

**CALIFORNIA ENVIRONMENTAL QUALITY ACT
INITIAL STUDY**

The Department of Toxic Substances Control (DTSC) has completed the following document for this project in accordance with the California Environmental Quality Act (CEQA) [Pub. Resources Code, div. 13, § 21000 et seq] and accompanying Guidelines [Cal. Code Regs., tit. 14, § 15000 et seq].

PROJECT INFORMATION

PROJECT TITLE: Yosemite National Park Corrective Actions		SITE CODING:
PROJECT ADDRESS: 9035 Village Drive	CITY: Yosemite National Park	COUNTY: Mariposa
PROJECT SPONSOR: National Park Service	CONTACT: Dan Sharon	PHONE: (209) 379-1038
APPROVAL ACTION UNDER CONSIDERATION BY DTSC: <input type="checkbox"/> Initial Permit Issuance <input type="checkbox"/> Permit Re-Issuance <input type="checkbox"/> Permit Modification <input type="checkbox"/> Closure Plan <input checked="" type="checkbox"/> Removal Action Workplan <input type="checkbox"/> Remedial Action Plan <input type="checkbox"/> Interim Removal <input type="checkbox"/> Regulations <input type="checkbox"/> Corrective Measure Study/Statement of Basis <input type="checkbox"/> Other (specify):		
STATUTORY AUTHORITY: <input type="checkbox"/> California H&SC, Chap. 6.5 <input checked="" type="checkbox"/> California H&SC, Chap. 6.8 <input type="checkbox"/> Other (specify):		
DTSC PROGRAM/ADDRESS: Site Mitigation and Restoration Program 1515 Tollhouse Road Clovis, California 93611	CONTACT: Lynne Baumgras lynne.baumgras@dtsc.ca.gov	PHONE: (559) 297-3978

PROJECT DESCRIPTION:

The Department of Toxic Substances Control (DTSC) is proposing Corrective Actions (CAs) for waste generation sites at six locations in the Yosemite National Park (YNP). The majority of the sites are considered a Former Waste Disposal Area (FWDA).

Yosemite National Park (YNP) is not a typical hazardous waste generator. YNP is located on property owned by the United States federal government and administered by the National Park Service (NPS) as part of the United States Department of the Interior (DOI). Many of the administrative and maintenance functions for YNP are conducted in the El Portal Administrative Area which is located outside of YNP boundaries on contiguous property also administered by the NPS.

Yosemite National Park lies on the western slope of the Sierra Nevada range in central California between the San Joaquin Valley to the west and the Great Basin to the east. Elevations in YNP range from 2,000 feet to more than 13,000 feet above sea level. Approximately 94.5% of YNP is wilderness. Most development is concentrated in Yosemite Valley.

Historically, YNP has generated more domestic trash than chemical waste. Due to the nature of the facility and the large number of visitors and employees (including concessionaire employees) most of the waste generated has been sanitary sewage, paper, and food related waste. A smaller quantity of waste possibly containing hazardous constituents was generated from building and vehicle maintenance.

The waste was managed by burning prior to landfilling. All the landfills were unlined pits that received occasional cover. A smaller quantity of wastes such as used oil and antifreeze were collected in underground tanks prior to pumping into trucks for transport off site. The underground tanks have been removed and replaced with aboveground tanks or containers. Management practices for wastes generated from pesticide application are not adequately documented.

Currently, NPS generates wastes at over 30 separate generation points from building maintenance, vehicle maintenance, and general operations. Accumulation of hazardous waste is conducted at or near the point-of-generation and managed as a satellite accumulation area. Once hazardous waste accumulation reaches the 55-gallon limit at the satellite accumulation area, it is transported within three days to the nearest primary accumulation area located either in Yosemite Valley or El Portal pending disposal.

The NPS currently operates YNP as a large quantity generator. Large quantity generators generate at least 1,000 kilograms (2,200 pounds or 300 gallons) of hazardous waste, or more than one kilogram of acute hazardous waste, in a month. Large quantity generators may accumulate hazardous waste onsite with no quantity limit for 90 days or less provided that the waste is accumulated according to the requirements of Title 40 Code of Federal Regulations (40 CFR) 262.34. The NPS and the concessionaires no longer treat or store hazardous waste in a manner that would require a RCRA or California treatment or storage permit or other grant of authorization.

NPS generates wastes from the following activities at YNP:

Petroleum Products (vehicle maintenance; electric shop; road, trail & tree crews)

- Diesel
- Gasoline
- Motor Oil
- Hydraulic Oil
- Chain Saw & Jackhammer Fuel/Oil
- Transformer Oil
- Oil Filters

Paint (building maintenance, vehicle maintenance, tree crew)

- Empty Spray Cans
- Lacquer-based Paint
- Latex-based Paint
- Oil-based Paint
- Stain
- Thinner

Solvents (building maintenance, vehicle maintenance)

- Mineral Spirits

Other Wastes (vehicle maintenance, building maintenance, general operations)

- Antifreeze
- Equipment Batteries
- Vehicle Batteries
- Vehicle Brake Pads

Hazardous waste is generated at various work sites or generation points throughout YNP. Over 30 separate generation points have been identified within the five major operational areas of the park (Yosemite Valley, Hodgdon Meadow, Wawona, El Portal and Tuolumne). The majority of generation points are related to maintenance operations.

Accumulation of hazardous waste is conducted at or near the point-of-generation and managed as a satellite accumulation area. The NPS operates two centralized satellite accumulation area lockers for containerized waste at the maintenance areas in Wawona and Hodgdon Meadow. The NPS also operates what it designates as "primary accumulation areas" at Yosemite Valley. When hazardous waste accumulation reaches the 5 5-gallon limit at a satellite accumulation area, it is transported within three days to the nearest primary accumulation area either in Yosemite Valley or El Portal.

Used motor oil and waste antifreeze are accumulated in aboveground storage tanks located at the Valley Machine Shop and the El Portal Machine Shop. The tanks are managed as accumulation areas with respect to time limits and daily inspection requirements.

The 1984 Resource Conservation and Recovery Act (RCRA) amendments provide authority for the U.S. Environmental Protection Agency (USEPA) to require comprehensive corrective action on Solid Waste Management Units (SMWUs). This Initial Study / Mitigated Negative Declaration (ISMND) identifies and describes six SWMUs operated by the NPS.

The RCRA Facility Assessment (RFA) also makes recommendations for further corrective action activities at these six closed or inactive SMWUs which include:

- Curry FWDA (located in Yosemite Valley) (refer to **Figure 1**)
- El Capitan FWDA (located in Yosemite Valley) (refer to **Figure 1**)
- Cascades (located in Yosemite Valley) (refer to **Figure 1**)
- Pohono Pit (located in Yosemite Valley) (refer to **Figure 1**)
- South Pit (located in Yosemite Valley) (refer to **Figure 1**)
- Mather FWDA (located near Hetch Hetchy dam) (refer to **Figure 2**)

Curry FWDA

The Curry Village Dump is located in Yosemite Valley east of Curry Village and southwest of the Upper Pines Campground (refer to **Figure 1**). The Yosemite Valley community used the Curry Village Dump as a repository for household and other municipal solid waste, including ash from the Yosemite Valley incinerator. The composition of the wastes is unknown but may have included hazardous constituents. In general, NPS employees believe that any hazardous wastes that were generated in Yosemite Valley during the dump's use period could have been disposed of at this site. This waste could have included tires, brake fluid, antifreeze, motor oil, transformer oil, solvents, paint, paint thinner and standard vehicle batteries as well as large batteries from electric vehicles. The site was occasionally burned to reduce volume.

In 1926, NPS excavated a pit at this location as a source of fill for a paving project at a different location. After the pit was created, it was used as a disposal site. Disposal at the site began with the construction of Curry Village in the 1920s and ended in 1967 or 1968. Currently the site comprises approximately one acre. The depth of waste material is unknown but has been estimated at between 20 and 40 feet.

During the 1960s, after the incinerator was moved from Yosemite Valley to El Portal, and before large dumpsters came into use in Yosemite, the Curry Village Dump was used as a transfer station where refuse was stored and sorted for disposal elsewhere. Garbage was sorted by type and condition and then collected and trucked to the incinerator in El Portal. The area had concrete loading docks for these operations. The site was used as a transfer station until closed in 1967 or 1968.

In the late 1970s, an attempt was made to restore the dump area. The concrete loading docks were removed and some revegetation occurred. Reportedly, fill material was brought in and used to cover up the site. The attempt at revegetation was relatively unsuccessful and, subsequently, the site was then used as a parking lot. The area has since been used as a parking lot and a materials storage and staging area by various private contractors, Yosemite Concession Services, and the NPS.

Records indicate the site was used as a land-farm operation for aerating contaminated soils on two different occasions. In 1987, hydrocarbon impacted soils were aerated at the old Curry Village Landfill. This aeration was an attempt to remediate hydrocarbon contaminated soils which were removed from the location of an underground storage tank (UST) containing diesel fuel as part of the former Yosemite Village Service Station. This UST was removed. A second incidence of land farming at the Curry Dump occurred in 1989. Soils from Grouse Creek, contaminated with road oil, were stored at this site for treatment (apparently aeration and dilution, although the record is inconclusive). These two occasions are the only known and documented incidences of land farming at this site.

El Capitan

The El Capitan Dump is located adjacent to the Merced River, directly downstream from the old El Capitan Picnic Area (refer to **Figure 1**). Because no disposal records were kept, information regarding the specific wastes and dates of disposal is unknown. A flood occurring in December 1964 uncovered the dump when the Merced River shifted its channel and cut into the dump site. Reportedly, at that time, individuals collected brass and copper "by the box-full," as well as old car parts. In 1990, a site investigation was performed at the El Capitan dump. No hazardous constituents were detected in the few samples collected. However, the sampling conducted was considered inadequate to fully characterize the site.

The El Capitan Dump is located within the boundaries of the Yosemite Valley Archeological District as listed in the National Register of Historic Places. Archaeological investigations of the site, conducted in 1991, found that the dump contained various hotel, household, and automobile related items. One stratum of artifacts contained material that had been burned or incinerated. These materials are thought to have most likely been from regular burning at the site. A layer

of compacted cans, thought to be from the can crusher associated with the Yosemite Valley incinerator, was also found in the site. Other articles observed at the site included some paint cans and at least one 55-gallon metal drum.

Reportedly, petroleum or oil-soaked soils were present throughout the site. These may have originated from a variety of sources that include dumping, road work, mosquito abatement practices, and/or the use of petroleum products to burn trash at the site. After the archeological survey was completed, this material was apparently replaced in the site pending further action in 1992. The nature of this material and the presence of hazardous constituents is unknown.

The NPS restored the El Capitan Dump area in 1992. The soil was screened to remove large pieces of trash which were transported off-site. The soil, which still contained fragments of trash, was used as road sub-grade material. The site was then regraded to approximately the pre-dump grade and replanted.

Cascades

Cascades Camp is located near the bottom of old Big Oak Flat Road at the west end of Yosemite Valley (refer to **Figure 1**). The Civilian Conservation Corps constructed a creosote dip tank at their Cascades Camp. It is estimated that the tank was constructed in the early 1930s and was used to treat back county bridge building materials. The inground tank was constructed of concrete and was approximately 10 feet by 3 feet deep. The tank was covered by wood or corrugated metal when not in use. The tank was constructed and used through the 1970s. The fate of the tank is not known but the tank was possibly buried in place.

Pohono Pit

Pohono Pit is located at the west end of Yosemite Valley northwest of the intersection of the north side and south side drives (refer to **Figure 1**). Pohono Pit was used as a can dump as early as the 1890s. Pohono Pit was also used to store explosives and as a dump for manure and vegetation which was burned. Pohono Pit has also been used as a rock quarry, to store waste oil and road oil, and to treat wood with creosote. NPS still uses Pohono Pit to store blasting caps in a special locker.

Pohono Pit was inspected during a 1996 visual site inspection. No waste containing hazardous constituents were observed. The area showed evidence of other dumping including observations of rock piles, demolished concrete, and vegetation. An adjacent area was used for cutting logs into material for fences and other structures.

Pohono Pit Waste Oil and Road Oil Tanks

NPS used the Pohono Pit area for a variety of light industrial activities including dumping, waste oil storage, and treating wood with creosote. Pohono Pit was originally the rock quarry used to build Pohono Bridge in 1910. The NPS continued to utilize a rock crusher at the site in the 1920s to provide road material for Yosemite Valley roads. During the 1930s the NPS constructed a small asphalt batch plant at the site, locally referred to as the 'Oil Plant'.

The Oil Plant also served as storage for road oils and a repository for used waste oils generated throughout Yosemite Valley. Used oils were recycled in numerous ways including between the 1930s and the 1960s used for spraying on dirt roads for dust control, deposition over wetlands for mosquito control, and trail improvement. Some sources indicate that the NPS utilized a tank with between 250 and 500 gallons for collecting waste oil. Other sources indicate several tanks served this purpose.

The Oil Plant was located about 40 yards south of the main quarry and remnant asphalt and oils are still visible on the surface throughout the Pohono Pit site. Road oil storage reportedly consisted of several 1,000-gallon steel tanks, which were elevated on steel platforms to provide gravity filling of road maintenance trucks. The NPS operated the Oil Plant until early 1970s and then removed the oil tanks in approximately 1980.

The NPS also used the area to store or dispose of debris such as explosives (storage only), horse manure, and vegetation which was burned.

South Pit Dump

South Pit Dump is located near Southside Drive in the southwestern portion of Yosemite Valley at the El Capitan crossover road (refer to **Figure 1**). South Pit is adjacent to a steep talus slope and is subject to falling rocks. Secondary roads previously provided access to South Pit, but the roads have been abandoned and vehicle access is impractical. South Pit was formerly used to dispose of municipal solid waste including food waste from Yosemite Valley. The dump was occasionally burned to reduce waste volume. South Pit was capped with asphalt in the 1960s. Because of its location in Yosemite Valley, South Pit Dump potentially received hazardous waste dumped by visitors or NPS personnel.

NPS is planning to complete a Preliminary Assessment and Site Investigation following Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) guidelines and an Archeological Survey following National Historic Preservation Act guidelines at the Taft Toe and South Pit areas. Although the work will follow CERCLA guidelines

this is not an official CERCLA site at this time. This work is being done in anticipation of possible construction of a 1,940-space parking lot and visitor orientation and transfer facility at this location that would cover 43 acres.

Mather

The Mather Ranger Station Dump is located in Tuolumne County approximately 100 yards along an abandoned dirt road intersecting the Hetch Hetchy Road, about three miles from the Mather Entrance Station (refer to **Figure 2**). This small bum dump was established for the solid waste refuse produced by the construction and associated construction camps used to build the Hetch Hetchy Road in the 1920s. The site is approximately one quarter of an acre in surface area.

The NPS has not completed an investigation at this site. However, NPS personnel have observed moderate amounts of porcelain, metals, glass, ash, and other related materials at this site. No data exists for types and quantities of materials disposed of at this site. The NPS estimates that this site was used as a dump between the 1920s and 1930s.

PROJECT ACTIVITIES:

Based on the results of the Corrective Actions prepared for each of the six cleanup sites, the following cleanup activities were selected for each site. These cleanup activities are protective of human health and the environment and are the most cost-effective options that meet the remedy decision factors. The cleanup activities are designed to address soil contamination and consist of the following components:

Curry Village FWDA

Cleanup activities at Curry Village parking lot involve institutional controls and groundwater monitoring, plus grading and capping with a low hydraulic conductivity layer landfill cover. Surface grading and capping would target the entire target treatment area covering approximately 80,000 square feet. The prescribed landfill cover would serve as a protective barrier for human and ecological receptors from exposure to municipal waste materials, as well as prevent infiltration from surface water run-on and run-off. Surface grading would direct stormwater run-on and run-off to protect the integrity of the surface cover and prevent stormwater contact with waste materials.

The wilderness trailhead parking lot currently has a soil cover with thickness ranging from 0.5 to 4 feet. Cleanup activities would utilize the existing soil cover material and, if necessary, import soil during grading and the construction of the cover to achieve a foundation layer thickness of 24 inches while maintaining a graded slope of at least 3 percent. The foundation layer would be compacted to the extent practical using methods that are in accordance with accepted civil engineering practice. Another layer of imported soil would be placed on top of the foundation layer. The addition/mixing of fine grain materials and/or bentonite to the imported soil layer would be performed to create a low hydraulic conductivity layer. This low hydraulic conductivity layer would be 12 inches in thickness and would contain 5 percent by weight of bentonite. This imported soil layer would also be compacted in accordance with accepted civil engineering practice. An 8-ounce non-woven geotextile layer and an erosion-resistant layer (e.g., gravel cover or equivalent) would then be added to serve as the surface cover. The erosion-resistant layer would also provide protection against fugitive dust. During remedial design, various types of erosion-resistant cover (e.g., gravel, asphalt pavement, alternative pavement methods) would be evaluated and selected based on adherence to applicable or relevant and appropriate restrictions (ARARs) and decisions by Park management. The final design of the landfill cover may contain layers in varying thickness with varying amount of additives but would be designed to meet requirements of California Code of Regulations (CCR) Title 27, Section 21090 (maintain a protective seal to keep moisture and rain from penetrating the landfill waste, prevent exposure of the public and the environment to the disposed waste, and prevent breached by digging or other activities by wildlife or humans).

The final cover would be sloped to direct storm water run-off to swales or to downslope areas where the water would infiltrate. Performance of stormwater control within the FWDA extent would be equal to or better than the current existing cover.

The final cover would be designed such that minimum maintenance would be required. A cover- integrity monitoring and annual maintenance program would be implemented to ensure the long- term effectiveness of the landfill cover.

In addition, a drainage swale would be constructed at the perimeter of the FWDA (near the locations of the ephemeral streams, but outside the FWDA's horizontal extent) such that stormwater would be directed away from the FWDA. Swale design will consider available space and would be sized to accommodate future storm events to prevent erosion/scour within the swale and beyond the outflow area. Riprap would be installed to dissipate flow at the outflow of the drainage swale. The swale would be up to 9 feet wide with a 3-foot base, 18 inches deep, and 650 feet in length. The assumptions used in the preliminary sizing of the swale include a watershed area of 15 acres and an intensity of 0.387 inches in a 5-minute storm during a 100-year event. However, swale and riprap locations and sizing are subject to change during remedial design.

The landfill cover would cap the entire FWDA and isolate the wastes at the FWDA from human/ecological receptors as well as from precipitation. As a result, the potential mobility of contaminants in the wastes at the FWDA is significantly reduced. A soil management plan would provide protection for construction workers against exposure to COCs in the FWDA subsurface. A groundwater monitoring program would be in place to monitor any potential impact by the wastes at the FWDA to groundwater quality.

While there are roads that lead directly to the Site, traffic in the YNP can be congested especially during dry season, when the implementation is expected to commence. This alternative requires the import of approximately 13,000 tons of soil which would require approximately 600 truckloads of materials (assuming 22 tons/truck and 1.5 tons/bank cubic yard), and 5 weeks of truck traffic (assuming 30 trucks per day). As mentioned above, traffic in the YNP can be congested especially during dry season, when the implementation is expected to commence. Therefore, in order to satisfy the enjoyment of park resources RAO, the implementation of this remedy must occur during weeks when tourist traffic is relatively low.

EI Capitan FWDA

The objectives of the removal action for the EI Capitan site are to:

- Prevent unacceptable risks to ecological receptors from exposure to contaminants of ecological concern (COECs) in soil and porewater.
- Restore groundwater to beneficial uses within a reasonable time frame by reducing contaminant concentrations to below the RGs.
- Minimize migration of chemicals from contaminated groundwater and soils that could result in degradation of the Merced River.
- Eliminate or minimize contaminant-related constraints to the full enjoyment and use of Park resources for operational, scientific, and interpretive purposes consistent with NPS mandates.
- Satisfy federal and state ARARs and any associated cleanup standards.

Cleanup activities would involve excavation of contaminated soil/materials exceeding removal action goals (RGs). Excavated contaminated soil/materials would be transported and disposed of at an appropriately permitted solid waste facility outside of YNP.

It is estimated that exceedances of RGs in subsurface soils would necessitate removal action up to a depth of 4 feet. The estimated surface area of contaminated soils for excavation is approximately 1.5 acre. The estimated total volume of contaminated soil/materials to be excavated is approximately 9,490 cubic yards (CY).

Mechanical excavation of contaminated soils would be conducted at all locations exceeding RGs up to a depth of 4 feet. Excavation would be scheduled during the dry season when the water table is anticipated to be low to minimize the need for dewatering. Dust suppression would be maintained to eliminate contaminant migration during implementation of this alternative and reduce the exposure of contaminated soil to workers.

Clean soil would be used to backfill excavation areas to match the surface conditions that previously existed. Clean soil is assumed to be transported from offsite sources tested to ensure that no contaminated soil exceeding RGs is present. The backfill surface would be restored to match the surface conditions that previously existed.

Contaminated soil/materials would be hauled offsite and the contaminated soil/materials would be disposed of at existing licensed solid waste facilities. Excavated materials that contain hazardous waste would be transported to a Class I hazardous waste landfill (permitted to receive, store, and treat landfill hazardous waste streams) for incidental treatment to meet ARARs (e.g., land disposal restrictions [LDRs]) and for disposal. Non-hazardous excavated materials would be transported to a Class II non-hazardous waste landfill (permitted to receive and store landfill non-hazardous waste streams) for disposal.

The existing MRP effectively restricts land use changes that would represent greater risks for exposure to human and ecological receptors (NPS 2014a). Although no construction is planned at the Site, if there were to be future construction allowed by the MRP, an additional soil management plan would be put in place to provide protection for future construction workers with protocols and safety precautions for any intrusive activities involving impacted soil. It is assumed that as part of the MRP, NPS employees would periodically visit the Site to verify that there have not been any disturbances. No additional monitoring or maintenance would be performed.

Cascades

The objectives of the removal action for the Cascades site are to:

- Prevent unacceptable risks to human and ecological receptors from exposure to site contaminants in soil.
- Eliminate or minimize contaminant-related constraints to the full enjoyment and use of Park resources for operational, scientific, and interpretive purposes consistent with NPS mandates.
- Satisfy federal and state ARARs and any associated cleanup standards.

Cleanup activities would involve excavation and disposal of contaminated soil/materials exceeding removal action goals (RGs). Excavated contaminated soil/materials would be transported and disposed of at an appropriately permitted solid waste facility outside of YNP.

It is assumed that exceedances of RGs in subsurface soils would necessitate removal action up to a depth of 4 feet. The estimated surface area of contaminated soils for excavation is approximately 13,850 square feet. The estimated total volume of contaminated soil/materials to be excavated is approximately 2,080 cubic yards (CY).

Mechanical excavation of contaminated soils would be conducted at all locations exceeding RGs up to a depth of 4 feet. Excavation would be scheduled during the dry season when the water table is anticipated to be low to minimize the need for dewatering. Dust suppression would be maintained to eliminate contaminant migration during implementation of this alternative and reduce the exposure of contaminated soil to workers.

Clean soil would be used to backfill excavation areas to match the surface conditions that previously existed. Clean soil is assumed to be transported from offsite sources tested to ensure that no contaminated soil exceeding RGs is present. The backfill surface would be restored to match the surface conditions that previously existed.

Contaminated soil/materials would be hauled offsite and the contaminated soil/materials would be disposed of at existing licensed solid waste facilities. Excavated materials that contain hazardous waste would be transported to a Class I hazardous waste landfill (permitted to receive, store, and treat landfill hazardous waste streams) for incidental treatment to meet ARARs (e.g., LDRs) and for disposal. Non-hazardous excavated materials would be transported to a Class II non-hazardous waste landfill (permitted to receive and store landfill non-hazardous waste streams) for disposal.

The existing MRP effectively restricts land use changes that would represent greater risks for exposure to human and ecological receptors (NPS 2014a). Although no construction is planned at the Site, if there were to be future construction allowed by the MRP, an additional soil management plan would be put in place to provide protection for future construction workers with protocols and safety precautions for any intrusive activities involving impacted soil. It is assumed that as part of the MRP, NPS employees would periodically visit the Site to verify that there have not been any disturbances. No additional monitoring or maintenance would be performed.

Pohono Pit

Although specific cleanup activities have not been characterized for the Pohono Pit site, for the purposes of this analysis it is assumed that cleanup activities would involve limited soil/material removal and offsite disposal, or no action.

South Pit

Although specific cleanup activities have not been characterized for the South Pit site, for the purposes of this analysis it is assumed that cleanup activities would involve limited soil/material removal and offsite disposal, or no action.

Mather FWDA

Although specific cleanup activities have not been characterized for the Mather site, for the purposes of this analysis it is assumed that cleanup activities would involve limited soil/material removal and offsite disposal. Based on the shallow depth to bedrock and limited areal extent at the Mather site, it is estimated that three to five cubic yards of debris-laden waste soil/material would be generated.

PUBLIC AGENCIES WHOSE APPROVAL IS REQUIRED:

While DTSC approves the overall remedy for each cleanup site, other public agencies may be involved through permitting or consultation such as the State Water Resources Control Board, California Department of Fish and Wildlife, U.S. Fish and Wildlife Service, along with the Counties of Tuolumne, Mariposa, Mono, and Madera.

NATIVE AMERICAN CONSULTATION:

DTSC complied with the 2014 Assembly Bill 52 (AB52). DTSC provided written notification to tribes on the Tribal Consultation List from the Native American Heritage Commission (NAHC) regarding the proposed cleanup activities on December 16, 2021. The notice included a brief project description, project location, and lead agency's contact information. DTSC received interest from none of the Tribal governments contacted.

Based on the proposed cleanup site locations, histories, and absence of known cultural resource findings, it is not likely that historical resources would be identified or impacted during cleanup activities. However, if historical resources are discovered during cleanup activities, then work would stop in that area until a qualified archaeologist or appropriately licensed professional can assess the significance of the find and, if necessary, develop appropriate response measures in consultation with the DTSC and other agencies and Native American representatives, as appropriate. Please refer to the Tribal Cultural Resources analysis (Section 18) for additional information.

REFERENCES USED:

- National Park Service (NPS), 2018. Engineering Evaluation/ Cost Analysis Report, Cascades Former Creosote Dip Tank Site. Prepared by CDM Federal Programs Corporation. July 10, 2018.
- NPS, 2022. Final Draft - Non Time-Critical Removal Action Work Plan El Capitan Former Waste Disposal Area Yosemite National Park, California. Prepared by Kane Environmental, Inc. February 11, 2022.
- NPS, 2022. Final Draft - Non Time-Critical Removal Action Work Plan Cascades Waste Disposal Area Yosemite National Park, California. Prepared by Kane Environmental, Inc. February 11, 2022.
- NPS, 2020. Engineering Evaluation/ Cost Analysis Report, El Capitan Former Waste Disposal Area. Prepared by CDM Federal Programs Corporation. May 15, 2020.
- NPS, 2015. Feasibility Study / Corrective Measures Study, Curry Former Waste Disposal Area. Prepared by CDM Smith Inc. July 2, 2015.
- United States Army Corps of Engineers (ACE), 2010. Final Facility Investigation Report, Mather Waste Accumulation Area, Yosemite National Park, California. Document Control Number: ACE08-449-H. Prepared by Shaw Environmental, Inc. June 2010.

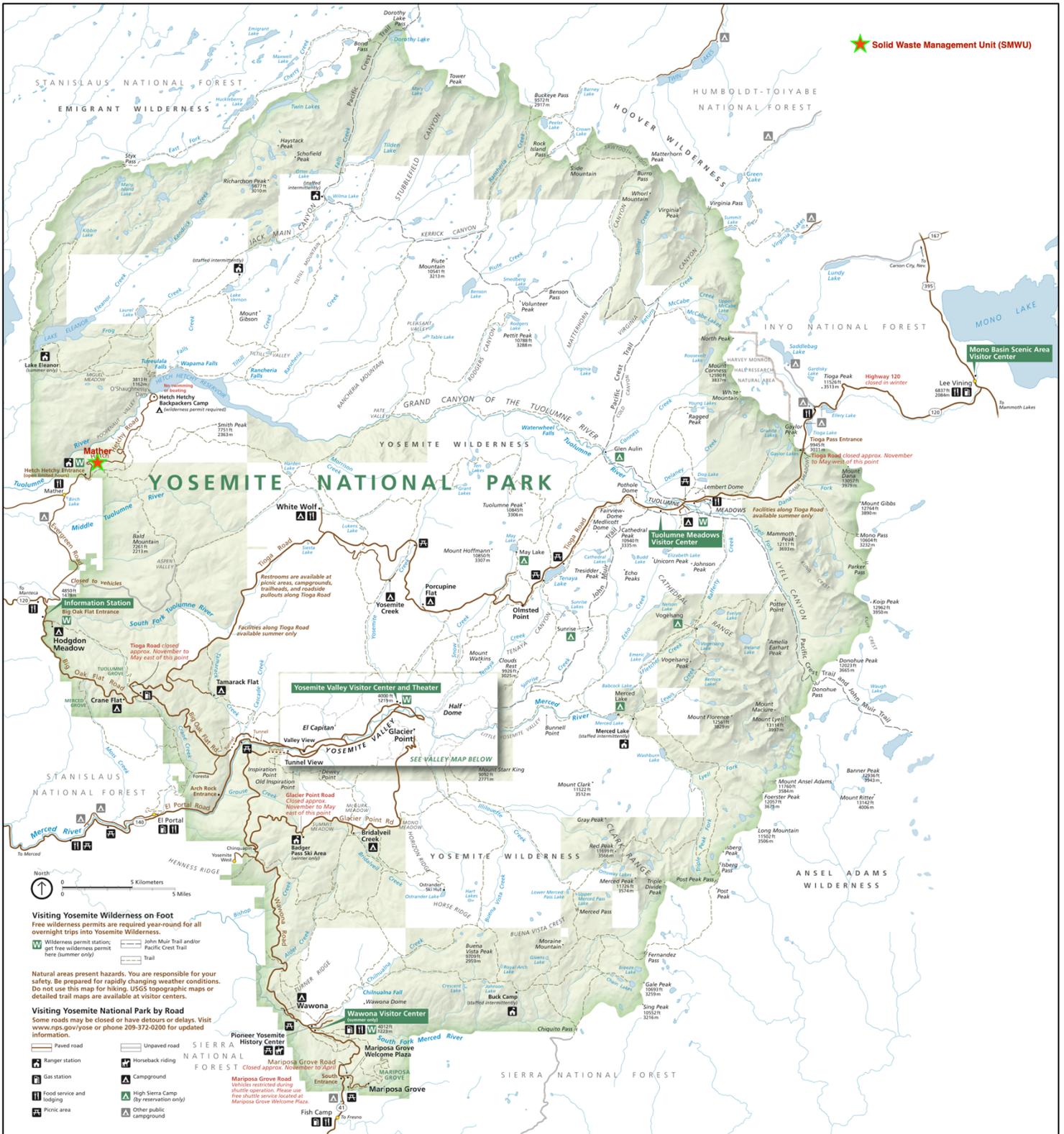


Figure 2
 SWMU Located Outside of Yosemite Valley

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ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a “Potentially Significant Impact,” as indicated by the checklist beginning on page 14. Please see the checklist beginning on page 14 for additional information.

