

**REDWOOD NATIONAL AND STATE PARKS
REDWOOD MAINTENANCE FACILITY RELOCATION
MITIGATION MONITORING AND REPORTING PLAN (MMRP)
2007**

Mitigation Measure	Mitigation Measure Description	Timing	Responsible for Implementing Mitigations	Responsible for Insuring Implementation	Required for Task to be Complete	Date Completed	Status / Comments
Geology, Geologic Hazards and Soils							
1	Implement siltation and sediment control measures approved by the California Stormwater Quality Association (Stormwater Best Management Practices for construction) and Regional Water Quality Control Board in construction areas to reduce erosion and surface scouring and to capture eroding soil before discharge to riparian channels. Measures at a minimum include the use of silt fencing and hay bales, and winterizing stockpiles.	Prior to and during construction	Construction Contractor	NPS/CDPR	Requirements incorporated into final approved contract agreement and implemented prior to and through the completion of construction		
2	Install water bars in temporary access roads located on slopes to control and reduce surface scouring.	Prior to and during construction	Construction Contractor	NPS/CDPR	Requirements incorporated into final approved contract agreement and implemented prior to and through the completion of construction		
3	Conserve and salvage topsoil for reuse. Materials will be reused to the maximum extent possible.	During construction	Construction Contractor	NPS/CDPR	Requirements incorporated into final approved contract agreement and implemented through the completion of construction		
4	All ground disturbing activities will occur between June 1 and October 31.	During construction	Construction Contractor	NPS/CDPR	Requirements incorporated into final approved contract agreement and implemented through the completion of construction		
Hydrology and Water Quality							
5	Design storm drain systems to adequately handle and convey surface water flows during a 100-year storm event without causing flooding onsite or in downstream locations.	Prior to and during construction	NPS/CDPR, Construction Contractor	NPS/CDPR	Requirements developed through design process, incorporated into final approved contract agreement, and implemented prior to and through the completion of construction		
6	Design storm drain systems to minimize stormwater pollutant concentrations and avert erosion of streambed deposits in receiving water bodies associated with stormwater discharge locations. Filter stormwater runoff from parking lots and maintenance areas prior to discharge.	Prior to and during construction	NPS/CDPR, Construction Contractor	NPS/CDPR	Requirements developed through design process, incorporated into final approved contract agreement, and implemented prior to and through the completion of construction		
7	Develop and implement a comprehensive stormwater pollution prevention plan for construction activities that complies with federal and state regulations and addresses all aspects of stormwater pollution prevention. The stormwater pollution prevention plan will be submitted to the parks for review/approval prior to construction activities. The stormwater pollution prevention plan will include at a minimum the following measures:	Prior to and during construction	NPS/CDPR, Construction Contractor	NPS/CDPR	Requirements developed through design process, incorporated into final approved contract agreement, and implemented prior to and through the completion of construction		

Mitigation Measure	Mitigation Measure Description	Timing	Responsible for Implementing Mitigations	Responsible for Insuring Implementation	Required for Task to be Complete	Date Completed	Status / Comments
	<ul style="list-style-type: none"> ▪ Take measures to control erosion, sedimentation, and compaction, and thereby reduce water pollution and adverse water quality effects on Elk Creek. Use silt fences, straw bales and sedimentation basins. in construction areas to reduce erosion, surface scouring, and discharge to water bodies. ▪ To the extent possible, schedule the use of mechanical equipment during periods of low precipitation to reduce the risk of accidental hydrocarbon leaks or spills. When mechanical equipment is necessary outside of low precipitation periods, use agency-approved methods to protect soil and water from contaminants. ▪ Dispose of volatile wastes and oils in approved containers for removal from construction sites to avoid contamination of soils, drainages, and watercourses. ▪ Inspect equipment for hydraulic and oil leaks prior to use on construction sites, and implement inspection schedules to prevent contamination of soil and water. ▪ Keep absorbent pads, booms, and other materials on site during projects that use heavy equipment to contain oil, hydraulic fluid, solvents, and hazardous material spills. 						
Wetlands							
8	When constructing the new arch culvert over the northernmost tributary that crosses Aubell Lane, the agencies will avoid placement of new structures, such as footings, within the streambed and bank.	During project design phase	NPS/CDPR	NPS/CDPR	Requirements developed through design process		
9	Work activities in active streambeds (areas of flowing water) will occur during periods of low flow (e.g., June through October).	During construction	Construction Contractor	NPS/CDPR	Requirements incorporated into final approved contract agreement and implemented through the completion of construction		
10	Avoid effects on waterways and wetlands during construction activities. Use protective materials identified in park and agency best management practices, such as silt fencing at waterways and wetlands to prevent construction materials from escaping work areas.	During construction	Construction contractor	NPS/CDPR	Requirements incorporated into final approved contract agreement and implemented through the completion of construction		

