

4.8 Aesthetics and Visual Resources

Affected Environment

Regional Setting

The Restoration Project encompasses a portion of the larger Battle Creek watershed and is located on the western volcanic slopes of Mt. Lassen in southeastern Shasta and northeastern Tehama Counties. Descending from Mt. Lassen, the Restoration Project slopes gradually westward toward the Sacramento Valley. To the west, panoramic views of the foothills, Sacramento Valley, Trinity Alps, and Coast Range are available. To the east, distant views of Lassen Peak and adjacent mountains are available from many locations within the region.

Local Setting

The western portion of the Restoration Project is composed of a gradually sloping bluff surrounded on the north and south by higher and more steeply sloping areas. From the north, panoramic views overlooking the lower portion of the Restoration Project are available from Wilson Hill Road as it descends the slopes on the north side of the Restoration Project, just south of Shingletown and Highway 44 (Figure 4.8-1).



Figure 4.8-1
Battle Creek Watershed

The eastern portion of the Restoration Project is composed of steeply sloping areas, where creek drainages are deeply incised and views are characterized by enclosed landscapes. The steep topography limits panoramic or distant views, while surrounding ridgelines restrict views within any particular drainage to views of that drainage.

Battle Creek Visual Sensitivity

The scenic quality of the Restoration Project is defined by the character of the landscape at each facility location as well as dominant elements in the landscape, such as distant views of Lassen Peak and adjacent mountains. Landscape character varies from panoramic landscapes in the western portion of the Restoration Project area to more enclosed landscapes in the eastern portion. The landscape character in the immediate vicinity of most Restoration Project facilities is considered to include enclosed landscapes. Enclosed landscapes are normally defined by “wall” and “floor” characteristics, such that the floor, composed of a creek, lake, or meadow, is surrounded by walls of trees or earth forms. As wall definition is lost because of distance, views become more panoramic in character (U.S. Department of Agriculture, Forest Service 1973).

Although scenic quality is high in the vicinity of all Restoration Project facilities, the visual sensitivity of each facility must be determined to assess impacts on visual resources. The visual sensitivity of each facility was evaluated by determining visibility of each facility from the following receptors (U.S. Department of Agriculture, Forest Service 1974):

- Primary and secondary roads and trails, including scenic highways, or roads leading directly to major areas of interest (national parks, national recreation areas, wilderness, dedicated wild areas, major recreation composites, historic sites and areas, and botanical sites);
- Fishing, swimming, and boating areas and other active or passive recreational areas located adjacent to water bodies such as creeks or lakes;
- Recreation areas, such as vista points, campgrounds, picnic grounds, visitor centers, or trail camps;
- Resorts and winter sports areas;
- Geological and botanical areas;
- Historical sites;
- Areas of primary importance for observation of wildlife;
- Tracts of primarily summer homes; and
- Highly sensitive communities, such as one where a large portion of the population is not directly related to performing land management activities.

North Fork Battle Creek Key Observation Points

Within the Restoration Project, North Fork Battle Creek traverses privately owned lands. Views of the North Fork Battle Creek channel are limited by topography. Roads providing direct access to North Fork Battle Creek are private and gated, limiting public access. The creek channel is deeply incised, with creek banks rising 100 to 200 feet from the creek channel at near-vertical slopes in some sections. Since public access to lands adjacent to the creek channel is restricted, there are few locations where North Fork Battle Creek is visible from public viewing or recreational areas.

Public Roadways

Public roadways in the North Fork Battle Creek vicinity include Highway 44, Wilson Hill Road, Battle Creek Bottom Road, Wildcat Road, and Manton Road (Figure 4.8-2). Highway 44 is a regional road that serves as one of the primary access roads to Lassen Volcanic National Park. This highway is located north of the Restoration Project. North Fork Battle Creek is not visible from this roadway. South of Highway 44 and Shingletown, panoramic views of the Battle Creek watershed are available from a section of Wilson Hill Road located north of the Restoration Project. However, the intervening distance (3 miles or more) and topography restrict visibility of Restoration Project facilities from distant and nearby areas. Hydroelectric Project facilities are located within or adjacent to the North Fork Battle Creek channel, which is lower in elevation than surrounding areas. This limits visibility of North Fork Battle Creek to the areas immediately adjacent to the channels. The creek is visible where Wildcat Road crosses the creek in the western portion of the Restoration Project. North Fork Battle Creek is not visible from Battle Creek Bottom Road, Wildcat Road, or Manton Road. No Hydroelectric Project facilities are located where North Fork Battle Creek is visible.

