

Mitigation Monitoring and Reporting Program

Manila Community Services District - Manila Community Services District Flood Reduction and Drainage Enhancement Project

SCH No. To be assigned

Environmental Protections Actions (EPA) and Mitigation Measures (MM)	Monitoring Responsibility	Monitoring/Reporting Action & Schedule	Verification (Initials/Date)
EPA 1 – Stormwater Pollution Prevention Plan (SWPPP) <p>The Project will obtain coverage under State Water Resources Control Board (Water Board) Order No. 2009-0009-DWQ, Waste Discharge Requirements for Discharges of Storm Water Runoff Associated with Construction and Land Disturbance Activities. The Project will submit permit registration documents (notice of intent, risk assessment, site maps, SWPPP, annual fee, and certifications) to the Water Board. The SWPPP will address pollutant sources, best management practices, and other requirements specified in the Order. The SWPPP will include erosion and sediment control measures, and dust control practices to prevent wind erosion, sediment tracking, and dust generation by construction equipment. A Qualified SWPPP Practitioner will oversee implementation of the Project SWPPP, including visual inspections, sampling, and analysis, and ensuring overall compliance.</p>	Manila CSD's contractor, to be verified by a SWPPP practitioner	<p>Performance criteria – North Coast Regional Water Quality Control Board and County standards</p> <p>Reporting actions – As required by the state permit</p> <p>Schedule - During project construction activities, including work and non-work times</p>	
Air Quality			
MM AQ-1: BMPs to Reduce Air Pollution <p>The contractor shall implement the following measures during construction:</p> <ul style="list-style-type: none"> – All exposed surfaces (e.g., staging areas, soil piles, active graded areas, excavations, and unpaved access roads) shall be watered two times per day or as required by site conditions and current weather patterns. – All visible mud or dirt track-out onto adjacent public roads shall be removed using street sweepers at least once per day, or as needed to alleviate dust and debris on the roadway. – All vehicle speeds on unpaved roads shall be limited to 15 miles per hour, unless the unpaved road surface has been treated for dust suppression with water, rock, wood chip mulch, or other dust prevention measures. – All areas to be paved shall be completed as soon as possible. – Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes. 	Manila CSD and Manila CSD's contractor	<p>Performance criteria – North Coast Unified Air Quality Management District standards</p> <p>Reporting actions – Verify requirements are included in final plans and specifications</p> <p>Schedule – During construction, check jobsite compliance as necessary</p>	

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<ul style="list-style-type: none"> – All construction equipment shall be maintained and properly tuned in accordance with the manufacturer’s specifications. 			
Biological Resources			
<p>MM BIO-1: Protect Special Status Plants</p> <p>Avoidance and minimization measures for special status plant species are addressed collectively for all species. The following measures are recommended:</p> <ul style="list-style-type: none"> – The locations of any special status plant populations mapped herein shall be clearly identified in the contract documents (100% design plans and final specifications) if they occur within or adjacent to the grading boundary. – If special status plant populations are detected where construction will have unavoidable impacts, seed will be collected prior to construction by a qualified botanist and redistributed following construction during the appropriate season. On-site seed collection from the impacted species will be prioritized. If on-site seed collection is infeasible due to blooming period conflicts with the planned construction season, off-site seed collection will occur from a suitable nearby area. 	Manila CSD and Manila CSD’s biologist and contractor	Performance criteria – California Department of Fish and Wildlife (CDFW) standards	
<p>MM BIO-2: Protect Special Status Bats</p> <p>Removal of confirmed or presumed-occupied bat roost habitat will occur only during seasonal periods of bat activity (when bats are volant, i.e., able to leave roosts) between March 1 and April 15 or September 1 and October 15, when evening temps rise above 45 F, and when no rainfall greater than ½ inches has occurred in the last 24 hours.</p> <p>If trees or structures cannot be removed during the volant period, i.e., Project activities occur during the bat maternity season which generally occur April 16th through August 30th, the Manila CSD’s qualified biologist shall conduct surveys within suitable habitat for special status bats. Survey methodology shall include visual examination with binoculars and may optionally utilize ultrasonic detectors to determine if special status bat species utilize the vicinity.</p> <p>Surveys shall be conducted by a qualified biologist within seven days prior to construction in any areas where potential maternity roosts may be disturbed/removed. The preconstruction surveys for bats may coincide with pre-construction surveys for other animals. Surveys shall include a visual inspection of the impact area and any large trees/snags with cavities or loose bark or crevices within infrastructure. If the presence of a maternity roost is confirmed, an appropriate buffer distance will be established in consultation with CDFW to ensure that construction noise will remain below disturbance thresholds for bats. If no bat utilization or roosts are found, then no further study or action is required. If bats are</p>	Manila CSD and Manila CSD’s biologist and contractor	<p>Performance criteria – California Department of Fish and Wildlife (CDFW) standards</p> <p>Reporting actions – Verify that protection and avoidance measures are in final specifications; verify completion and documentation of surveys, if necessary</p> <p>Schedule – Pre-construction and during construction; verify applicable disturbance buffers and protection measures are implemented</p>	