<input type="checkbox"/>	Aesthetics	<input type="checkbox"/>	Agriculture and Forestry	<input type="checkbox"/>	Air Quality
<input checked="" type="checkbox"/>	Biological Resources	<input type="checkbox"/>	Cultural Resources	<input type="checkbox"/>	Energy
<input type="checkbox"/>	Geology/Soils	<input type="checkbox"/>	Greenhouse Gas Emissions	<input checked="" type="checkbox"/>	Hazards and Hazardous Materials
<input checked="" type="checkbox"/>	Hydrology/Water Quality	<input type="checkbox"/>	Land Use/Planning	<input type="checkbox"/>	Mineral Resources
<input checked="" type="checkbox"/>	Noise	<input type="checkbox"/>	Population/Housing	<input type="checkbox"/>	Public Services
<input type="checkbox"/>	Recreation	<input type="checkbox"/>	Transportation	<input type="checkbox"/>	Tribal Cultural Resources
<input type="checkbox"/>	Utilities/Service Systems	<input type="checkbox"/>	Wildfire	<input type="checkbox"/>	Mandatory Findings of Significance

SUMMARY OF MITIGATION

DTSC has determined the following mitigation measures would be required beyond those incorporated as part of the proposed Corrective Actions to ensure that potential impacts would be less than significant. In order to minimize a potential impact of the project to biological resources, construction activities would be required to be scheduled to minimize potential impacts during sensitive wildlife lifecycles (refer to the Biological Resources analysis (Section 4) for further discussion). In order to minimize a potential impact related to hazards and hazardous materials and public services, a Health and Safety Plan and Transportation and Traffic Control Management Plan would both be required to be prepared and implemented (refer to the Hazards and Hazardous Materials analysis (Section 9) and Public Services analysis (Section 15) for further discussion). In order to minimize a potential impact related to hydrology and water quality, a Storm Water Pollution Prevention Plan (SWPPP) would be required to be prepared and implemented (refer to the Hydrology and Water Quality analysis (Section 10) for further discussion). In order to minimize potential impacts related to noise, a construction work plan/schedule, which specifies how the contractor will minimize construction-related noise in noise-sensitive areas, shall be prepared and approved along with limiting the maximum permissible construction equipment noise levels (refer to the Noise analysis (Section 13) for further discussion).

Activities associated with the proposed Corrective Actions would be substantially similar in nature to those described and analyzed in the *Merced Wild and Scenic River Final Comprehensive Management Plan and Environmental Impact Statement* (Merced River CMP/EIS). Yosemite National Park previously agreed to implementing mitigation measures recommended in the Merced River CMP/EIS for potential environmental impacts. Implementation of the actions required in the applicable Merced River CMP/EIS mitigation measures, identified below, would similarly reduce potential impacts associated with the proposed Corrective Actions to a less-than-significant level.

Bio-1

Merced River CMP/EIS: MM-WL-1 – Fish and Wildlife Protection

The Contractor and Contractor’s employees shall not feed any animals within Yosemite National Park.

The Contractor shall make all reasonable efforts in accordance with the plans and specifications for the protection of threatened or endangered or candidate species including their habitat in accordance with Federal, State, Regional, and local laws and regulations.

Contractor shall schedule construction activities with seasonal consideration of wildlife lifecycles to minimize impacts during sensitive periods (i.e., after bird nesting seasons, when bats are neither hibernating nor have young, etc); limit the effects of light and noise on adjacent habitat through controls on construction equipment; and provide adequate education and enforcement to limit construction worker activities that are destructive to wildlife and habitats. Contractor shall maintain routes of escape from excavated pits and trenches for animals that might fall in. During construction activities, Contractor personnel shall maintain vigilance for animals caught in excavations and take appropriate action to free them.

- Excavation pits shall have a ramp or incline at either end to allow for human and wildlife escape.
- Each morning prior to commencing work activities, Contractor shall inspect construction site for trapped wildlife in excavation pits and carefully remove. If necessary, contact the Contracting Officer for assistance.

Merced River CMP/EIS: MM-WL-2 – Bear Precautions

Bears may be present at any location within the YNP boundaries, including at the project site. The Contractor shall incorporate the following precautions in all activities within the YNP boundary.

All food, toiletries, and scented items (i.e., bug spray) shall be placed in bear boxes at the construction site provided by the Contractor. Bear boxes must remain closed and latched at all times, unless items are being retrieved. No food, toiletries, or scented items shall be stored in vehicles or left out.

- All food waste and food-related waste shall be disposed of in accordance with Non-Hazardous Solid Wastes requirements described elsewhere within this section.
- All vehicles shall be checked daily to ensure that no items that may attract bears remain inside an unattended vehicle. Items that shall not be left in vehicles include canned food, drinks, soap, cosmetics, toiletries, domestic trash, recyclable food containers, ice chests, grocery bags, and unwashed items used for preparing or eating meals.
- All windows and doors in recreational vehicles or trailers used for lodging or office space shall be closed and latched when not occupied.
- The Contractor shall walk the job site at the end of each day and check for trash, food, and food-related items remaining at the site and dispose of the items in a bear-proof receptacle.
- Proper food storage is important to the welfare of the Yosemite bear population and is required by law. The Contractor shall receive and all Contractor personnel shall read a brochure entitled, *The Bears are not to Blame*, provided by NPS staff as a courtesy. Contractor staff shall call the Save-a-Bear hotline (209) 372-0322 to report overflowing trash containers, improperly stored food, or bear sightings.

Merced River CMP/EIS: MM-WL-3 – Special Status Plant Species

If special-status plant species are identified within the construction disturbance zone, in particular within restoration and revegetation areas, avoid special-status plant populations to the extent feasible during construction activities.

If it is not feasible for construction activities to avoid special status plant species, species conservation measures will be developed in coordination with Yosemite National Park natural resources staff. Measures may include salvage of special-status plants for use in revegetating disturbed areas and transplantation of special-status plants wherever possible using methods and monitoring identified in the revegetation plan, monitoring to ensure successful revegetation, protection of plantings, and replacement of unsuccessful plant materials if practicable.

Merced River CMP/EIS: MM-WL-4 – Elderberry Longhorn Beetle Conservation Guidelines

Yosemite National Park and Contractor shall adhere to the “Conservation Guidelines for the Valley Elderberry Longhorn Beetle” (USFWS 1999) to avoid and minimize adverse impacts on the federally listed valley elderberry longhorn beetle. The guidelines specify avoidance and protection measures; transplantation specifications; requirements for planting additional seedlings, cuttings, and associated native species; monitoring; and reporting. Establish an estimated 1.53 acre conservation area at the Greenemeyer Sand Pit for elderberry shrubs and required additional species, pending specifications of U.S. Fish and Wildlife Service Biological Opinion for the final Merced River Plan/EIS.

Merced River CMP/EIS: MM-WL-5 – Construction Timing

Schedule construction activities with seasonal consideration of wildlife lifecycles to minimize impacts during sensitive periods (i.e., after bird nesting seasons, when bats are neither hibernating nor have young, etc).

Merced River CMP/EIS: MM-WL-6 – Bat Habitat Protection Guidelines

A qualified bat biologist will conduct surveys prior to construction to evaluate whether habitat that will be affected by the proposed action provide hibernacula or nursery colony roosting habitat for bat species.

If bats are detected during reproduction or hibernation periods, disturbance of potential habitat will be delayed until the bats can be excluded from the area in a manner that does not adversely affect their survival or that of their young.

If bats are detected during reproduction or hibernation periods, disturbance of potential habitat will be delayed until the bats can be excluded from the area in a manner that does not adversely affect their survival or that of their young.

If surveys conducted immediately prior to construction do not reveal any bat species present within the project area, then the action will begin within three days to prevent the destruction of any bats that could move into the area after the survey.

Merced River CMP/EIS: MM-WL-7 – Bird Habitat Protection Guidelines

Beginning in early spring, a park wildlife biologist will conduct bird surveys and review current owl reports to determine whether special status species are present and may be mating, nesting, or foraging in the project vicinity.

If nesting birds are observed (e.g., discovered by workers) that are not special status species, the project manager will notify the park wildlife biologist who will recommend steps to avoid undesirable impacts to the nest or young.

Hazard-1

The contractor shall prepare and implement a health and safety plan (HASP) prior to the start of offsite transport of the impacted material that includes the following provisions:

- Identification of requirements for workers and other construction management components such as dust and off-Site migration control,
- Workers undertake training for all construction activities involving work in proximity to potentially contaminated soils in accordance with California Occupational Safety and Health Administration standards, contained in Title 8 of the CCR,
- Establishment and implementation of health and safety provisions for monitoring exposure to construction workers, procedures to be undertaken in the event that previously unreported contamination is discovered, and emergency procedures and responsible personnel,
- Description, in detail, of how potential for exposures would be minimized for all personnel who enter the cleanup site and of how migration of contaminated materials beyond the cleanup site would be prevented.

Hazard-2

The contractor shall prepare and implement a Transportation and Traffic Control Management Plan (TTCMP) prior to the start of offsite transport of the impacted material that includes the following provisions:

- Description of the characteristics of the waste to be transported (i.e., the soils and sediments),
- Destination of the waste,
- Transportation mode and routes,
- Traffic control and loading procedures.
- Description of procedures truck drivers to follow for the delivery of waste to a landfill.
- Description of how truck traffic will be managed in sensitive locations (e.g., schools).
- Store any hazardous or impacted materials in a designated material-handling area with secondary containment,
- Implement a Storm Water Pollution Prevention Plan (SWPPP) to minimize the accidental releases of hazardous or remediation materials,
- Provide enhanced spill response training for construction workers,
- Coordinate with the YNP personnel to restrict truck traffic to weeks when tourist traffic is relatively low.

MM-GCM-1 – General Construction Management

All Contractor and subcontractor employees shall receive a brief orientation about working in Yosemite National Park and the El Portal Administrative Site prior to actually performing work. The orientation describes the efforts to be taken by the Contractor and subcontractor employees to protect the natural, cultural and physical resources of YNP while working on this and other projects. This orientation also describes mitigation and other environmental protection measures that must be adhered to at all times while in the Park.

All contractor and subcontractor employees shall view a government provided orientation video to ensure each is fully aware of the natural and cultural resource protection and mitigation requirements of work at YNP, or in the El Portal Administrative Site. Government staff will provide the initial orientation. Subsequent on-going awareness orientation for new employees and when site conditions change shall be performed by contractor and integrated into construction operation procedures.

The Contractor shall maintain a manifest tracking all contractor personnel, when they received their orientation training, and when they started work. Contractor personnel shall be field identifiable as having received their orientation training by means of a readily visible sticker on their hard hat.

Prior to entry into the park, Contractor shall steam-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. 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 assessment, as well as to ensure that the project conforms with all applicable permits or project conditions. Store all construction equipment within the delineated work limits. Contractor shall also confine work areas within creek channels to the smallest area necessary.

If deemed necessary, demolition/construction work on weekends or federal government holidays may be authorized, with prior written approval of the Superintendent.

Contractor shall remove all tools, equipment, barricades, signs, surplus materials, and rubbish from the project work limits upon project completion. Contractor shall repair any asphalt surfaces that are damaged due to work on the project to original condition. Contractors shall also remove all debris from the project site, including all visible concrete, timber, and metal pieces.

The park shall develop a Communications Strategy Plan to alert necessary park and Concessioner employees, residents and visitors to pertinent elements of the construction work schedule.

Contractor shall verify utility locations by contacting the Underground Services Alert prior to the start of construction.

The Contractor shall provide protective fencing enclosures around construction areas, including utility trenches to protect public health and safety.

The NPS will apply for and comply with all federal and state permits required for construction-related activities.

Contractor and NPS shall implement compliance monitoring to ensure that the project remains within the parameters of National Environmental Policy Act (NEPA) and National Historic Preservation Act (NHPA) compliance documents.

Develop an emergency notification plan that complies with park, federal, and state requirements and allows contractors to properly notify park, federal, and/or state personnel in the event of an emergency during construction activities. This plan will address notification requirements related to fire, personnel, and/or visitor injury, releases of spilled material, evacuation processes, etc. The emergency notification plan will be submitted to the park for review/approval prior to commencement of construction activities.

Notify utilities prior to construction activities Identify locations of existing utilities prior to removal activity to prevent damage to utilities. The Underground Services Alert and NPS maintenance staff will be informed 72 hours prior to any ground disturbance. Construction-related activities will not proceed until the process of locating existing utilities is completed (water, wastewater, electric, communications, and telephone lines). An emergency response plan will be required of the contractor.

MM-HYD-1 – Stormwater Pollution Prevention Plan

Contractor shall prepare and implement a Stormwater Pollution Prevention Plan (SWPPP) that designates construction best management practices to be used to control the sources of fine sediment and to capture and filter it before entering the river. The SWPPP shall define the characteristics of the site, identify the type of construction that will be occurring, and describe the practices that will be implemented to control erosion and the release of pollutants in stormwater. At a minimum, the SWPPP shall address the following, as applicable:

Stabilization Practices

- The stabilization practices to be implemented shall specify the intended stabilization practices, which may include one or more of the following: temporary seeding, mulching, geotextiles, sod stabilization, vegetative buffer strips, erosion control mats, protection of trees, preservation of mature vegetation, etc. On the daily Contractor Quality Control (CQC) Report, the Contractor shall record the dates when the major grading activities occur, (e.g., clearing and grubbing, excavation, embankment, and/or grading); when construction activities temporarily or permanently cease on a portion of the site; and when stabilization practices are initiated. Unless otherwise directed by the Contracting Officer for the reasons below (i.e., unsuitable conditions or no activity for less than 21 days), stabilization practices shall be initiated as soon as practicable, in any portion of the site where construction activities have temporarily or permanently ceased, but no more than 14 calendar days after the activities cease.
- Unsuitable Conditions - Where the initiation of stabilization measures by the 14th day after construction activity temporarily or permanently ceases is precluded by unsuitable conditions caused by the weather, stabilization practices shall be initiated as soon as practicable after conditions become suitable.
- No Activity for Less Than 21 Days - Where construction activity will resume on a portion of the site within 21 days from when activities ceased (e.g., the total time period that construction activity is temporarily ceased is less than 21 days), then stabilization practices do not have to be initiated on that portion of the site by the 14th day after construction activity temporarily ceased.

Structural Practices

- The Contractor shall implement structural practices to divert flows from exposed soils, temporarily store flows, or otherwise limit runoff and the discharge of pollutants from exposed areas of the site. Structural practices shall be implemented in a timely manner during the construction process to minimize erosion and sediment runoff. Location and details of installation of structural practices shall be depicted on the construction drawings.

Silt Fences

- The Contractor shall provide silt fences as a temporary structural practice to minimize erosion and sediment runoff. Silt fences shall be properly installed to effectively retain sediment immediately after completing each phase of work where erosion would occur in the form of sheet and rill erosion (e.g. clearing and grubbing, excavation, embankment, and grading). Silt fences shall be installed in the locations indicated on the drawings or as needed based on Contractor operations. Final removal of silt fence barriers shall be upon approval by the Contracting Officer.
- Silt fences shall extend a minimum of 16 inches above the ground surface and shall not exceed 34 inches above the ground surface. Filter fabric shall be from a continuous roll cut to the length of the barrier to avoid the use of joints. When joints are unavoidable, filter fabric shall be spliced together at a support post, with a minimum 6-inch overlap, and securely sealed. A trench shall be excavated approximately 4 inches wide and 4 inches deep on the upslope side of the location of the silt fence. The 4-inch by 4-inch trench shall be backfilled and the soil compacted over the filter fabric. Silt fences shall be removed upon approval by the COR.

Straw Bales

- Straw bales are not authorized for use in storm water control at YNP. They have the potential to introduce exotic species into the Park environment.

Diversion Dikes

- Diversion dikes shall have a maximum channel slope of 2 percent and shall be adequately compacted to prevent failure. The minimum height measured from the top of the dike to the bottom of the channel shall be 18 inches. The minimum base width shall be 6 feet and the minimum top width shall be 2 feet. The Contractor shall ensure that the diversion dikes are not damaged by construction operations or traffic. Diversion dikes shall be located as shown on the drawings or as needed based on Contractor operations. Location of diversion dikes shall be fully coordinated with cultural and natural environmental protection requirements described in Section 01355, Natural, Cultural, and Physical Resources Protection.

Filter Fabric

- The geotextile shall comply with the requirements of ASTM D 4439, and shall consist of polymeric filaments that are formed into a stable network such that filaments retain their relative positions. The filament shall consist of a long-chain synthetic polymer composed of at least 85 percent by weight of ester, propylene, or amide, and shall contain stabilizers and/or inhibitors added to the base plastic to make the filaments resistance to deterioration due to ultraviolet and heat exposure. Synthetic filter fabric shall contain ultraviolet ray inhibitors and stabilizers to provide a minimum of six months of expected usable construction life at a temperature range of 0 to 120 degrees F. The filter fabric shall meet the following requirements:

FILTER FABRIC FOR SILT SCREEN FENCE		
Physical Property	Test Procedure	Strength Requirement
Grab Tensile	ASTM D 4632	100 lbs. min.
Elongation (%)		30% max
Trapezoid Tear	ASTM D 4533	55 lbs. min.
Permittivity	ASTM D 4491	0.2 sec
AOS (U.S. Std Sieve)	ASTM D 4751	20-100

Silt Fence Stakes and Posts

- The Contractor may use either wooden stakes or steel posts for fence construction. Wooden stakes utilized for silt fence construction, shall have a minimum cross section of 2 inches by 2 inches when hardwood is used and 4 inches by 4 inches when softwood is used, and shall have a minimum length of 5 feet. Steel posts (standard "U" or "T" section) utilized for silt fence construction, shall have a minimum weight of 1.33 pounds per linear foot and a minimum length of 5 feet.

Identification Storage and Handling

- Filter fabric shall be identified, stored and handled in accordance with ASTM D 4873.

Maintenance

- The Contractor shall maintain the temporary and permanent vegetation, erosion and sediment control measures, and other protective measures in good and effective operating condition by performing routine inspections to determine condition and effectiveness, by restoration of destroyed vegetative cover, and by repair of erosion and sediment control measures and other protective measures. The following procedures shall be followed to maintain the protective measures.
- Silt fences shall be inspected in accordance with the below paragraph, Inspections. Any required repairs shall be made promptly. Close attention shall be paid to the repair of damaged silt fence resulting from end runs and undercutting. Should the fabric on a silt fence decompose or become ineffective, and the barrier is still necessary, the fabric shall be replaced promptly. Sediment deposits shall be removed when deposits reach one-third of the height of the barrier. When a silt fence is no longer required, it shall be removed with approval of COR. The immediate area occupied by the fence and any sediment deposits shall be shaped to an acceptable grade.
- Diversion dikes shall be inspected in accordance with the below paragraph, Inspections. Close attention shall be paid to the repair of damaged diversion dikes and necessary repairs shall be accomplished promptly. When diversion dikes are no longer required, they shall be shaped to an acceptable grade.

Inspections

- The Contractor shall inspect disturbed areas of the construction site, areas used for storage of materials that are exposed to precipitation that have not been finally stabilized, stabilization practices, structural practices, other controls, and area where vehicles exit the site at least once every 7 calendar days and within 24 hours of the end of any storm that produces 0.5 inches or more rainfall at the site. Where sites have been finally stabilized, such inspection shall be conducted at least once every month.

- Disturbed areas and areas used for material storage that are exposed to precipitation shall be inspected for evidence of, or the potential for, pollutants entering the drainage system. Erosion and sediment control measures identified in the Storm Water Pollution Prevention Plan shall be observed to ensure that they are operating correctly. Discharge locations or points shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters. Locations where vehicles exit the site shall be inspected for evidence of offsite sediment tracking.
- For each inspection conducted, the Contractor shall prepare a report summarizing the scope of the inspection, name(s) and qualifications of personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the Storm Water Pollution Prevention Plan, maintenance performed, and actions taken. The report shall be furnished to the COR within 24 hours of the inspection as a part of the Contractor's daily CQC Report. A copy of the inspection report shall be maintained on the job site.

MM-HYD-3 – Hazardous Materials and Wastes

- Identify potentially hazardous substances to be used on the job site.
- Identify handling procedures to ensure that hazardous substances are not released into the air, water, or ground.
- Comply with Federal, State, and local laws and regulations for storage, handling, and disposal of these materials.
- Storage of hazardous or flammable chemicals in the staging area or elsewhere on the site is prohibited except as approved by the Contracting Officer.
- Hazardous materials shall not be discarded into the jobsite debris or waste-disposal facilities.
- Empty containers shall be removed from the site and disposed of in a manner prescribed by law.
- Used lubricants and used oil to be discarded shall be stored in marked corrosion-resistant containers and recycled or disposed in accordance with 40 CFR 279, State, and local laws and regulations.
- A copy of the Material Safety Data Sheets (MSDS) and the maximum quantity of each hazardous material to be on site at any given time is to be maintained on site and submitted to the Contracting Officer.
- Before new hazardous materials are brought on site or removed from the site, the MSDS file shall be updated and submitted to the Contracting Officer.

MM-HYD-4 – Spill Prevention and Response Plan (SPRP)

The California Regional Water Quality Control Board has issued a Cleanup and Abatement Order and Time Schedule Order to Yosemite National Park ordering that no sewage spills occur. The Contractor shall be required to follow the requirements of the Order and shall prepare a Spill Prevention and Response Plan and take appropriate spill prevention measures during all phases of the work. The California Regional Water Quality Control Board requires a minimum of 10 days to review the SPRP. All recommendations by the Board will be implemented at no additional cost to the NPS.

The primary purpose of the SPRP is to prevent sewage spills from occurring by proper planning and protection of the project area, and then to respond to any sewage spills that may occur during the course of this project including appropriate notification of staff. The Plan will be general in nature and typical to all phases of the work with site specific plans required for each area involving trenching or any work with the possibility of accessing the existing system. The sewer lines are located throughout Yosemite Valley and in close proximity to waterways and stream channels such that spilled sewage could possibly reach the Merced River.

The SPRP is structured in two parts – first a Spill Prevention Plan and then a Spill Response Plan. The Spill Prevention Plan (SPP) includes evaluation of specific conditions, set-up of containment for actual construction work as well as for bypass pumping. Sewer bypasses must be constructed to tie existing lines into the new system and to tie the new system into the existing system. The Spill Response Plan (SRP) includes the initial response to stop and contain a spill, notification of staff, clean-up, and follow-up documentation. The SPP and the SRP together comprise the entire SPRP. A template of a plan follows at the end of this Section. An electronic version of this template will be provided to the successful bidder.

All Contractor employees are required to be trained in the Spill Prevention Control in accordance with this SPRP.

MM-HYD-5 – Hazardous Materials Spill Prevention and Response Plan

Contractor shall provide a Hazardous Materials Spill Prevention and Response Plan to address spill prevention and response measures for hazardous substances used on site, including fuels. Prior to the start of work, the Contractor shall submit a plan that complies with YNP, Federal and State requirements and allows contractors to properly notify officials in the event of an emergency occurring during construction activities. YNP requirements include, and the plan shall state, at a minimum:

- During non-work operations, stationary equipment shall be parked over specially prepared containment pads designed to trap any leaking oil, fuel, or hydraulic fluids.
- Inspect construction site daily for proper storage of hazardous materials, proper parking of equipment on containment pads, and for hydraulic and oil leaks of equipment, tighten hoses, and ensure they are in good condition.
- Routine oiling and lubrication shall be conducted in areas with secondary containment using Best Management Practices (BMPs) at all times. Refueling of equipment in wetlands or stream channel areas is not allowed at any time.
- Contractor shall maintain secondary containment for all equipment operating with fluids (such as drilling) or when direct discharge of leakage, spills, or other source of construction or equipment fluids can flow directly to any streambed, whether flowing with water or dry. Containment shall be designed and installed so as to prevent accidental spills into streambeds in the event of mechanical failure or hose breakage.
- Contractor shall maintain spill response materials on the project site when using heavy equipment to ensure rapid response to small spills. These materials shall include absorbent pads, booms, or other materials as appropriate to contain oil, hydraulic fluid, solvents, and hazardous material spills. A list of the spill response materials to be kept on site shall be submitted to the Contracting Officer.
- Contractor shall provide names and phone numbers of appropriate contractor's personnel to be contacted at any time (24 hours per day) regarding accidental release of hazardous substances to air, soil or water. This list shall be submitted to the Contracting Officer and a copy visibly displayed in work areas on site.
- Contractor shall have the Contracting Officer's and other appropriate Government emergency numbers posted and shall immediately notify the Contracting Officer or other Government representative on any accidental release of hazardous substances to air, soil or water.
- Hazardous or flammable chemicals shall be prohibited from storage in the staging area, except for those substances identified in the Oil and Hazardous Materials Spill Prevention, Control, and Countermeasure Plan. Hazardous waste materials shall be immediately removed from project site in approved containers.
- Comply with all applicable regulations and policies during the removal and remediation of asbestos, lead paint, and polychlorinated biphenyls.

MM-HYD-6 – Protection from Exotic Plant Species

Prior to developing construction design documents for projects within the river corridor, the contractor shall survey the ordinary high water mark; the determination of the high water mark will be in accordance with U.S. Army Corps of Engineers guidance. Survey(s) of the ordinary high water mark will be used to determine the boundary of the riparian buffer. All new development shall be located outside of the riparian buffer, which encompasses the area within 150 feet of the ordinary high water mark on both sides of the river.

MM-NOI-1 – Construction Work Plan and Schedule

Contractor shall submit to the park for review and approval prior to commencement of construction a construction work plan/schedule that specifies the ways in which the contractor will minimize construction-related noise in noise-sensitive areas. At a minimum, the plan shall state the following:

- Ensure that all construction equipment has functional exhaust muffler systems;
- Use hydraulically or electrically powered construction equipment, when feasible;
- Locate stationary noise sources as far from sensitive receptors as possible;
- Limit the idling of motors except as necessary (e.g., concrete mixing trucks);
- A construction schedule that minimizes impacts to adjacent noise-sensitive activities;
- Engine braking ("jake" brakes) shall not be used in lodging, camping or residential areas;
- Continuous noise abatement is required to prevent disturbance and nuisance to Park visitors and workers and to the occupants of adjacent premises and surrounding areas; and

- If the Contracting Officer determines excessive noise is emanating from the construction site, the Contractor may be required to provide sound barriers to deflect noise transmission from visitor areas or other areas impacted by noise.

Construction noise shall be minimized through use of best available noise control techniques wherever feasible. Sound levels must be kept to a minimum at all times. Equipment and machinery shall not exceed 85 db when measured at 100 linear feet distance. Contractor shall use sound attenuated compressors and generators that comply with the most recent California Department of Transportation standards.

MM-NOI-2 – Noise Management Levels

Contractor shall ensure that all construction equipment and practices adhere to the following noise limitations:

Repetitive and/or intermittent, high-level noise: Permitted only during Daytime.

Do not exceed the following dB(A) limitations at 50 feet:

<u>Sound Level in dB(A)</u>	<u>Time Duration of Impact Noise</u>
70	More than 12 minutes in any hour
80	More than 3 minutes in any hour

Maximum permissible construction equipment noise levels at 50 feet:

<u>Earthmoving</u>	<u>dB(A)</u>	<u>Materials Handling</u>	<u>dB(A)</u>
Front loaders	75	Concrete mixer	75
Backhoes	75	Concrete pump	75
Dozers	75	Crane	75
Tractors	75	Jack hammer	75
Scrapers	80	Rock drill	80
Graders	75	Pneumatic tools	80
Trucks	75	Saws	75
Pavers, stationary	80	Vibrators	75
Pumps	75		
Generators	75		
Compressors	75		

Ambient Noise:

Maximum noise levels (dB) for receiving noise area at property line shall be as follows:

Residential receiving area	Daytime: 65 dB
	Nighttime: 45 dB
Commercial/industrial receiving area	Daytime: 67 dB
	Nighttime: 65 dB

In the event the existing local ambient noise level exceeds the maximum allowable receiving noise level (dB), the receiving noise level maximum for construction operations shall be adjusted as follows:

Residential receiving area: Maximum 3 additional dB above the local ambient as measured at property line.

Commercial/Industrial receiving area: Maximum 5 additional dB above the local ambient as measured at the property line.

MM-NOI-3 – Field Quality Control

Contractor shall assess potential effects of construction noise on adjacent neighbors or facility occupants in accordance with ASTM E1686 and as follows:

Ambient noise measurement: Measure at the property line at a height of at least four (4) feet above the immediate surrounding surface. Average the ambient noise level over a period of at least 15 minutes.