Recreational Receptors

Visual sensitivity of the Restoration Project is limited by the absence of public recreational or viewing areas (e.g., swimming areas and vista points) along North Fork Battle Creek and its adjacent upland areas. Recreational activities that occur in and around North Fork Battle Creek are performed primarily by people who are fishing at public access locations and who have purchased trespass rights along Battle Creek. Since sport fishermen purchasing trespass rights are viewing features from specific locations, visibility of Restoration Project facilities by these receptors at any key observation point cannot be determined. Camp Latieze, located in Manton, is the only campground in the Restoration Project area. However, North Fork Battle Creek is not visible from this camp.

Residential Neighborhoods or Communities

North Fork Battle Creek and the Hydroelectric Project facilities in this creek are not visible from any nearby communities. Views from the southernmost residential areas of Shingletown (south of Highway 44) are panoramic, overlooking Battle Creek and the surrounding watersheds. However, the distance between Hydroelectric Project facilities and these residences (3 miles or more) limits the potential visibility of North Fork Battle Creek and the Hydroelectric

Project facilities. In addition, intervening topography further restricts visibility of Hydroelectric Project facilities from distant and nearby areas.

South Fork Battle Creek Key Observation Points

Most lands along South Fork Battle Creek are in private ownership. However, the private lands are interspersed with small areas of public lands. Because of the area's remote nature and the abundance of privately owned lands, public access to South Fork Battle Creek is fairly limited.

Public Roadways

Highway 36 is located south of South Fork Battle Creek and is one of the primary access roads to Lassen Volcanic National Park. This highway is located south of the Restoration Project. No Hydroelectric Project facilities are visible from this roadway. Manton Road connects Highways 36 and 44 and could be considered a secondary access road to Lassen Volcanic National Park. South Fork Battle Creek is visible at the Manton Road Bridge, approximately one-half mile downstream of Coleman Diversion Dam. However, the dam is not visible from this bridge. Approximately 2,000 feet east of this bridge, there is a short section of Manton Road, just east of its intersection with the dam's access road, where brief views of South Fork Battle Creek and Coleman Diversion Dam are available. However, these views are mostly screened by intervening trees (Figure 4.8-2) and their visibility is further reduced by the distance and elevation change.

Recreational Receptors

There are more recreational uses along South Fork Battle Creek than North Fork Battle Creek, but the extent of such uses is still limited. Recreational uses include fishing, hunting, kayaking, and one lodging facility. Public access for fishing is also available near Inskip Powerhouse. Hydroelectric Project facilities could also be visible to those who have purchased trespass rights along South Fork Battle Creek for hunting and fishing. However, because these receptors are not location-specific, the visibility of Hydroelectric Project facilities cannot be determined. South Fork Battle Creek within the Restoration Project area (from approximately 0.75 mile downstream of the South Diversion Dam to the Coleman National Fish Hatchery) has been used for kayaking, although it is not listed in any official river rafting guidebooks (see Section 4.14, "Recreation," for more discussion). For kayakers, Inskip Diversion Dam and Coleman Diversion Dam are visible.



Figure 4.8-2
Inskip Powerhouse and Coleman Diversion Dam from
Manton Road

Inskip Diversion Dam and Coleman Diversion Dam make these two sections of South Fork Battle Creek unrunnable; kayakers must leave the water and portage around these facilities. The Oasis Springs Lodge, a fly-fishing lodge and dude ranch, is located adjacent to Inskip Diversion Dam on South Fork Battle Creek. Existing views of Inskip Diversion Dam from the Oasis Springs Lodge are shown in Figure 4.8-3.



Figure 4.8-3
Inskip Diversion Dam from Oasis Springs Lodge

Public Lands

Public lands managed by the BLM are located adjacent to or near South Diversion Dam on South Fork Battle Creek. Recreational use of these public lands is limited by their inaccessibility, but could include hunting, which is permitted on BLM lands, and kayaking. Ponderosa Way provides public access to BLM lands, but steep terrain and intervening vegetation limit the visibility of South Diversion Dam to the slopes immediately above the creek. Visual sensitivity of the section of South Fork Battle Creek is limited by the area's inaccessibility and steep terrain.

Other Key Observation Points

Darrah Springs Hatchery is located at Darrah Springs on Baldwin Creek, a tributary to mainstem Battle Creek. This hatchery is located at the western extent of the Restoration Project. Public access for fishing on Baldwin Creek is available at this location. The Asbury Diversion Dam and pump station are located on Baldwin Creek, where public access for fishing is available. These facilities are visible from Baldwin Creek where the access road crosses over Baldwin Creek (Figure 4.8-4).



