents an area of high visual contrast. The predominately reddish clay soils and smooth textures are a strong visual contrast to the surrounding native green forest.
Dark Day Boat Launch	KOP 6	R	II to IV	Yes, except for drawdown impact	NFS	New Bullards Bar Reservoir is seen primarily in the foreground and some middle ground from a neutral viewer position located just above the courtesy dock at high water. The view of the reservoir is to the northeast and north. There are no views of New Bullards Bar Dam or Emerald Cove Marina because they are located over 3 miles to the southwest and blocked from view topographically. In the late spring with a full pool, the reservoir provides a natural look with no visual contrast. Later in the summer, the drawdown zone around the reservoir presents an area of high visual contrast. The predominately red clay soils and smooth textures are a strong visual contrast to the surrounding native green forest.
Sunset Vista Point and Bullards Bar Trailhead	KOP 7	M-TNF PR-PNF	IV	Yes, for TNF M-VQO No, for PNF PR-VQO	NFS	New Bullards Bar Dam and Reservoir is seen in the foreground from a superior viewer position located at a developed vista point. The view is framed by native forest vegetation. The view of the dam and reservoir is to the southwest. The view duration is long because forest visitors are invited to come to the vista point to enjoy the view. At high pool, the curved linear element of the dam and the bright orange log boom present enough visual contrast to be considered a Type IV EVC. In addition, the marina and moored houseboats all in light or white colors add to the visual contrast. Marysville Road beyond the dam and County Road 169 present linear elements and visible road cuts. Also visible from the vista point is the location of a recent fire resulting in dead, dying and downed trees on the hillside above and downstream of the dam, which is not related to the project, but may temporarily increase its visibility from nearby roads. Later in the summer, drawdown will increase the visual contrast from the exposed dam and the exposed shoreline.

Table 2.1-1. (continued)

Project Facilities Viewing Location	KOP or PP[1]	LRMP VQO[2]	EVC Rating[3]	Consistent with LRMP[4]	Land Ownership	Discussion and Explanation
NEW BULLARDS BAR DAM AND RESERVOIR (continued)						
Bullards Bar Trail	KOP 8	R for shoreline PR and M for dam	III to IV	Yes, for the reservoir and the dam	NFS and YCWA	New Bullards Bar Reservoir is seen in the foreground from a partially screened neutral viewer position located along Bullards Bar Trail. New Bullards Bar Dam is seen just beyond the foreground at the beginning of middle ground. The view from Bullards Bar Trail is to the southwest partially screened by vegetation. The view duration is long (minutes or longer) for recreation users hiking along the trail. There are several screened views along the trail. At high pool and middle ground, the dam is not that visible. The light to medium gray concrete presents some visual contrast to the water and surrounding green vegetation, but overall is considered low visual contrast. Emerald Cove Marina is also in middle ground and the light colors create some contrast but with vegetative screening and distance is also considered low visual contrast. Later in the summer, the drawdown exposes more of the concrete, smooth textured dam and may be considered a moderate visual contrast.
Cottage Creek Boat Launch	KOP 9	M-TNF PR-PNF	III to IV	Yes, for TNF M-VQO No, for PNF PR-VQO	YCWA	New Bullards Bar Dam is seen in foreground from a neutral viewer position located at the Cottage Creek boat launch turn around. The view from the boat launch is to the south. The view duration is long (minutes) for recreation users launching their boats or going to Emerald Cove Marina to rent a boat or purchase food and supplies. At high pool, the dam has little exposure (approximately 30 feet) and the color is medium to dark gray concrete. The visual contrast is moderate due to the straight line introduced at the top of the dam, the chain link fence, and the straight uprights of the light poles. The gate lifting apparatus introduces additional geometric shapes but the uprights are painted a gray green that reduces contrast. The native forest green behind the dam provides visual contrast to the medium to dark gray of the dam. In the immediate foreground the bright orange floating booms and the light/white colors of the marina present strong visual contrast to the water and the generally green backdrop of the local forest. At the southwest end of the dam, the cut face of the rock with light gray colors and horizontal terracing presents low visual contrast due to the re-vegetation with native pines on the cut face. As the water level drops, the visual contrast of the dam will increase compared to the surrounding native forest green.
Cottage Creek Boat Launch Parking Area	KOP 10	M-TNF PR-PNF	III to IV	Yes, for TNF M-VQO No, for PNF PR-VQO	YCWA	New Bullards Bar Dam is seen in the foreground from a superior viewer position located at the Cottage Creek boat launch parking area. The view from the parking area is to the south. The view duration is long (minutes) for recreation users parking their cars and trailers. At high pool, the dam has little exposure (approximately 30 feet) and the color is medium to dark gray concrete. The visual contrast is moderate due to the straight line introduced at the top of the dam, the view of the top of the dam including Marysville Road, the chain linked fence, and the straight uprights of the light poles. The spillway gate apparatus introduces additional geometric shapes, but the uprights are painted a gray/green that reduces contrast. The native forest green behind the dam sets up the visual contrast to the medium to dark gray of the dam. In the foreground, the bright orange floating booms and the light/white colors of the marina present strong visual contrast to the water and the generally green backdrop of the local forest. As the water level drops, the visual contrast of the dam increases significantly compared to the surrounding native forest green.