Ambient noise measurement at urban sites: Conduct during morning peak traffic hour between 7 A.M. and 9 A.M. and afternoon peak traffic hour between 4 P.M. and 6 P.M. In addition, conduct a 24-hour measurement at the proposed Corrective Action sites to document the noise pattern throughout the day. Adjust and weight for seasonal and climatic variations.

Monitor noise produced from construction operations in accordance with ASTM E1780.

DETERMINATION

On the basis of this initial evaluation:

<input type="checkbox"/>	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
<input checked="" type="checkbox"/>	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
<input type="checkbox"/>	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
<input type="checkbox"/>	I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
<input type="checkbox"/>	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

CERTIFICATION

I hereby certify that the statements furnished above and in the attached documentation, present the data and information required for this initial study evaluation to the best of my ability and that the facts, statements and information presented are true and correct to the best of my knowledge and belief.



04/28/2022

Preparer's Signature

Date

Lynne Baumgras
Preparer's Name

Senior Engineering Geologist
Preparer's Title

(559) 297-3978
Phone #



Branch Chief Signature

5/11/2022

Date

Ed Walker, P.E.
Branch Chief Name

Engineering Manager
Branch Chief Title

(916) 255-3676
Phone #

EVALUATION OF ENVIRONMENTAL IMPACTS

- 1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
- 4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less-than-significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).
- 5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
 - a) Earlier Analysis Used. Identify and state where they are available for review.
 - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
- 9) The explanation of each issue should identify:
 - a) the significance criteria or threshold, if any, used to evaluate each question; and
 - b) the mitigation measure identified, if any, to reduce the impact to less than significance.

ENVIRONMENTAL IMPACT ANALYSIS

1. AESTHETICS				
Except as provided in Public Resources Code Section 21099, would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

REGULATORY SETTING (LAWS, ORDINANCES, REGULATIONS, STANDARDS):

Yosemite General Management Plan

The Merced River is a prominent visual feature in Yosemite Valley along with the unique visual features created by the river over time. As a result, scenic views from nearly all lands in the Merced River corridor are distinct and scenic quality is a core value embedded in the NPS Organic Act of 1916:

Federal areas known as national parks . . . which purpose is to conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations. (NPS Organic Act, 16 USC 1)

The Yosemite Land Grant of 1864 legislation granted the Yosemite Valley from the federal government to the State of California “upon the express conditions that the premises shall be held for public use, resort, and recreation; inalienable for all time.” This was the first-time land in the United States was preserved for its scenic values and for public benefit.

The visual landscape factored prominently in the decision to designate Yosemite as a national park and is one of the primary resources that the NPS is charged with protecting. As such, the NPS has taken the approach of analyzing potential impacts on visual resources by considering these inherent resources to be self-evidently valuable, and that the crux of any analysis should focus on how visitors to the park experience these resources. Following this principle, the NPS established policies and regulations, as described above, to protect visual resources, including efforts to characterize and catalog important scenic landscapes. The NPS has further developed these policies by identifying important scenic resources and establishing a framework for protecting them, including restrictions on development of human-made structures in visually important areas. Today, although structures and infrastructure intrude into some scenic views from the main stem Merced River and South Fork Merced River, or views to the river (such as the roads near the river in Yosemite Valley), the area is largely pristine and human-made features do not dominate, even in the landscapes where they are visible.

A Sense of Place, Design Guidelines for Yosemite Valley

A Sense of Place, Design Guidelines for Yosemite Valley (2005) provides a framework for describing appropriateness of architectural and landscape character of new buildings, site work, and alterations. In general, the goals of the Design Guidelines include:

- Retention of natural site character, including setting, materials, and ecological processes.
- Design new buildings and facilities to blend with the natural environment, emphasizing non-intrusive design. They are sensitive to the environmental capacity of the site to absorb modifications. Facilities fit in with their sites rather than dominate them. Buildings are subordinate to the environment.
- Compatibility of structures and facilities with the cultural context and character in which they are located and protection of cultural integrity.
- Coordination and integration of the design of individual structures with those of the site plan as a whole.
- Enhancement of unifying architectural and landscape themes and elements within defined areas throughout Yosemite Valley.
- Emphasis on simplicity and restraint in design and respect for past building character, traditions, and practices.
- Recognition of the principles of rustic design used by previous designers, identification of those who retain validity today, and contemporary interpretation of those principles.

The detailed guidelines sections of *A Sense of Place* provide direction as to which design strategies and themes may be suitable for particular areas including Yosemite Village, Curry Village, and day-use areas.

California Scenic Highway Program

The Scenic Highway Program allows county and city governments to apply to the California Department of Transportation (Caltrans) to establish a scenic corridor protection program which was created by the Legislature in 1963. Its purpose is to protect and enhance the natural scenic beauty of California highways and adjacent corridors through special conservation treatment.

ENVIRONMENTAL SETTING (BASELINE):

The scenery of Yosemite is one of its most significant resources and is largely responsible for the high visitation of the park by people from around the world. Scenic views from nearly all lands in the Merced River corridor include steep valleys and canyon walls, clear air, spectacular rock formations, and panoramic views, which combine to offer a wealth of visual resources nearly unsurpassed in the United States. As people move through the varied topography and vegetation along sections of the valleys and canyons that frame the Merced River, they experience a varied sequence of visual resources that provide a cumulative visual experience that is unique and above and beyond that of enjoying any one single viewpoint. This experience involves the interaction of multiple elements in relation to each other: the juxtaposition of individual features with the foreground and background, the interface of different surfaces, and the interplay of light reflecting off the different colors and textures of the elements making up the visual landscape.

The six cleanup sites are located either in the Yosemite Valley, near Hetch Hetchy dam, or in the High Sierra area near Tioga Pass. Each cleanup site can be identified as part of an expansive, natural, scenic view. Each cleanup site has also been disturbed locally by human presence and activity.

APPLICABLE THRESHOLDS OF SIGNIFICANCE:

The significance determination in this visual analysis is based on consideration of: (1) the extent of change related to visibility of the proposed Corrective Action sites from key public vantage points; (2) the degree of visual contrast and compatibility in scale and character between project activities and the existing surroundings; (3) conformance of the proposed Corrective Actions with public policies regarding visual and urban design quality; and (4) potential adverse effects on scenic vistas and scenic resources.

ENVIRONMENTAL STUDIES PERFORMED AND METHODOLOGY:

No project-specific environmental studies related to aesthetic resources were prepared for the proposed Corrective Actions. However, the methodology employed for assessing potential aesthetic impacts involved considering the existing viewshed and the project activities that have the potential to change the project-area visual character.

IMPACT ANALYSES AND CONCLUSIONS:

Analysis as to whether or not project activities would:

- a. Have a substantial adverse effect on a scenic vista?

Impact Analysis:

The proposed Corrective Actions would excavate and haul impacted soil/material. No new above ground structures or modifications to existing structures would occur with implementation of the proposed Corrective Actions. Therefore, no adverse effects on the view of scenic ridges, waterways, or local vantage points would occur. The nearest scenic vistas are prominently visible from each Site. However, temporary cleanup activities at each Site would occur between two days and five weeks, beginning in the first half of 2021 and ending in the last half of 2021. Cleanup activities would involve the use of dump trucks and excavators to remove contaminated soils/materials. This heavy equipment would be visible to tourists in YNP. However, visual scenery in YNP occurs primarily above the viewer and cleanup activities would occur below the prominent visual scenery and would not disrupt the overall unique viewscape in YNP. Therefore, the temporary cleanup activities would not result in any long-term adverse effects to a scenic vista.

Conclusion:

Components of the proposed temporary cleanup activities would not have the potential to substantially affect the long-term view of a scenic vista. Therefore, there would be a less-than-significant impact.

- Potentially Significant Impact
- Less Than Significant With Mitigation Incorporated
- Less Than Significant Impact
- No Impact

- b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

Impact Analysis:

The nearest roadway to the proposed Corrective Action sites that is officially designated as a California State Scenic Highway is a section of Highway 120, located east from the YNP boundary. Even there are not any state scenic highways in YNP, it is acknowledged that the roadways extending through YNP provide unobstructed views of numerous unique, scenic resources.

Cleanup activities would involve the use of dump trucks and excavators to remove contaminated soils/materials. This heavy equipment would be visible to tourists in YNP. Visual scenery in YNP occurs primarily above the viewer. However, cleanup activities would occur below the prominent visual scenery and not disrupt the overall unique viewscape as viewed by travelers through the YNP. Therefore, the temporary cleanup activities would not result in any long-term damage to a scenic resource as viewed from a roadway.

Conclusion:

Scenic resources (e.g., trees, rock outcroppings, historic buildings) would not be damaged through implementation of proposed temporary cleanup activities. Implementation of the proposed Corrective Actions would not result in any long-term impacts to scenic resources.

- Potentially Significant Impact
- Less Than Significant With Mitigation Incorporated
- Less Than Significant Impact
- No Impact

- c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Impact Analysis:

Each cleanup site has a publicly accessible vantage point of unique, scenic resources in YNP. Cleanup activities would involve the use of dump trucks and excavators to remove contaminated soils/materials. This heavy equipment would be visible to tourists in YNP. Visual scenery in YNP occurs primarily above the viewer. However, cleanup activities would occur below the prominent visual scenery and not disrupt or degrade the overall unique viewscape in YNP. Therefore, the temporary cleanup activities would not result in any long-term degradation of the existing visual character or quality of views in YNP.

Conclusion:

Based on the temporary nature of the construction activities, a less-than-significant impact related to substantially degrading the existing visual character or quality of public views at or near the cleanup sites in YNP would occur.

- Potentially Significant Impact
- Less Than Significant With Mitigation Incorporated
- Less Than Significant Impact
- No Impact

- d. Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?

Impact Analysis:

The proposed cleanup activities would be conducted during daytime hours with the limited potential for some work to occur after sunset. Any nighttime lighting used during cleanup activities would be limited to a relatively small work area and would not introduce any new temporary or permanent sources of substantial light or glare that would adversely affect daytime or nighttime views in YNP.

Conclusion:

Cleanup activities would not require nor introduce a new temporary or permanent source of substantial light or glare that would adversely affect scenic views in YNP. Therefore, implementation of the proposed cleanup would result in a less-than-significant impact.

- Potentially Significant Impact
- Less Than Significant With Mitigation Incorporated
- Less Than Significant Impact
- No Impact

References Used:

California Department of Transportation. 2018. California Scenic Highway Program. Available at: http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/ (Accessed August 2020).

United States Department of the Interior, National Park Service (NPS). January 2013. *Merced Wild and Scenic River Final Comprehensive Management Plan and Environmental Impact Statement*.

2. AGRICULTURE AND FORESTRY RESOURCES				
<p>In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state’s inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.</p>				
Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

REGULATORY SETTING (LAWS, ORDINANCES, REGULATIONS, STANDARDS):

No laws, ordinances, regulations, or standards protecting agriculture or forestry resources are applicable to the proposed Corrective Actions.

ENVIRONMENTAL SETTING (BASELINE):

The proposed Corrective Action sites is located in YNP; however, the cleanup sites are not located in or near any agricultural or specific forestry resources. The proposed Corrective Action sites has been designated as a National Park continuously since 1890 for the protection of natural resources.

APPLICABLE THRESHOLDS OF SIGNIFICANCE:

The list of agriculture or forestry resource effects that may be considered significant contained in Appendix G of the CEQA Guidelines (Environmental Checklist) was used to establish a threshold of significance.

ENVIRONMENTAL STUDIES PERFORMED AND METHODOLOGY:

Based on the lack of agricultural or specific forestry resources in or near the cleanup sites, no environmental studies relating to agriculture or forestry resources were prepared for the proposed Corrective Actions.

IMPACT ANALYSES AND CONCLUSIONS:

Analysis as to whether or not project activities would:

- a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

Impact Analysis:

There is not any officially designated Farmland in YNP. Project-related cleanup activities would remain within each site boundary. Therefore, no impact to designated Farmland would occur.

Conclusion:

- Potentially Significant Impact
 Less Than Significant With Mitigation Incorporated
 Less Than Significant Impact
 No Impact

- b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?

Impact Analysis:

The cleanup sites are not designated as Williamson Act Land by the California Department of Conservation, Division of Land Resource Protection, and CCC Williamson Act FY 2012/2013 map (CA State Geoportal 2020). Therefore, project-related cleanup activities would not conflict with any Williamson Act contracts. The cleanup sites are zoned as Public by Tuolumne County and Natural Resources by Mariposa County. These land use designations would not conflict with any existing agricultural zoning. No impact would occur.

Conclusion:

- Potentially Significant Impact
 Less Than Significant With Mitigation Incorporated
 Less Than Significant Impact
 No Impact

- c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

Impact Analysis:

There is no land with existing zoning of forest land or timberland within the proposed Corrective Action sites. The cleanup sites are zoned as Public by Tuolumne County and Natural Resources by Mariposa County. These land use designations would not conflict with any existing forest land zoning. The cleanup activities would not directly conflict with existing zoning or cause rezoning of forest land or timberland. Therefore, there would be no impact to forest land or timberland.

Conclusion:

- Potentially Significant Impact
 Less Than Significant With Mitigation Incorporated
 Less Than Significant Impact
 No Impact

- d. Result in the loss of forest land or conversion of forest land to non-forest use?

Impact Analysis:

It is acknowledged that the cleanup sites are located in YNP which is a world-known natural resource area. One of the prominent characteristics of YNP is its forest setting. Cleanup activities would involve the use of dump trucks and excavators to remove contaminated soils/materials. This heavy equipment would be used on land in a protected forest area. However, the cleanup activities would not result in converting the existing forest land to non-forest uses. The existing forest land on which cleanup activities would occur would remain as forest land after cleanup activities complete at each site.

Conclusion:

- Potentially Significant Impact
- Less Than Significant With Mitigation Incorporated
- Less Than Significant Impact
- No Impact

- e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural uses?

Impact Analysis:

The cleanup activities would not occur in any areas of existing agricultural uses. Therefore, the proposed cleanup activities would not have the potential to conflict with existing zoning for, or cause rezoning of agricultural land. There would be no impact.

Conclusion:

- Potentially Significant Impact
- Less Than Significant With Mitigation Incorporated
- Less Than Significant Impact
- No Impact

References Used:

California State Geoportal. *California Important Farmland Finder*. 2020.
<https://gis.data.ca.gov/datasets/8ab78d6c403b402786cc231941d1b929> (Accessed September 18, 2020)

NPS. January 2013. *Merced Wild and Scenic River Final Comprehensive Management Plan and Environmental Impact Statement*.

3. AIR QUALITY				
Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations.				
Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

REGULATORY SETTING (LAWS, ORDINANCES, REGULATIONS, STANDARDS):

Federal and State Ambient Air Quality Standards

The Clean Air Act of 1970 (42 USC 7401 et seq.) tasked the U.S. Environmental Protection Agency (EPA) with establishing national ambient air quality standards (NAAQS) and periodically reassessing whether these standards are adequate to protect public health and the national welfare, including those resources and values associated with national parks and wilderness areas. The NAAQS set thresholds for criteria pollutants, including ozone (O₃), carbon monoxide (CO), nitrogen oxides (NO_x), sulfur dioxide (SO₂), suspended particulate matter (PM), and lead (Pb). Subsets of particulate matter have been identified for which permissible levels have been established since 1970 which include particulate matter of 10 microns in diameter or less (PM₁₀) and particulate matter of 2.5 microns in diameter or less (PM_{2.5}).

Under the 1988 California Clean Air Act, the California Air Resources Board has also adopted standards for these criteria pollutants (called California Ambient Air Quality Standards, or CAAQS) and applies additional standards for pollutants that are not currently included in the national standards. The federal and state ambient standards differ in some cases; in general, the California standards are more stringent, particularly for ozone and PM₁₀.

State Implementation Plans

The state and federal Clean Air Acts require nonattainment air districts to develop plans, known as State Implementation Plans (SIPs). SIPs are comprehensive plans that describe how the district would attain NAAQS. The 1990 amendments to the federal Clean Air Act set deadlines for attainment based on the severity of an area’s air pollution problem. SIPs are not single documents but are a compilation of new and previously submitted plans, programs (e.g., monitoring, modeling, permitting), district rules, state regulations, and federal controls. Many of California’s SIPs rely on the same core set of control strategies, including emission standards for cars and heavy trucks, fuel regulations, and limits on emissions from consumer products. State law makes the California Air Resources Board the lead agency for all purposes related to the SIP. Local air districts and other agencies prepare SIP elements and submit them to the California Air Resources Board for review and approval.

The cleanup sites are located in the Mountain Counties Air Basin. The Mountain Counties Air Basin has been designated as nonattainment for state and federal ozone standards. Only the YNP portion of Mariposa County is designated as nonattainment for the state PM₁₀ standard, primarily due to local sources near the Yosemite Valley Visitor Center monitoring site. The Mariposa County Air Pollution Control District (MCAPCD) is the regional agency responsible for

rulemaking, permitting, and enforcement activities affecting stationary sources in Mariposa County. No air quality plans have been prepared for the Mariposa County or Tuolumne County portion of the Mountain Counties Air Basin. The state has not required an ozone plan because of the overwhelming influence of pollutant transport on ozone conditions in Mariposa County.

In addition, both the MCAQMD and TCAQMD have published CEQA Guidelines and Thresholds of Significance guidance. The purpose of these guidelines is to assist lead agencies in evaluating air quality impacts of projects and plans proposed in either Mariposa County or Tuolumne County. In this section, air quality is evaluated against numbers set forth in these guides.

ENVIRONMENTAL SETTING (BASELINE):

California is divided into air basins that are defined partly by their meteorological and topographical characteristics. As previously noted, the cleanup sites in YNP are located in the Mountain Counties Air Basin.

The cleanup sites lie within the Sierra Nevada mountain range, which roughly parallels the eastern boundary of California and extends from the Cascades Range in the north to the Tehachapi Mountains in the south. Cooler climates with more wind are, in general, characteristic of the mountains, as contrasted with the nearby valleys. Mountain climatic zones are characterized by considerable vertical wind motion and by winds and temperatures different from those in the valleys. The Yosemite Valley, for instance, experiences inversions, which occur when air temperature increases with altitude. Flat topography traps descending cold air at night, creating a shallow inversion layer that inhibits air pollutant dispersion and results in high pollutant concentrations.

APPLICABLE THRESHOLDS OF SIGNIFICANCE:

The MCAQMD and TCAQMD CEQA Guidelines Thresholds of Significance for average daily air emissions are shown in Table 3.1 below. If project-related average daily emissions are below these thresholds, the impacts are considered less than significant, even if peak days have emissions over the thresholds.

**TABLE 3.1
THRESHOLDS OF SIGNIFICANCE FOR CONSTRUCTION-RELATED
CRITERIA AIR POLLUTANTS AND PRECURSORS**

Criteria Pollutant or Precursor	Emissions Threshold of Significance	
	MCAQMD (tons per year)	TCAQMD (pounds per day)
ROG	Not applicable	1,000
NO _x	100	1,000
PM ₁₀	100	1,000
CO ₂	500	Not applicable
CO	100	1,000

Notes:

NO_x = nitrogen oxide

PM₁₀ = particulate matter less than 10 microns in size

CO₂ = carbon dioxide

CO = carbon monoxide

ROG = reactive organic gases

ENVIRONMENTAL STUDIES PERFORMED AND METHODOLOGY:

California Emissions Estimator Model ® (CalEEMod, Version 2016.3.2) was run to determine if project-related air emissions exceed BAAQMD CEQA Air Quality Guidelines. The CalEEMod results are summarized in Table B-1, and the model basis information is summarized in Table B-2 and B-3 (refer to Attachment A). Complete CalEEMod Input and Output is provided in Attachment A. The following construction equipment was considered in modeling air emissions:

- On-road trucks (worker transportation),
- Loaders,
- Haul trucks,
- Excavators, and
- Rubber tire dozer.

IMPACT ANALYSES AND CONCLUSIONS:

Analysis as to whether or not project activities would:

- a. Conflict with or obstruct implementation of the applicable air quality plan?

Impact Analysis:

For the purposes of this analysis, potential air quality impacts were evaluated for the proposed Curry site exclusively. Activities associated with each Corrective Action taken at individual sites would occur at separate times and would not overlap. Therefore, only the Corrective Action with the most extensive activities (Curry soil cap) was evaluated and the assumption made that the other five sites would result in lesser potential impacts than concluded for the Curry site.

Construction-related activities would result in emissions of ozone precursors (NO_x and reactive organic gases [ROG]), particulates (PM₁₀), air toxics, and greenhouse gases (project-related greenhouse gas emissions are analyzed separately in Section 8 of this Initial Study/Negative Declaration). Emissions for construction activities associated with implementing the proposed cleanup activities were performed in accordance with the MCAQMD and TCAQMD CEQA Air Quality Guidelines, using the California Emissions Estimator Model ® (CalEEMod, Version 2016.3.2) and the results are shown in Table 3.2 below. The CalEEMod Input and Output model results are provided in Attachment A.

**TABLE 3.2
THRESHOLDS OF SIGNIFICANCE FOR CONSTRUCTION-RELATED
CRITERIA AIR POLLUTANTS AND PRECURSORS**

Criteria Pollutant or Precursor	Emissions Threshold of Significance		Estimated Unmitigated Corrective Action Maximum Daily Emissions (lb/day)	Is Threshold of Significance Exceeded?
	MCAQMD (tons per year)	TCAQMD (pounds per day)		
ROG	Not applicable	1,000	N/A / 0.09	No
NO _x	100	1,000	0.13 / 0.71	No
PM ₁₀	100	1,000	0.02 / 0.09	No
CO ₂	500	Not applicable	20 / N/A	No
CO	100	1,000	0.15 / 0.80	No

Notes:

NO_x = nitrogen oxide

PM₁₀ = particulate matter less than 10
microns in size

CO₂ = carbon dioxide

CO = carbon monoxide

ROG = reactive organic gases

As shown in Table 3.2, project-related construction activities that would generate the greatest amount of air emissions (Curry soil cap) would be below MCAQMD and TCAQMD CEQA Thresholds of Significance for construction impacts.

The proposed Corrective Actions would also prepare and implement a Dust Control Plan to ensure the construction activities would substantially reduce the creation of PM₁₀ and visible dust emissions during ground disturbing activities. Specifically, the proposed Corrective Actions would include best management practices (BMPs) aimed at reducing emissions from construction equipment such as:

- Using alternative fueled construction equipment when available,
- Minimizing idling time to a maximum of 5 minutes,
- Maintaining properly tuned equipment, and
- Limiting the hours of operation of heavy-duty equipment and/or the amount of equipment in use.

Conclusion:

The CalEEMod results indicate that the project-related emissions would be below the MCAQMD and TCAQMD CEQA thresholds for construction projects. The short-term construction activities of the proposed

Corrective Actions and implementation of appropriate and feasible control strategies (e.g., dust control plan, BMPs) would not conflict with or obstruct implementation of applicable air quality plan. Therefore, project impacts are considered less than significant.

- Potentially Significant Impact
- Less Than Significant With Mitigation Incorporated
- Less Than Significant Impact
- No Impact

- b. Result in cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard.

Impact Analysis:

For the purposes of this analysis, potential air quality impacts were evaluated for the proposed Curry site exclusively. Activities associated with each Corrective Action taken at individual sites would occur at separate times and would not overlap. Therefore, only the Corrective Action with the most extensive activities (Curry soil cap) was evaluated and the assumption made that the other five sites would result in lesser potential impacts than concluded for the Curry site.

The proposed cleanup Sites are designated nonattainment for state and federal ozone standards and designated as nonattainment for the state PM10 standard (NPS 2013). As shown in Table 3.2 above, the proposed Corrective Action-related emissions of these pollutants would not exceed any of the thresholds of significance established in the MCAQMD and TCAQMD CEQA Guidelines.

Conclusion:

Construction activities associated with implementing the proposed Corrective Actions would generate emissions of non-attainment pollutants that are below the thresholds of significance identified in the MCAQMD and TCAQMD CEQA Guidelines. Therefore, implementation of the proposed Corrective Actions would result in a less-than-significant impact to the net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard.

- Potentially Significant Impact
- Less Than Significant With Mitigation Incorporated
- Less Than Significant Impact
- No Impact

- c. Expose sensitive receptors to substantial pollutant concentrations?

Impact Analysis:

For the purposes of this analysis, potential air quality impacts were evaluated for the proposed Curry site exclusively. Activities associated with each Corrective Action taken at individual sites would occur at separate times and would not overlap. Therefore, only the Corrective Action with the most extensive activities (Curry soil cap) was evaluated and the assumption made that the other five sites would result in lesser potential impacts than concluded for the Curry site.

The California Air Resources Board (CARB) defines sensitive receptors as children, elderly, asthmatics, or others who are at a heightened risk of negative health outcomes due to exposure to air pollution. For the purposes of this analysis, the locations where these populations can typically congregate (e.g., schools, hospitals) are considered sensitive receptor locations. Cleanup activities associated with implementing the proposed Corrective Actions would take place in an area protected for its natural and scenic resources. YNP is a widely known area with visitors from around the world. For purposes of this analysis, visitors to YNP are considered sensitive receptors. However, the proposed cleanup activities would not generate substantial amounts of pollutant concentrations. As shown in Table 3.2 above, cleanup activities are estimated to generate air emissions below MCAQMD and TCAQMD CEQA Thresholds of Significance for construction impacts.

Conclusion:

YNP visitors are considered to be sensitive receptors and can be found throughout the park. Proposed cleanup activities would generate air emissions below MCAQMD and TCAQMD CEQA Thresholds of Significance for construction impacts and, therefore, would not have the potential to expose sensitive receptors to substantial pollutant concentrations.

- Potentially Significant Impact
- Less Than Significant With Mitigation Incorporated
- Less Than Significant Impact
- No Impact

- d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Impact Analysis:

Implementation of proposed cleanup activities have the potential to generate odors during the operation of construction equipment, such as those experienced from diesel engine exhaust. For purposes of this analysis, visitors to YNP are considered the closest receptors of odors. These visitors can be found throughout the park and have the potential to locate in close proximity to cleanup activities. However, visitors are typically moving (e.g., walking, hiking, biking, driving) through the park and staying at one location for an extended period of time. In addition, the cleanup activities would not occur near any highly popular areas of the YNP where people congregate, such as the base of Yosemite Falls, Vernal Fall, Half Dome, or The Ahwahnee. The distance between the proposed cleanup sites and popular areas of YNP is considered sufficient to eliminate the ability for a visitor to discern an odor originating from cleanup activities (i.e., diesel exhaust fumes) from the overall air space.

Conclusion:

Project-related odors during cleanup activities would not be discernable by the closest receptors (i.e., YNP visitors) because of the distance between them and the limited time that a visitor would be in proximity to a proposed cleanup site. Therefore, implementation of the cleanup activities would not result in other emissions that could adversely affect a substantial number of people.

- Potentially Significant Impact
- Less Than Significant With Mitigation Incorporated
- Less Than Significant Impact
- No Impact

References Used:

NPS. January 2013. *Merced Wild and Scenic River Final Comprehensive Management Plan and Environmental Impact Statement.*

4. BIOLOGICAL RESOURCES				
Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife, U.S. Fish and Wildlife Service, or NOAA Fisheries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

REGULATORY SETTING (LAWS, ORDINANCES, REGULATIONS, STANDARDS):

Applicable statutes and regulations to the proposed Corrective Actions include:

Federal Endangered Species Act (ESA): (16 United States Code (USC) § 1531-1544, 50 Code of Federal Regulations (CFR) Part 17). The Federal ESA provides a program for the conservation of threatened and endangered plants and animals and the habitats in which they are found.

Federal Migratory Bird Treaty Act (MBTA): (16 USC § 703-712, 50 CFR Part 21). The MBTA makes it illegal to take, possess, import, export, transport, sell, purchase, barter, or offer for sale, purchase, or barter, any migratory bird, or the parts, nests, or eggs of such a bird except under the terms of a valid Federal permit.

California Endangered Species Act (CESA): (Fish and Game Code (FGC) chapter 1.5, sections 2050-2115.5, California Code of Regulations (CCR), title 14, chapter 6, § 783.0-787.9). CESA protects or preserves all native species of fishes, amphibians, reptiles, birds, mammals, invertebrates, and plants, and their habitats, threatened with extinction and those experiencing a significant decline which, if not halted, would lead to a threatened or endangered designation.

CESA states that all native species of fishes, amphibians, reptiles, birds, mammals, invertebrates, and plants, and their habitats, threatened with extinction and those experiencing a significant decline which, if not halted, would lead to a threatened or endangered designation, will be protected or preserved.

Additionally, the California FGC § 3503 prohibits the take, possession, or needless destruction of the nest or eggs of any bird; and § 3513 prohibits the take or possession of any migratory nongame bird or part thereof as designated in the MBTA. Any birds in the orders Falconiformes or Strigiformes (birds of prey, such as hawks and owls) are protected under FGC 3503.5, which makes it unlawful to take, possess, or destroy their nest or eggs.

ENVIRONMENTAL SETTING (BASELINE):

Yosemite National Park is located within the Sierra Nevada ecoregion. The Park embraces almost 1,200 square miles of scenic wild lands set aside in 1890 to preserve a portion of the central Sierra Nevada that stretches along California's eastern flank. Yosemite is one of the largest and least-fragmented habitat blocks in the Sierra Nevada, and it supports a diversity of plants and wildlife.

Vegetation ranges from valley grasslands and woodlands through chaparral-covered slopes to montane coniferous forests and alpine meadows. The Park has an elevation range from 2,000 to 13,123 feet above sea level and contains five major vegetation zones: chaparral/oak woodland, lower montane, upper montane, subalpine and alpine.