Figure 4.8-4
Asbury Pump Station

Regulatory Setting

The following laws, regulations, or policies are related to aesthetics and visual resources.

Redding Resource Management Plan

Public lands within the Restoration Project area are managed by the BLM. The Restoration Project is located within the BLM's Ishi Management Area. The Redding Resource Management Plan provides guidelines for managing and allocating resources within this area and identifies Battle Creek as having regional recreational, fisheries, and biological values with the most important segment located on South Fork Battle Creek below Manton Road. The plan indicates that this segment of Battle Creek contains the majority of chinook salmon spawning habitat, generally adequate water flows for recreational pursuits, and nesting raptors including bald eagle. The Coleman National Fish Hatchery is also located on this segment.

The plan calls for consolidation of public lands along the segment of Battle Creek below Manton Road and active BLM management of this area (e.g., improving semiprimitive recreational opportunities, enhancing anadromous fisheries, maintaining and improving riparian vegetation, protecting wildlife habitat, and maintaining the area's scenic quality). The plan also states that the Battle Creek corridor (below Manton Road) should be managed as Visual Resource Management Class II, which is described as follows:

The objective of this class is to retain the existing character of the landscape. The level of change to the characteristic landscape should be low. Management activities may be seen, but should not attract the attention of the casual observer. Any changes must repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape.

Hydroelectric Project facilities on South Fork Battle Creek are located upstream of Manton Road and outside BLM-managed lands. Therefore, Restoration Project conformance with these management objectives and actions would not be required. However, these objectives provide useful guidelines for evaluating the Restoration Project's visual impacts on this section of South Fork Battle Creek.

National Wild and Scenic Rivers System

Map 3 of the Ishi Management Area of the Redding Resource Management Plan designates South Fork Battle Creek as eligible for inclusion in the National Wild and Scenic Rivers System. Battle Creek has not been included in the system nor is it currently under study for inclusion. The plan indicates that continued BLM administration of public lands above Manton Road hinges on a conclusive determination that this portion of South Fork Battle Creek is suitable for inclusion in the National Wild and Scenic Rivers System. Until that

determination is made, the plan states that the BLM should manage these lands in a manner that does not impair any outstandingly remarkable values.

The Wild and Scenic Rivers Act of 1968 (16 USC 1271 et seq.) selects certain rivers that possess remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values; preserves them in a free-flowing condition; and protects their local environments. The Act establishes three classes of river areas:

- **Wild.** Free from impoundments, generally inaccessible except by trail, with essentially primitive watersheds or shorelines and unpolluted waters.
- **Scenic.** Free from impoundments, accessible in places by road, and with shorelines or watersheds still largely undeveloped.
- **Recreational.** Readily accessible by road or railroad, may have some development along the shoreline, and may have undergone some impoundment or diversion in the past.

According to the Redding Resource Management Plan, South Fork Battle Creek between Ponderosa Way and Manton Road Bridge is classified as “recreational.” Five Hydroelectric Project facilities (i.e., South Diversion Dam, South Powerhouse, Inskip Diversion Dam, Inskip Powerhouse, and Coleman Diversion Dam) are located within this section of South Fork Battle Creek. The segment between Manton Road Bridge and ¼ mile upstream of Coleman Powerhouse is classified as “scenic.” No Hydroelectric Project facilities are located along this segment of South Fork Battle Creek.

The Wild and Scenic Rivers Act requires that the rivers and streams included or proposed for inclusion into the system be considered during project planning and that project impacts be identified in an environmental assessment or environmental impact statement. The impacts on scenic quality along North Fork and South Fork Battle Creek are evaluated below.

Environmental Consequences

Summary

No significant aesthetics or visual resources impacts are associated with the No Action Alternative. Significant and unavoidable impacts are associated with all Action Alternatives (Five Dam Removal, No Dam Removal, Six Dam Removal, and Three Dam Removal) in the vicinity of the Oasis Springs Lodge. Disturbance would be limited to areas associated with construction, modification, or removal activities, including streambeds, stream banks, short-term and long-term access roads, staging areas, Hydroelectric Project dam site facilities, conveyances, and appurtenant facilities. Reclamation will implement mitigation measures where appropriate to reduce significant impacts to less-than-significant levels. For significant and unavoidable impacts to the Oasis Springs Lodge,

mitigation is recommended but it would not reduce aesthetic or visual resource impacts to less-than-significant levels.

Impact Significance Criteria

According to Appendix G of the State CEQA Guidelines, impacts for this analysis would be considered significant if implementation of the Restoration Project would:

- have a substantial adverse effect on a highly visible scenic vista;
- substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings along a scenic corridor;
- block, disrupt, or reduce public viewing opportunities; or
- violate visual quality objectives adopted by federal, state, or local government agencies.