Table 2.1-1 (continued)

Project Facilities Viewing Location	KOP or PP[1]	LRMP VQO[2]	EVC Rating[3]	Consistent with LRMP[4]	Land Ownership	Discussion and Explanation
NEW BULLARDS BAR DAM AND RESERVOIR (continued)						
New Bullards Bar Dam Overlook	KOP 11	M	IV	Yes, for TNF-M	YCWA	New Bullards Bar Dam is seen in the immediate foreground from a slightly superior to neutral viewer position located at the edge of the dam on a vista point along Marysville Road. The view from Sunset Vista Point is to the north. The view duration is long (minutes) for motorists parking their cars and stopping to look at the dam. At full pool, around 30 feet of dam is exposed, but the light and medium gray concrete is in strong contrast to the water and surrounding native forest due to the size of the improvements and close proximity view. The white colors of the houseboats moored to the right of the dam also present visual contrast, but are of less consequence as seen in the middle ground. The bright orange booms also present strong visual contrast but are that color for safety purposes. With water level drawdown, the contrast would be even stronger.
Marysville Road Turn Out	KOP 12	PR-PNF M-TNF	IV	No, for PNF-PR Yes, for TNF-M	YCWA	New Bullards Bar Dam is seen in the foreground from a slightly superior to superior viewer position located at a road turnout along Marysville Road (County Road 8). The view from the turnout is to the northeast. This view is similar to views from Marysville Road. The view duration is long (minutes) for motorists parking their cars, but similar views from moving cars would be a few seconds. These views of the down stream side of the dam are fairly new due to a recent fire. In about 20 years, new trees will grow and block this view. Due to the height of the dam (645 feet), a large amount of light to medium gray concrete is seen from this observation point. This light color and straight line at the top of the dam is in strong contrast to the reservoir water and surrounding green native forest. The white colors of Emerald Cove Marina also present visual contrast but are of less consequence as seen in the middle ground.
Burnt Bridge Campground	PP 3	R	No view of reservoir (NA)	Yes	NFS	Burnt Bridge Campground has been closed for many years. No visual analysis was conducted because there are no views of the reservoir or facilities from this closed campground. One picture was taken from the campground loop closest to the reservoir to demonstrate the local views of vegetation and the lack of views of the reservoir.
Schoolhouse Campground	PP 4	R	No view of reservoir (NA)	Yes	NFS	Schoolhouse Campground provides overnight camping for families arranged with single camping spurs and is located adjacent to the reservoir. No visual analysis was conducted because there were no views of the reservoir or facilities from this campground. Dense forest vegetation blocks the view. One picture was taken from Campsite No. 23, the closest to the reservoir and facing the reservoir, to demonstrate the local views of vegetation and the lack of views of the reservoir. No EVC evaluation was conducted due to lack of views.
Parking Area for Sunset Vista Point and Bullards Bar Trailhead	PP 5	R/PR/M	No view of facilities or reservoir	Yes	NFS	Bullards Bar Trailhead users have no views of the dam or reservoir from the parking area. Vegetation blocks the views. No visual analysis was conducted because no views of the reservoir or facilities from this trailhead. One picture was taken from the trailhead facing the reservoir to demonstrate the local views of vegetation and the lack of views of the reservoir. See KOP 7, Sunset Vista Point, for views very close to this parking area.