The five major vegetation zones at Yosemite provide habitat for a variety of wildlife species. Yosemite has more than 300 species of vertebrate animals, and 85 of these are native mammals. Ungulates include large numbers of mule deer. Bighorn sheep formerly populated the Sierra Crest, but have been reduced to several remnant populations. There are 17 species of bats, nine of which are either Federal or California Species of Special Concern. Over 150 species of birds regularly occur in the Park, including Great Gray Owls. Fifty state and federally threatened, endangered and sensitive animal and plant species are found in Yosemite. Some of the Park's threatened, endangered and sensitive animal species include the Yosemite toad, mastiff and spotted bats, the Sierra Nevada red fox, the spotted owl, the California wolverine, the northern goshawk, the willow flycatcher and Bohart's blue butterfly.

APPLICABLE THRESHOLDS OF SIGNIFICANCE:

The list of biological resource effects that may be considered significant contained in Appendix G of the CEQA Guidelines (Environmental Checklist) was used to establish a threshold of significance.

ENVIRONMENTAL STUDIES PERFORMED AND METHODOLOGY:

Proposed cleanup activities are evaluated in terms of the context, intensity, and duration of the impacts, as defined below, and whether the impacts are considered beneficial or adverse to the natural environment. Vegetation data in the project area derives from the Merced Wild and Scenic River Comprehensive Management Plan / Draft Environmental Impact Statement. Quantitative analysis was used wherever possible; however, when quantitative analysis is not feasible, qualitative analysis is used. Qualitative analysis relies substantially on professional judgment, supported by extrapolation of relevant research, where appropriate, to reach reasonable conclusions as to the context, intensity, duration, and type of potential impact.

IMPACT ANALYSES AND CONCLUSIONS:

Analysis as to whether or not project activities would:

- a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Impact Analysis:

Cleanup activities may cause some local, short-term, minor, adverse impacts to natural habitat, but ultimately would result in beneficial impacts when natural ecological processes are restored. For example, construction activities associated with cleanup actions of municipal waste could have local, short-term, minor, adverse impacts on plant communities. Potential adverse impacts on vegetation include damage to or removal of vegetation. Vegetation that is needed to be removed during cleanup activities would not substantially fragment existing native vegetation communities, reduce species diversity, or substantially reduce the overall size or quality of native plant communities in YNP.

The existing municipal waste located at the proposed cleanup sites has the potential to negatively impact existing species in YNP. Such an example includes when animals ingest plastic waste which can then block their digestive tracts. Removal or capping of municipal waste is intended to result in a beneficial impact on

the overall natural habitats and species found in YNP. Even though cleanup activities are not anticipated to occur during nesting or breeding season, the proposed Corrective Actions would include MM Bio-1 to address short-term disturbance.

Conclusion:

Raptors and other birds have the potential to use the cleanup sites and surrounding areas as foraging habitat and/or nesting. During implementation of proposed cleanup activities, nearby habitat for locally nesting raptors or migratory birds could be impacted. Implementation of recommended mitigation measures would ensure potential impacts to nesting and foraging birds remain at less-than-significant levels. In addition, cleanup or capping of municipal waste would result in an overall beneficial impact to biological habitats.

- Potentially Significant Impact
- Less Than Significant With Mitigation Incorporated
- Less Than Significant Impact
- No Impact

- b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?

Impact Analysis:

There are no wetlands on the cleanup sites themselves. The Merced River runs near the three cleanup sites (Curry, El Capitan, Cascades). Cleanup activities would not occur in any wetland habitats and would only occur on the proposed cleanup sites. Construction and haul equipment along with workers would also be confined to defined access routes, designated staging areas, and designated cleanup areas. Additionally, no in-water work would occur at the Merced River interface or any other water interface. Based on the approach for conducting cleanup activities onsite, no impacts would occur to any riparian habitat or other sensitive natural community identified in local regional plans, policies, regulations, or by the CDFW, or USFWS.

Conclusion:

Wetlands are not located on any of the proposed cleanup sites and implementation of cleanup activities would not impact any nearby, offsite wetlands. Therefore, proposed cleanup activities would not have the potential to effect on any riparian habitat or other sensitive natural community.

- Potentially Significant Impact
- Less Than Significant With Mitigation Incorporated
- Less Than Significant Impact
- No Impact

- c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Impact Analysis:

Cleanup activities would not occur in any wetland areas and would only occur on the proposed cleanup sites. Construction and haul equipment along with workers would also be confined to defined access routes, designated staging areas, and designated construction areas. Additionally, no in-water work would occur at the Merced River interface or any other water interface. Based on the approach for conducting cleanup activities onsite, no impacts would occur to any wetlands through direct removal, filling, hydrological interruption, or other means.

Conclusion:

Wetlands are not located on the proposed cleanup sites and implementation of cleanup activities would not impact any nearby, offsite wetlands. Based on the approach for conducting cleanup activities onsite, no impacts would occur to any wetlands. Therefore, proposed cleanup activities would not have the potential to affect any state or federally protected wetlands.

- Potentially Significant Impact
- Less Than Significant With Mitigation Incorporated
- Less Than Significant Impact
- No Impact

- d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Impact Analysis:

Based on the temporary nature and duration of the cleanup activities and the location of work areas, the proposed cleanup activities would not have the potential to interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites. This conclusion is based on the temporary nature and duration of the cleanup work and the work areas. However, there is the potential for special status bird species to nest in or near a proposed cleanup site. The proposed Corrective Actions would include MM Bio-1 to address short-term disturbance. Once completed, removal or capping of municipal waste is intended to result in a beneficial impact on the overall natural habitats and species found in YNP including their movements and corridors.

Conclusion:

There is the potential for special status bird species to nest in or near the cleanup sites. Implementation of recommended MM Bio-1 would ensure impacts to nesting and foraging birds remain at less-than-significant levels. Once completed, removal or capping of municipal waste would result in a beneficial impact on the overall natural habitats and species found in YNP including their movements and corridors.

- Potentially Significant Impact
- Less Than Significant With Mitigation Incorporated
- Less Than Significant Impact
- No Impact

- e. Conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Impact Analysis:

NPS Management Policies (2006) establishes Service-wide vegetation management policy which includes YNP. These policies state, "Whenever possible, natural processes will be relied upon to maintain native plant and animal species and influence natural fluctuations in populations of these species."

Cleanup activities may cause some local, short-term, minor, adverse impacts to natural habitat, but ultimately would result in beneficial impacts when natural ecological processes are restored. For example, construction activities associated with cleanup actions of municipal waste could have local, short-term, minor, adverse impacts on biological resources. Potential adverse impacts on biological resources include damage to or removal of vegetation. Vegetation that is needed to be removed during cleanup activities would not substantially fragment existing native vegetation communities, reduce species diversity, or substantially reduce the overall size or quality of biological resources in YNP.

The existing municipal waste located at the proposed cleanup sites has the potential to negatively impact existing biological resources in YNP. Removal or capping of municipal waste is intended to result in a beneficial impact on the overall natural habitats and biological resources found in YNP.

Conclusion:

Various biological resources are found on the cleanup sites and surrounding areas. During implementation of proposed cleanup activities, onsite and nearby biological resources could be impacted. However, cleanup or capping of municipal waste is intended to result in an overall beneficial impact to biological resources. In addition, cleanup activities would assist and further NPS' policies for the maintenance and protection of native biological resources.

- Potentially Significant Impact
- Less Than Significant With Mitigation Incorporated
- Less Than Significant Impact
- No Impact

- f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Impact Analysis:

The 1997 Vegetation Management Plan (NPS) provides broad guidance and specific implementation plans for vegetation management in Yosemite.

Cleanup activities may cause some local, short-term, minor, adverse impacts to natural habitat, but ultimately would result in beneficial impacts when natural ecological processes are restored. For example, construction activities associated with cleanup actions of municipal waste could have local, short-term, minor, adverse impacts on natural habitat. Potential adverse impacts on natural habitat include damage to or removal of vegetation. Vegetation that is needed to be removed during cleanup activities would not substantially fragment existing native vegetation communities, reduce species diversity, or substantially reduce the overall size or quality of natural habitat in YNP.

The existing municipal waste located at the proposed cleanup sites has the potential to negatively impact existing natural habitat in YNP. Removal or capping of municipal waste is intended to result in a beneficial impact on the overall natural habitats and biological resources found in YNP.

Conclusion:

Various natural habitats are found on the cleanup sites and surrounding areas. During implementation of proposed cleanup activities, onsite and nearby natural habitats could be impacted. However, cleanup or capping of municipal waste is intended to result in an overall beneficial impact to natural habitats. In addition, cleanup activities would assist and further NPS' policies for the maintenance and protection of natural habitats found in YNP.

- Potentially Significant Impact
- Less Than Significant With Mitigation Incorporated
- Less Than Significant Impact
- No Impact

Recommended Mitigation Measures:

Bio-1

Activities associated with the proposed Corrective Actions would be substantially similar in nature to those described and analyzed in the *Merced Wild and Scenic River Final Comprehensive Management Plan and Environmental Impact Statement (Merced River CMP/EIS)*. Yosemite National Park previously agreed to implementing mitigation measures recommended in the Merced River CMP/EIS for potential environmental impacts. Implementation of the actions required in the applicable Merced River CMP/EIS mitigation measures, identified below, would similarly reduce potential impacts associated with the proposed Corrective Actions to a less-than-significant level.

Merced River CMP/EIS: MM-WL-1 – Fish and Wildlife Protection

The Contractor and Contractor's employees shall not feed any animals within Yosemite National Park.

The Contractor shall make all reasonable efforts in accordance with the plans and specifications for the protection of threatened or endangered or candidate species including their habitat in accordance with Federal, State, Regional, and local laws and regulations.

Contractor shall schedule construction activities with seasonal consideration of wildlife lifecycles to minimize impacts during sensitive periods (i.e., after bird nesting seasons, when bats are neither hibernating nor have young, etc); limit the effects of light and noise on adjacent habitat through controls on construction equipment; and provide adequate education and enforcement to limit construction worker activities that are destructive to wildlife and habitats.

Contractor shall maintain routes of escape from excavated pits and trenches for animals that might fall in. During construction activities, Contractor personnel shall maintain vigilance for animals caught in excavations and take appropriate action to free them.

- Excavation pits shall have a ramp or incline at either end to allow for human and wildlife escape.
- Each morning prior to commencing work activities, Contractor shall inspect construction site for trapped wildlife in excavation pits and carefully remove. If necessary, contact the Contracting Officer for assistance.

Merced River CMP/EIS: MM-WL-2 – Bear Precautions

Bears may be present at any location within the YNP boundaries, including at the project site. The Contractor shall incorporate the following precautions in all activities within the YNP boundary.

All food, toiletries, and scented items (i.e., bug spray) shall be placed in bear boxes at the construction site provided by the Contractor. Bear boxes must remain closed and latched at all times, unless items are being retrieved. No food, toiletries, or scented items shall be stored in vehicles or left out.

- All food waste and food-related waste shall be disposed of in accordance with Non-Hazardous Solid Wastes requirements described elsewhere within this section.
- All vehicles shall be checked daily to ensure that no items that may attract bears remain inside an unattended vehicle. Items that shall not be left in vehicles include canned food, drinks, soap, cosmetics, toiletries, domestic trash, recyclable food containers, ice chests, grocery bags, and unwashed items used for preparing or eating meals.
- All windows and doors in recreational vehicles or trailers used for lodging or office space shall be closed and latched when not occupied.
- The Contractor shall walk the job site at the end of each day and check for trash, food, and food-related items remaining at the site and dispose of the items in a bear-proof receptacle.
- Proper food storage is important to the welfare of the Yosemite bear population and is required by law. The Contractor shall receive and all Contractor personnel shall read a brochure entitled, The Bears are not to Blame, provided by NPS staff as a courtesy. Contractor staff shall call the Save-a-Bear hotline (209) 372-0322 to report overflowing trash containers, improperly stored food, or bear sightings.

Merced River CMP/EIS: MM-WL-3 – Special Status Plant Species

If special-status plant species are identified within the construction disturbance zone, in particular within restoration and revegetation areas, avoid special-status plant populations to the extent feasible during construction activities.

If it is not feasible for construction activities to avoid special status plant species, species conservation measures will be developed in coordination with Yosemite National Park natural resources staff. Measures may include salvage of special- status plants for use in revegetating disturbed areas and transplantation of special-status plants wherever possible using methods and monitoring identified in the revegetation plan, monitoring to ensure successful revegetation, protection of plantings, and replacement of unsuccessful plant materials if practicable.

Merced River CMP/EIS: MM-WL-4 – Elderberry Longhorn Beetle Conservation Guidelines

Yosemite National Park and Contractor shall adhere to the “Conservation Guidelines for the Valley Elderberry Longhorn Beetle” (USFWS 1999) to avoid and minimize adverse impacts on the federally listed valley elderberry longhorn beetle. The guidelines specify avoidance and protection measures; transplantation specifications; requirements for planting additional seedlings, cuttings, and associated native species; monitoring; and reporting. Establish an estimated 1.53 acre conservation area at the Greenemeyer Sand Pit for elderberry shrubs and required additional species, pending specifications of U.S. Fish and Wildlife Service Biological Opinion for the final Merced River Plan/EIS.

Merced River CMP/EIS: MM-WL-5 – Construction Timing

Schedule construction activities with seasonal consideration of wildlife lifecycles to minimize impacts during sensitive periods (i.e., after bird nesting seasons, when bats are neither hibernating nor have young, etc).

Merced River CMP/EIS: MM-WL-6 – Bat Habitat Protection Guidelines

A qualified bat biologist will conduct surveys prior to construction to evaluate whether habitat that will be affected by the proposed action provide hibernacula or nursery colony roosting habitat for bat species.

If bats are detected during reproduction or hibernation periods, disturbance of potential habitat will be delayed until the bats can be excluded from the area in a manner that does not adversely affect their survival or that of their young.

If bats are detected during reproduction or hibernation periods, disturbance of potential habitat will be delayed until the bats can be excluded from the area in a manner that does not adversely affect their survival or that of their young.

If surveys conducted immediately prior to construction do not reveal any bat species present within the project area, then the action will begin within three days to prevent the destruction of any bats that could move into the area after the survey.

Merced River CMP/EIS: MM-WL-7 – Bird Habitat Protection Guidelines

Beginning in early spring, a park wildlife biologist will conduct bird surveys and review current owl reports to determine whether special status species are present and may be mating, nesting, or foraging in the project vicinity.

If nesting birds are observed (e.g., discovered by workers) that are not special status species, the project manager will notify the park wildlife biologist who will recommend steps to avoid undesirable impacts to the nest or young.

References Used:

NPS. January 2013. *Merced Wild and Scenic River Final Comprehensive Management Plan and Environmental Impact Statement*.

5. CULTURAL RESOURCES				
Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

REGULATORY SETTING (LAWS, ORDINANCES, REGULATIONS, STANDARDS):

The definition of historical resources can be found in PRC §21084.1 and 14 CCR § 15064.5. Unique archaeological resources are defined in PRC § 21083.2 and 14 CCR § 15064.5. Tribal cultural resources are defined in PRC Div. 13 Section 21074.

California Assembly Bill 52 (AB52) specifies that any project for which a Notice of Preparation, Notice of Mitigated Negative Declaration or Notice of Negative Declaration is filed on or after July 1, 2015, the Lead agency must provide formal notification within 14 days of determining that an application for a project is complete or of a decision to undertake a project to the designated contact or tribal representative of the affiliated California Native American tribes. The tribe that is traditionally and culturally affiliated to the geographic area where a project is located must have requested that the lead agency in question provide notification to the tribe (PRC 21081.3.1). Please refer to Section 18, Tribal Cultural Resources, of this Initial Study for additional discussion.

If remains are found on Site, the County Coroner will make the determination of origin and disposition, pursuant to Public Resources Code (PRC) § 5097.98. If the remains are determined to be Native American, the Coroner would notify the NAHC (per Health and Safety Code (HSC) 7050.5(c)) The NAHC would identify and notify the person(s) who might be the most likely descendent, who would make recommendations for the appropriate and dignified treatment of the remains (PRC Div. 5 section 5097.98). The descendants shall complete their inspection and make recommendations for treatment within 48 hours of being granted access to the Site (CEQA Guidelines, CCR section 15064.5(e); HSC section 7050.5).

ENVIRONMENTAL SETTING (BASELINE):

There are numerous historic sites located in YNP, and a high concentration of historic sites are found in Yosemite Valley (NPS 2013b). Specific known historic sites located within ¼-mile of a proposed cleanup site include the Pohono Bridge (National Register of Historic Places List) and Camp Curry Village (National Register of Historic Places List). In addition, each of the proposed cleanup sites located in the Yosemite Valley are also located in the Yosemite Valley Historic District and Yosemite Valley Archaeological District.

The Valley floor landscape as a whole is nationally significant in the themes of outdoor recreation, tourism, and conservation. Since 1864, Yosemite has been an archetype for the preservation of scenic places through their development as public parks. The historic and archaeological districts consist of 929 buildings and sites, including El Capitan Bridge and Camp Curry. Additionally, Yosemite Valley Historic District includes resources such as natural systems/features, spatial organization, vegetation, circulation, land use, and vistas which all contribute to the significance of the district. Lastly, the Camp Curry Historic District is illustrative of the foundation and early development of the Curry family concession enterprise and their unique contribution to a character of accommodation still available in Yosemite.

APPLICABLE THRESHOLDS OF SIGNIFICANCE:

To be eligible for the California Register, a prehistoric or historic-period property must be significant at the local, state, and/or federal level under one or more of the following four criteria:

1. Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage;

2. Is associated with the lives of persons important in our past;
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or,
4. Has yielded, or may be likely to yield, information important in prehistory or history.

A resource eligible for the California Register must meet one of the criteria of significance described above and retain enough of its historic character or appearance (integrity) to be recognizable as a historical resource and to convey the reason for its significance. It is possible that a historic resource may not retain sufficient integrity to meet the criteria for listing in the National Register, but it may still be eligible for listing in the California Register.

ENVIRONMENTAL STUDIES PERFORMED AND METHODOLOGY:

No cultural resource studies to determine whether if archeological or historical resources are present at any specific proposed cleanup site were conducted. For the purposes of this analysis, each proposed cleanup site is considered to be a significant historical site because of its location in YNP.

IMPACT ANALYSES AND CONCLUSIONS:

Analysis as to whether or not project activities would:

- a. Cause a substantial adverse change in the significance of a historical resource pursuant to in §15064.5?

Impact Analysis:

Historical resources, as defined by 14 CCR section 15064.5, have been identified as potentially occurring at the cleanup sites based on their location in specific historic districts of YNP. The proposed cleanup sites have been disturbed by human presence (i.e., visitors) in YNP. Based on the existing disturbed nature of each of the proposed cleanup sites, it is not likely that previously unknown historical resources would be identified or impacted. However, if historical resources are discovered during the proposed cleanup activities, then ground disturbing activities within 25 feet would stop until a qualified archaeologist or appropriately licensed professional can assess the significance of the find and, if necessary, develop appropriate response measures in consultation with the DTSC, NPS, and other agencies and Native American representatives, as appropriate.

Conclusion:

The proposed cleanup activities would not include demolition, elimination, or manipulation of a known historical resource. In addition, the finding of a historical resource during implementation of the proposed cleanup activities is unlikely based on the extensive research previously conducted into the historic conditions of YNP, particularly in Yosemite Valley (NPS, Figure 9-48). In addition, cleanup activities would cease if a historical resource were to be discovered. Therefore, the proposed cleanup activities would not cause a substantial adverse change in the significance of a known historical resource.

- Potentially Significant Impact
- Less Than Significant With Mitigation Incorporated
- Less Than Significant Impact
- No Impact

- b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Impact Analysis:

Archaeological resources, as defined by 14 CCR section 15064.5, have not been specifically identified at the proposed cleanup sites. However, seven cleanup sites are located in the Yosemite Valley Archeological District which consists of over 100 known sites significant for their ability to yield important information about prehistoric lifeways.

Early archeological surveys of Yosemite Valley focused on prehistoric or historic-era Indian sites rather than historic-era resources representative of homesteading, visitor, and NPS facilities. The entire Yosemite Valley has been surveyed to some extent for prehistoric resources, except for wet meadows, areas of impenetrable vegetation, and some talus slopes. Due to changes in groundcover and vegetation patterns, as well as more refined survey techniques and standards since the original (1970s) inventories, it is likely that more previously undocumented, prehistoric resources exist in the Valley.

Although the majority of archeological sites in the Valley retain a relatively high degree of integrity and, therefore, maintain their eligibility for listing on the National Register, many sites have been disturbed by human activity and natural processes. Visitor use has been the most widespread impact, although its effect is not as serious as other types of impacts. Due to the scarcity of easily buildable land, several archeological sites were damaged by historic-era construction of facilities and utilities. Much of the road system was developed in the early 1900s. Other visitor accommodations, such as The Ahwahnee and Camp Curry, were constructed approximately 100 years ago. Many roads, hotels, and other visitor accommodations have been constructed since 1957, and preservation of archeological resources did not begin in earnest in Yosemite until the creation of the NHPA in 1966.

Removal or capping of municipal waste is proposed as part of cleanup activities. Actions associated with municipal waste removal or capping would include removing artificial fill and decompacting soils, recontouring the ground surface, and revegetating the area with native plant species. Some of the infrastructure removal actions are proposed for near areas of known archeological sites. Therefore, inadvertent discovery of unknown resources could occur, and it is possible that intact deposits of subsurface cultural materials may still exist in cleanup sites. Ground-disturbing actions associated with the removal of abandoned infrastructure could result in an adverse impact for those actions proposed within known sites.

While inadvertent discovery of an unrecorded site is not necessarily an impact in and of itself, it can result in exposure of artifacts and other cultural materials to erosion, loss of stratigraphic information, trampling, vandalism, and collection, when avoidance is not possible. However, if archaeological resources are discovered during the proposed cleanup activities, then ground disturbing activities within 25 feet would stop until a qualified archaeologist or appropriately licensed professional can assess the significance of the find and, if necessary, develop appropriate response measures in consultation with the DTSC, NPS, and other agencies and Native American representatives.

Conclusion:

The proposed cleanup activities would not include demolition, elimination, or manipulation of a known archaeological resource. In addition, the finding of an archaeological resource during implementation of the proposed cleanup activities is unlikely based on the extensive research previously conducted into the historic conditions of YNP, particularly in Yosemite Valley. In addition, cleanup activities would cease if an archaeological resource were to be discovered. Therefore, the proposed cleanup activities would not cause a substantial adverse change in the significance of a known archaeological resource.

- Potentially Significant Impact
- Less Than Significant With Mitigation Incorporated
- Less Than Significant Impact
- No Impact

c. Disturb any human remains, including those interred outside of dedicated cemeteries?

Impact Analysis:

There are no known human remains on or near the proposed cleanup sites and given the previous disturbance of the cleanup sites by visitors to YNP, the potential for such remains to be present is considered low. If human remains are encountered, the County Coroner would be immediately notified. No further ground disturbing activities shall occur within 25 feet of the work area until the County Coroner has made a determination of origin and disposition, pursuant to PRC § 5097.98. If the remains are determined to be Native American, the Coroner would notify the NAHC (per Health and Safety Code 7050.5(c)) and the County Coordinator of Indian Affairs.

Conclusion:

Implementation of cleanup activities is not expected to encounter or disturb any human remains, including those interred outside of dedicated cemeteries. If human remains are encountered, procedures will be followed to prevent disturbing the remains and ensure compliance with applicable codes and regulations.

- Potentially Significant Impact
- Less Than Significant With Mitigation Incorporated
- Less Than Significant Impact

No Impact

References Used:

NPS. January 2013. *Merced Wild and Scenic River Final Comprehensive Management Plan and Environmental Impact Statement.*

6. ENERGY				
Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

REGULATORY SETTING (LAWS, ORDINANCES, REGULATIONS, STANDARDS):

In 2015, Governor Brown signed Senate Bill 350 to codify climate, clean energy, and energy efficiency goals. The regulations focus on generating energy through renewable sources and increasing the energy efficiency of buildings.

ENVIRONMENTAL SETTING (BASELINE):

Electrical power and natural gas are provided to the proposed cleanup sites by Pacific Gas and Electric Company (PG&E). PG&E obtains its energy supplies from power plants and natural gas fields in northern California and from energy purchased outside its service area and delivered through high voltage transmission lines.

APPLICABLE THRESHOLDS OF SIGNIFICANCE:

The list of energy resource effects that may be considered significant contained in Appendix G of the CEQA Guidelines (Environmental Checklist) was used to establish a threshold of significance.

ENVIRONMENTAL STUDIES PERFORMED AND METHODOLOGY:

Based on the lack of significant increase in energy demand from cleanup sites, no environmental studies relating to energy resources were prepared for the proposed cleanup activities.

IMPACT ANALYSES AND CONCLUSIONS:

Analysis as to whether or not project activities would:

- a. Result in potentially significant impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Impact Analysis:

To implement the proposed cleanup activities, it is expected that construction equipment (e.g., tractors, excavators, loaders, generators, trucks, light-duty vehicles) would use petroleum fuels (diesel and gasoline products) and would not use on-site electricity or natural gas sources. Implementation of the proposed site-specific cleanup activities would occur over a short duration (5 weeks maximum) and, therefore, the wasteful, inefficient, or unnecessary use of petroleum fuels would not occur. Construction contractors would use existing office space in YNP. Implementation of the proposed Corrective Actions would not result in adding any new facilities that would increase the demand for energy resources.

Conclusion:

The proposed cleanup activities would not add new facilities that could increase the demand for energy resources. Cleanup activities would use equipment in accordance with manufacturer’s specifications. Therefore, implementation of the proposed cleanup activities would not result in a wasteful, inefficient, or unnecessary consumption of energy resources. In addition, implementation of proposed cleanup activities would not result in a new permanent energy demand.

Potentially Significant Impact

- Less Than Significant With Mitigation Incorporated
- Less Than Significant Impact
- No Impact

b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Impact Analysis:

In 2015, Governor Brown signed Senate Bill 350 to codify climate, clean energy, and energy efficiency goals. The regulations focus on generating energy through renewable sources and increasing the energy efficiency of buildings. Implementation of proposed cleanup activities would not result in constructing any new buildings that would increase the demand for energy resources, renewable or otherwise.

Conclusion:

The proposed cleanup activities would not construct new facilities or permanent structures and would not generate any new energy demands. Therefore, the proposed cleanup activities would not conflict with or obstruct any state or local plan for renewable energy or energy efficiency.

- Potentially Significant Impact
- Less Than Significant With Mitigation Incorporated
- Less Than Significant Impact
- No Impact

References Used:

NPS. January 2013. *Merced Wild and Scenic River Final Comprehensive Management Plan and Environmental Impact Statement.*

7. GEOLOGY AND SOILS				
Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

REGULATORY SETTING (LAWS, ORDINANCES, REGULATIONS, STANDARDS):

The National Park Service (NPS) has several guiding principles with respect to the management of geologic resources. Geologic resources include geologic processes, shorelines, hazards, and unique geologic features. These guidelines are specified in the NPS Management Policies 2006. That document specifies that the NPS will, at a minimum: (1) assess the impacts of natural processes and human activities on geologic resources, (2) maintain and restore the integrity of existing geologic resources, (3) integrate geologic resource management into NPS operations and planning, and (4) interpret geologic resources for park visitors (NPS 2006a, section 4.8.1, 53). With a few exceptions, the management policies generally direct the NPS to allow natural geologic processes to proceed unimpeded; facilitate the continuance of natural shoreline processes; and protect geologic resources from human-induced impacts while minimizing the potential impacts of geohazards on visitors, staff, and developed areas (NPS 2006a).

ENVIRONMENTAL SETTING (BASELINE):

The proposed cleanup sites are located in Yosemite National Park (YNP) which occupies approximately 1,170 square miles in the central portion of the Sierra Nevada. The Sierra Nevada is the highest and most continuous mountain range in California. The range is generally asymmetrical, with a gentle west slope and a steep east escarpment. Elevations approach sea level on the western side and reach about 14,000 feet above mean sea level at the crest.

The Sierra Nevada is essentially an uplifted block of the earth's crust that was tilted westward by normal faults on the eastern boundary. Granitic bedrock is found widespread in YNP and dominates a significant portion of the Sierra Nevada. The upper reaches of the main stem of the Merced River are dominated by the interaction of a wild river flowing through granitic landscapes. This glaciated canyon is narrow, with steep gradients in some areas, and wider in other areas where the river flows at a gradual slope and forms a floodplain. Yosemite Valley is primarily composed of granite and is glacially carved, with its floor ranging from 3,800 to 4,200 feet above sea level. The valley is oriented in an east-west direction, and its sides rise 1,500 feet to 4,000 feet above the essentially flat valley floor. Yosemite Valley is approximately 6.8 miles long and varies from a little under 0.5-mile-wide to around 0.75 mile wide.

The downslope movement of the ice masses cut and sculpted the U-shaped valley that is present today. The geologic display also includes the formations underlying Vernal Fall and Nevada Fall, and constitutes one of the finest examples of stair-step morphology in the country.

When glaciers melt, the rock debris they transport (till) is deposited in ridge-shaped landforms known as moraines. A medial moraine at the east end of Yosemite Valley was created when glaciers extending from Upper Merced and Tenaya canyons merged at the confluence of the two canyons. Two other prominent moraines were formed in Yosemite Valley after the last glacier retreated about 15,000 years ago. A terminal moraine, marking the furthest extent of the glacier, lies just east of Bridalveil Meadow. The El Capitan moraine, lying further east, is a recessional moraine, formed after the leading edge of the glacier retreated up the valley from its farthest extent. After the last glacier melted, water flow dammed morainal material to form what is now referred to as the prehistoric Lake Yosemite. Stream deposits then filled in Lake Yosemite, adding to the 2,000-foot-thick sediment that underlies the present-day floor of Yosemite Valley and covers the glacially eroded granite rock below.

APPLICABLE THRESHOLDS OF SIGNIFICANCE:

The list of geological and soils resource effects that may be considered significant contained in Appendix G of the CEQA Guidelines (Environmental Checklist) was used to establish a threshold of significance.

ENVIRONMENTAL STUDIES PERFORMED AND METHODOLOGY:

No site-specific geological studies were conducted at any proposed cleanup site.