Mitigation Measure	Mitigation Measure Description	Timing	Responsible for Implementing Mitigations	Responsible for Insuring Implementation	Required for Task to be Complete	Date Completed	Status / Comments
11	Minimize the disturbance to and removal of riparian vegetation. Where riparian vegetation extends outside of the designated 100-foot setback from the creek and into the construction zone, avoid disturbance to this vegetation and establish a 25-foot protective buffer at the edge of riparian habitat. Prior to construction, install protective fencing material to demarcate all setbacks (100-foot and 25-foot setbacks) that protect the creek and the edge of riparian vegetation. If riparian vegetation cannot be avoided or protected within buffer zones, then the area of riparian vegetation disturbed will be replaced at a 1:1 ratio within the project vicinity as described under the revegetation measures. Store equipment and materials in designated setback zones. For these activities, provide proper and timely maintenance for vehicles and equipment used during construction to reduce the potential for mechanical breakdowns. Conduct maintenance and fueling within designated setback areas for these activities.	Prior to and during construction	Construction contractor	NPS/CDPR	Requirements incorporated into final approved contract agreement and implemented prior to and through the completion of construction		
12	Additional mitigation, protective measures, and applicable permit conditions imposed by permitting and/or regulatory agencies identified following the completion of the environmental compliance phase will be implemented as required.	During construction, ongoing maintenance	NPS/CDPR	NPS/CDPR	Requirements implemented through the completion of construction and during project operation		
Vegetation							
13	Avoid removal and damage to large trees. Retain native trees with a diameter of 20 inches or greater at breast height throughout the site. Removal of trees greater than 20 inches in diameter at breast height will be assessed by park biologists to determine whether they provide suitable habitat for listed species. If so, regulatory agencies will be consulted, and their requirements followed. Any large trees that are approved to be removed will be cut into the longest possible segments with root wads attached, if possible, and stockpiled for use in natural resource projects; they will be replaced at a 1:1 ratio. Only plantings of trees will be used, no seeds will be substituted. Smaller removed trees will be used as mulch material.						
14	Install temporary barriers to contain construction activities, thereby protecting natural surroundings (including trees, plants, and root zones) from damage. Avoid fastening ropes, cables, or fences to trees.	Prior to and during construction	Construction contractor	NPS/CDPR	Requirements incorporated into final approved contract agreement and implemented prior to and through the completion of construction		
15	Install fencing material to minimize use of highly sensitive sites, such as riparian corridors and wetlands, and install signs as needed to direct use to more appropriate areas.	Prior to and during construction	Construction contractor	NPS/CDPR	Requirements incorporated into final approved contract agreement and implemented prior to and through the completion of construction		