Source: Table 3.0-1 in YCWA's Technical Memorandum 10-1, *Visual Quality on National Forest System Land.*

[1] KOP: Key Observation Point or PP: Photo Point.

[2] LRMP VQO: LRMP Visual Quality Objectives. R = Retention; PR = Partial Retention; and M = Modification

[3] EVC Rating: Existing Visual Condition rating. Forest Service EVC Type I through V. EVC II is equivalent to a Retention VQO which would be considered a better visual condition. EVC IV is equivalent to a Modification VQO, a less desirable condition.

[4] Refers to TNF's LRMP.

2.2 Mitigation Measures Identified

During the spring 2012 field assessment of EVC, YCWA explored possible mitigation measures that could be applied to Project facilities to improve their visual quality. No feasible mitigation measures were identified. It should be noted that some facilities did not meet VQO standards, but no viable mitigation measure was identified. This was particularly true for Emerald Cove Marina and New Bullards Bar Dam, as the water level decreased over the summer season. Dam structures often have high visual contrast and do not meet visual objectives, but the engineering and safety requirements from the Commission strictly limit what can be done to a dam structure. As noted in Study 10-1, *Visual Quality on Federal Land*, the motor boats and house boats introduce high color contrast to the reservoir but these boats and the associated facilities are part of normal recreation management and expected by the public.

In fall 2012, YCWA met with the TNF's landscape architect in the field to discuss possible visual quality mitigation measures. Two mitigation measures were identified and are discussed in Section 3.0. In the early summer of 2013, a recreation meeting between YCWA and TNF staff identified the need for visual enhancement activities at Sunset Vista Point (Key Observation Point [KOP] 7). The visual enhancement activities are also discussed in Section 3.0.

2.3 Mitigation Measure Feasibility

The proposed visual mitigation and enhancement measures were reviewed by YCWA for operational feasibility and it was determined to be compatible with current operational needs.

SECTION 3.0

MITIGATION MEASURES

In this section, proposed mitigation measures are listed by facility. For each facility, a short description of the visual contrast is provided along with the EVC rating, followed by the mitigation measure. The appropriate KOPs are described and typical photographs are provided. The two facilities listed below are located on YCWA lands and are seen from NFS land. In addition, a third facility is listed for visual quality enhancement activities that involve vegetation removal to enhance the view from Sunset Vista Point.

3.1 Emerald Cove Marina Fuel Storage Tanks

These two, 87 octane and premium fuel storage tanks contain fuel that is used to supply the fuel pumps on Emerald Cove Marina floating docks. The tanks are visible in the immediate foreground from the Cottage Creek Boat Ramp, in the foreground from New Bullards Bar Reservoir near the marina, and in the middle ground (i.e., ~0.5 miles) from the Vista Point south of New Bullards Bar Dam. The existing white color of the fuel tanks is in strong contrast to the tan grasses in summer and green grasses in spring and winter as well as the backdrop of dark green conifer forest (EVC. IV). Figure 3.1-1 is a photograph of the fuel storage tanks taken from the Cottage Creek Boat Launch approach road.

Figure 3.1-1. Photograph of Emerald Cove Marina fuel storage tanks.

The visual quality mitigation for the tanks is to paint them gray/green or brown to blend with the surroundings. If technical requirements prevent painting, an alternative mitigation is to construct dark colored fencing that would visually screen the white tanks.