IMPACT ANALYSES AND CONCLUSIONS:

Analysis as to whether or not project activities would:

- a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
 - i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

Impact Analysis:

The Sierra Nevada range of YNP is not considered an area of particularly high seismic activity. No active or potentially active faults have been identified in the mountain region of the park (NPS 2003). However, Yosemite can undergo seismic shaking associated with earthquakes on fault zones on the east and west margins of the Sierra Nevada range, as it has done in the past. These fault zones include the Foothills fault zone to the west, the volcanically active area in the Mono Craters-Long Valley Caldera area to the east, and the various faults in the Owens Valley fault zone, also to the east.

The Foothills fault zone, which includes the Melones Fault and Bear Mountain Fault, extends in a north-south direction in the foothills of the Sierra Nevada, approximately 30–50 miles west of Yosemite Valley. This fault zone has not experienced movement in the last 2 million years and thus is not considered active or potentially active.

The Mono Lake fault is located approximately 35 miles northeast of Yosemite Valley in the Mono Craters-Long Valley Caldera region. Since 1980, this area has experienced considerable seismic activity. Earthquakes have been attributed to movement on the Mono Lake fault (Sierra Nevada frontal fault) and movement associated with resurgent volcanic activity of the Long Valley Caldera. The Mono Craters last erupted 600 years ago. A 5.7-magnitude earthquake on the Mono Lake fault in October 1990 was felt as far west as Sacramento and the San Francisco Bay Area and caused landslides and rock falls at Tioga Pass and on the Big Oak Flat Road. In September 2004, a swarm of earthquakes, with two greater than magnitude 5, occurred in the Adobe Hills north of Long Valley and just east of Mono Lake; the epicenter of the swarm is in the vicinity of the Hunton Valley fault system.

The Owens Valley fault, located approximately 100 miles southeast of Yosemite Valley, has experienced movement in the last 200 years, and the California Geological Survey considers this fault active. The most notable earthquake felt in YNP was the Owens Valley earthquake of March 26, 1872. The Owens Valley earthquake is estimated to have had a magnitude of 7.6 and was one of the largest earthquakes in U.S. history. This earthquake reportedly caused damage in the Sacramento and San Joaquin valleys and caused significant rock falls in Yosemite Valley.

The proposed cleanup sites are not located in an Alquist-Priolo Earthquake Fault Zone and a known earthquake fault does not cross any of the sites (CGS, 2020). The nearest Alquist-Priolo Earthquake Fault Zone, Mono Lake fault, is located approximately 13 miles east of the Tioga Pass area. The closest fault zone to the Yosemite Valley is the Silver Lake fault which is approximately 28 miles to east.

Site workers would be present for a short duration during proposed site-specific cleanup activities (5 weeks maximum) and therefore the potential for exposure to substantial risk of injury to people would be limited. In addition, the cleanup activities would not involve the installation of any subsurface features. However, cleanup activities would install a soil cover (cap) at the Curry cleanup site but this feature would not expose people or structures to significant impacts from fault rupture associated effects.

Conclusion:

The proposed cleanup activities are not identified as being in an Alquist-Priolo Earthquake Fault Zone and no known earthquake faults exist on any of the cleanup sites; therefore, the risk of loss, injury, or death involving from onsite ruptures would not occur.

- Potentially Significant Impact
- Less Than Significant With Mitigation Incorporated
- Less Than Significant Impact
- No Impact

ii) Strong seismic ground shaking?

Impact Analysis:

The proposed Corrective Action sites are located in a seismically active area and the site may be exposed to moderate to strong shaking in the event of an earthquake in the region (CGS, 2016).

Implementation of cleanup activities would require the use of heavy equipment and would place numerous workers onsite. Workers would be present for approximately 5 weeks maximum at a specific site; therefore, the potential for substantial risk or injury to people from seismic ground shaking would be limited. In addition, the cleanup activities would not involve the installation of any subsurface features. However, cleanup activities would install a soil cover (cap) at the Curry cleanup site but this feature would not expose people or structures to significant impacts from strong seismic ground shaking if it were to occur.

Conclusion:

Even though the cleanup sites are located in a seismically active area and the sites may be exposed to moderate to strong shaking if an earthquake occurred, the cleanup activities would occur outdoors away from any structures. Therefore, the risk of loss, injury, or death from strong seismic ground shaking would be negligible.

- Potentially Significant Impact
- Less Than Significant With Mitigation Incorporated
- Less Than Significant Impact
- No Impact

iii) Seismic-related ground failure, including liquefaction?

Impact Analysis:

The proposed cleanup sites are susceptible to liquefaction and seismically induced settlement (NPS 2003). Due to liquefaction, which generally occurs at depths shallower than 50 ft-bgs, soils may lose their ability to support structures. However, cleanup activities would not involve building new structures.

Workers would be present for the short project duration (5 weeks maximum at a specific site), therefore the potential for substantial risk or injury to people would be limited. In addition, the cleanup activities would not involve the installation of any subsurface features. However, cleanup activities would install a soil cover (cap) at the Curry cleanup site but this feature would not expose people or structures to significant impacts from seismic-related ground failure, including liquefaction.

Conclusion:

Even though the cleanup sites are in an area susceptible to liquefaction and seismically induced settlement, cleanup activities would not involve activities that would place buildings or people at risk of loss, injury, or death at significant risk if liquefaction.

- Potentially Significant Impact
- Less Than Significant With Mitigation Incorporated
- Less Than Significant Impact
- No Impact

iv) Landslides?

Impact Analysis:

The potential for landslide hazards has been identified throughout YNP which could occur as a result in the unlikely event of a large earthquake (NPS 2003). These hazards are typically along the edges of cliffs. The cleanup activities would be performed on level ground and not in areas at risk of rockfalls or landslides (e.g., cliffs). Therefore, there would be little potential for substantial risk or injury from landslides or rockfalls.

Conclusion:

No landslide or rockfall impacts from cliffs located throughout YNP would occur relating to placing people or buildings at risk loss, injury, or death involving landslides.

- Potentially Significant Impact
- Less Than Significant With Mitigation Incorporated
- Less Than Significant Impact
- No Impact

b. Result in substantial soil erosion or the loss of topsoil?

Impact Analysis:

The proposed soil cap at Curry cleanup site would decrease the amount of potential soil erosion by preventing storm water runoff contact and water intrusion into the soil. The proposed area of the soil cap would be graded to direct runoff to swales or to downslope areas where the water would infiltrate. In addition, a

drainage swale would be constructed at the perimeter of the FWDA (near the locations of the ephemeral streams, but outside the former waste disposal area's (FWDA) horizontal extent) such that stormwater would be directed away from the FWDA. Swale design will consider available space and would be sized to accommodate future storm events to prevent erosion/scour within the swale and beyond the outflow area. Riprap would be installed to dissipate flow at the outflow of the drainage swale.

Conclusion:

Design of the proposed cleanup activities (i.e., soil cap) would limit the potential for soil erosion or loss of topsoil on the cleanup sites. Impacts related to soil erosion and loss of topsoil would be less than significant.

- Potentially Significant Impact
- Less Than Significant With Mitigation Incorporated
- Less Than Significant Impact
- No Impact

- c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Impact Analysis:

The cleanup sites are flat with very little relief therefore the potential for slope instability, lateral spreading, or collapse are minimal. The soils beneath the cleanup sites would not be subject to subsidence because cleanup activities would not involve the removal of groundwater.

In addition, cleanup of the sites would not involve any activities that could result in liquefaction of existing onsite soils (process by which saturated, unconsolidated soil or sand is converted into a suspension during an earthquake). This is because the vibrations associated with the proposed cleanup activities are incapable of approximating those necessary to cause liquefaction.

Conclusion:

Characteristics of existing soils on the proposed cleanup sites would not be unstable or become unstable as a result of implementing the proposed Corrective Actions. This would be considered a less-than-significant impact.

- Potentially Significant Impact
- Less Than Significant With Mitigation Incorporated
- Less Than Significant Impact
- No Impact

- d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Impact Analysis:

Expansive soils are characterized by their ability to undergo volume change due to variations in moisture content. Implementation of proposed cleanup activities would not involve construction of new structures or facilities. Engineering considerations have been incorporated into the design of the cleanup activities.

Conclusion:

Proposed cleanup activities would not result in any new structures or facilities being placed on expansive soils. In addition, cleanup activities have been engineered to consider compaction of onsite materials. Therefore, substantial risk to life or property from expansive soils would be less than significant.

- Potentially Significant Impact
- Less Than Significant With Mitigation Incorporated
- Less Than Significant Impact

No Impact

- e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

Impact Analysis:

The proposed cleanup activities would not require the use of septic tanks or alternative wastewater disposal systems nor involve construction of such new systems.

Conclusion:

The use or construction of septic tanks or alternative wastewater disposal systems are not part of the proposed cleanup activities. No impact involving septic tanks or alternative wastewater disposal systems as a result of onsite soils would occur.

Potentially Significant Impact

Less Than Significant With Mitigation Incorporated

Less Than Significant Impact

No Impact

- f. Directly or indirectly destroy a unique paleontological resources or site unique feature?

Impact Analysis:

Paleontological resources have not been specifically identified at the proposed cleanup sites. Removal or capping of municipal waste is proposed as part of cleanup activities. Actions associated with municipal waste removal or capping would include removing artificial fill and decompacting soils, recontouring the ground surface, and revegetating the area with native plant species. Therefore, inadvertent discovery of unknown paleontological resources could occur, and it is possible that intact deposits of subsurface resources may still exist in cleanup sites.

While inadvertent discovery of an unrecorded paleontological site is not necessarily an impact in and of itself, it can result in exposure of artifacts and other cultural materials to erosion, loss of stratigraphic information, trampling, vandalism, and collection, when avoidance is not possible. However, if paleontological resources are discovered during the proposed cleanup activities, then ground disturbing activities within 25 feet would stop until an appropriately licensed professional can assess the significance of the find and, if necessary, develop appropriate response measures in consultation with the DTSC, NPS, and other agencies and Native American representatives.

Conclusion:

The proposed cleanup activities would not include demolition, elimination, or manipulation of a known paleontological resource. In addition, the finding of a paleontological resource during implementation of the proposed cleanup activities is unlikely based on the extensive research previously conducted into the historic conditions of YNP, particularly in Yosemite Valley. In addition, cleanup activities would cease if a paleontological resource were to be discovered. Therefore, the proposed cleanup activities would not cause a substantial adverse change in the significance of a known paleontological resource.

Potentially Significant Impact

Less Than Significant With Mitigation Incorporated

Less Than Significant Impact

No Impact

References Used:

Department of Toxic Substances Control. 2011. Modification of Environmental Remedy at the PG&E "Shell Pond and CBA Property" in Bay Point, California. Initial Study

California Department of Conservation, California Geological Survey (CGS). 2010. Fault Activity Map of California. <http://maps.conservation.ca.gov/cgs/fam/>(Accessed October 12, 2018).

NPS. January 2013. *Merced Wild and Scenic River Final Comprehensive Management Plan and Environmental Impact Statement*.

8. GREENHOUSE GAS EMISSIONS				
Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

REGULATORY SETTING (LAWS, ORDINANCES, REGULATIONS, STANDARDS):

Assembly Bill 32 32 (AB 32) requires California to reduce its greenhouse gas (GHG) emissions to 1990 levels by 2020, a reduction of approximately 15 percent below emissions expected under a “business as usual” scenario. Both the MCAQMD and TCAQMD have published CEQA Guidelines and Thresholds of Significance guidance to assist lead agencies in evaluating air quality impacts, including GHG emissions, of projects and plans proposed in either Mariposa County or Tuolumne County. In this section, GHG emissions are evaluated against numbers set forth in these guides.

ENVIRONMENTAL SETTING (BASELINE):

Greenhouse gases are global pollutants, unlike criteria air pollutants that are of regional or local concern. The largest anthropogenic source of GHGs is the combustion of fossil fuels, which results primarily in emissions of carbon dioxide (CO₂). Other GHGs include methane, nitrous oxide, fluorinated gases, ozone, and sulfur hexafluoride. To account for the differences of the warming effects of various GHGs, emissions are standardized into carbon dioxide equivalents (CO₂e).

APPLICABLE THRESHOLDS OF SIGNIFICANCE:

The MCAQMD CEQA Guidelines identify a construction-related maximum annual threshold of significance of 500 metric tons of CO₂e per year (MCAQMD, 2020). The TCAQMD does not identify any thresholds for GHG emissions.

ENVIRONMENTAL STUDIES PERFORMED AND METHODOLOGY:

California Emissions Estimator Model ® (CalEEMod, Version 2016.3.25 was run to identify project-related GHG emissions (BREEZE, 2017). The Complete CalEEMod Input and Output is provided in Attachment A.

IMPACT ANALYSES AND CONCLUSIONS:

Analysis as to whether or not project activities would:

- a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Impact Analysis:

Implementation of proposed cleanup activities would generate GHG emissions through mobilization of construction equipment; onsite delivery of materials, equipment and supplies; offsite shipment of waste materials; onsite use of vehicles and heavy equipment; worker commutes to each proposed cleanup site; and demobilization activities. The CalEEMod was run to identify the potential greenhouse gas emissions generated by implementation of proposed cleanup activities. Results of the model indicate that cleanup activities would generate approximately 20.1 metric tons of CO₂e per year during the construction period (refer to Attachment A). Carbon dioxide equivalent, or CO₂e, is a term for describing different greenhouse gases in a common unit. For any quantity and type of

greenhouse gas, CO₂e signifies the amount of CO₂ which would have the equivalent global warming impact (Ecometrica 2012).

Construction activities associated with implementation of corrective measures would generate approximately 20.1 metric tons of CO₂e per year. This amount of CO₂e falls below the MCAQMD CEQA Guidelines construction-related maximum annual threshold of significance for land-use projects of 500 metric tons of CO₂ per year.

Conclusion:

The proposed Corrective Actions would not result in a new permanent stationary or non-stationary source of GHGs and construction-related GHG emissions would be short-term and temporary. In addition, the estimated CO₂e emissions from implementing the cleanup activities (20.1 metric tons of CO₂e per year) would fall below MCAQMD CEQA Guidelines construction-related maximum annual threshold of significance (500 metric tons of CO₂e per year). Therefore, GHG emissions resulting from implementation of the proposed Corrective Actions are considered to have a less-than-significant impact on the environment.

- Potentially Significant Impact
- Less Than Significant With Mitigation Incorporated
- Less Than Significant Impact
- No Impact

- b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Impact Analysis:

The MCAQMD and TCAQMD are responsible for regulating GHG emissions in the project area. The Mariposa County 2005 General Plan recommend that GHGs for projects be quantified and identify a CEQA threshold of significance for construction-related GHG emissions at 500 metric tons per year. In addition, the estimated CO₂e emissions from implementing the cleanup activities (20.1 metric tons of CO₂e per year) would fall below Mariposa County's CEQA Guidelines construction-related maximum annual threshold of significance (500 metric tons of CO₂e per year). Therefore, construction activities would not conflict with any goals set by the MCAQMD to achieve implementation of Assembly Bill 32 pertaining to global warming (CARB, 2006).

Conclusion:

The operation of construction equipment during implementation of cleanup activities at the proposed cleanup sites would be short-term and temporary and would not conflict with any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. All cleanup activities would be performed in compliance with the Mariposa County rules and polices. No impact related to conflict with a GHG reduction plan would occur.

- Potentially Significant Impact
- Less Than Significant With Mitigation Incorporated
- Less Than Significant Impact
- No Impact

References Used:

- BREEZE Software. 2017. California Emissions Estimator Model [®], Version 2016.3.2. <http://www.caleemod.com/> (Accessed February 2019).
- California Air Resources Board. 2006. Assembly Bill No. 32. September 27.
- Ecometrica 2012. Greenhouse Gases, CO₂, CO₂e, and Carbon: What Do All These Terms Mean? August 2012. Matthew Brander. Available at: <https://ecometrica.com/assets/GHGs-CO2-CO2e-and-Carbon-What-Do-These-Mean-v2.1.pdf>

NPS. January 2013. *Merced Wild and Scenic River Final Comprehensive Management Plan and Environmental Impact Statement.*

9. HAZARDS AND HAZARDOUS MATERIALS				
Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

REGULATORY SETTING (LAWS, ORDINANCES, REGULATIONS, STANDARDS):

Federal laws and regulations: Resource Conservation and Recovery Act (RCRA) Title 42 United States Code and 40 Code Federal Regulations (CFR) Parts 260-279. More specifically, hazardous waste generators are governed by 40 CFR part 262, subpart E and transporters of hazardous waste governed by 40 CFR part 263. RCRA gives EPA the authority to control hazardous waste from the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid waste. The U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration regulates the transport of hazardous materials through Title 49 of the Code of Federal Regulations, Subchapter C.

State laws and regulations: Hazardous Waste Control Law (Health and Safety Code (HSC) Chapter 6.5) and 22 California Code of Regulations (CCR). The law establishes regulations and incentives which ensure that the generators of hazardous waste employ technology and management practices for the safe handling, treatment, recycling, and destruction of their hazardous wastes prior to disposal. Article 6 of HSC Chapter 6.5 discusses the transportation of hazardous waste. California Vehicle Code: Divisions 2, 6, 12, 13, 14, 15 also apply to transportation of hazardous materials.

ENVIRONMENTAL SETTING (BASELINE):

Soil investigation activities performed since 1998 identified the presence of various municipal wastes in onsite soils/materials from historical operations and visitor activities in YNP. Evaluations of potential risks to human health and ecological receptors from hazards in onsite soils/materials were performed and identified for each individual site. Human health and ecological risk assessments are summarized in the Corrective Action for each cleanup site.

APPLICABLE THRESHOLDS OF SIGNIFICANCE:

The list of hazards and hazardous materials effects that may be considered significant contained in Appendix G of the CEQA Guidelines (Environmental Checklist) was used to establish a threshold of significance.

ENVIRONMENTAL STUDIES PERFORMED AND METHODOLOGY:

Human health and ecological risk assessments performed for the proposed cleanup sites are summarized in each cleanup site-specific engineering evaluation/cost analysis (EECA) (DTSC 2020).

IMPACT ANALYSES AND CONCLUSIONS:

Analysis as to whether or not project activities would:

- a. Create a significant hazard to the public or the environment throughout the routine transport, use, or disposal of hazardous materials?

Impact Analysis:

For the purposes of this analysis, potential impacts related to hazards and hazardous materials were evaluated for the proposed Curry site exclusively. Activities associated with each Corrective Action taken at individual sites would occur at separate times and would not overlap. Therefore, only the Corrective Action with the most extensive activities (Curry soil cap) was evaluated and the assumption made that the other five sites would result in lesser potential impacts than concluded for the Curry site.

Hazardous materials used during implementation of cleanup activities would include fuels and oils for standard operation of construction equipment. Proper storage and disposal, the use of BMPs, and compliance with applicable laws and regulations governing the management of hazardous materials and hazardous waste would minimize potential impacts associated with the use of such materials. Construction activities are estimated to occur over a maximum of 5 weeks during use and transport of hazardous materials, and management and/or transport of waste generated would occur.

Cleanup activities would involve the removal of maximum of 13,000 tons of contaminated soil/material which would be hauled offsite. The maximum of 13,000 tons of contaminated soil/material primarily includes municipal waste from historic operations and visitors in YNP.

Materials requiring offsite disposal would be profiled to determine whether it is hazardous or non-hazardous. The contaminated soils/materials would be transported and disposed of at an appropriate permitted hazardous waste disposal facility in compliance with federal and state laws and regulations. As mentioned above, traffic in the YNP can be congested especially during dry season, when the implementation of cleanup activities could commence. Therefore, in order to satisfy the enjoyment of park resources RAO, the proposed Corrective Actions would include MM Hazard-2 to require the implementation of a Transportation and Traffic Control Management Plan (TTCMP) prior to the start of offsite transport of the impacted material.

Conclusion:

The adherence to the MM Hazard-2 and MM Hazard-3, standard practices, and disposal of contaminated soils/materials at appropriate waste facilities, implementation of cleanup activities would not a create a significant hazard to the public or the environment throughout the routine transport, use, or disposal of hazardous materials. Project-related impacts would be less than significant.

- Potentially Significant Impact
- Less Than Significant With Mitigation Incorporated
- Less Than Significant Impact

No Impact

- b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Impact Analysis:

For the purposes of this analysis, potential impacts related to hazards and hazardous materials were evaluated for the proposed Curry site exclusively. Activities associated with each Corrective Action taken at individual sites would occur at separate times and would not overlap. Therefore, only the Corrective Action with the most extensive activities (Curry soil cap) was evaluated and the assumption made that the other five sites would result in lesser potential impacts than concluded for the Curry site.

Implementation of cleanup activities at the proposed cleanup sites have the potential to release hazardous materials into the environment during removal, management, and/or transport of contaminated soils/materials; from an accidental release of fuel, oil, or maintenance chemicals from construction equipment; and/or from dust generated during construction activities.

The probability that hazardous materials would accidentally escape to the environment during transportation is considered low because hazardous materials would not be transported to the proposed cleanup sites and a maximum of 30 truckloads per day for a maximum of 5 weeks are estimated for the offsite transport of contaminated soils/materials. The probability for accidental release during transport would be further minimized through the implementation of MM Hazard-2 which would require the implementation of a TTCMP prior to the start of offsite transport of the impacted material.

During construction activities, potential spills or releases of hazardous materials could occur over a maximum 5-week period. To minimize the potential for accidental spills or releases of hazardous materials, implementation of MM HAZ-1 would require the preparation and implementation of a health and safety plan (HASP), workers undertake training for activities involving work in proximity to potentially contaminated soils/materials, and the establishment and implementation of health and safety provisions for monitoring exposure to construction workers.

Conclusion:

The adherence to the MM Hazard-1, MM Hazard-2, and MM Hazard-3, cleanup activities would be required to adhere to the requirements of hazardous waste management plans (i.e., HASP, TTCMP) and to implement standard practices. Therefore, the proposed Corrective Action's potential to create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment would be less than significant.

- Potentially Significant Impact
- Less Than Significant With Mitigation Incorporated
- Less Than Significant Impact
- No Impact

- c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school?

Impact Analysis:

There are no schools within one-quarter mile of the proposed cleanup sites. The closest schools are located approximately 1.5 miles to the northwest (Yosemite National Park Valley School) of the Curry cleanup site. In addition, the proposed Corrective Actions would implement a TTCMP (as required by the recommended MM Hazard-2), which would include addressing traffic management in sensitive locations (e.g., schools).

Conclusion:

Implementation of cleanup activities at the proposed cleanup sites would not occur within one-quarter mile of an existing or proposed school and the proposed Corrective Actions would implement a TTCMP (as required by MM Hazard-2) that would address the transportation of hazardous wastes near schools. Impacts to schools from implementation of the cleanup activities are considered less than significant.

- Potentially Significant Impact
- Less Than Significant With Mitigation Incorporated
- Less Than Significant Impact
- No Impact

- d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Impact Analysis:

The proposed cleanup sites are not included on the list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.

Conclusion:

The proposed Corrective Action sites are not included on the list of hazardous materials sites compiled pursuant to Government Code Section 65962.5; therefore, no impact would occur.

- Potentially Significant Impact
- Less Than Significant With Mitigation Incorporated
- Less Than Significant Impact
- No Impact

- e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

Impact Analysis:

The proposed cleanup sites are not located within the boundaries of an airport land use plan. The closest airports to the cleanup sites include the Pine Mountain Lake Airport, which is located in Groveland approximately 19 miles to the west of the Mather cleanup site, and the Lee Vining Airport, which is located in Lee Vining approximately 12 miles to the east of the Gaylor cleanup site.

Conclusion:

The proposed cleanup activities would not occur in an area located within an airport land use plan nor within two miles of a public airport or public use airport. Therefore, implementation of the proposed Corrective Actions would not result in a safety hazard or excessive noise for people residing or working in the project area.

- Potentially Significant Impact
- Less Than Significant With Mitigation Incorporated
- Less Than Significant Impact
- No Impact

- f. Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?

Impact Analysis:

An emergency response plan and emergency evacuation plan that meets all federal, state, and local requirements is currently implemented throughout YNP. In the event of an emergency during proposed cleanup activities, the existing Yosemite Emergency Preparedness System would be implemented to control and mitigate the emergency situation and evacuate the site, if needed.

The transportation of equipment and materials to and from the proposed cleanup sites have the potential to impair implementation or interfere with the existing emergency response plan and/or evacuation plan.

Specifically, trucks carrying equipment and materials could slow down the flow of traffic on public streets and potentially impede emergency response or evacuation efforts. A TTCMP (as required by recommended MM Hazard-2) would be implemented prior to construction activities as part of the Corrective Action that includes a plan for project management to communicate directly with truck drivers. As a result, if existing Yosemite Emergency Preparedness System were to be implemented in response to an emergency, project management would be able to immediately suspend equipment and material transportation until the emergency response is completed or the evacuation order is lifted.

Conclusion:

The proposed Corrective Actions would implement a TTCMP (as required by MM Hazard-2) that would allow for suspending construction activities that could impair implementation of an adopted emergency response plan or emergency evacuation plan. Impacts to an adopted emergency response plan or emergency evacuation plan are considered less than significant.

- Potentially Significant Impact
- Less Than Significant With Mitigation Incorporated
- Less Than Significant Impact
- No Impact

- g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

Impact Analysis:

The proposed cleanup sites are located in an area with environmental conditions conducive to wildland fires. Specific, the cleanup sites are in an areas with dry vegetation of the Yosemite National Forest. Operation of construction equipment on the during cleanup activities has the limited potential to spark a fire. However, construction activities would implement BMPs which address fire prevention methods such as:

- restricting vehicles from driving or parking on dry vegetation during fire sensitive times of the year; and
- wetting dry construction areas before commencing activities, and wetting throughout the day, as appropriate.

Conclusion:

Although construction equipment has a minimal potential to spark a fire during cleanup activities, implementation of BMPS would substantially limit the potential for a wildland fire that exposes people or structures to a significant risk of loss, injury or death to occur. Impacts from wildland fires during implementation of the cleanup activities are considered less than significant.

- Potentially Significant Impact
- Less Than Significant With Mitigation Incorporated
- Less Than Significant Impact
- No Impact

Recommended Mitigation Measures:

Hazard-1

The contractor shall prepare and implement a health and safety plan (HASP) prior to the start of offsite transport of the impacted material that includes the following provisions:

- Identification of requirements for workers and other construction management components such as dust and off-Site migration control,
- Workers undertake training for all construction activities involving work in proximity to potentially contaminated soils in accordance with California Occupational Safety and Health Administration standards, contained in Title 8 of the CCR,

- Establishment and implementation of health and safety provisions for monitoring exposure to construction workers, procedures to be undertaken in the event that previously unreported contamination is discovered, and emergency procedures and responsible personnel,
- Description, in detail, of how potential for exposures would be minimized for all personnel who enter the cleanup site and of how migration of contaminated materials beyond the cleanup site would be prevented.

Hazard-2:

The contractor shall prepare and implement a Transportation and Traffic Control Management Plan (TTCMP) prior to the start of offsite transport of the impacted material that includes the following provisions:

- Description of the characteristics of the waste to be transported (i.e., the soils and sediments),
- Destination of the waste,
- Transportation mode and routes,
- Traffic control and loading procedures.
- Description of procedures truck drivers to follow for the delivery of waste to a landfill.
- Description of how truck traffic will be managed in sensitive locations (e.g., schools).
- Store any hazardous or impacted materials in a designated material-handling area with secondary containment,
- Implement a Storm Water Pollution Prevention Plan (SWPPP) to minimize the accidental releases of hazardous or remediation materials,
- Provide enhanced spill response training for construction workers,
- Coordinate with the YNP personnel to restrict truck traffic to weeks when tourist traffic is relatively low.

Hazard-3

Activities associated with the proposed Corrective Actions would be substantially similar in nature to those described and analyzed in the *Merced Wild and Scenic River Final Comprehensive Management Plan and Environmental Impact Statement (Merced River CMP/EIS)*. Yosemite National Park previously agreed to implementing mitigation measures recommended in the Merced River CMP/EIS for potential environmental impacts. Implementation of the actions required in the applicable Merced River CMP/EIS mitigation measures would similarly reduce potential impacts associated with the proposed Corrective Actions to a less-than-significant level.

Merced River CMP/EIS: MM-GCM-1 – General Construction Management

All Contractor and subcontractor employees shall receive a brief orientation about working in Yosemite National Park and the EI Portal Administrative Site prior to actually performing work. The orientation describes the efforts to be taken by the Contractor and subcontractor employees to protect the natural, cultural and physical resources of YNP while working on this and other projects. This orientation also describes mitigation and other environmental protection measures that must be adhered to at all times while in the Park.

All contractor and subcontractor employees shall view a government provided orientation video to ensure each is fully aware of the natural and cultural resource protection and mitigation requirements of work at YNP, or in the EI Portal Administrative Site. Government staff will provide the initial orientation. Subsequent on-going awareness orientation for new employees and when site conditions change shall be performed by contractor and integrated into construction operation procedures.

The Contractor shall maintain a manifest tracking all contractor personnel, when they received their orientation training, and when they started work. Contractor personnel shall be field identifiable as having received their orientation training by means of a readily visible sticker on their hard hat.

Prior to entry into the park, Contractor shall steam-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. 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 assessment, as well as to ensure that the project conforms with all applicable permits or project conditions. Store all construction equipment within the delineated work limits. Contractor shall also confine work areas within creek channels to the smallest area necessary.

If deemed necessary, demolition/construction work on weekends or federal government holidays may be authorized, with prior written approval of the Superintendent.

Contractor shall remove all tools, equipment, barricades, signs, surplus materials, and rubbish from the project work limits upon project completion. Contractor shall repair any asphalt surfaces that are damaged due to work on the project to original condition. Contractors shall also remove all debris from the project site, including all visible concrete, timber, and metal pieces.