A reduction in mountainous, rural, and open space aesthetics, scenic vistas, and surrounding visual resources would represent significant environmental consequences. Short-term activities associated with construction were not considered potentially significant. However, visible scarring of landscape that would require more than 3 years to naturally restore views was considered significant.

Impact Assessment

As applicable, the General Environmental Protection Measures listed in the introduction to this chapter shall be utilized for this resource. In addition, specific mitigation measures for this resource are identified below.

No Action Alternative

The No Action Alternative would not affect aesthetic and visual resources. It would not alter existing views of Hydroelectric Project facilities or affect any scenic vistas. Therefore, the No Action Alternative would not adversely affect aesthetics or visual quality in the Restoration Project area.

Five Dam Removal Alternative (Proposed Action)

The following facilities within the Restoration Project could be affected by the implementation of the Five Dam Removal Alternative:

- Wildcat Diversion Dam,

- Eagle Canyon Diversion Dam,
- North Battle Creek Feeder Diversion Dam,
- Coleman Diversion Dam (including Inskip Powerhouse bypass facility and tailrace connector),
- Inskip Diversion Dam (including South Powerhouse tailrace connector tunnel),
- South Diversion Dam,
- Soap Creek Feeder,
- Lower Ripley Creek Feeder, and
- Asbury Diversion Dam.

Each site is on private land or land owned by PG&E, and public access is restricted to these facilities, limiting visual sensitivity.

Impact 4.8-1 Significant and Unavoidable—Construction of tailrace connectors, new fish screens and fish ladders, and associated facilities would reduce scenic quality at the Oasis Springs Lodge.

Existing views from the Oasis Springs Lodge's main building include:

- South Fork Battle Creek;
- Inskip Diversion Dam and appurtenant facilities (i.e., headworks, power lines, access path railings, and access stairs on the north side of the creek);
- Orange buoy markers that extend across the creek; and
- wooded, undeveloped hillsides to the north of the creek (Figure 4.8-5).

Existing views of the creek and dam would not be altered by this alternative. Although the Five Dam Removal Alternative would include upgrading the headworks and relocating power lines, such improvements would not significantly alter the existing scenic quality from the lodge's main building since appurtenant facilities are already visible from this location.

However, existing views of the wooded, undeveloped hillsides to the north would be substantially altered by construction of a new access road proposed to be constructed from South Powerhouse to Inskip diversion dam and canal. The access road would be visible from the Oasis Springs Lodge, its facilities, and its creek bank frontage. Figure 4.8-5 presents existing views of the north bank of South Fork Battle Creek from the lodge's creek bank vicinity (northwest of the lodge between the tennis court and pool). Figure 4.8-6 is a photo simulation depicting views of the proposed access road.

Figure 4.8-5
View of the North Bank of South Fork Battle Creek from Oasis Springs Lodge

Figure 4.8-6
Photo Simulation of the View of the Proposed Access Road from Oasis Springs Lodge

Views of the road's cut slope from most of the lodge's main building would be screened by existing mature trees located north of the pool and along the southern creek bank. However, the cut slope would be visible from the lodge's westernmost rooms, lawn area, and tennis court because of the lack of tree screens in this vicinity. Although the cut slope would be hydromulched and revegetated with grasses within 3 years of construction, the change in views resulting from proposed grading and tree removal would require more than 3 years before wooded hillside views could be restored. Therefore, visual impacts on the Oasis Springs Lodge resulting from proposed road construction would be significant.

Downstream of Inskip Diversion Dam, views from the lodge's main building of the existing fish ladder and Inskip Canal are mostly obscured by the tennis court,

trees, and the dam. Under this alternative, proposed facilities located downstream of the dam include a new fish ladder proposed on the north side of the creek and an access path extending northward from the fish screen and ladder. The tennis court, trees, and the dam would obscure views of these facilities from the lodge's main building. Topography and trees on the northern creek bank would also help block or screen most views of the west end of the access road, parking lot, and fish ladder facilities from the lodge's main building and tennis court. Nevertheless, there could be limited views of cut slopes resulting from grading along the northern creek bank to accommodate the proposed access road and parking lot.