Mitigation Measure	Mitigation Measure Description	Timing	Responsible for Implementing Mitigations	Responsible for Insuring Implementation	Required for Task to be Complete	Date Completed	Status / Comments
16	Seed or plant bare natural areas disturbed by demolition and construction activities using native species in compliance with CDPR's state and North Coast Redwood District's genetic conservation policies.	During construction	Construction contractor	NPS/CDPR	Requirements incorporated into final approved contract agreement and implemented through the completion of construction		
17	Develop and implement a revegetation approach with specific components of a strategy that will include, but not be limited to, the following: <ul style="list-style-type: none"> ▪ Soil salvage/reuse ▪ Plant salvage ▪ Soil preparation ▪ Selection, use, and treatment of new soil ▪ Use of native plants of native genotypes ▪ Use of fertilizers ▪ Non-native weed control ▪ Supplemental revegetation if initial revegetation fails (survival less than 75 %) ▪ Repair/replacement of damaged trees ▪ Mulching (utilize locally derived material, if available) 	Prior to and during construction, ongoing maintenance	NPS/CDPR, Construction Contractor	NPS/CDPR	Requirements developed through design process, incorporated into final approved contract agreement, and implemented prior to, through the completion of construction, and during project operation		
18	Implement a non-native species control program in accordance with the Redwood National and State Parks Exotic Plant Management Plan and Executive Order 13122 – Invasive Species. Standard measures include the following elements: ensure construction-related equipment arrives on site free of mud or seed-bearing material, use native seeds and straw materials to the extent feasible, and identify and treat areas of non-native species prior to construction.	Prior to and during construction	NPS/CDPR, Construction Contractor	NPS/CDPR	Requirements developed through design process, incorporated into final approved contract agreement, and implemented prior to and through the completion of construction		

Mitigation Measure	Mitigation Measure Description	Timing	Responsible for Implementing Mitigations	Responsible for Insuring Implementation	Required for Task to be Complete	Date Completed	Status / Comments
19	All trees to be removed shall be identified on site prior to construction using visible markings within the vegetation clearing limit. Trees to remain on site (i.e., saved trees outside of the vegetation clearing limit) will be protected during construction. Prior to the start of any clearing, stockpiling, excavation, grading, compaction, paving, change in ground elevation, or construction, remaining trees that are immediately adjacent to or within the project construction corridor shall be clearly delineated by constructing short post and plank walls, or other protective fencing material, at the dripline of each tree to hold back fill. The delineation markers shall remain in place for the duration of all project work. Where proposed development or other site work must encroach upon the dripline of a saved tree, special construction techniques will be required to allow the roots to breathe and obtain water (examples include, but are not limited to, use of hand equipment for tunnels and trenching, allowance of only one pass through a tree's dripline). Tree wells or other techniques may be used where advisable. Excavation adjacent to any trees, when permitted, will be in such a manner that will cause only minimal root damage. No tree roots 3 inches in diameter or larger will be cut.	Prior to and during construction	NPS/CDPR, Construction Contractor	NPS/CDPR	Requirements developed through design process, incorporated into final approved contract agreement, and implemented prior to and through the completion of construction		
20	If any saved tree is damaged sufficiently by project implementation to result in mortality, then the contractor will replace the tree at a 1:1 ratio.	During construction, ongoing maintenance	Construction Contractor	NPS/CDPR	Requirements incorporated into final approved contract agreement, and implemented through the completion of construction and during project operation		
21	The following shall not occur within the dripline of any saved tree: parking; storage of vehicles, equipment, machinery, stockpiles of excavated soils, or construction materials; or dumping of oils or chemicals. No burning or use of equipment with an open flame shall occur near or within the dripline.	During construction	Construction contractor	NPS/CDPR	Requirements incorporated into final approved contract agreement and implemented through the completion of construction		
Wildlife							
22	If natural resources monitor detects any vertebrate species vulnerable to mortality, entrapment, or other direct effects, the species shall be avoided or the monitor will relocate the species.	Throughout project timeline	NPS/CDPR, Construction Contractor	NPS/CDPR	Requirements incorporated into final approved contract agreement, and implemented prior to, through the completion of construction, and during project operation		
23	Inform workers of the dangers of intentional or unintentional feeding of wildlife, and on inadvertent harassment through observation or pursuit. Work sites would be closed to the public.	Throughout project timeline	NPS/CDPR, Construction Contractor	NPS/CDPR	Requirements incorporated into final approved contract agreement, and implemented prior to, through the completion of construction, and during project operation		
24	All trash that may attract wildlife shall be contained and removed daily from the site(s).	Throughout project timeline	NPS/CDPR, Construction Contractor	NPS/CDPR	Requirements incorporated into final approved contract agreement, and implemented prior to, through the completion of construction, and during project operation		