The park shall develop a Communications Strategy Plan to alert necessary park and Concessioner employees, residents and visitors to pertinent elements of the construction work schedule.

Contractor shall verify utility locations by contacting the Underground Services Alert prior to the start of construction.

The Contractor shall provide protective fencing enclosures around construction areas, including utility trenches to protect public health and safety.

The NPS will apply for and comply with all federal and state permits required for construction-related activities.

Contractor and NPS shall implement compliance monitoring to ensure that the project remains within the parameters of National Environmental Policy Act (NEPA) and National Historic Preservation Act (NHPA) compliance documents.

Develop an emergency notification plan that complies with park, federal, and state requirements and allows contractors to properly notify park, federal, and/or state personnel in the event of an emergency during construction activities. This plan will address notification requirements related to fire, personnel, and/or visitor injury, releases of spilled material, evacuation processes, etc. The emergency notification plan will be submitted to the park for review/approval prior to commencement of construction activities.

Notify utilities prior to construction activities Identify locations of existing utilities prior to removal activity to prevent damage to utilities. The Underground Services Alert and NPS maintenance staff will be informed 72 hours prior to any ground disturbance. Construction-related activities will not proceed until the process of locating existing utilities is completed (water, wastewater, electric, communications, and telephone lines). An emergency response plan will be required of the contractor.

References Used:

NPS. January 2013. *Merced Wild and Scenic River Final Comprehensive Management Plan and Environmental Impact Statement.*

10. HYDROLOGY AND WATER QUALITY				
Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:			<input checked="" type="checkbox"/>	
(i) result in substantial erosion or siltation on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(iv) impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

REGULATORY SETTING (LAWS, ORDINANCES, REGULATIONS, STANDARDS):

The Wild and Scenic Rivers Act directs managing agencies to preserve free-flowing conditions and water quality of designated rivers. “Free flowing,” as applied, means existing or flowing in natural condition without impoundment, diversion, straightening, riprapping, or other modification. Water quality is to be maintained or improved to levels that meet federal criteria or federally approved state standards for aesthetics, fish, and wildlife propagation.

The Clean Water Act of 1972 (CWA), as amended (33 USC, section 1251 et seq.), establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters (33 CFR 323.3). Under the CWA, the U.S. Environmental Protection Agency (EPA) sets water quality standards for all contaminants in surface waters and implements pollution control programs, such as the National Pollutant Discharge Elimination System permit program, which requires a federal permit for any proposed point source of water pollution (EPA 1972). CWA section 404 regulates the placement of dredged or fill materials into wetlands and other jurisdictional waters of the U.S.; section 401 requires federal agencies to obtain certification from the state or federally recognized Indian tribe (on tribal lands) before issuing permits that would increase pollutant loads to a body of water. These tools are employed to achieve the broader goal of restoring and maintaining the chemical, physical, and biological integrity of the nation’s waters.

The State Water Resources Control Board and the Regional Water Quality Control Boards (collectively Water Boards) share authority to implement the Federal Clean Water Act (CWA, 33 U.S.C. §1251 et seq.) and California's Porter-Cologne Water Quality Control Act (California Water Code, Section 7). The CWA establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters.

The Water Boards enforce waste discharge requirements through National Pollutant Discharge Elimination System (NPDES) permits. The Porter-Cologne Act mandates the Regional Water Board to develop, adopt and implement a Basin Plan for the Region.

The Central Valley Regional Water Quality Control Board's Water Quality Control Plan designates the Merced River and South Fork Merced River with existing beneficial use for irrigation; wildlife habitat; and freshwater habitat; as well as recreational activities that include canoeing, rafting, noncontact recreation, and water contact recreation (Central Valley Regional Water Quality Control Board 2010).

High water quality is critical for the survival and health of species associated with riparian and aquatic ecosystems. Water quality elements that affect aquatic ecosystems include water temperature, dissolved oxygen, suspended sediment, nutrients, and chemical pollutants. These elements interact in complex ways within aquatic systems to directly and indirectly influence patterns of growth, reproduction, and mobility of aquatic organisms. Potential contributors to water quality impacts near the cleanup sites are briefly summarized below.

The following regulations are also applicable:

- The State Board published a resolution (SWRCB Resolution No. 88-63, as revised by Resolution No. 2006-0008) adopting policy regarding sources of drinking water where exceptions are provided for waters meeting certain criteria.
- The U.S. Environmental Protection Agency promulgated numeric water quality criteria for priority toxic pollutants and other water quality standards provisions to be applied to inland surface waters, enclosed bays and estuaries in California (California Toxics Rule, CTRs).
- A California Stormwater Construction General Permit is required for construction projects disturbing more than 1 acre. The legally responsible person is required to electronically file permit registration documents consisting of a notice of intent, risk assessment, site map, Storm Water Pollution Prevention Plan (SWPPP), annual fee, and signed certification statement through the State Water Board's Storm Water Multi-Application and Report Tracking System.

ENVIRONMENTAL SETTING (BASELINE):

The cleanup sites are located in the YNP and in the Merced River basin. The Merced River originates along the crest of the Sierra Nevada at an elevation of about 13,000 feet and flows west for 145 miles to its confluence with the San Joaquin River in the Central Valley. From its headwaters, the main stem flows through Little Yosemite Valley, Yosemite Valley, and the Merced River gorge before leaving Yosemite National Park. The South Fork Merced River originates near Triple Divide Peak at an elevation of over 10,500 feet. It flows west through Wawona, then joins the Merced River near Indian Flat. Outside of the park, the Merced River continues through the Merced River canyon before entering Lake McClure. From the outlet of Lake McClure, the Merced River continues westward toward the confluence with the San Joaquin River near Hills Ferry. Within YNP, the Merced River drains about 256,000 acres (400 square miles).

Sources of Water Quality Impacts

Bank Erosion

Water quality has the potential to be affected in areas where visitor use of the Merced River is high. High use of the streambank induces bank erosion through the loss of vegetative cover and soil compaction. Bank erosion can result in the widening of the river channel and loss of riparian and meadow floodplain areas. Water quality can then be altered through increased suspended sediments caused by erosion, higher water temperatures from a lack of riparian cover, and lower dissolved oxygen levels due to elevated temperatures and shallower river depths.

Nonpoint Pollution Sources

Human activities and the use of vehicles can result in potential water pollutants that may collect on land surfaces and later be transported into the river or its tributaries by stormwater runoff. Recreational activities, such as pack animal use,

swimming, and hiking, can lead to the introduction of organic, physical, and chemical pollutants into aquatic systems. Nonpoint-source runoff from roads and parking lots may potentially affect water quality by contributing hydrocarbons and heavy metals to land surfaces. Additionally, sediment derived from road sanding during winter can contribute elevated sediment loads to area waterways.

Stormwater runoff from developed surfaces is discharged directly or indirectly into the Merced River and other streams and lakes throughout the park. In the Yosemite Wilderness, nonpoint-source pollutants include human and pack animal wastes and sediments contributed through erosion. These sources have the potential to affect water quality in all segments of the Merced River.

In addition to local sources, water resources in the park can be affected by regional air pollution through atmospheric deposition. The entire Sierra Nevada range is sensitive to acid precipitation due to its granitic substrate and the resulting low-buffering capacity of its water resources. The Sierra Nevada are also sensitive to nitrogen deposition from remote fossil fuel emissions. Ongoing studies are examining the effects of external and internal air pollutants on natural resources, including surface water resources.

Underground Tanks and Abandoned Landfills

Numerous underground storage facilities exist within the park, including fuel and waste storage tanks. Since 1986, more than 100 underground tanks have been located and removed. The park currently has over 30 known contamination sites from leaking underground storage tanks. The park also contains a number of old landfill and surface dumpsites that are potential contaminant sources impacts to water quality.

APPLICABLE THRESHOLDS OF SIGNIFICANCE:

The list of hydrology and water quality effects that may be considered significant contained in Appendix G of the CEQA Guidelines (Environmental Checklist) was used to establish a threshold of significance.

ENVIRONMENTAL STUDIES PERFORMED AND METHODOLOGY:

The hydrogeological conditions have been characterized through site investigations conducted for each cleanup site.

IMPACT ANALYSES AND CONCLUSIONS:

Analysis as to whether or not project activities would:

- a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Impact Analysis:

The objectives of the proposed cleanup activities include improving water quality conditions by removing municipal wastes and debris or constructing a soil cap. The removal of wastes and debris and construction of a soil cap would reduce infiltration of water through contaminated soil (i.e., municipal wastes, debris) and, thus, decrease the potential for contaminants to migrate from soil to groundwater.

Construction activities during implementation of onsite cleanup activities would not violate any water quality standards or water discharge requirements. To ensure surface water bodies are not impacted during construction activities, implementation of recommended MM Hydrology-1 would require a site-specific SWPPP be prepared by a certified Qualified SWPPP Developer and implemented prior to and during cleanup activities. In addition, associated BMPs (e.g., wattles, drain inlet protection) would be implemented during construction to prevent runoff into surface water bodies. After completion of construction activities, storm water runoff from each cleanup site would return to the natural conveyance system.

Conclusion:

The proposed cleanup activities are anticipated to improve surface water quality and groundwater quality and result in the overall reduction of contaminant mass permeating into surface and groundwater systems. To ensure cleanup activities would not violate any water quality standards, waste discharge requirements, or otherwise substantially degrade surface or groundwater quality, implementation of MM Hydrology-1 would require the preparation and implementation of a SWPPP. Impacts are considered to be less than significant with implementation of recommended mitigation measures.

Potentially Significant Impact

- Less Than Significant With Mitigation Incorporated
- Less Than Significant Impact
- No Impact

- b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impeded sustainable groundwater management of the basin?

Impact Analysis:

Groundwater would not be extracted as part of implementation of cleanup activities, including construction of a soil cap. Groundwater beneath the site would remain isolated.

Construction of the soil cap in the Curry Village site would result in a small reduction of groundwater recharge. However, implementation of the proposed cleanup activities, including construction of the soil cap at Curry Village, would not substantially interfere with the overall recharge of groundwater because the footprint of the proposed impervious surfaces (i.e., cap) is very small compared to the overall groundwater basin.

Conclusion:

Implementation of cleanup activities would not interfere substantially with groundwater recharge. A less-than-significant impact is expected to occur.

- Potentially Significant Impact
- Less Than Significant With Mitigation Incorporated
- Less Than Significant Impact
- No Impact

- c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

(i) result in substantial erosion or siltation on or off-site;

Impact Analysis:

A large portion of Curry Village cleanup site is currently paved with asphalt and have storm water controls in place. Construction of the proposed soil cap Curry Village would not substantially increase the existing paved surface area, and the existing storm water controls are sufficient for the minimal additional runoff.

Runoff from the Curry Village soil cap would be managed in accordance with all applicable laws and regulations, with updates and amendments to the existing facility NPDES General Permit for Storm water Discharges under the Industrial General Permit, as needed. Implementation of the SWPPP would also ensure erosion or siltation does not occur on- or offsite during construction activities.

The remaining cleanup sites are currently unpaved and surface water (i.e., precipitation) infiltrates through the subsurface. Removal of municipal wastes and debris would not affect the current natural drainage pattern and would not result in any additional erosion or siltation.

Conclusion:

Construction of a soil cap at Curry Village would result in slight changes to onsite drainage patterns. However, the soil cap would not substantially alter the existing drainage pattern of the overall site area in a manner which would result in substantial erosion or siltation on- or offsite. Consequently, impacts are considered to be less than significant.

- Potentially Significant Impact
- Less Than Significant With Mitigation Incorporated
- Less Than Significant Impact
- No Impact

(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on-or offsite;

Impact Analysis:

A large portion of Curry Village parking lot is already paved with asphalt and has storm water controls in operation. Construction of the soil cap at Curry Village would slightly increase the paved surface area and may increase runoff. However, the existing, operating storm water controls at the Curry Village site are sufficient to prevent flooding due to the slight increase in paved surface.

The remaining cleanup sites are currently unpaved and surface water (i.e., precipitation) infiltrates through the subsurface. Removal of municipal wastes and debris would not affect the current natural drainage pattern and would not result in any additional surface runoff which could result in flooding.

Conclusion:

Although the proposed soil cap at the Curry Village cleanup site would create a minor alteration to existing drainage patterns, it would not substantially alter the rate or amount of surface runoff in a manner which would result in flooding on- or offsite. Impacts related to flooding are considered to be less than significant.

- Potentially Significant Impact
- Less Than Significant With Mitigation Incorporated
- Less Than Significant Impact
- No Impact

(iii) create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff; or

Impact Analysis:

A large portion of Curry Village parking lot is already paved with asphalt and has storm water controls in operation. Construction of the soil cap at Curry Village would slightly increase the paved surface area and may increase runoff. However, the potential slight increase in runoff would not exceed the capacity of existing storm water controls at Curry Village. The soil cap is designed to cover contaminated soil and would, therefore, reduce sources of polluted runoff.

In addition, requirements of the SWPPP would be followed and associated BMPs would be implemented during construction activities to ensure activities would not create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff. BMPs can include structural BMPs such as silt fences, sedimentation ponds, erosion control blankets, and temporary or permanent seeding, while non-structural BMPs can include picking up trash and debris, sweeping up nearby sidewalks and streets, maintaining equipment, and training site staff on erosion and sediment control practices.

The remaining cleanup sites are currently unpaved and surface water (i.e., precipitation) infiltrates through the subsurface. Removal of municipal wastes and debris would not affect the current natural drainage pattern and would result in removing the potential for polluted runoff.

Conclusion:

Construction of the proposed soil cap and implementation of proposed cleanup activities would not create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff.

- Potentially Significant Impact
- Less Than Significant With Mitigation Incorporated
- Less Than Significant Impact
- No Impact

(iv) impede or redirect flood flows?

Impact Analysis:

The proposed cleanup sites located in the Yosemite Valley lie within an active floodplain of the Merced River. However, the proposed cleanup sites are located within open land and the proposed cleanup activities would not involve building any structures which could impede or redirect flood flows.

Conclusion:

Activities associated with proposed cleanup activities would not construct any structures which could impede or redirect flood flows. Therefore, no impact would occur.

- Potentially Significant Impact
- Less Than Significant With Mitigation Incorporated
- Less Than Significant Impact
- No Impact

d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

Impact Analysis:

No occurrences of a seiche have been recorded in YNP. In addition, the proposed cleanup sites are not located in an area at risk from tsunami inundation. The proposed cleanup sites are not susceptible to seiche inundation because there are no major landlocked bodies of water within or near the sites.

Conclusion:

Implementation of proposed cleanup activities would not occur in an area at risk to seiche or from tsunami inundation. Therefore, the potential for release of pollutants from the proposed cleanup sites would not occur. No impact would occur.

- Potentially Significant Impact
- Less Than Significant With Mitigation Incorporated
- Less Than Significant Impact
- No Impact

e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Impact Analysis:

The objectives of the proposed cleanup activities include improving water quality conditions by constructing a soil cap at Curry Village and removing municipal wastes and debris. The cap would reduce the infiltration of water through contaminated soil and, thus, decrease the potential for contaminants to migrate from soil to groundwater. Overall, implementation of the proposed cleanup activities would result in positive impacts to water quality in YNP.

Conclusion:

Construction activities during implementation of site cleanup activities would not violate any water quality standards or water discharge requirements identified in any water quality control plan or sustainable groundwater management plan.

- Potentially Significant Impact
- Less Than Significant With Mitigation Incorporated
- Less Than Significant Impact
- No Impact

Recommended Mitigation Measures:

Hydrology-1

Activities associated with the proposed Corrective Actions would be substantially similar in nature to those described and analyzed in the *Merced Wild and Scenic River Final Comprehensive Management Plan and Environmental Impact Statement (Merced River CMP/EIS)*. Yosemite National Park previously agreed to implementing mitigation measures recommended in the Merced River CMP/EIS for potential environmental impacts. Implementation of the actions required in the applicable Merced River CMP/EIS mitigation measures would similarly reduce potential impacts associated with the proposed Corrective Actions to a less-than-significant level.

Merced River CMP/EIS: MM-HYD-1 – Stormwater Pollution Prevention Plan

Contractor shall prepare and implement a Stormwater Pollution Prevention Plan (SWPPP) that designates construction best management practices to be used to control the sources of fine sediment and to capture and filter it before entering the river. The SWPPP shall define the characteristics of the site, identify the type of construction that will be occurring, and describe the practices that will be implemented to control erosion and the release of pollutants in stormwater. At a minimum, the SWPPP shall address the following, as applicable:

Stabilization Practices

- The stabilization practices to be implemented shall specify the intended stabilization practices, which may include one or more of the following: temporary seeding, mulching, geotextiles, sod stabilization, vegetative buffer strips, erosion control mats, protection of trees, preservation of mature vegetation, etc. On the daily Contractor Quality Control (CQC) Report, the Contractor shall record the dates when the major grading activities occur, (e.g., clearing and grubbing, excavation, embankment, and/or grading); when construction activities temporarily or permanently cease on a portion of the site; and when stabilization practices are initiated. Unless otherwise directed by the Contracting Officer for the reasons below (i.e., unsuitable conditions or no activity for less than 21 days), stabilization practices shall be initiated as soon as practicable, in any portion of the site where construction activities have temporarily or permanently ceased, but no more than 14 calendar days after the activities cease.
- Unsuitable Conditions - Where the initiation of stabilization measures by the 14th day after construction activity temporarily or permanently ceases is precluded by unsuitable conditions caused by the weather, stabilization practices shall be initiated as soon as practicable after conditions become suitable.
- No Activity for Less Than 21 Days - Where construction activity will resume on a portion of the site within 21 days from when activities ceased (e.g., the total time period that construction activity is temporarily ceased is less than 21 days), then stabilization practices do not have to be initiated on that portion of the site by the 14th day after construction activity temporarily ceased.

Structural Practices

- The Contractor shall implement structural practices to divert flows from exposed soils, temporarily store flows, or otherwise limit runoff and the discharge of pollutants from exposed areas of the site. Structural practices shall be implemented in a timely manner during the construction process to minimize erosion and sediment runoff. Location and details of installation of structural practices shall be depicted on the construction drawings.

Silt Fences

- The Contractor shall provide silt fences as a temporary structural practice to minimize erosion and sediment runoff. Silt fences shall be properly installed to effectively retain sediment immediately after completing each phase of work where erosion would occur in the form of sheet and rill erosion (e.g. clearing and grubbing, excavation, embankment, and grading). Silt fences shall be installed in the locations indicated on the drawings or as needed based on Contractor operations. Final removal of silt fence barriers shall be upon approval by the Contracting Officer.

- Silt fences shall extend a minimum of 16 inches above the ground surface and shall not exceed 34 inches above the ground surface. Filter fabric shall be from a continuous roll cut to the length of the barrier to avoid the use of joints. When joints are unavoidable, filter fabric shall be spliced together at a support post, with a minimum 6-inch overlap, and securely sealed. A trench shall be excavated approximately 4 inches wide and 4 inches deep on the upslope side of the location of the silt fence. The 4-inch by 4-inch trench shall be backfilled and the soil compacted over the filter fabric. Silt fences shall be removed upon approval by the COR.

Straw Bales

- Straw bales are not authorized for use in storm water control at YNP. They have the potential to introduce exotic species into the Park environment.

Diversions Dikes

- Diversion dikes shall have a maximum channel slope of 2 percent and shall be adequately compacted to prevent failure. The minimum height measured from the top of the dike to the bottom of the channel shall be 18 inches. The minimum base width shall be 6 feet and the minimum top width shall be 2 feet. The Contractor shall ensure that the diversion dikes are not damaged by construction operations or traffic. Diversion dikes shall be located as shown on the drawings or as needed based on Contractor operations. Location of diversion dikes shall be fully coordinated with cultural and natural environmental protection requirements described in Section 01355, Natural, Cultural, and Physical Resources Protection.

Filter Fabric

- The geotextile shall comply with the requirements of ASTM D 4439, and shall consist of polymeric filaments that are formed into a stable network such that filaments retain their relative positions. The filament shall consist of a long-chain synthetic polymer composed of at least 85 percent by weight of ester, propylene, or amide, and shall contain stabilizers and/or inhibitors added to the base plastic to make the filaments resistance to deterioration due to ultraviolet and heat exposure. Synthetic filter fabric shall contain ultraviolet ray inhibitors and stabilizers to provide a minimum of six months of expected usable construction life at a temperature range of 0 to 120 degrees F. The filter fabric shall meet the following requirements:

FILTER FABRIC FOR SILT SCREEN FENCE		
Physical Property	Test Procedure	Strength Requirement
Grab Tensile	ASTM D 4632	100 lbs. min.
Elongation (%)		30% max
Trapezoid Tear	ASTM D 4533	55 lbs. min.
Permittivity	ASTM D 4491	0.2 sec
AOS (U.S. Std Sieve)	ASTM D 4751	20-100

Silt Fence Stakes and Posts

- The Contractor may use either wooden stakes or steel posts for fence construction. Wooden stakes utilized for silt fence construction, shall have a minimum cross section of 2 inches by 2 inches when hardwood is used and 4 inches by 4 inches when softwood is used, and shall have a minimum length of 5 feet. Steel posts (standard "U" or "T" section) utilized for silt fence construction, shall have a minimum weight of 1.33 pounds per linear foot and a minimum length of 5 feet.

Identification Storage and Handling

- Filter fabric shall be identified, stored and handled in accordance with ASTM D 4873.

Maintenance

- The Contractor shall maintain the temporary and permanent vegetation, erosion and sediment control measures, and other protective measures in good and effective operating condition by performing routine inspections to determine condition and effectiveness, by restoration of destroyed vegetative cover, and by repair of erosion and sediment control measures and other protective measures. The following procedures shall be followed to maintain the protective measures.
- Silt fences shall be inspected in accordance with the below paragraph, Inspections. Any required repairs shall be made promptly. Close attention shall be paid to the repair of damaged silt fence resulting from end runs and undercutting. Should the fabric on a silt fence decompose or become ineffective, and the barrier is still necessary, the fabric shall be replaced promptly. Sediment deposits shall be removed when deposits reach one-third of the height of the barrier. When a silt fence is no longer required, it shall be removed with approval of COR. The immediate area occupied by the fence and any sediment deposits shall be shaped to an acceptable grade.
- Diversion dikes shall be inspected in accordance with the below paragraph, Inspections. Close attention shall be paid to the repair of damaged diversion dikes and necessary repairs shall be accomplished promptly. When diversion dikes are no longer required, they shall be shaped to an acceptable grade.

Inspections

- The Contractor shall inspect disturbed areas of the construction site, areas used for storage of materials that are exposed to precipitation that have not been finally stabilized, stabilization practices, structural practices, other controls, and area where vehicles exit the site at least once every 7 calendar days and within 24 hours of the end of any storm that produces 0.5 inches or more rainfall at the site. Where sites have been finally stabilized, such inspection shall be conducted at least once every month.
- Disturbed areas and areas used for material storage that are exposed to precipitation shall be inspected for evidence of, or the potential for, pollutants entering the drainage system. Erosion and sediment control measures identified in the Storm Water Pollution Prevention Plan shall be observed to ensure that they are operating correctly. Discharge locations or points shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters. Locations where vehicles exit the site shall be inspected for evidence of offsite sediment tracking.
- For each inspection conducted, the Contractor shall prepare a report summarizing the scope of the inspection, name(s) and qualifications of personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the Storm Water Pollution Prevention Plan, maintenance performed, and actions taken. The report shall be furnished to the COR within 24 hours of the inspection as a part of the Contractor's daily CQC Report. A copy of the inspection report shall be maintained on the job site.

Merced River CMP/EIS: MM-HYD-3 – Hazardous Materials and Wastes

- Identify potentially hazardous substances to be used on the job site.
- Identify handling procedures to ensure that hazardous substances are not released into the air, water, or ground.
- Comply with Federal, State, and local laws and regulations for storage, handling, and disposal of these materials.
- Storage of hazardous or flammable chemicals in the staging area or elsewhere on the site is prohibited except as approved by the Contracting Officer.
- Hazardous materials shall not be discarded into the jobsite debris or waste-disposal facilities.
- Empty containers shall be removed from the site and disposed of in a manner prescribed by law.
- Used lubricants and used oil to be discarded shall be stored in marked corrosion-resistant containers and recycled or disposed in accordance with 40 CFR 279, State, and local laws and regulations.
- A copy of the Material Safety Data Sheets (MSDS) and the maximum quantity of each hazardous material to be on site at any given time is to be maintained on site and submitted to the Contracting Officer.
- Before new hazardous materials are brought on site or removed from the site, the MSDS file shall be updated and submitted to the Contracting Officer.

Merced River CMP/EIS: MM-HYD-4 – Spill Prevention and Response Plan (SPRP)

The California Regional Water Quality Control Board has issued a Cleanup and Abatement Order and Time Schedule Order to Yosemite National Park ordering that no sewage spills occur. The Contractor shall be required to follow the requirements of the Order and shall prepare a Spill Prevention and Response Plan and take appropriate spill prevention measures during all phases of the work. The California Regional Water Quality Control Board requires a minimum of 10 days to review the SPRP. All recommendations by the Board will be implemented at no additional cost to the NPS.

The primary purpose of the SPRP is to prevent sewage spills from occurring by proper planning and protection of the project area, and then to respond to any sewage spills that may occur during the course of this project including appropriate notification of staff. The Plan will be general in nature and typical to all phases of the work with site specific plans required for each area involving trenching or any work with the possibility of accessing the existing system. The sewer lines are located throughout Yosemite Valley and in close proximity to waterways and stream channels such that spilled sewage could possibly reach the Merced River.

The SPRP is structured in two parts – first a Spill Prevention Plan and then a Spill Response Plan. The Spill Prevention Plan (SPP) includes evaluation of specific conditions, set-up of containment for actual construction work as well as for bypass pumping. Sewer bypasses must be constructed to tie existing lines into the new system and to tie the new system into the existing system. The Spill Response Plan (SRP) includes the initial response to stop and contain a spill, notification of staff, clean-up, and follow-up documentation. The SPP and the SRP together comprise the entire SPRP. A template of a plan follows at the end of this Section. An electronic version of this template will be provided to the successful bidder.

All Contractor employees are required to be trained in the Spill Prevention Control in accordance with this SPRP.

Merced River CMP/EIS: MM-HYD-5 – Hazardous Materials Spill Prevention and Response Plan

Contractor shall provide a Hazardous Materials Spill Prevention and Response Plan to address spill prevention and response measures for hazardous substances used on site, including fuels. Prior to the start of work, the Contractor shall submit a plan that complies with YNP, Federal and State requirements and allows contractors to properly notify officials in the event of an emergency occurring during construction activities. YNP requirements include, and the plan shall state, at a minimum:

- During non-work operations, stationary equipment shall be parked over specially prepared containment pads designed to trap any leaking oil, fuel, or hydraulic fluids.
- Inspect construction site daily for proper storage of hazardous materials, proper parking of equipment on containment pads, and for hydraulic and oil leaks of equipment, tighten hoses, and ensure they are in good condition.
- Routine oiling and lubrication shall be conducted in areas with secondary containment using Best Management Practices (BMPs) at all times. Refueling of equipment in wetlands or stream channel areas is not allowed at any time.
- Contractor shall maintain secondary containment for all equipment operating with fluids (such as drilling) or when direct discharge of leakage, spills, or other source of construction or equipment fluids can flow directly to any streambed, whether flowing with water or dry. Containment shall be designed and installed so as to prevent accidental spills into streambeds in the event of mechanical failure or hose breakage.
- Contractor shall maintain spill response materials on the project site when using heavy equipment to ensure rapid response to small spills. These materials shall include absorbent pads, booms, or other materials as appropriate to contain oil, hydraulic fluid, solvents, and hazardous material spills. A list of the spill response materials to be kept on site shall be submitted to the Contracting Officer.
- Contractor shall provide names and phone numbers of appropriate contractor's personnel to be contacted at any time (24 hours per day) regarding accidental release of hazardous substances to air, soil or water. This list shall be submitted to the Contracting Officer and a copy visibly displayed in work areas on site.
- Contractor shall have the Contracting Officer's and other appropriate Government emergency numbers posted and shall immediately notify the Contracting Officer or other Government representative on any accidental release of hazardous substances to air, soil or water.

- Hazardous or flammable chemicals shall be prohibited from storage in the staging area, except for those substances identified in the Oil and Hazardous Materials Spill Prevention, Control, and Countermeasure Plan. Hazardous waste materials shall be immediately removed from project site in approved containers.
- Comply with all applicable regulations and policies during the removal and remediation of asbestos, lead paint, and polychlorinated biphenyls.

Merced River CMP/EIS: MM-HYD-6 – Protection from Exotic Plant Species

Prior to developing construction design documents for projects within the river corridor, the contractor shall survey the ordinary high water mark; the determination of the high water mark will be in accordance with U.S. Army Corps of Engineers guidance. Survey(s) of the ordinary high water mark will be used to determine the boundary of the riparian buffer. All new development shall be located outside of the riparian buffer, which encompasses the area within 150 feet of the ordinary high water mark on both sides of the river.

References Used:

NPS. January 2013. *Merced Wild and Scenic River Final Comprehensive Management Plan and Environmental Impact Statement.*

11. LAND USE AND PLANNING				
Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

REGULATORY SETTING (LAWS, ORDINANCES, REGULATIONS, STANDARDS):

President Abraham Lincoln signed the Yosemite Valley Grant Act, Senate Bill 203, on June 30, 1864. The legislation gave California the Yosemite Valley and the nearby Mariposa Big Tree Grove “upon the express conditions that the premises shall be held for public use, resort, and recreation.” The public use of land in YNP continue to be protected by this legislation.

ENVIRONMENTAL SETTING (BASELINE):

Senate Bill 203 of 1864 established YNP as an area held for public use, resort, and recreation. YNP continues to build upon those land use conditions today.