3.2 Gate Controls and Housings on New Bullards Bar Dam

These Project features are visible in the immediate foreground from Marysville Road, in the foreground from the reservoir near the dam, from the dam overlook, and from Bullards Bar Vista Point. The white color of the gate controls and housings are a strong contrast to the surrounding green forest vegetation (EVC IV). Figure 3.2-1 is a photograph of the gate control and housings taken from the Dam Overlook parking area.

Figure 3.2-1. Photograph of the New Bullards Bar Dam gate controls and housings.

The visual quality mitigation for the control gate and housings is to paint them in the color of existing steel structures on the dam (preferably green) so they blend with the surroundings.

3.3 Sunset Vista Point Visual Enhancement

Sunset Vista Point is located on NFS lands approximately 5/8 of a mile north east of New Bullards Bar Reservoir Dam, just off of Marysville Road. The visual enhancement activity is selective vegetation removal to maintain the Vista Point viewing opportunity. Figure 3.3-1 is a photograph of the present view, taken from the Vista Point.

Figure 3.3-1. Photograph of the present view from Sunset Vista Point (KOP 7).

The visual quality enhancement activities involving vegetation removal are as follows:

- Remove small trees and high shrubs from downslope low vegetation zone. Emphasize removal of large shrubs or trees in the immediate foreground (30 feet from vista point) every ten years.
- Remove larger trees further downslope, as tree tops block view of the reservoir, dam and marina. Evaluate every ten years; remove trees as needed.
- Remove scotch broom (*Cytisus scoparius*) in the low vegetation zone as per the Integrated Vegetation Management Plan included in the new license.
- Implement selective thinning of trees up to 300 feet east of existing vista point and 300 feet downhill from the existing trail to open up additional views of the reservoir. Keep some clumps of trees to partially block view of house boats and maintain variety in the thinning treatment.
- Have a YCWA landscape architect assist in marking vegetation for removal to ensure meeting visual quality enhancement objectives.

SECTION 4.0

SCHEDULE FOR IMPLEMENTATION

This section lists the mitigation measure and displays, in table format, when implementation of the mitigation measure will be completed. Mitigation measures are listed in Table 4.0-1, by facility, the required action, and the timeline to accomplish the action. See Section 6.0, Consultation During Implementation for YCWA coordination efforts before mitigation measures are implemented.

Table 4.0-1. Yuba River Development Project visual quality mitigation schedule.

Project Facilities	Action	Timeline
Emerald Cove Marina Fuel Storage Tanks	Paint the fuel storage tanks gray/green or brown to blend with the surroundings. If technical requirements prevent painting, construct dark colored fencing (i.e., preferably dark brown) that would visually screen the white tanks.	Within 3 full calendar years of issuance of the new License
New Bullards Bar Dam Gate Controls and Housings on New Bullards Bar Dam	Paint the gate controls and housings in the color of existing steel structures on the dam (preferably green).	After issuance of the new License, when the facilities are scheduled for painting during normal operations and maintenance
Sunset Vista Point Visual Enhancement vegetation removal	Remove small trees, shrubs, scotch broom, and large trees, as described in Section 3.3, to maintain vista point view of New Bullards Bar Reservoir.	Within 3 full calendar years of issuance of the new License. After first treatment, evaluate for further vegetation removal every ten years.

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SECTION 5.0

FUTURE PROJECTS

5.1 Visual Review Process

For Project modifications on NFS land that may result in changes to the visual environment, the following steps will be followed:

- Step 1. Notify the Forest Service. Notify the Forest Service of planned facility modifications and identify any potential impacts to the existing visual environment of the Project area.
- Step 2. Develop a Draft Visual Resource Protection Plan. If determined by the Forest Service that a visual resource protection plan is required, develop a draft visual resource protection plan that identifies the actions that will be taken to protect, enhance, and/or mitigate the visual resources impacted by the planned modification.
- Step 3. Submit Visual Resource Protection Plan for Review. Provide a draft visual resource protection plan to the Forest Service for review.
- Step 4. Revise and Finalize Visual Resource Protection Plan. Revise and finalize the visual resource protection plan, based on Forest Service review comments.
- Step 5. Submit Visual Resource Protection Plan for Approval. Submit final visual resource protection plan to the Forest Service for approval.