Mitigation Measure	Mitigation Measure Description	Timing	Responsible for Implementing Mitigations	Responsible for Insuring Implementation	Required for Task to be Complete	Date Completed	Status / Comments
25	Maintain routes of escape from excavated pits and trenches for larger animals that might become entrapped. Cover post holes, open pipe ends and other narrow pits at the end of each construction workday. Inspect pits, trenches, post holes, pipes, and other excavations each morning for trapped animals and contact the agency staff to free them.	During Construction	NPS/CDPR, Construction Contractor	NPS/CDPR	Requirements incorporated into final approved contract agreement, and implemented prior to, through the completion of construction, and during project operation		
Special-status Species							
26	NPS/CDPR natural resources staff will monitor construction activities as necessary to ensure implementation of the mitigation measures required in this document	During Construction	NPS/CDPR, Construction Contractor	NPS/CDPR	Requirements incorporated into final approved contract agreement, and implemented prior to, through the completion of construction,		
27	No construction will occur within 825 feet of old growth redwood (approximately 500 feet down the waterline from the tank) between the dates of March 24 through September 15.	Prior to and during Construction	NPS/CDPR, Construction Contractor	NPS/CDPR	Requirements developed through design process, incorporated into final approved contract agreement, and implemented prior to and through the completion of construction		
28	Conduct Northern spotted owl surveys following approved USFWS protocol prior to construction activities. If owls are detected, construction activities will be excluded within 825 feet of owl habitat from February 1 through July 31. If any other listed special-status species are detected, additional consultation will be undertaken with the U.S. Fish and wildlife Service or California Dept. of Fish & Game to determine construction stipulations that would be required. Additional measures required by regulatory agencies will be implemented prior to and during project construction, and could include restrictions on construction timing, monitoring for presence of listed species, identification of special-status species protection buffers, and modification of facility siting.	Prior to and during Construction	NPS/CDPR, Construction Contractor	NPS/CDPR	Requirements developed through design process, incorporated into final approved contract agreement, and implemented prior to and through the completion of construction		

Mitigation Measure	Mitigation Measure Description	Timing	Responsible for Implementing Mitigations	Responsible for Insuring Implementation	Required for Task to be Complete	Date Completed	Status / Comments
29	<p>Implement the detailed measures indicated in the National Marine Fisheries Service Biological Opinion for the Southern Oregon/Northern California Coho salmon, as follows:</p> <ol style="list-style-type: none"> 1. Ground-disturbing work will be conducted only during the normal operating season (NOS) which is between June 1 and October 15. Culvert replacement will occur during the NOS but prior to upstream migration of adult anadromous salmonids. The stream course will not be dewatered when eggs or alevins are present. Riparian vegetation will be removed only if absolutely necessary for culvert upgrade or road widening activities. Temporary low water crossings will be designed, and inspected daily, to insure fish passage. The construction schedule for culvert replacement will be carefully timed in consultation with the park fish biologist. 2. All stream crossings will be constructed to accommodate at least the 100-year flood, including associated bed load and debris. Fish passage will be provided and maintained at all road crossings of existing and potential fish-bearing streams. Crossings will be constructed and maintained to prevent diversion of stream flow out of the channel and down the road in event of a crossing failure. 3. Listed salmonids that would be in the area under construction will be captured prior to and during stream flow diversion and dewatering and relocated to a suitable instream location immediately up or down stream of the work area. This will be done by RNSP Fishery Biologists by using an electroshocker and netting methods. RNSP Fishery Biologists will follow NOAA Fisheries guidelines. All efforts will be taken to neither exhaust nor kill listed salmonids during collection and relocation. 4. Water bars will be installed in temporary access roads located on slopes to control and reduce surface scouring. 5. Culvert and dip construction will take place from the bank, if possible, or on a temporary, removable pad underlain with filter fabric. 	Prior to and during Construction	NPS/CDPR, Construction Contractor	NPS/CDPR	Requirements developed through design process, incorporated into final approved contract agreement, and implemented prior to and through the completion of construction		