APPLICABLE THRESHOLDS OF SIGNIFICANCE:

The list of land use and planning resource effects that may be considered significant contained in Appendix G of the CEQA Guidelines (Environmental Checklist) was used to establish a threshold of significance.

ENVIRONMENTAL STUDIES PERFORMED AND METHODOLOGY:

Based on the lack of land use changes in or near the proposed cleanup sites, no environmental studies relating to land use and planning were prepared for the proposed cleanup activities.

IMPACT ANALYSES AND CONCLUSIONS:

Analysis as to whether or not project activities would:

- a. Physically divide an established community?

Impact Analysis:

There are no residential areas or developed community on the proposed cleanup sites or located within ½ mile distance.

Conclusion:

Proposed cleanup activities would not have the potential to physically divide an established community based on the distance between the proposed cleanup sites and nearest developed community. No impact would occur.

- Potentially Significant Impact
- Less Than Significant With Mitigation Incorporated
- Less Than Significant Impact
- No Impact

- b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Impact Analysis:

The proposed cleanup activities are intended to improve the established public use, resort, and recreation activities in YNP.

Conclusion:

Implementation of cleanup activities would not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the proposed cleanup sites adopted for avoiding or mitigating an environmental effect. No impact would occur.

- Potentially Significant Impact
- Less Than Significant With Mitigation Incorporated
- Less Than Significant Impact
- No Impact

References Used:

NPS. January 2013. *Merced Wild and Scenic River Final Comprehensive Management Plan and Environmental Impact Statement.*

12. MINERAL RESOURCES				
Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

REGULATORY SETTING (LAWS, ORDINANCES, REGULATIONS, STANDARDS):

No laws, ordinances, regulations, or standards protecting mineral resources are applicable to the proposed cleanup activities. The Department of the Interior has responsibility for most of the nationally owned natural resources, including mineral resources. The department assesses the national mineral resources and works to ensure that their development is in the best interests of all people by encouraging stewardship and citizen participation in their care.

ENVIRONMENTAL SETTING (BASELINE):

The proposed cleanup sites are located in YNP which is underlain primarily by granite. The particular type of granitic rock is distinguishable by the varying mineral composition, texture, and percentages of primary minerals.

APPLICABLE THRESHOLDS OF SIGNIFICANCE:

The list of mineral resource effects that may be considered significant contained in Appendix G of the CEQA Guidelines (Environmental Checklist) was used to establish a threshold of significance.

ENVIRONMENTAL STUDIES PERFORMED AND METHODOLOGY:

Based on the lack of mineral resources in or near the proposed Corrective Action sites, no environmental studies relating to mineral resources were prepared for the proposed Corrective Actions.

IMPACT ANALYSES AND CONCLUSIONS:

Analysis as to whether or not project activities would:

- a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

Impact Analysis:

The proposed cleanup sites and surrounding area has been identified in the California Department of Conservation, Division of Mines and Geology as containing precious metals, carbonate rock, and concrete-grade aggregate.

Conclusion:

The removal of municipal waste and debris and construction of a soil cap would not prevent access to potential mineral resources if the proposed cleanup sites and surrounding area are ever opened to mining. Therefore, no impacts would occur.

- Potentially Significant Impact
- Less Than Significant With Mitigation Incorporated
- Less Than Significant Impact

No Impact

- b. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

Impact Analysis:

The proposed cleanup sites are not located in an area specifically identified as a mineral resource area.

Conclusion:

The removal of municipal waste and debris and construction of a soil cap would not prevent access to mineral resources if the proposed cleanup sites and surrounding area are ever opened to mining. Therefore, no impacts would occur.

Potentially Significant Impact

Less Than Significant With Mitigation Incorporated

Less Than Significant Impact

No Impact

References Used:

California Department of Conservation, Division of Mines and Geology. 2020. <https://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=mlc> (Accessed August 2020).

NPS. January 2013. *Merced Wild and Scenic River Final Comprehensive Management Plan and Environmental Impact Statement.*

13. NOISE				
Would the project result in:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

REGULATORY SETTING (LAWS, ORDINANCES, REGULATIONS, STANDARDS):

National Park Service Management Policies

The following National Park Service policies (2006) are applicable to the proposed cleanup activities.

Soundscape Management (Policy 4.9). The National Park Service (NPS) will preserve, to the greatest extent possible, the natural soundscapes of parks. The NPS will restore to the natural condition wherever possible those park soundscapes that have become degraded by unnatural sounds (i.e., noise), and will protect natural soundscapes from unacceptable impacts. Using appropriate management planning, superintendents will identify what levels and types of unnatural sound constitute acceptable impacts on park natural soundscapes. The NPS will take action to prevent or minimize all noise that through frequency, magnitude, or duration adversely affects the natural soundscape or other park resources or values, or that exceeds levels that have been identified through monitoring as being acceptable to or appropriate for visitor uses at the sites being monitored.

Cultural Soundscapes Management (Policy 3.3.1.7). The NPS will preserve soundscape resources and values of the parks to the greatest extent possible to protect opportunities for appropriate transmission of cultural and historic sounds that are fundamental components of the purposes and values for which the parks were established. An example of appropriate cultural and historic sound includes native drumming at Yosemite National Park. The NPS will prevent inappropriate or excessive types and levels of noise from unacceptably affecting the ability of the soundscape to transmit the cultural and historic resource sounds associated with park purposes.

Director’s Order #47: Soundscape Preservation and Noise Management

Director’s Order #47 outlines the operational policies guiding the protection, maintenance, and restoration of the natural soundscape resource in the national park system. The directive instructs park managers to maintain natural soundscapes that are not affected by external (i.e., human-made) noise. By definition, noise is human-caused sound that is considered unpleasant and unwanted. Where the soundscape is found to be degraded, park managers are to facilitate and promote progress toward the restoration of the natural soundscape (NPS 2000b).

National Park Service Reference Manual 47

National Park Service Reference Manual 47, Soundscape Preservation and Noise Management, prepared in response to Director’s Order #47, provides the following: (1) technical guidance on soundscape management planning, including direction on the preparation of soundscape preservation and noise management plans (referred to as soundscape management plans); (2) direction on the measurement of sound characteristics to be

applied in soundscape management planning; (3) technical guidance on education opportunities; (4) technical guidance on noise prevention and mitigation; and (5) direction on interagency planning.

Yosemite General Management Plan

The Yosemite General Management Plan outlines general management priorities for resource management in the park. With regard to sound, this management plan calls for the limitation of noise to the greatest extent possible. More specifically, it places high priority on reducing traffic congestion in Yosemite Valley to reduce the exposure of visitors to noise associated with motor vehicles. Among the tools available to the park for achieving this reduction in vehicle noise, specifically motorcycle noise, is regulatory enforcement.

ENVIRONMENTAL SETTING (BASELINE):

The proposed cleanup sites are located in an area of natural sounds of Yosemite National Park. The soundscape in areas adjacent to the Merced River, and at each cleanup site, include sounds from waterfalls, flowing water, animals, rustling tree leaves, and other natural sounds. These are not considered noise. Typical sources of noise in the park, and can be heard at each cleanup site, include motor vehicles, human activity, and aircraft. Noise does not have to be loud to have an impact on Yosemite's natural environment.

APPLICABLE THRESHOLDS OF SIGNIFICANCE:

For purposes of this analysis, noise effects may be considered significant if cleanup activities would result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of a proposed cleanup site.

ENVIRONMENTAL STUDIES PERFORMED AND METHODOLOGY:

Proposed cleanup activities were evaluated in terms of the context, intensity, and duration of the impacts on soundscape, and whether the impacts would be considered beneficial or adverse to the soundscape environment. The methodology for evaluating impacts on soundscapes was adapted from those provided by the NPS Natural Sounds Program Office. The soundscapes impact assessment involves the identification and qualitative description of the types of actions proposed during cleanup activities that could affect the ambient acoustic environment. For most sound sources, such characteristics would include the location and movement of the source, its operational features that produce sound, and how the sound would be distributed over time. Impacts are described as potential changes in the existing soundscape resulting from the proposed activities, as compared with existing conditions. The analysis of effects to soundscapes is qualitative, with professional judgment applied to reach reasonable conclusions as to the context, intensity, and duration of potential impacts. The effects of these activities are considered for sensitive human receivers only. Sensitive receivers include nearby residents and recreational users (both day-use and overnight users).

Context. The context of the impact considers whether the impact would be local or regional. Impacts to soundscapes were determined to be local and limited to the Merced River corridor and immediate vicinity. For this reason, context will not be further discussed for soundscapes, except to the extent of describing which segments would be affected.

Intensity. The intensity of the impact considers whether the impact would be negligible, minor, moderate, or major. Negligible impacts are those in which the effects would not be detectable, having no discernible effect on the ambient environment. Minor impacts would be those that are slightly detectable but would not be expected to have an overall effect on the soundscape environment. Moderate impacts would be clearly detectable and could have an appreciable effect. Major impacts would have a substantial, highly noticeable influence on the ambient noise environment.

Duration. The duration of the impact considers whether the impact would occur in the short-term or the long-term. A short-term impact would be temporary in duration or transitory in effect, such as construction noise. A long-term impact would have a permanent effect on the ambient noise environment.

Type of Impact. Impacts are evaluated in terms of whether they would be beneficial or adverse to the ambient soundscape environment. Beneficial impacts would reduce noise levels, while adverse impacts would have the opposite effect.

IMPACT ANALYSES AND CONCLUSIONS:

Analysis as to whether or not project activities would result in:

- a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Impact Analysis:

The proposed cleanup activities could result in local, short-term, adverse impacts on wildlife and visitors related to increased noise. The proposed cleanup activities would use heavy equipment for removing municipal waste and debris and for constructing the soil cap at Curry Village. In addition, trucks would be used to transport materials to the proposed cleanup sites and to remove wastes for offsite management.

These cleanup activities would require a temporary noise increase within the vicinity of each cleanup site, resulting from construction activities and vehicle noise. Heavy construction equipment and haul trucks would temporarily add to the noise environment in a cleanup site area. Most of the cleanup activities would occur in areas distant from noise-sensitive uses. As a result, soundscape/noise impacts resulting from implementation of the cleanup activities would be short-term, minor, adverse impact on soundscapes in the vicinity of these activities.

Construction activities associated with implementing the proposed cleanup activities would occur only during daytime hours and, therefore, would not impact visitors sleeping. Specifically, visitors camping in the Upper Pines Campground would be located closest to the proposed soil cap proposed to be constructed at the Curry Village parking lot. Even though construction activities at the Curry Village parking lot could be heard by the closest campers at Upper Pines, the cleanup activities would be short-term and would not substantially impact the visitor's experience at YNP. However, as a result of construction activities occurring within 1,000 feet of visitors/campers at Upper Pines and as a result of the exclusiveness and uniqueness of the area in which activities would occur, mitigation measure Noise-1 is recommended to ensure noise generated by construction activities are limited to greatest extent possible.

Conclusion:

The proposed cleanup activities would occur only during daytime hours and would be short-term. Visiting YNP is considered a unique experience for tourists and, therefore, actions to limit noise exposure during construction activities, to the greatest extent possible, is recommended through implementation of mitigation measure MM Noise-1. Implementation of these actions would reduce potentially significant noise impacts associated with cleanup activities, particularly construction of a soil cap, to a less-than-significant level.

- Potentially Significant Impact
- Less Than Significant With Mitigation Incorporated
- Less Than Significant Impact
- No Impact

- b. Generation of excessive groundborne vibration or groundborne noise levels?

Impact Analysis:

Implementation of proposed cleanup activities would require the use of heavy construction equipment (e.g., paver, loader, excavator) at the cleanup sites. Groundborne vibration and noise generated by the use of these heavy construction equipment would not be felt at the nearest receptor (i.e., campers in Upper Pines Campground) because the distance (1,000 feet) would substantially attenuate vibration and noise.

Conclusion:

Construction equipment used during proposed cleanup activities would not generate excessive groundborne vibration or noise felt at the nearest receptor. No impact would occur.

- Potentially Significant Impact
- Less Than Significant With Mitigation Incorporated
- Less Than Significant Impact
- No Impact

- c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

Impact Analysis:

The proposed Corrective Action sites are not located within an airport land use plan, vicinity of a private airstrip, or within two miles of a public airport or public use airport. The closest airports to the cleanup sites include the Pine Mountain Lake Airport, which is located in Groveland approximately 19 miles to the west of the Mather cleanup site, and the Lee Vining Airport, which is located in Lee Vining approximately 12 miles to the east of the Gaylor cleanup site.

Conclusion:

The proposed cleanup activities would not have the potential to expose people residing or working in the project area to excessive noise levels generated by a nearby airport or airfield. No impact would occur.

- Potentially Significant Impact
- Less Than Significant With Mitigation Incorporated
- Less Than Significant Impact
- No Impact

Recommended Mitigation Measures:

Noise-1

Activities associated with the proposed Corrective Actions would be substantially similar in nature to those described and analyzed in the *Merced Wild and Scenic River Final Comprehensive Management Plan and Environmental Impact Statement (Merced River CMP/EIS)*. Yosemite National Park previously agreed to implementing mitigation measures recommended in the Merced River CMP/EIS for potential environmental impacts. Implementation of the actions required in the applicable Merced River CMP/EIS mitigation measures would similarly reduce potential impacts associated with the proposed Corrective Actions to a less-than-significant level.

MM-NOI-1 – Construction Work Plan and Schedule

Contractor shall submit to the park for review and approval prior to commencement of construction a construction work plan/schedule that specifies the ways in which the contractor will minimize construction-related noise in noise-sensitive areas. At a minimum, the plan shall state the following:

- Ensure that all construction equipment has functional exhaust muffler systems;
- Use hydraulically or electrically powered construction equipment, when feasible;
- Locate stationary noise sources as far from sensitive receptors as possible;
- Limit the idling of motors except as necessary (e.g., concrete mixing trucks);
- A construction schedule that minimizes impacts to adjacent noise-sensitive activities;
- Engine braking (“jake” brakes) shall not be used in lodging, camping or residential areas;
- Continuous noise abatement is required to prevent disturbance and nuisance to Park visitors and workers and to the occupants of adjacent premises and surrounding areas; and
- If the Contracting Officer determines excessive noise is emanating from the construction site, the Contractor may be required to provide sound barriers to deflect noise transmission from visitor areas or other areas impacted by noise.

Construction noise shall be minimized through use of best available noise control techniques wherever feasible. Sound levels must be kept to a minimum at all times. Equipment and machinery shall not exceed 85 db when measured at 100 linear feet distance. Contractor shall use sound attenuated compressors and generators that comply with the most recent California Department of Transportation standards.

MM-NOI-2 – Noise Management Levels

Contractor shall ensure that all construction equipment and practices adhere to the following noise limitations:

Repetitive and/or intermittent, high-level noise: Permitted only during Daytime.

Do not exceed the following dB(A) limitations at 50 feet:

<u>Sound Level in dB(A)</u>	<u>Time Duration of Impact Noise</u>
70	More than 12 minutes in any hour
80	More than 3 minutes in any hour

Maximum permissible construction equipment noise levels at 50 feet:

<u>Earthmoving</u>	<u>dB(A)</u>	<u>Materials Handling</u>	<u>dB(A)</u>
Front loaders	75	Concrete mixer	75
Backhoes	75	Concrete pump	75
Dozers	75	Crane	75
Tractors	75	Jack hammer	75
Scrapers	80	Rock drill	80
Graders	75	Pneumatic tools	80
Trucks	75	Saws	75
Pavers, stationary	80	Vibrators	75
Pumps	75		
Generators	75		
Compressors	75		

Ambient Noise:

Maximum noise levels (dB) for receiving noise area at property line shall be as follows:

Residential receiving area	Daytime: 65 dB
	Nighttime: 45 dB
Commercial/industrial receiving area	Daytime: 67 dB
	Nighttime: 65 dB

In the event the existing local ambient noise level exceeds the maximum allowable receiving noise level (dB), the receiving noise level maximum for construction operations shall be adjusted as follows:

Residential receiving area: Maximum 3 additional dB above the local ambient as measured at property line.

Commercial/Industrial receiving area: Maximum 5 additional dB above the local ambient as measured at the property line.

MM-NOI-3 – Field Quality Control

Contractor shall assess potential effects of construction noise on adjacent neighbors or facility occupants in accordance with ASTM E1686 and as follows:

Ambient noise measurement: Measure at the property line at a height of at least four (4) feet above the immediate surrounding surface. Average the ambient noise level over a period of at least 15 minutes.

Ambient noise measurement at urban sites: Conduct during morning peak traffic hour between 7 A.M. and 9 A.M. and afternoon peak traffic hour between 4 P.M. and 6 P.M. In addition, conduct a 24-hour measurement at the proposed Corrective Action sites to document the noise pattern throughout the day. Adjust and weight for seasonal and climatic variations.

Monitor noise produced from construction operations in accordance with ASTM E1780.

References Used:

NPS. January 2013. *Merced Wild and Scenic River Final Comprehensive Management Plan and Environmental Impact Statement.*

14. POPULATION AND HOUSING				
Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

REGULATORY SETTING (LAWS, ORDINANCES, REGULATIONS, STANDARDS):

No laws, ordinances, regulations, or standards protecting population and housing resources are applicable to the proposed cleanup activities.

ENVIRONMENTAL SETTING (BASELINE):

The proposed cleanup sites do not contain any housing. The cleanup sites, excluding Curry Village, are located on undeveloped lands. Curry Village cleanup site contains an existing parking lot that serves visitors to Curry Village and the Upper Pines Campground.

APPLICABLE THRESHOLDS OF SIGNIFICANCE:

The list of population and housing resource effects that may be considered significant contained in Appendix G of the CEQA Guidelines (Environmental Checklist) was used to establish a threshold of significance.

ENVIRONMENTAL STUDIES PERFORMED AND METHODOLOGY:

Based on the lack of existing housing and permanent population on or near the proposed cleanup sites, no environmental studies relating to population and housing resources were prepared.

IMPACT ANALYSES AND CONCLUSIONS:

Analysis as to whether or not project activities would:

- a. Induce substantial unplanned population growth in area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Impact Analysis:

Implementation of the proposed cleanup activities are intended to clean up contaminated soils/materials in YNP. Remediation of contaminated soils/materials would not allow for increased population growth, such as new housing construction, because the uses at each cleanup site would not change.

Conclusion:

The proposed cleanup activities would not have the potential to induce substantial unplanned population growth in the area, either directly or indirectly.

- Potentially Significant Impact
- Less Than Significant With Mitigation Incorporated
- Less Than Significant Impact
- No Impact

- b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

Impact Analysis:

Implementation of the proposed cleanup activities are intended to clean up contaminated soils/materials in YNP. Remediation of contaminated soils/materials would not require removing any existing people or housing.

Conclusion:

The proposed cleanup activities would not have the potential to displace substantial numbers of existing people or housing.

- Potentially Significant Impact
- Less Than Significant With Mitigation Incorporated
- Less Than Significant Impact
- No Impact

References Used:

NPS. January 2013. *Merced Wild and Scenic River Final Comprehensive Management Plan and Environmental Impact Statement.*

15. PUBLIC SERVICES				
Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Fire protection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

REGULATORY SETTING (LAWS, ORDINANCES, REGULATIONS, STANDARDS):

No laws, ordinances, regulations, or standards protecting public services resources are applicable to the proposed cleanup activities.

ENVIRONMENTAL SETTING (BASELINE):

The proposed cleanup sites are located in the nationally recognized Yosemite National Park. There are no hospitals, daycare centers, libraries, or police stations located within one mile of the Site.

APPLICABLE THRESHOLDS OF SIGNIFICANCE:

The list of public services resource effects that may be considered significant contained in Appendix G of the CEQA Guidelines (Environmental Checklist) was used to establish a threshold of significance.

ENVIRONMENTAL STUDIES PERFORMED AND METHODOLOGY:

Based on the lack of cleanup activities needing or affecting existing public services resources, no environmental studies relating to public services resources were prepared.

IMPACT ANALYSES AND CONCLUSIONS:

Analysis as to whether or not project activities would:

Result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:

Fire protection?

Impact Analysis:

The closest fire station to the proposed cleanup sites in Yosemite Valley is the NPS El Portal Fire Station located approximately 11 miles to the west. The closest fire station to the proposed cleanup sites near Tioga Pass (Gaylor Pit, Vogelsang) is the Lee Vining Volunteer Fire Department located approximately 11 miles to the east. The closest fire station to the proposed cleanup sites near Hetch Hetchy reservoir is the Groveland Fire Department located approximately 23 miles to the west. Potential demands on fire protection services

may increase slightly during the construction period as a result of unforeseen events related to the scope of work. However, ongoing adherence to procedures and practices identified in a site-specific HASP (as required by implementation of MM Hazards-1) would reduce the potential for incidents to occur that would require a fire district response.

Conclusion:

Ongoing adherence to procedures and practices identified in a site-specific HASP (as required by implementation of MM Hazards-1) would reduce the potential for incidents to occur that would require response from fire protection services. After completion of cleanup activities, the proposed Corrective Actions would not cause an increase in demand on fire protection, as compared to the current demand.

- Potentially Significant Impact
- Less Than Significant With Mitigation Incorporated
- Less Than Significant Impact
- No Impact

Police protection?

Impact Analysis:

The proposed cleanup sites are located in the jurisdiction of the Visitor Protection staff of YNP. Visitor Protection staff performs various visitor management and resource protection duties including front-country and backcountry wilderness law-enforcement operations, provision of emergency medical services, horse patrol, search and rescue, structural and wildland fire management, transportation and circulation management, and parkwide dispatching services. Potential demands on law enforcement or emergency response services could increase slightly during the construction period as a result of unforeseen events or circumstances. However, risks to human health and safety would be minimized through ongoing adherence to procedures and practices identified a site-specific HASP (as required by implementation of MM Hazards-1) that would reduce opportunities for vandalism.

Conclusion:

Ongoing adherence to procedures and practices identified in a site-specific HASP (as required by implementation of MM Hazards-1) would reduce the need for police protection services. After completion of corrective measures, the project would not cause an increase in demand on police protection, as compared to current demand.

- Potentially Significant Impact
- Less Than Significant With Mitigation Incorporated
- Less Than Significant Impact
- No Impact

Schools?

Impact Analysis:

The closest schools to the proposed cleanup sites include Yosemite National Park Valley School located approximately 1.5 miles to the northwest of the Curry Village cleanup site. The proposed cleanup activities would not result in an increase in population or associated increase in demand on these schools.

Conclusion:

Cleanup activities would not create a demand for existing or new school facilities. No impact to school facilities would occur.

- Potentially Significant Impact
- Less Than Significant With Mitigation Incorporated
- Less Than Significant Impact

No Impact

Parks?

Impact Analysis:

The proposed cleanup sites are located in the nationally recognized Yosemite National Park. Implementation of the proposed cleanup activities are intended to clean up contaminated soils/materials in the park. The proposed cleanup activities would not result in an increase in population or associated increase in demand on parks.

Conclusion:

Cleanup activities would not create a demand for existing or new park facilities. No impact to park facilities would occur.

- Potentially Significant Impact
- Less Than Significant With Mitigation Incorporated
- Less Than Significant Impact
- No Impact

Other public facilities?

Impact Analysis:

The closest hospital to the proposed cleanup sites is the John C. Fremont Health located approximately 23 miles to the southwest in Mariposa. Construction activities could result in a slight increase in demands for services at the medical center. The potential for incidents requiring medical attention would be minimized through adherence with a site-specific HASP (as required by implementation of MM Hazards-1).

Conclusion:

Ongoing adherence to procedures and practices identified in a site-specific HASP (as required by implementation of MM Hazards-1) would reduce the need for other public facilities and services. After cleanup activities complete, the project would not cause an increase in demand on other public facilities and services, as compared to current demand.

- Potentially Significant Impact
- Less Than Significant With Mitigation Incorporated
- Less Than Significant Impact
- No Impact

References Used:

NPS. January 2013. *Merced Wild and Scenic River Final Comprehensive Management Plan and Environmental Impact Statement.*

16. RECREATION				
	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

REGULATORY SETTING (LAWS, ORDINANCES, REGULATIONS, STANDARDS):

No laws, ordinances, regulations, or standards protecting agriculture or forestry resources are applicable to the proposed cleanup activities.

ENVIRONMENTAL SETTING (BASELINE):

People travel to Yosemite National Park for a multitude of recreational reasons and their recreational experiences are highly individualized. Some visit the park in the company of friends and family to marvel at its iconic landscape features — its dramatic waterfalls and geologic wonders. Others seek the solitude and primitive nature of the park’s wilderness. Some come to study the park’s unique and diverse plant and animal life. Others are attracted by its excellent recreational opportunities, including rock climbing and bouldering, cross country skiing, and backcountry hiking and camping. Thus, the continuum of visitor experiences extends from highly social to isolated, from independent to directed, from spontaneous to controlled, from easy to challenging, and from natural to more urban (NPS 2003).

APPLICABLE THRESHOLDS OF SIGNIFICANCE:

The list of recreational resource effects that may be considered significant contained in Appendix G of the CEQA Guidelines (Environmental Checklist) was used to establish a threshold of significance.

ENVIRONMENTAL STUDIES PERFORMED AND METHODOLOGY:

Based on the lack of cleanup activities needing or affecting existing recreational resources, no environmental studies relating to recreational resources were prepared.

IMPACT ANALYSES AND CONCLUSIONS:

- a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

Impact Analysis:

The proposed cleanup sites are located in a nationally recognized park and the cleanup activities are intended to improve the existing recreational facilities at YNP. Implementation of proposed cleanup activities would not directly increase the use of or need for additional parks in the area.

Conclusion:

The proposed cleanup activities would not increase the use of existing neighborhood and regional parks, other recreational parks, or other recreational facilities. Cleanup activities would result in improving existing recreational facilities. No impact to the use of existing neighborhood and regional parks or other recreational facilities would occur.

- Potentially Significant Impact
- Less Than Significant With Mitigation Incorporated
- Less Than Significant Impact
- No Impact

- b. Does the project include recreational facilities or require construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

Impact Analysis:

The proposed cleanup sites are located in a nationally recognized park and the cleanup activities are intended to improve the existing recreational facilities at YNP. Implementation of proposed cleanup activities would not involve or require construction of any recreational facilities.

Conclusion:

The proposed Corrective Actions would not construct or cause the need for construction of additional recreational facilities. Cleanup activities would result in improving existing recreational facilities. No impact to existing or need for additional recreational facilities would occur.

- Potentially Significant Impact
- Less Than Significant With Mitigation Incorporated
- Less Than Significant Impact
- No Impact

References Used:

NPS. January 2013. *Merced Wild and Scenic River Final Comprehensive Management Plan and Environmental Impact Statement.*

17. TRANSPORTATION				
Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

REGULATORY SETTING (LAWS, ORDINANCES, REGULATIONS, STANDARDS):

Federal laws and regulations: Resource Conservation and Recovery Act (RCRA) Title 42 United States Code Subtitle C and 40 Code Federal Regulations (CFR) Parts 260-279. More specifically, transporters of hazardous waste are governed by 40 CFR part 263. RCRA gives EPA the authority to control hazardous waste from the generation, transportation, treatment, storage, and disposal of hazardous waste. The U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration regulates the transport of hazardous materials through Title 49 of the Code of Federal Regulations, Subchapter C.

State laws and regulations: Hazardous Waste Control Law (Health and Safety Code (HSC) Chapter 6.5) and 22 California Code of Regulations (CCR). The law establishes regulations and incentives which ensure that the generators of hazardous waste employ technology and management practices for the safe handling, treatment, recycling, and destruction of their hazardous wastes prior to disposal. Article 6 of HSC Chapter 6.5 discusses the transportation of hazardous waste. California Vehicle Code: Divisions 2, 6, 12, 13, 14, 15 also apply to transportation of hazardous materials.

ENVIRONMENTAL SETTING (BASELINE):

California state highways leading into Yosemite National Park (Highways 41, 120, and 140) transition into an internal parkwide road system at the entrance stations. Yosemite’s road network, outside of Yosemite Valley, is generally characterized by one travel lane in each direction. Destinations throughout the Valley are accessed through a loop, comprised primarily of Southside Drive (inbound) and Northside Drive (outbound). The loop is connected by four crossings of the Merced River.

Happy Isle Loop Road provides direct access to the Curry cleanup site. Northside Drive and Southside Drive provide access to the El Capitan and Cascades cleanup sites. Evergreen Road, which provides access through the Hetch Hetchy Entrance and to Hetch Hetchy Dam, provides access to the Mather cleanup site.

Traffic volumes within the park tend to be highest during the months of peak visitation, which are generally between May and September (Memorial Day to Labor Day), with July and August typically being the busiest months. Park traffic is comprised mainly of park visitors, and park employees (many of whom live along the Highway 140 corridor). Vehicle entries are generally evenly spread among the entrance stations except for the Hetch Hetchy Entrance, which is the only entrance not directly accessible from a state highway and not connected to the park’s broader road network.

The vast majority of park visitors arrive by private automobile. A summer of 2007 park visitor survey found that 84.4% of respondents arrived by private automobile. Other modes included commercial tour bus (4.8%), recreational vehicle (3.2%), and regional bus transit (1.3%). Among those who entered the park by private vehicle, nearly 87% traveled through the

park in their private vehicle at least part of the time. However, more than 60% of these visitors also traveled via the Yosemite Valley Shuttle.

Traffic volumes fluctuate seasonally, daily, and hourly within the park. As noted previously, traffic tends to be heaviest during the summer, between May and September. However, visitation patterns also vary based on day of the week and time of day, with traffic volumes in the park higher during weekends than on weekdays. Similarly, visitor travel to and from the park results in daily traffic peaks beginning in the late morning and lasting through early evening. While these fluctuations are seen throughout the park, their implications for Merced River management tend to be most pronounced within the Yosemite Valley area (Segment 2). Planning for management activities and facilities where peak conditions are significantly different from average typically applies the concept of design conditions, which address typically busy days during the peak season, but not the day with the highest visitation.