Although views of these facilities from the lodge's main building would be screened, patrons fishing along the lodge's creek frontage would view most proposed facilities along this section of the creek. This is because the lodge's fishing rights extend beyond the main building vicinity (downstream of the Inskip Diversion Dam and upstream of South Powerhouse). These facilities would also be visible to kayakers using this section of the creek. The cut slope above the proposed access road, the proposed fish ladder facilities, the South Powerhouse tailrace connector, and the potential borrow site and staging area located east of the South Powerhouse would be visible from the lodge's creek bank frontage. Proposed tree removal would further increase the visibility of Restoration Project construction (primarily associated with road, parking lot, and tailrace connector facilities) from locations along the lodge's creek bank frontage.

Changes in creek bank views resulting from the construction of the fish ladder and tailrace connector tunnel facilities would not significantly reduce the scenic quality of this section of the creek because creek bank views near the proposed facilities already include Inskip Diversion Dam, South Powerhouse, and their appurtenant facilities. Scenic quality in the vicinity of the proposed facilities has already been reduced by these facilities. Although scenic quality could be temporarily reduced by the construction of the proposed South Powerhouse borrow site and staging area, it is anticipated that this temporary impact would be mitigated by proposed regrading, hydromulching, and revegetation of this area after construction has been completed. Since the proposed facilities are located on private land with restricted public access, this change in views would be limited to patrons of Oasis Springs Lodge using the southern creek bank in this vicinity and a small number of kayakers who could use this section of South Fork Battle Creek. This impact is significant. Implementing the following mitigation measure would reduce this impact, but not to a less-than-significant level.

Mitigation Measures for Impact 4.8-1. Upon completing installation of the proposed access road, Reclamation will be responsible for revegetating the area along the road to improve its aesthetic quality to the patrons of Oasis Springs Lodge. Reclamation will implement the following revegetation plan:

- Broadcast native seed with native straw mulch, at sufficient concentration to ensure even coverage and germination, to revegetate the area above the road's cut slope. The native seed mix shall consist of a mixture of grasses,

forbs, and wild flowers native to the region and appropriate for site conditions.

- Apply rock-aging compound to the cut slope of the hill before native seed application. Because soil conditions are poor and little vegetation would grow on the cut slope, the rock-aging compound will improve the germination rate of the broadcasted seeds.
- Plant trees along the downhill side of the proposed access road at random intervals to simulate natural distributions to eventually screen views of this cut slope from the Oasis Springs Lodge. Trees will consist of a mixture of native oak species and grey pine in keeping with existing vegetation on the slope. Trees will be planted in augured holes that are approximately 36 inches deep and 12 inches in diameter. Plastic plant-protection tubes will be installed around all oak and pine seedlings. Watering basins for all seedlings will be approximately 36 inches in diameter and 4 inches high.
- Monitor all tree-planting sites. A qualified biologist will visit all tree-planting sites biannually for the first 5 years after road installation to determine seedling survival rates. Planting sites will be recorded as being dead if there is no viable aboveground growth visible. For example, if all the leaves on a tree are brown, but an examination of the stems and branches showed viable stem vigor, the plant will be considered to be alive with a poor vigor rating. Where a tree is determined not to be alive, it shall be replaced.
- Plant native oak or grey pine trees in the vicinity of the proposed parking lot to reduce its visibility from the creek.

In addition to implementing a revegetation plan, Reclamation will apply an acid wash to the rock face along the proposed access road to break up the appearance of the cut in the hillside and improve its aesthetic quality to the patrons of Oasis Springs Lodge.

Impact 4.8-2 Less than Significant—Proposed construction of tailrace connector, bypass chute, and fish screen and fish ladders would alter views from adjacent area.

Coleman Diversion Dam and Inskip Powerhouse Vicinity. Construction of the Inskip Powerhouse tailrace connector and bypass pipeline/chute facilities would not significantly alter the scenic quality of surrounding areas. Although South Fork Battle Creek and the Coleman Diversion Dam vicinity can be seen from a short section of Manton Road, these views are screened by trees on the south side of this road. The proposed tailrace connector, staging area, lower bypass chute and basin, and appurtenant facilities would be located on the northern creek bank east of Coleman Diversion Dam. These trees would also screen views of these facilities from Manton Road, and therefore, visual impacts to this public roadway would be less than significant. Since screened views of this area from Manton Road already include Coleman Diversion Dam, the Inskip Powerhouse, and their appurtenant facilities, the addition of proposed facilities adjacent to these existing facilities would not significantly reduce scenic quality.

Similarly, these facilities would be visible to only a limited number of kayakers using this section of the creek. The scenic quality of this section for kayakers has already been reduced by the Inskip Powerhouse, Coleman Diversion Dam, and its penstock and, therefore, the addition of proposed facilities would not substantially alter this section's scenic quality.