Mitigation Measure	Mitigation Measure Description	Timing	Responsible for Implementing Mitigations	Responsible for Insuring Implementation	Required for Task to be Complete	Date Completed	Status / Comments
29 cont.	<p>Detailed measures continued...</p> <ol style="list-style-type: none"> <li data-bbox="344 284 895 983">6. If there is a live stream at the crossing when the culvert will be replaced, stream flow will be diverted around the culvert construction site. Presence of alevins or eggs will be determined by a RNSP Fishery Biologist prior to dewatering. The diverted flows will be returned to their natural stream course as soon as construction is complete and prior to the rainy season. Any wastewater from project activities and dewatering will be disposed of off-site in a location that will not drain directly into a stream channel or carry sediment laden water into a stream channel. Installation of hay bales and silt fences will be completed before flow is restored to its natural stream channel. Ground-disturbing work will temporarily cease and disturbed sites will be winterized if the National Weather Service 5-day forecast predicts 100 percent chance of rain over 0.5 inches on a given day in the Aubell area and/or if the 1-day forecast predicts a 50 percent chance of over 0.5 inches of rain the next day. <li data-bbox="344 993 895 1286">7. Sediment delivery to streams from roads will be minimized. Road surfaces will be outsloped, except in cases where outsloping would increase sediment delivery to streams or where outsloping is unfeasible or unsafe. Road drainage will be routed away from potentially unstable channels, fills, and hillslopes. Side casting will be restricted as necessary to prevent the introduction of sediment into streams. <li data-bbox="344 1296 895 1437">8. When constructing the new arch culvert for the northernmost tributary that crosses Aubell Lane, the agencies will avoid placement of new structures, such as footings, within the streambed. <li data-bbox="344 1447 895 1538">9. Removal, installation, or operation of hazardous material storage tanks will comply with federal and state regulations. <li data-bbox="344 1548 895 1659">10. Disruption of natural hydrologic flow paths, including diversion of stream flow and interception of surface and subsurface flows, will be minimized. <li data-bbox="344 1669 895 1820">11. To minimize the effects of effluent entering the stream if the sewer line is ever damaged, the sewer line will be double lined and placed in the fill of the arch culvert where the line crosses the stream. 	Prior to and during Construction	NPS/CDPR, Construction Contractor	NPS/CDPR	Requirements developed through design process, incorporated into final approved contract agreement, and implemented prior to and through the completion of construction		

Mitigation Measure	Mitigation Measure Description	Timing	Responsible for Implementing Mitigations	Responsible for Insuring Implementation	Required for Task to be Complete	Date Completed	Status / Comments
30	Implement on-going program and new measures to reduce potential threats to listed special-status bird species as part of the <i>Conservation Strategy for Managing Threatened and Endangered Species in Redwood National and State Parks</i> (NPS 2003a), including but not limited to, noise reduction measures, and stopping work if listed special-status bird species are encountered during project activities.	Prior to and during Construction	NPS/CDPR, Construction Contractor	NPS/CDPR	Requirements developed through design process, incorporated into final approved contract agreement, and implemented prior to and through the completion of construction		
31	To avoid disturbance to bird species protected under the Migratory Bird Treaty Act, NPS will remove nesting substrate that will be subsequently disturbed by construction (trees and large shrubs) before the nesting season (February 1 through September 30) to encourage migratory birds to select nesting trees outside the project area. Nesting trees for migratory birds are abundant in the parks.	Prior to Construction	NPS	NPS/CDPR	Requirements developed through design process and implemented prior to construction		
Air Quality							
32	Limit truck and related construction equipment speeds in active construction areas (e.g., exposed dirt surfaces) to a maximum of 25 miles per hour while inside park boundaries, unless a lower speed limit is posted.	During Construction	Construction Contractor	NPS/CDPR	Requirements incorporated into final approved contract agreement and implemented through the completion of construction		
33	Cover truck beds for vehicles leaving construction sites to minimize blowing dust or loss of debris.	During Construction	Construction Contractor	NPS/CDPR	Requirements incorporated into final approved contract agreement and implemented through the completion of construction		
34	Maintain adequate dust suppression equipment and using clean water brought to the site to control excess airborne particulates at staging areas, active construction zones, and unpaved roads leading to/from active construction areas.	During Construction	Construction Contractor	NPS/CDPR	Requirements incorporated into final approved contract agreement and implemented through the completion of construction		
Natural Soundscapes							
35	Use hydraulically or electrically powered construction equipment, when feasible.	During Construction	Construction Contractor	NPS/CDPR	Requirements incorporated into final approved contract agreement and implemented through the completion of construction		
36	Locate stationary noise sources as far from sensitive receptors (e.g., residences) to the extent possible.	During design phase, construction, and operation	NPS/CDPR, Construction Contractor	NPS/CDPR	Requirements developed through design process, incorporated into final approved contract agreement, and implemented prior to, through the completion of construction, and during project operation		
37	Ensure that all construction equipment has functional exhaust/muffler systems.	During construction, and operation	NPS/CDPR, Construction Contractor	NPS/CDPR	Requirements developed through design process, incorporated into final approved contract agreement, and implemented prior to, through the completion of construction, and during project operation		