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<p>found to utilize the BSA, or presence is assumed, a bat specialist should be engaged to advise the best method to prevent impact.</p> <p>Project-related lighting shall be minimized if any construction occurs at night, either contained within structures or limited by appropriate reflectors or shrouds and focused on areas needed for safety, security or other essential requirements.</p>			
<p>MM BIO-3: Protect Special Status, Migratory, and Nesting Birds</p> <p>Ground disturbance and vegetation clearing will be conducted, where feasible, during the fall and/or winter months and outside of the avian nesting season (which is generally assumed to occur between March 15 – August 15) to avoid any direct effects to special-status and protected birds. Ground disturbance and vegetation clearing that cannot be confined to the fall and/or winter outside of the nesting season, will require that a qualified biologist conduct pre-construction surveys within the vicinity of the BSA, to check for nesting activity of native birds and to evaluate the site for presence of raptors and special status bird species. The biologist will conduct at minimum a one-day pre-construction survey within the seven-day period prior to vegetation removal and ground-disturbing activities. If ground disturbance and vegetation removal work lapses for seven days or longer during the nesting season, a qualified biologist will conduct a supplemental avian pre-construction survey before Project work is reinitiated.</p> <p>If active nests are detected within the construction footprint, or within 500 feet of construction activities, the biologist will flag a buffer around each nest. Construction activities will avoid nest sites until the biologist determines that the young have fledged, or nesting activity has ceased. If nests are documented outside of the construction (disturbance) footprint, but within 500 feet of the construction area, buffers will be implemented as needed. In general, the buffer size for common species will be determined on a case-by-case basis in consultation with the CDFW and, if applicable, with USFWS. Buffer sizes will take into account factors such as (1) noise and human disturbance levels at the construction site at the time of the survey and the noise and disturbance expected during the construction activity; (2) distance and amount of vegetation or other screening between the construction site and the nest; and (3) sensitivity of individual nesting species and behaviors of the nesting birds.</p> <p>If active nests are detected during the survey, the qualified biologist will monitor all nests at least once per week to determine whether birds are being disturbed. Activities that might, in the opinion of the qualified biologist, disturb nesting activities (e.g., excessive noise), will be prohibited within the buffer zone until such a determination is made. If signs of disturbance or distress are observed, the qualified biologist will immediately implement adaptive measures to reduce disturbance. These measures may include, but are not limited to, increasing buffer size, halting</p>	<p>Manila CSD and Manila CSD's biologist and contractor</p>	<p>Performance criteria – California Department of Fish and Wildlife (CDFW) standards</p> <p>Reporting actions – Verify that protection and avoidance measures are in final specifications; verify completion and documentation of surveys, if necessary</p> <p>Schedule – Pre-construction and during construction; verify applicable disturbance buffers and protection measures are implemented</p>	