The park typically experiences the highest traffic volumes on weekends during the summer, with peak volumes occurring during holiday weekends. During the peak season of 2011 (Memorial Day weekend through Labor Day weekend), an average of 5,749 vehicles entered Yosemite Valley on Southside Drive daily. On the busiest day (June 18), 7,345 vehicles entered the Valley; this represents an increase of 28% when compared to an average day.

Daily traffic volumes recorded at fixed counter locations within the Yosemite Valley indicate a long-term historical trend of growth in traffic. Traffic volumes leveled off and even fell slightly between 2001 and 2006. However, they have once again begun to rise and have approached historic highs (NPS 2011n). Daily traffic volumes during most of the year do not exceed the capacity of any of the major roadways. Similarly, on busy summer days, travelers on most park roads during peak travel hours encounter only minor to moderate congestion. However, at key activity areas (popular attractions, parking areas, and major intersections) within Yosemite Valley, and at the park entrance stations, moderate to major congestion occurs (RSG 2011). Disruptions to traffic flow are often attributed to excessive circulation on roadways by visitors and tour bus drivers seeking parking spaces.

Traffic volumes inbound to Yosemite Valley increase through the early portion of the day, reaching a peak from 10:00 a.m. to about noon. Average inbound traffic volumes on Southside Drive during this period in July 2011 were about 641 vehicles per hour. On the busiest day in 2011, the inbound hourly volume of traffic reached about 648 to 821 vehicles per hour. On these days, the peak travel period generally extends from 10:00 a.m. to about 2:00 p.m. Peak traffic occurs when available parking has reached saturation, resulting in continuous stop-and-go traffic for those two to four hours of peak demand. Inbound traffic is slowed or diverted.

Traffic volumes leaving Yosemite Valley tend to increase towards the later part of the day, peaking between 4:00 p.m. and 6:00 p.m. Average outbound traffic volumes on Northside Drive during this period in July 2011 were about 724 vehicles per hour. Traffic volumes on the average day equal or exceed 500 vehicles per hour on Northside Drive from about 2:00 p.m. to 6:00 p.m. On the busiest day in 2011, the outbound traffic volume peaked at 750 vehicles per hour and exceeded 500 vehicles per hour from 1:00 p.m. to 8:00 p.m.

The roadway system in Yosemite Valley can be confusing to first-time visitors because of the one-way circulation, limited opportunities to cross the Merced River, and circuitous travel routes. Highly congested locations include the intersection of Northside Drive and the Camp 6 parking lot entrance, the intersection of Northside Drive and Sentinel Drive (“Bank Three Way”), and the pedestrian crossing from Yosemite Lodge to Lower Yosemite Fall. Conflicts between vehicles and pedestrians at these key intersections are a primary factor in causing traffic delays, which are experienced primarily during the afternoon hours during the peak season. Traffic congestion in the Valley can cause frustrating delays to visitors in private vehicles, leads to increased vehicle emissions, and disrupts the operation of the Valley shuttle bus system.

The park employs a traffic management response team to assist with traffic congestion, mainly within the Valley, during peak summer days. The traffic management team helps relieve congestion by providing visitor information, directing vehicles to parking locations, and managing intersections, pedestrian and vehicle traffic. On those occasions when traffic volumes and parking in the East Valley reaches or exceeds capacity, traffic managers will redirect traffic otherwise bound for the East Valley. This diversion measure is commonly known as the “shunt” (see figure 9-45) and involves a series of specific management contingencies for managing excess traffic at a rate of 200 to 400 vehicles per hour.

Mass Transit

Multiple transit services operate within Yosemite, including the Yosemite Area Regional Transit System (YARTS), external tour bus operators, and concessioner-operated in-park shuttle and tour bus services. With the exception of shuttle bus services in Tuolumne Meadows and to the Mariposa Grove from Wawona, nearly all buses travel to and from or within Yosemite Valley.

APPLICABLE THRESHOLDS OF SIGNIFICANCE:

The list of transportation resource effects that may be considered significant contained in Appendix G of the CEQA Guidelines (Environmental Checklist) was used to establish a threshold of significance. LOS has been the standard by which transportation impacts of major developments and changes to roads were measured. LOS was formally defined in the 1965 Highway Capacity Manual as a “qualitative measure of the effect of a number of factors, which include speed and travel time, traffic interruptions, freedom to maneuver, safety, driving comfort and convenience, and operating cost”. It is better understood today that LOS does not accurately reflect vehicle travel as it only focuses on individual local intersections and roadway segments and not on the entire vehicle trip. In 2013, the State of California passed Senate Bill (SB) 743 which required the Office Planning and Research (OPR) to amend the CEQA Guidelines to provide an alternative to LOS for evaluating transportation impacts. LOS was replaced with Vehicle Miles Traveled (VMT) as “the most appropriate metric of a project’s potential transportation impacts”. VMT data are used primarily by transportation agencies, environmental agencies, and consultants to perform a variety of functions such as allocating resources, estimating vehicle emissions, computing energy consumption, and assessing traffic impacts.

Section 15064.3(b) of the CEQA Guidelines states the following:

(b) Criteria for Analyzing Transportation Impacts.

- (1) Land Use Projects. Vehicle miles traveled exceeding an applicable threshold of significance may indicate a significant impact. Generally, projects within one-half mile of either an existing major transit stop or a stop along an existing high-quality transit corridor should be presumed to cause a less than significant transportation impact. Projects that decrease vehicle miles traveled in the project area compared to existing conditions should be presumed to have a less than significant transportation impact.
- (2) Transportation Projects. Transportation projects that reduce, or have no impact on, vehicle miles traveled should be presumed to cause a less than significant transportation impact. For roadway capacity projects, agencies have discretion to determine the appropriate measure of transportation impact consistent with CEQA and other applicable requirements. To the extent that such impacts have already been adequately addressed at a programmatic level, such as in a regional transportation plan EIR, a lead agency may tier from that analysis as provided in Section 15152.
- (3) Qualitative Analysis. If existing models or methods are not available to estimate the vehicle miles traveled for the particular project being considered, a lead agency may analyze the project’s vehicle miles traveled qualitatively. Such a qualitative analysis would evaluate factors such as the availability of transit, proximity to other destinations, etc. For many projects, a qualitative analysis of construction traffic may be appropriate.
- (4) Methodology. A lead agency has discretion to choose the most appropriate methodology to evaluate a project’s vehicle miles traveled, including whether to express the change in absolute terms, per capita, per household or in any other measure. A lead agency may use models to estimate a project’s vehicle miles traveled, and may revise those estimates to reflect professional judgment based on substantial evidence. Any assumptions used to estimate vehicle miles traveled and any revisions to model outputs should be documented and explained in the environmental document prepared for the project. The standard of adequacy in Section 15151 shall apply to the analysis described in this section.

ENVIRONMENTAL STUDIES PERFORMED AND METHODOLOGY:

The focus of this impact assessment was the effect of cleanup activities on how well the transportation system would continue to accommodate parking and the associated traffic flow and transportation experience within the Yosemite Valley. Conditions were assessed based on potential changes in traffic volumes through Yosemite Valley tied to existing amounts of visitor use.

IMPACT ANALYSES AND CONCLUSIONS:

Analysis as to whether or not project activities would:

- a. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle and pedestrian facilities?

Impact Analysis:

The proposed cleanup activities would not affect public roadways in the long-term because these activities would not substantially affect the overall circulation system. The proposed cleanup activities would add some traffic to roadways during a maximum 5-week construction period due to delivery of materials and supplies to individual cleanup sites, removal of contaminated soil/materials from individual cleanup sites, and workers traveling to and from individual cleanup sites. The proposed cleanup activities would not have any long-term effects on existing congestion levels in Yosemite National Park.

During construction, periodic movement of heavy equipment would occur using Northside and Southside Drives in Yosemite Valley and Evergreen Road near Hetch Hetchy Dam. It is anticipated that up to a maximum of 600 truck trips would occur over a maximum 5-week construction period. Implementation of cleanup activities would result in a maximum of 30 heavy haul truck trips per day spread throughout the day. As these trips would be intermittent, the cleanup activities would not substantially increase the existing traffic on any roadway in Yosemite National Park.

Prior to entering the Site, all haulers will demonstrate that their vehicles are properly registered, operational, and placarded in compliance with Federal, State and Local laws, for the type of material being transported. In addition, NPS will require that all haulers provide transport in accordance with California Department of Transportation permitted transportation safety requirements. The proposed cleanup activities would implement traffic congestion management by minimizing truck transport to off-peak hours, reducing the number of trucks per day, caravanning trucks to and from cleanup sites, and spacing out trucks leaving cleanup sites. Therefore, the proposed cleanup activities are considered a less-than-significant impact in relation to overall congestion management in Yosemite National Park.

The closest bike/pedestrian lane in Yosemite Valley are located adjacent to El Capitan and Cascades cleanup sites. Specific to the El Capitan cleanup site, cleanup activities would require closure of a portion of the Valley Loop Trail. Closure of the Valley Lop Trail would be temporary, would occur only during cleanup activities, and would re-open immediately upon completion of cleanup activities. No other trails or pedestrian/bike lane would need to be closed during cleanup activities at any other sites.

Although no formal bike lane is located near the Curry cleanup site along Happy Isle Loop Road, the roadway itself is used regularly by bicyclists. The YARTS bus line is located adjacent to the El Capitan and Cascades cleanup sites and within ¼-mile of the Curry cleanup site. The temporary increase in truck traffic during implementation of cleanup activities would not affect any program, plan, ordinance or policy relating to these transportation facilities.

Conclusion:

The proposed cleanup activities would not incorporate any activities, short-term or long-term, that would have the ability to conflict with any program, plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle and pedestrian facilities in Yosemite National Park.

- Potentially Significant Impact
- Less Than Significant With Mitigation Incorporated
- Less Than Significant Impact
- No Impact

b. Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?

Impact Analysis:

Vehicle miles traveled (VMT) is a measure used in transportation planning for a variety of purposes. It measures the amount of travel for all vehicles in a geographic region over a given period of time, typically a one-year period. VMT is calculated by adding all the miles driven by all the cars and trucks on all the roadways in a region. This metric plays an integral role in the transportation planning, policy-making, and revenue estimation processes due to its ability to indicate travel demand and behavior. VMT may also be used to evaluate conformity assumptions, adjust travel demand forecasts, and identify pavement maintenance needs. Implementation of corrective measures would not generate additional long-term vehicle trips or change circulation patterns in the project area.

Conclusion:

The proposed corrective measures would not increase long-term vehicle miles traveled levels from/to the proposed Corrective Action sites consistent with Section 15064.3(b) of the CEQA Guidelines. There would be no impact.

- Potentially Significant Impact
- Less Than Significant With Mitigation Incorporated
- Less Than Significant Impact
- No Impact

- c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Impact Analysis:

The proposed Corrective Actions involve onsite construction activities to address soil and groundwater contamination. The proposed corrective measures would not contain a design feature or incompatible use that would substantially increase traffic hazards because the activities would not alter the public roadways system. The current intersection at Port Chicago Highway and Nichols Road is stop controlled for safe traffic movements to/from the proposed Corrective Action sites and this condition would not change.

Conclusion:

Implementation of the corrective measures would not include any design features or incompatible uses which would substantially increase hazards. No impacts related to increased hazards due to a geometric design feature or incompatible uses would occur.

- Potentially Significant Impact
- Less Than Significant With Mitigation Incorporated
- Less Than Significant Impact
- No Impact

- d. Result in inadequate emergency access?

Impact Analysis:

The proposed corrective measures would not affect emergency access to/from the proposed Corrective Action sites in the long-term because these activities would not substantially change the overall circulation system on- and offsite. In addition, all construction equipment would be located and stored onsite and would not have the potential to block access roads.

Conclusion:

Emergency access to/from the proposed Corrective Action sites would not change with implementation of corrective measures. No impacts related to inadequate emergency access would occur.

- Potentially Significant Impact
- Less Than Significant With Mitigation Incorporated
- Less Than Significant Impact
- No Impact

References Used:

NPS. January 2013. *Merced Wild and Scenic River Final Comprehensive Management Plan and Environmental Impact Statement.*

18. TRIBAL CULTURAL RESOURCES				
Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21083.3.2.) Information may also be available from the California Native American Heritage Commission’s Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.				
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

REGULATORY SETTING (LAWS, ORDINANCES, REGULATIONS, STANDARDS):

Tribal cultural resources are defined in PRC Div. 13 Section 21074. California Assembly Bill 52 (AB52) specifies that any project for which a Notice of Preparation, Notice of Mitigated Negative Declaration or Notice of Negative Declaration is filed on or after July 1, 2015, the Lead agency must provide formal notification within 14 days of determining that an application for a project is complete or of a decision to undertake a project to the designated contact or tribal representative of the affiliated California Native American tribes. The tribe that is traditionally and culturally affiliated to the geographic area where a project is located must have requested that the lead agency in question provide notification to the tribe (PRC 21081.3.1).

If remains are found on Site, the County Coroner will make the determination of origin and disposition, pursuant to Public Resources Code (PRC) § 5097.98. If the remains are determined to be Native American, the Coroner would notify the NAHC (per Health and Safety Code 7050.5(c)) The NAHC would identify and notify the person(s) who might be the most likely descendent, who would make recommendations for the appropriate and dignified treatment of the remains (PRC Div. 5 section 5097.98). The descendants shall complete their inspection and make recommendations for treatment within 48 hours of being granted access to the Site (CEQA Guidelines, CCR section 15064.5(e); HSC section 7050.5).

ENVIRONMENTAL SETTING (BASELINE):

There are numerous historic sites located in YNP, and a high concentration of historic sites are found in Yosemite Valley (NPS 2013b). Specific known historic sites located within ¼-mile of a proposed cleanup site include the Pohono Bridge (National Register of Historic Places List) and Camp Curry Village (National Register of Historic Places List). In addition, each of the proposed cleanup sites located in the Yosemite Valley are also located in the Yosemite Valley Historic District and Yosemite Valley Archaeological District.

The Valley floor landscape as a whole is nationally significant in the themes of outdoor recreation, tourism, and conservation. Since 1864, Yosemite has been an archetype for the preservation of scenic places through their development as public parks. The historic and archaeological districts consist of 929 buildings and sites, including El Capitan Bridge and Camp Curry. Additionally, Yosemite Valley Historic District includes resources such as natural systems/features, spatial organization, vegetation, circulation, land use, and vistas which all contribute to the significance of the district.

There are no known tribal cultural resources, as defined in PRC Div. 13 Section 21074, on any cleanup site or in their immediate vicinity. DTSC complied with the 2014 Assembly Bill 52 (AB52). DTSC provided written notification to tribes on the Tribal Consultation List from the NAHC regarding the proposed Corrective Actions on December 16, 2021. The notice included a brief project description, project location, and lead agency's contact information. DTSC received interest from one of the Tribal governments contacted.

APPLICABLE THRESHOLDS OF SIGNIFICANCE:

Tribal cultural resources are defined as either 1) sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either included or determined to be eligible for inclusion in the California Register of Historical Resources (California Register) or listed in a local register of historical resources or 2) a resource determined by the lead agency, in its discretion and supported by substantial evidence, is a tribal cultural resource (OPR, 2017).

To be eligible for the California Register, a prehistoric or historic-period property must be significant at the local, state, and/or federal level under one or more of the following four criteria:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2. Is associated with the lives of persons important in our past;
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or,
4. Has yielded, or may be likely to yield, information important in prehistory or history.

A resource eligible for the California Register must meet one of the criteria of significance described above and retain enough of its historic character or appearance (integrity) to be recognizable as a historical resource and to convey the reason for its significance. It is possible that a historic resource may not retain sufficient integrity to meet the criteria for listing in the National Register, but it may still be eligible for listing in the California Register.

ENVIRONMENTAL STUDIES PERFORMED AND METHODOLOGY:

No tribal cultural resource studies to determine whether if archeological or historical resources are present at any specific proposed cleanup site were conducted.

IMPACT ANALYSES AND CONCLUSIONS:

- a. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
 - i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or

Impact Analysis:

There are no known tribal cultural resources, as defined in PRC Section 21074, on the proposed cleanup sites. However, seven cleanup sites are located in the Yosemite Valley Archeological District which consists of over 100 known sites significant for their ability to yield important information about prehistoric lifeways.

Early archeological surveys of Yosemite Valley focused on prehistoric or historic-era Indian sites rather than historic-era resources representative of homesteading, visitor, and NPS facilities. The entire Yosemite Valley has been surveyed to some extent for prehistoric resources, except for wet meadows, areas of impenetrable vegetation, and some talus slopes. Due to changes in groundcover and vegetation patterns, as well as more refined survey techniques and standards since the original (1970s) inventories, it is likely that more previously undocumented, prehistoric resources exist in the Valley.

Although the majority of archeological sites in the Valley retain a relatively high degree of integrity and, therefore, maintain their eligibility for listing on the National Register, many sites have been disturbed by human activity and natural processes. Visitor use has been the most widespread impact, although its effect is not as serious as other types of impacts. Due to the scarcity of easily buildable land, several archeological sites were damaged by historic-era construction of facilities and utilities. Much of the road system was developed in the early 1900s. Other visitor accommodations, such as The Ahwahnee and Camp Curry, were constructed approximately 100 years ago. Many roads, hotels, and other visitor accommodations have been constructed since 1957, and preservation of archeological resources did not begin in earnest in Yosemite until the creation of the NHPA in 1966.

Removal or capping of municipal waste is proposed as part of cleanup activities. Actions associated with municipal waste removal or capping would include removing artificial fill and decompacting soils, recontouring the ground surface, and revegetating the area with native plant species. Some of the infrastructure removal actions are proposed for near areas of known archeological sites. Therefore, inadvertent discovery of unknown resources could occur, and it is possible that intact deposits of subsurface cultural materials may still exist in cleanup sites. Ground-disturbing actions associated with the removal of abandoned infrastructure could result in an adverse impact for those actions proposed within known sites.

While inadvertent discovery of an unrecorded site is not necessarily an impact in and of itself, it can result in exposure of artifacts and other cultural materials to erosion, loss of stratigraphic information, trampling, vandalism, and collection, when avoidance is not possible. However, if archaeological resources are discovered during the proposed cleanup activities, then ground disturbing activities within 25 feet would stop until a qualified archaeologist or appropriately licensed professional can assess the significance of the find and, if necessary, develop appropriate response measures in consultation with the DTSC, NPS, and other agencies and Native American representatives. After discussion with their Tribal Chairperson or respective Cultural Resources Managers or Tribal Historic Preservation Officers and in collaboration with DTSC (including the Office of Environmental Equity) and the property owner, any measures deemed necessary to record and/or protect the cultural or archaeological resource(s) would be implemented.

Conclusion:

The proposed cleanup activities would not include the demolition, elimination, or manipulation of a known tribal cultural resource. In addition, the finding of an unknown tribal cultural resource during implementation of cleanup activities is unlikely based on the disturbances by human activity (i.e., visitors) and natural processes. However, the proposed Corrective Actions includes measures that would be implemented if discovery of unknown tribal cultural resource were uncovered during corrective measures. The proposed Corrective Actions would not cause a substantial adverse change in the significance of a tribal cultural resource and impacts would be less than significant.

- Potentially Significant Impact
- Less Than Significant With Mitigation Incorporated
- Less Than Significant Impact
- No Impact

- ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resource Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Impact Analysis:

There are no known tribal cultural resources, as defined in PRC Section 21074, on the proposed cleanup sites or in its immediate vicinity.

On December 16, 2021, the DTSC formally notified the six tribes identified in the NAHC listing. By February 11, 2022, none of tribal Governments responded or did not respond to the AB52 Consultation letter and requested consultation. Although the tribes did not identify any known tribal cultural resources that may be affected by the proposed Corrective Actions, there would still be potential for unknown tribal cultural resources to be affected during ground disturbance activities. Due to this, the tribes recommended actions to reduce the potential for adverse effects to cultural resources that may be discovered during construction. The

proposed cleanup activities include a standard operating procedure whereby all possible damages caused in the event of an unanticipated discovery can be avoided. Specifically, if tribal cultural resources are discovered during corrective measures, work would stop in that area until a qualified archaeologist or appropriately licensed professional can assess the significance of the find and, if necessary, develop appropriate response measures in consultation with the DTSC and other agencies and Native American representatives, as appropriate. No other tribes have responded with a request for consultation.

Conclusion:

As no known tribal cultural resources occur at the proposed cleanup sites or would be affected by the proposed cleanup activities, and implementation of the contingency set forth in Section 18 (a)(i) above would reduce impacts to unknown tribal cultural resources during excavation activities, impacts would be less than significant.

- Potentially Significant Impact
- Less Than Significant With Mitigation Incorporated
- Less Than Significant Impact
- No Impact

References Used:

NPS. January 2013. *Merced Wild and Scenic River Final Comprehensive Management Plan and Environmental Impact Statement.*

19. UTILITIES AND SERVICE SYSTEMS				
Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

REGULATORY SETTING (LAWS, ORDINANCES, REGULATIONS, STANDARDS):

No laws, ordinances, regulations, or standards protecting utilities and service systems resources are applicable to the proposed cleanup activities.

ENVIRONMENTAL SETTING (BASELINE):

The Yosemite National Park Utilities Branch operates and maintains all water and wastewater utility systems, including backcountry utilities (i.e., composting toilets, water systems), operates two wastewater treatment plants, and maintains potable water production and the high-voltage electric system parkwide. Operations are based in El Portal, Yosemite Valley, Wawona, Tuolumne Meadows, and the backcountry.

APPLICABLE THRESHOLDS OF SIGNIFICANCE:

The list of utilities and service systems resource effects that may be considered significant contained in Appendix G of the CEQA Guidelines (Environmental Checklist) was used to establish a threshold of significance.

ENVIRONMENTAL STUDIES PERFORMED AND METHODOLOGY:

Based on the lack of cleanup activities needing or affecting existing utility and service systems, no environmental studies relating to utility and service systems were prepared.

IMPACT ANALYSES AND CONCLUSIONS:

Analysis as to whether or not project activities would:

- a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities the construction or relocation of which could cause significant environmental effects?

Impact Analysis:

Proposed cleanup activities would not create the need for or result in the construction of new or expanded water or wastewater treatment, electric power, natural gas, or telecommunications facilities.

Conclusion:

Activities associated with the proposed cleanup activities would not require new or expanded water or wastewater treatment, electric power, natural gas, or telecommunications facilities. No impacts to these facilities would occur.

- Potentially Significant Impact
- Less Than Significant With Mitigation Incorporated
- Less Than Significant Impact
- No Impact

- b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Impact Analysis:

Implementation of site-specific cleanup activities would require a maximum of 5 weeks to complete. The primary source of water required during construction activities would be supplied and transported to individual cleanup sites by water trucks.

Conclusion:

Sufficient water supplies from existing resources onsite are available to serve the needs of cleanup activities during the maximum 5-week construction period. The cleanup activities would not create long-term, future demand for water supply beyond existing conditions. Impacts to water supplies would be less than significant.

- Potentially Significant Impact
- Less Than Significant With Mitigation Incorporated
- Less Than Significant Impact
- No Impact

- c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Impact Analysis:

Implementation of cleanup activities would not generate wastewater that would require a wastewater treatment provider. Wastewater generated during equipment decontamination activities would be containerized, profiled, and disposed at an appropriate offsite facility.

Conclusion:

Construction activities associated with cleanup activities would not create a demand for wastewater treatment at any wastewater treatment provider. No impact to a wastewater treatment provider would occur.

- Potentially Significant Impact
- Less Than Significant With Mitigation Incorporated
- Less Than Significant Impact
- No Impact

- d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Impact Analysis:

Solid waste associated with site-specific cleanup activities would comprise of a maximum 13,000 tons of contaminated soil/material. Contaminated soil/material would be transported to an appropriate facility for disposal based on final waste characterization results. Whichever facility is chosen would be required to have sufficient permitted capacity to receive the maximum 13,000 tons of contaminated soil/material; however, the capacity to accept would be confirmed in advance of transport to a facility. The asphalt/base rock material may be suitable for recycling. If the asphalt/base rock material is not suitable for recycling, it would be shipped to a facility which has sufficient permitted capacity.

Conclusion:

Solid waste generated by cleanup activities would be served by a landfill with sufficient permitted capacity to accept the contaminated soil/material. A less-than-significant impact would occur to solid waste facilities.

- Potentially Significant Impact
- Less Than Significant With Mitigation Incorporated
- Less Than Significant Impact
- No Impact

- e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Impact Analysis:

Implementation of cleanup activities would generate a maximum 13,000 tons of contaminated soil/material. Disposal of contaminated soil/material would comply with all federal, state, and local statutes and regulations related to solid waste including characterization, storage, labeling, transport, and disposal.

Conclusion:

Disposal of contaminated soil/material would comply with all federal, state, and local statutes and regulations related to solid waste. Therefore, no impacts related to compliance with federal, state, and local management and reduction statutes and regulations related to solid waste would occur.

- Potentially Significant Impact
- Less Than Significant With Mitigation Incorporated
- Less Than Significant Impact
- No Impact

References Used:

NPS. January 2013. *Merced Wild and Scenic River Final Comprehensive Management Plan and Environmental Impact Statement.*

20. WILDFIRE				
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

REGULATORY SETTING (LAWS, ORDINANCES, REGULATIONS, STANDARDS):

No laws, ordinances, regulations, or standards protecting wildfire resources are applicable to the proposed cleanup activities.

ENVIRONMENTAL SETTING (BASELINE):

State Responsibility Areas are boundaries adopted by the Board of Forestry and Fire Protection and are areas where the California Department of Forestry and Fire (CAL FIRE) has a financial responsibility for fire suppression and prevention. Review of the California State Responsibility Area Viewer for State Responsibility Area and Local Responsibility Area indicate the proposed cleanup sites are not located in a Very High Hazard Severity Zone (VHFHSZ) but is located in a Federal Responsibility Area (FRA). The closest State Responsibility Area is located 8 miles southwest of Yosemite Valley (California State Geoportal 2020).

APPLICABLE THRESHOLDS OF SIGNIFICANCE:

The list of wildfires resource effects that may be considered significant contained in Appendix G of the CEQA Guidelines (Environmental Checklist) was used to establish a threshold of significance.

ENVIRONMENTAL STUDIES PERFORMED AND METHODOLOGY:

Based on the lack of cleanup activities being located in or near state responsibility areas or lands classified as very high fire hazard severity zones, no environmental studies relating to wildfire risks were prepared.

IMPACT ANALYSES AND CONCLUSIONS:

Analysis as to whether or not project activities would:

- a. Substantially impair an adopted emergency response plan or emergency evacuation plan?

Impact Analysis:

Please refer to the analysis provided in Section 9(f) of this Initial Study.

Conclusion:

Please refer to the conclusion provided in Section 9(f) of this Initial Study.

- Potentially Significant Impact
- Less Than Significant With Mitigation Incorporated
- Less Than Significant Impact
- No Impact

- b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

Impact Analysis:

The proposed cleanup sites are located in areas with environmental conditions conducive to wildland fires. However, operation of construction equipment on the during cleanup activities has the limited potential to spark a fire. Construction activities would implement BMPs which address fire prevention methods such as:

- restricting vehicles from driving or parking on dry vegetation during fire sensitive times of the year; and
- wetting dry construction areas before commencing activities, and wetting throughout the day, as appropriate.

Conclusion:

Although construction equipment has a minimal potential to spark a fire during cleanup activities, implementation of BMPS would substantially limit the potential for a wildland fire that exposes people or structures to a significant risk of loss, injury or death to occur. Impacts from wildland fires during implementation of the cleanup activities are considered less than significant.

- Potentially Significant Impact
- Less Than Significant With Mitigation Incorporated
- Less Than Significant Impact
- No Impact

- c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

Impact Analysis:

Implementation of cleanup activities would not require the installation or maintenance of associated infrastructure (e.g., fuel breaks, emergency water sources, power lines, other utilities) that could exacerbate fire risk or could result in temporary or ongoing impacts to the environment. Cleanup activities may require construction of temporary access roads of compacted clean soil or imported clean gravel to facilitate access to work areas. However, the temporary access roads would overall reduce wildfire risk during the implementation of cleanup activities by incorporating soil or gravel.

Conclusion:

The proposed cleanup activities would not install any infrastructure that could exacerbate fire risk or could result in temporary or ongoing impacts to the environment. No impact would occur.

- Potentially Significant Impact
- Less Than Significant With Mitigation Incorporated
- Less Than Significant Impact
- No Impact

- d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

Impact Analysis:

Landslides tend to occur where slopes are steeper with higher relief. The proposed cleanup sites are flat with very little relief. The proposed cleanup activities would not significantly change the existing slope of any proposed cleanup site.

In addition, construction of the soil cap at Curry Village would affect the current drainage pattern slightly; however, the intended design would direct runoff to prevent ponding and percolation. Runoff from the soil cap would be collected at the existing storm water capture system.

Conclusion:

The proposed cleanup activities would not create steep slopes or disturb any landslide-prone areas. In addition, proposed cleanup activities would not expose people or structures to risk from uncontrolled storm water runoff. These impacts are considered less than significant.

- Potentially Significant Impact
- Less Than Significant With Mitigation Incorporated
- Less Than Significant Impact
- No Impact

References Used:

- California State Geoportal. 2020. *California Fire Hazard Severity Zone Viewer*. Available at: <https://gis.data.ca.gov/datasets/789d5286736248f69c4515c04f58f414> Accessed September 22, 2020.
- NPS. January 2013. *Merced Wild and Scenic River Final Comprehensive Management Plan and Environmental Impact Statement*.

21. MANDATORY FINDINGS OF SIGNIFICANCE**Based on evidence provided in this Initial Study, DTSC makes the following findings:**

- a. The project does not have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory.
- b. The project does not have impacts that are individually limited but cumulatively considerable. (“Cumulatively considerable” means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)
- c. The project does not have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly.

Authority: Public Resources Code 21083, 21094.5.5

Reference: Public Resources Code Sections 21094.5 and 21094.5.5