Mitigation Measure	Mitigation Measure Description	Timing	Responsible for Implementing Mitigations	Responsible for Insuring Implementation	Required for Task to be Complete	Date Completed	Status / Comments
38	Limit the idling of motors, except as necessary (e.g., concrete mixing trucks).	During construction, and operation	NPS/CDPR, Construction Contractor	NPS/CDPR	Requirements developed through design process, incorporated into final approved contract agreement, and implemented prior to, through the completion of construction, and during project operation		
39	Locate noise intensive maintenance operations at proposed new facility as distant from sensitive receptors as possible. If they must be located near sensitive receptors, muffle stationary noise sources to the extent feasible and/or, where practicable, enclose within sheds.	During design phase and operation	NPS/CDPR	NPS/CDPR	Requirements developed through design process, incorporated into final approved contract agreement, and implemented prior to, through the completion of construction, and during project operation		
40	Design new maintenance facility buildings to attenuate interior noise, such that noise generated within the maintenance facility will be less audible in the ambient environment.	During design phase	NPS/CDPR	NPS/CDPR	Requirements developed through design process		
Cultural Resources							
41	A qualified archeologist, as directed by the Secretary of the Interior and NPS/CDPR standards, and an Elk Valley Rancheria tribal representative shall monitor ground disturbing construction activities until it is determined that no subsurface cultural resources exist within the area of potential effect for both Regua and Aubell areas.	During construction	NPS/CDPR	NPS/CDPR	Implemented through the completion of construction		
42	In the event unknown cultural resources are encountered within the Aubell area during the course of construction, e.g. lithic scatters, charcoal residue, burial remains, the findings shall be examined by a qualified archeologist per the Secretary of the Interior's Professional Qualifications Standards for Archaeology (48 FR 44739). If any find is determined to be significant, representatives of the Elk Valley Rancheria and the qualified archeologist shall meet to determine the appropriate avoidance measures or other appropriate mitigation.	During construction	NPS/CDPR, Construction Contractor	NPS/CDPR	Requirements incorporated into final approved contract agreement, and implemented through the completion of construction		
43	In the event of the discovery of human remains, the California Health and Safety Code, Section 7050.5, requires that construction or excavation stop in the vicinity of discovered human remains until the coroner can determine whether the remains are those of a Native American. If the remains are determined to be Native American, the coroner must contact the Native American Heritage Commission, and the project sponsors must comply with state and federal laws relating to the disposition of Native American burials.	During construction	NPS/CDPR, Construction Contractor	NPS/CDPR	Requirements incorporated into final approved contract agreement, and implemented through the completion of construction		