These steps may be coordinated with other resources and be part of a larger notification report or submittal report.

5.2 Visual Resource Protection Plan

Described below are the items a Visual Resource Protection Plan for modification of facilities on NFS land shall address:

- Description of Project. Describe the proposed Project in terms of size, color, texture and form. Describe location of the project in the landscape.
- Map. Provide a map that shows the location of the project and displays the VQOs for the Forest Service.
- Identify VQOs. Identify the VQOs for the Project Area.
- Identify Viewpoints. Determine where the vantage points of the project will be seen from. List roads, trails, water bodies, and recreation sites from which the public may view the project. Identify the most important viewpoints. Locate these viewpoints on a map and label them as KOPs.
- Describe Visual Measures. Describe any measures that have been incorporated into the Project that will help protect, enhance, or mitigate the impact to the visual environment.

- Describe Visual Contrast. Estimate what the visual contrast will be from the proposed Project to the surrounding landscape in terms of line, color, texture and form.
- Predict Ability to Meet VQO's. Based on estimated visual contrast, predict if the project will meet Visual Resource Protection Plan VQOs. If not, estimate what level will be met by the proposed project on NFS land.

The above items may be folded into a larger Project proposal report rather than a stand alone report.

SECTION 6.0

REPORTING, CONSULTATION AND PLAN REVISIONS

6.1 Reporting and Consultation

Each year during the term of the license, YCWA shall arrange to meet with the Forest Service to discuss visual quality activities on NFS land within the FERC Project Boundary. The meeting will occur concurrently with the meeting in YCWA's proposed Condition GEN1. At the meeting, YCWA will provide to the Forest Service an oral report of visual mitigation activities, if any, completed in the previous year on NFS land. The report will include the following information: name of facility where mitigation measure was applied; general description of the mitigation measure accomplished; an initial estimate of success of the visual mitigation measure from the KOP; and any other applicable information. YCWA will also describe any visual quality mitigation planned for that calendar year.

6.2 Plan Revisions

YCWA, in consultation with the Forest Service, will review, update, and/or revise the Visual Resource Management Plan, as needed, when significant changes in the existing conditions occur. Changes or revisions to the Visual Resource Management Plan will be expected if visual quality conditions change as a result of unforeseen effects, either from new or existing Project-related activities, or from natural events or if other regulatory or legal requirements are established. Any updates to the Visual Resource Management Plan will be prepared in coordination and consultation with the Forest Service. Sixty days will be allowed for the Forest Service to provide written comments and recommendations before YCWA files the updated Visual Resource Management Plan with FERC for FERC's approval. YCWA will include all relevant documentation of coordination/consultation with the updated Visual Resource Management Plan filed with FERC. If YCWA does not adopt a particular recommendation by the Forest Service, the filing would include the reasons for not doing so, based on Project-specific information. YCWA will implement the Visual Resource Management Plan as approved by FERC.[7]

[7] The Plan will not be considered revised until FERC issues its formal approval.

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SECTION 7.0

REFERENCES CITED

United States Department of Agriculture, Forest Service (USFS) 1988. Plumas National Forest Land and Resource Management Plan. USDA Forest Service, Pacific Southwest Region, San Francisco, CA. URL: www.fs.fed.us/r5/rsl/clearinghouse/gis-download.shtml

_____. 1990. Tahoe National Forest Land and Resource Management Plan. USDA Forest Service, Pacific Southwest Region, San Francisco, CA. URL: www.fs.fed.us/r5/rsl/clearinghouse/gis-download.shtml

Yuba County Water Agency (YCWA). 2012. Technical Memorandum 10-1, *Visual Quality on Federal Land*. In Appendix E3, Exhibit E, *Environmental Report*, of YCWA's April 2014 Application for a Major Project - Existing Dam for the Yuba River Development Project.

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