Development of the proposed overflow wasteway and bypass facilities would not substantially alter the scenic quality of this area. Restricted access, distance, and topography would preclude the presence of any sensitive receptors and no visual impacts would result. Specifically, the area above the Inskip Powerhouse would be developed with the proposed bypass facility. The proposed overflow wasteway would be located farther uphill at the forebay inlet to the Inskip Powerhouse penstock. Wasteway facilities would be located on private land where public access is restricted, limiting the potential for visual impacts to sensitive receptors. Distant views of portions of this area are available from Manton Road, but distance and topography limit the visibility of existing facilities. The proposed overflow wasteway also would not be visible from Manton Road because of distance and topography. Visual impacts associated with the upper pipeline section of the bypass facility (between the forebay inlet and the chute above Inskip Powerhouse) would be limited to temporary visual impacts resulting from vegetation removal, since this facility is proposed to be buried. In addition to distance, topography, and the limited visibility of proposed vegetation removal, trees located between Manton Road and the proposed facilities would screen views from sections of Manton Road, further reducing the potential for visual impacts. These impacts are considered to be less than significant.

Other Facilities. Construction of new fish screens and fish ladders at North Battle Creek Feeder and Eagle Canyon Diversion Dams would not substantially alter scenic resources. Proposed construction at these two locations would include not only instream facilities but also the improvement of the access path at Eagle Canyon Diversion Dam and development of a new access road at North Battle Creek Feeder. Both of these features are located on private land where public access is restricted. In addition, the steep terrain in the vicinity of these facilities would limit the visibility of proposed construction from adjacent areas. The creek banks drop steeply from surrounding areas to the creek, limiting visibility of proposed facilities and associated vegetation removal to areas immediately adjacent to the site. Therefore, scenic quality from public viewing areas would not be affected by facility construction. This impact is considered to be less than significant.

To monitor the increased instream flow releases at Asbury Diversion Dam on Baldwin Creek, a new gauging station would be required just below the dam. No structural changes to the existing spill gates would be required. Since construction would be limited to this gauging station below the dam, no substantial visual changes would occur at the public access to Baldwin Creek, which is located just above Asbury Diversion Dam.

Impact 4.8-3 Less than Significant—Removal of diversion dams and associated construction would not substantially reduce scenic quality from public viewing areas.

The proposed removals of Wildcat, South, Coleman, Soap Creek Feeder, and Lower Ripley Creek Feeder Diversion Dams and their appurtenant facilities would improve scenic quality within the immediate vicinity of these facilities. However, there would be no change in scenic quality from public viewing areas such as public roads, scenic vistas, recreational facilities, or communities, since Hydroelectric Project facilities are not visible from these locations. The removal of Coleman Diversion Dam would improve scenic quality for the limited number of kayakers and fishermen (those purchasing trespass rights) who could use this section of South Fork Battle Creek, assuming that those recreationists prefer natural vistas over dams and appurtenant facilities.

The proposed dam removals would require the construction of staging areas and access road improvements at some locations. The proposed construction would involve vegetation removal in staging areas, grading (including blading and widening), placing gravel on access roads, and on-site wasting of excavated materials. Any reduction in scenic quality resulting from these activities would be less than significant because they would not be visible from any public viewing areas. In addition, most on-site visual changes resulting from this construction would be restored within 3 years by the proposed revegetation of staging areas and areas affected by on-site wasting. The proposed improvements (widening and gravel placement) at access road intersections with public roadways would not significantly alter existing scenic resources since public views already include existing roadway intersections, gates, and fencing. This impact is considered to be less than significant.

No Dam Removal Alternative

Under the No Dam Removal Alternative, fish screens and fish ladders would be constructed at North Battle Creek Feeder, Wildcat, Eagle Canyon, South, Inskip, and Coleman Diversion Dams. No dams would be removed under this alternative, and no changes are proposed at Soap Creek Feeder and Lower Ripley Creek Feeder.

Impact 4.8-4 Significant and Unavoidable—Construction of new fish screens and fish ladders and associated facilities would reduce scenic quality at the Oasis Springs Lodge.

Construction at the Inskip Diversion Dam would avoid the less-than-significant visual impacts associated with the construction of the South Powerhouse tailrace connector tunnel and bypass features at the Inskip Diversion Dam site, as described under the Five Dam Removal Alternative, because these facilities would not be constructed under the No Dam Removal Alternative. However, the proposed access road, a significant and unavoidable aesthetic impact visible from Oasis Springs Lodge, and associated facilities would still be constructed to maintain the fish screen and fish ladder at Inskip Diversion Dam. This impact for the No Dam Removal Alternative is similar to Impact 4.8-1 described under

the Five Dam Removal Alternative and is considered significant. Implementing mitigation measures for Impact 4.8-1 would reduce this significant impact, but not to a less-than-significant level.