Mitigation Measure	Mitigation Measure Description	Timing	Responsible for Implementing Mitigations	Responsible for Insuring Implementation	Required for Task to be Complete	Date Completed	Status / Comments
44	If human remains of Native American origin are discovered on non-federal land during project construction, CEQA Guidelines 15064.5 (e)(1)(b) will be implemented: If the coroner determines the remains to be Native American: 1. The coroner shall contact the Native American Heritage Commission within 24 hours. 2. The Native American Heritage Commission shall identify the person or persons it believes to be the most likely descended from the deceased Native American. 3. The most likely descendent may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98.	During construction	CDPR, Construction Contractor	NPS/CDPR	Requirements incorporated into final approved contract agreement and implemented through the completion of construction		
Transportation							
45	Install appropriate traffic signs.	During design phase, construction, and operation	NPS/CDPR	NPS/CDPR	Requirements developed through design process and implemented prior to, through the completion of construction, and during project operation		
46	Develop and implement comprehensive traffic control and visitor protection measures for park review/approval that: Provide procedures for preparing and submitting specific street closure, traffic control, and detour plans. Provide procedures for managing staging areas to restrict public access and maintain site safety. Ensure that motorists are safely and efficiently routed around construction areas, including advance warning signs and a traffic director to maintain safe and efficient traffic flow during the construction period. Minimum access requirements for emergency vehicles and personnel would be maintained at all times.	Prior to and during construction	NPS/CDPR, Construction Contractor	NPS/CDPR	Requirements incorporated into final approved contract agreement and implemented prior to and through the completion of construction		
Scenic Resources							
47	Where feasible, consolidate construction equipment and materials to the staging areas at the end of each work day to limit the visual intrusion of construction equipment during non-work hours.	Prior to and during construction	Construction Contractor	NPS/CDPR	Requirements incorporated into final approved contract agreement and implemented prior to and through the completion of construction		
48	Provide native vegetation to screen new developed facilities from park visitors' and adjacent land users' views.	During design phase and following construction	NPS/CDPR	NPS/CDPR	Requirements developed through design process and implemented following the completion of construction, during project operation		

Mitigation Measure	Mitigation Measure Description	Timing	Responsible for Implementing Mitigations	Responsible for Insuring Implementation	Required for Task to be Complete	Date Completed	Status / Comments
49	Design color of facility to match the vernacular of the landscape.	During design phase	NPS/CDPR	NPS/CDPR	Requirements developed through design process		
50	Design new facilities in an architectural style consistent with the national and state park setting, and that of the surrounding community.	During design phase	NPS/CDPR	NPS/CDPR	Requirements developed through design process		
51	Include the minimum lighting required for site security.	During design phase	NPS/CDPR	NPS/CDPR	Requirements developed through design process		
52	Use downward-facing and unobtrusive luminaries at facilities and building entrances and exits. Direct and shield night lighting to minimize light scatter effects.	During design phase	NPS/CDPR	NPS/CDPR	Requirements developed through design process		
Park Operations and Facilities							
53	Implement compliance monitoring to ensure that the project remains within the parameters of NEPA, CEQA, and National Historic Preservation Act compliance documents, all applicable permits, etc.	Prior to and during construction	NPS/CDPR, Construction Contractor	NPS/CDPR	Requirements incorporated into final approved contract agreement and implemented prior to and through the completion of construction		
54	Identify the construction zone and inspect the project to ensure that impacts stay within the parameters of the project area and do not escalate beyond the scope of the environmental compliance documentation, as well as to ensure that the project conforms to all applicable permits or project conditions. Store all construction equipment within the delineated work limits. Confine work areas within stream channels to the smallest area necessary.	Prior to and during construction	NPS/CDPR, Construction Contractor	NPS/CDPR	Requirements incorporated into final approved contract agreement and implemented prior to and through the completion of construction		
55	Provide a project orientation for all construction workers to increase their understanding and sensitivity to the challenges of the special environment in which they will be working.	Prior to and during construction	NPS/CDPR, Construction Contractor	NPS/CDPR	Requirements incorporated into final approved contract agreement and implemented prior to and through the completion of construction		
56	Remove all tools, equipment, barricades, signs, surplus materials, and rubbish from the project work limits upon project completion. Remove all debris from the project area, including all visible concrete, timber, and metal pieces not specifically required on-site in the project plans and specifications.	During construction	Construction Contractor	NPS/CDPR	Requirements incorporated into final approved contract agreement and implemented through the completion of construction		

Mitigation Measure	Mitigation Measure Description	Timing	Responsible for Implementing Mitigations	Responsible for Insuring Implementation	Required for Task to be Complete	Date Completed	Status / Comments
57	Develop and implement a safety plan, which includes emergency notification procedure that complies with park, federal, and state requirements and allows contractors or staff to properly notify park, federal, and/or state personnel in the event of an emergency during construction activities. This will address notification requirements related to fire, personnel, and/or visitor injury, releases of spilled material and evacuation procedures. The emergency notification procedure will be submitted to the parks for review/approval prior to implementation and start of work.	Prior to and during construction	NPS/CDPR, Construction Contractor	NPS/CDPR	Requirements incorporated into final approved contract agreement and implemented prior to and through the completion of construction		
58	Consult with utilities companies (i.e., water, wastewater, electric, communications, and telephone service suppliers) prior to the start of construction to determine the location of facilities within the project area. Locate and flag existing utility lines, pipelines, etc., and appropriate buffer zones, prior to the start of any excavation, heavy equipment use, or other activities that could damage the utilities. Advise the Underground Services Alert and agency maintenance staff at least 72 hours in advance of any planned ground disturbance in the vicinity of these areas (or in accordance with notification requirements).	Prior to and during construction	NPS/CDPR, Construction Contractor	NPS/CDPR	Requirements incorporated into final approved contract agreement and implemented prior to and through the completion of construction		
59	Minimize the use of hazardous materials for the project. Store and use all hazardous materials in compliance with federal regulations. All applicable Materials Safety Data Sheets will be kept on site for inspection. Dispose of hazardous materials at a licensed facility	Throughout project timeline	NPS/CDPR, Construction Contractor	NPS/CDPR	Requirements incorporated into final approved contract agreement and implemented prior to, through the completion of construction, and during project operation		
60	Develop and implement a comprehensive spill prevention/response plan that complies with federal and state regulations and addresses all aspects of spill prevention, notification, emergency spill response strategies for spills occurring on land and water, reporting requirements, monitoring requirements, personnel responsibilities, response equipment type and location, and drills and training requirements. The spill prevention/response plan will be submitted to the parks for review/approval prior to commencement of construction activities.	Throughout project timeline	NPS/CDPR, Construction Contractor	NPS/CDPR	Requirements developed through design process, incorporated into final approved contract agreement, and implemented prior to, through the completion of construction, and during project operation		
61	Prior to entry into the parks, clean heavy equipment to prevent importation of non-native plant species, tighten hydraulic fittings, ensure hydraulic hoses are in good condition and replace if damaged, and repair all petroleum leaks.	During construction	Construction Contractor	NPS/CDPR	Requirements incorporated into final approved contract agreement and implemented through the completion of construction		

Mitigation Measure	Mitigation Measure Description	Timing	Responsible for Implementing Mitigations	Responsible for Insuring Implementation	Required for Task to be Complete	Date Completed	Status / Comments
62	To minimize the possibility of hazardous materials seeping into soil or water, check equipment frequently to identify and repair any leaks. Standard measures include hazardous materials storage and handling procedures; spill containment, cleanup, and reporting procedures; and limitation of refueling and other hazardous activities to upland/nonsensitive sites. Provide an adequate hydrocarbon spill containment system (absorption materials, shovels and containers) on site, in case of unexpected spills in the project area. Ensure equipment is equipped with a hazardous spill containment kit. Ensure that personnel trained in the use of hazardous spill containment kits are on site at all times during construction activities.	Throughout project timeline	NPS/CDPR, Construction Contractor	NPS/CDPR	Requirements incorporated into final approved contract agreement and implemented prior to, through the completion of construction, and during project operation		
63	Removal, installation, or operation of underground and aboveground storage tanks will comply with federal and state regulations.	Throughout project timeline	NPS/CDPR, Construction Contractor	NPS/CDPR	Requirements incorporated into final approved contract agreement and implemented prior to, through the completion of construction, and during project operation		
64	Reuse and recycle project materials to the extent feasible. Dispose of project waste at an approved landfill.	Throughout project timeline	NPS/CDPR, Construction Contractor	NPS/CDPR	Requirements incorporated into final approved contract agreement and implemented prior to, through the completion of construction, and during project operation		