Impact 4.8-5 Less than Significant—Proposed construction of fish screen and fish ladders would alter views from adjacent area.

Proposed construction of fish screens and fish ladders at North Battle Creek Feeder, Eagle Canyon, Wildcat, South, and Coleman Diversion Dams would result in less-than-significant visual impacts since these facilities are located on private lands where public access is restricted. Construction at these sites would not alter scenic quality from public viewing areas such as public roads, scenic vistas, recreational facilities, or communities, since the proposed facilities would not be visible from such locations. Although public lands (managed by BLM) are located near South Diversion Dam, the dam can be seen only from the slopes immediately above the creek because of the location's steep terrain and intervening vegetation. Because of these limited viewing opportunities, this impact is considered less than significant.

Impact 4.8-6 Less than Significant—Construction of fish screens and fish ladders and associated project activities would substantially reduce scenic quality from public viewing areas.

No dams would be removed under this alternative because fish screens and fish ladders would be constructed instead at North Battle Creek Feeder, Eagle Canyon, Wildcat, South, Inskip, and Coleman Diversion Dams (no construction activities are proposed at Soap Creek Feeder and Lower Ripley Creek Feeder under this alternative under the No Dam Removal Alternative). Construction of the fish screens and fish ladders would require the construction of staging areas and access road improvements at some locations. The proposed construction would involve vegetation removal in staging areas, grading (including blading and widening), placing gravel on access roads, and on-site wasting of excavated materials. Any reduction in scenic quality resulting from these activities would be less than significant because Hydroelectric Project facilities are not visible from any public viewing areas. In addition, most on-site visual changes resulting from this construction would be restored within 3 years by the proposed revegetation of staging areas and areas affected by on-site wasting. The proposed improvements (widening and gravel placement) at access road intersections with public roadways would not significantly alter existing scenic resources since public views already include existing roadway intersections, gates, and fencing. This impact is considered to be less than significant.

Six Dam Removal Alternative

Facility modifications under the Six Dam Removal Alternative would be essentially the same as the Five Dam Removal Alternative at all sites, with the addition of impacts associated with removing Eagle Canyon Diversion Dam.

Impact 4.8-7 Significant and Unavoidable—Construction of tailrace connectors, new fish screen and fish ladder and associated facilities would reduce scenic quality at the Oasis Springs Lodge.

The Six Dam Removal Alternative would undertake the same improvements to the Inskip Diversion Dam and South Powerhouse vicinity as the Five Dam Removal Alternative. The proposed access road between South Powerhouse and Inskip Diversion Dam, a significant and unavoidable aesthetic impact visible from Oasis Springs Lodge, and associated facilities would be constructed to maintain the fish screen and fish ladder at Inskip Diversion Dam. This impact is similar to Impact 4.8-1 described under the Five Dam Removal Alternative and is considered significant. Implementing mitigation measures for Impact 4.8-1 would reduce this impact, but not to a less-than-significant level.

Impact 4.8-8 Less than Significant—Proposed construction of tailrace connector, bypass chute, and fish screen and fish ladders would alter views from adjacent area.

The Six Dam Removal Alternative would involve the same construction features as the Five Dam Removal Alternative, except that it would result in the removal of Eagle Canyon Diversion Dam rather than construction of a new fish ladder and fish screen at this location. Constructing fish screens and fish ladders at North Battle Creek Feeder and Inskip Diversion Dams, as proposed by the Six Dam Removal Alternative, would result in less-than-significant visual impacts since these facilities are located on private lands where public access is restricted. This impact is similar to Impact 4.8-2 described under the Five Dam Removal Alternative and is considered less than significant.

Impact 4.8-9 Less than Significant—Removal of diversion dams and associated construction would substantially reduce scenic quality from public viewing areas.

This impact is similar to Impact 4.8-3 described under the Five Dam Removal Alternative, except that an additional dam, the Eagle Canyon Diversion Dam, would be removed under this alternative. Eagle Canyon Diversion Dam is located on private land where public access is limited and steep terrain in the vicinity of the dam would limit the visibility during dam removal activities and upgrading of the access path. The removal of Eagle Canyon, Wildcat, South, Soap Creek Feeder, Lower Ripley Creek Feeder, and Coleman Diversion Dams would not reduce the scenic quality of the surrounding area because these facilities are not visible from any public viewing areas. In the long-term, scenic quality would be improved by the removal of the dams from the natural landscape. As a result, visual impacts at these diversion dams are considered less than significant.

Three Dam Removal Alternative

The Three Dam Removal Alternative would undertake the same removal activities at North Battle Creek Feeder, Wildcat, Inskip, and Coleman Diversion Dams (including the Inskip tailrace and bypass facilities located near Coleman Diversion Dam) as the Five Dam Removal Alternative. South Diversion Dam

would not be removed under this alternative and would have a new fish ladder and fish screen installed. No construction is proposed at Soap Creek Feeder and Lower Creek Feeder Diversion Dams, which would remain as they are currently under this alternative. Eagle Canyon Diversion Dam would be removed under this alternative rather than receive installation of a new fish ladder and fish screen as under the Five Dam Removal Alternative.

Impact 4.8-10 Significant and Unavoidable—Construction of new fish screen and fish ladder and associated facilities would reduce scenic quality at the Oasis Springs Lodge.

The Three Dam Removal Alternative would undertake the same work on the Inskip Diversion Dam and South Powerhouse vicinity as identified under the Five Dam Removal Alternative for the proposed tailrace connector, fish ladder, access road, power line, and waste area facilities. Therefore, the Three Dam Removal Alternative would have a similar impact on the visual scenic quality at the Oasis Springs Lodge as the Five Dam Removal Alternative. This impact is similar to Impact 4.8-1 and is considered significant. Implementing the mitigation measures identified for Impact 4.8-1 under the Five Dam Removal Alternative would reduce this impact, but not to a less-than-significant level.

Impact 4.8-11 Significant and Unavoidable—Construction of the channel with armoring or revetment would alter views of the South Fork creek bank.

The Three Dam Removal Alternative proposes the use of an open channel rather than a tunnel for the tailrace connector between South Powerhouse and Inskip Canal. Because the river side of the channel would be protected with riprap, views from the Oasis Springs Lodge's creek bank frontage would change from a wooded, undeveloped slope to a developed channel with a rock-filled armored revetment above and riprap revetment below the channel. In addition, channel construction would require tree removal along the entire northern creek bank between the South Powerhouse and Inskip Canal. Such a change in scenic quality along this section of the creek is considered to be significant, particularly when combined with the significant visual impacts resulting from the proposed cut slope and tree removal associated with access road construction. This significant visual impact would be unavoidable and irreversible because it cannot be mitigated to a less-than-significant level. Mitigation by planting tree screens, as required for the proposed access road, would not be feasible since the river side of the revetment would be covered with geomembrane fabric and riprap.

Impact 4.8-12 Less than Significant—Proposed construction of fish screens and fish ladders would alter views from adjacent area.

Construction of new fish screens and fish ladders at North Battle Creek Feeder and South Diversion Dams would not significantly alter the scenic quality of surrounding areas because this facility is located on private land where public access is restricted. In the vicinity of the North Battle Creek Feeder site, the steep terrain would limit the visibility of proposed construction from adjacent areas. Although public lands (managed by BLM) are located near South Diversion Dam, the dam can be seen only from the slopes immediately above the creek because of the location's steep terrain and intervening vegetation. This

impact is similar to Impact 4.8-2 described under the Five Dam Removal Alternative. Visual impacts at North Battle Creek Feeder and South Diversion Dam are less than significant.

Impact 4.8-13 Less than Significant—Removal of diversion dams and associated construction would substantially reduce scenic quality from public viewing areas.

The Three Dam Removal Alternative proposed to remove Eagle Canyon, Wildcat, and Coleman Diversion Dams. The removal of Wildcat and Coleman Diversion Dams would not reduce the scenic quality of the surrounding area because these facilities are not visible from any public viewing areas. Eagle Canyon Diversion Dam is located on private land where public access is limited and steep terrain in the vicinity of the dam would limit the visibility during dam removal activities and upgrading of the access path. Therefore, visual impacts at these diversion dams are considered less than significant.

Cumulative Impacts

Cumulative aesthetics and visual quality impacts associated with the Proposed Action and past, present, or probable future projects would not occur in the Battle Creek watershed because no other projects (including related projects described in Chapter 6) are known to change the visual quality of the Battle Creek watershed. Panoramic views overlooking most of the Battle Creek watershed are available from areas to the north (near Shingletown). However, distance and topography limit visibility of Restoration Project facilities to only a few sensitive receptors. Although construction of the new access road between South Powerhouse and Inskip Diversion Dam would be an unavoidable significant impact, the Proposed Action would generally improve aesthetics by removing existing diversion dams (i.e., Wildcat, South, Soap Creek Feeder, Lower Ripley Creek Feeder, and Coleman Diversion Dams).