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<p>disruptive construction activities in the vicinity of the nest until fledging is confirmed or nesting activity has ceased, placement of visual screens or sound dampening structures between the nest and construction activity, reducing speed limits, replacing and updating noisy equipment, queuing trucks to distribute idling noise, locating vehicle access points and loading and shipping facilities away from noise-sensitive receptors, reducing the number of noisy construction activities occurring simultaneously, and/or reorienting and/or relocating construction equipment to minimize noise at noise sensitive receptors.</p>			
<p>MM BIO-4: Protect Northern Red-legged Frogs</p> <p>The Manila CSD will retain a qualified biologist to perform a pre-construction survey for the Northern Red-legged Frog within seven days prior to commencement of ground disturbance. The survey will be limited to the Project footprint and within 50 feet of suitable habitat. The biologist will relocate any specimens that occur within the work-impact zone to nearby suitable habitat. If a Northern Red-legged Frog is observed in an active construction zone, the contractor will halt construction activities in the area and the frog will be moved to a safe location in similar habitat outside of the construction zone. Construction within areas of standing water will be limited to the period of the year between July 1 and October 30 to avoid disturbance to breeding frogs. After July 1, a qualified biologist will inspect any work areas containing surface water (not including puddles resulting from rainfall) to ensure tadpoles or metamorphosing frogs are not present. If they are present, the qualified biologist will implement a rescue and relocation operation to move any tadpoles or metamorphosing frogs to a safe location in nearby suitable habitat.</p>	<p>Manila CSD and Manila CSD's biologist and contractor</p>	<p>Performance criteria – County, state, and federal standards, consistent with the project's permits</p> <p>Reporting actions – Verify that protection and avoidance measures are in final specifications</p> <p>Schedule – Pre-construction and during construction</p>	
<p>MM BIO-5: Protect Special Status Fish</p> <p>The following shall be implemented by Manila CSD to protect special status fish:</p> <ul style="list-style-type: none"> – Temporary exclusion fencing will be installed along the shoreline near planned areas of ground disturbance, if any, to limit inadvertent disturbance near aquatic habitat. The temporary exclusion fencing will be shown in the final 100% construction plan set. – Equipment maintenance or refueling will not occur within 100 feet of the Humboldt Bay shoreline. – Erosion control shall be installed for work in tidal drainages to avoid post-construction turbidity inputs into Humboldt Bay. Erosion control measures shall be shown on the final 100% design plan set. – Dewatering of aquatic habitat shall not occur. – Fish relocation shall not occur. 	<p>Manila CSD and Manila CSD's contractor</p>	<p>Performance criteria – County, state, and federal standards, consistent with the project's permits</p> <p>Reporting actions – Verify requirements are in final specifications</p> <p>Schedule – Pre-construction, during construction; verify applicable measures are implemented; check jobsite compliance as necessary</p>	

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<p>MM BIO-6: Protect Western Bumble Bee</p> <p>If an occupied Western Bumble Bee nest is observed in an active construction zone, the contractor will halt construction activities surrounding the area. A biologist will observe the nest and a buffer would be established to protect the occupied nest.</p>	<p>Manila CSD and Manila CSD's biologist and contractor</p>	<p>Performance criteria – County, state, and federal standards, consistent with the project's permits</p> <p>Reporting actions – Verify requirements are in final specifications</p> <p>Schedule – Pre-construction, during construction; verify applicable measures are implemented; check jobsite compliance as necessary</p>	
<p>MM BIO-7: Avoidance and Minimization Measures to Protect Adjacent Wetlands</p> <p>The Manila CSD shall implement the following avoidance and protection measures for Waters of the United States and Waters of the State adjacent to areas of planned disturbance that will not be impacted (filled or excavated) during Project construction:</p> <ul style="list-style-type: none"> – The Manila CSD shall attempt to avoid or minimize impacts to wetlands/waters to the greatest extent feasible in the final design plans. – Adjacent wetlands shall be clearly identified in the final construction documents (100% design planset) – Suitable perimeter control measures, such as silt fences, or straw wattles shall be placed below all construction activities at the edge of surface water features to intercept sediment before it reaches the waterway. These measures shall be installed prior to any clearing or grading activities. 	<p>Manila CSD and Manila CSD's contractor</p>	<p>Performance criteria – County, state, and federal standards, consistent with the project's permits</p> <p>Reporting actions – Verify requirements are in final specifications</p> <p>Schedule – Pre-construction, during construction; verify applicable measures are implemented; check jobsite compliance as necessary</p>	
<p>MM BIO-8: Compensate for Loss of Wetlands</p> <p>The Project shall avoid fill and conversion of seasonal wetlands and waters, to the extent feasible. If fill cannot be avoided, the Project shall compensate for the loss of seasonal wetland habitat to ensure there is no net loss in wetlands. The Project shall compensate for impacts to identified wetlands through restoration, rehabilitation, and/or creation of wetland at a ratio of no less than 1:1 and to the satisfaction of jurisdictional agencies.</p> <p>A Habitat, Mitigation, and Monitoring Plan (HMMP) shall be prepared in coordination with the NCRWQB, the USACE, and the Coastal Commission. Onsite locations for three-parameter wetland mitigation shall occur along existing drainage ditches, at the locations where rain gardens would be installed, and the locations where drainage</p>	<p>Manila CSD and Manila CSD's biologist and contractor</p>	<p>Performance criteria – County, state, and federal standards, consistent with the project's permits</p> <p>Reporting actions – Verify requirements are in final specifications; verify completion of HMMP</p> <p>Schedule – Pre-construction, during construction, and post-</p>	

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<p>ditch connection will be created. Onsite locations for one-parameter wetland mitigation shall be occur within the Manila Community Park area. The Plan shall be acceptable to the regulatory agencies with jurisdiction over wetlands and waters and include the following elements: mitigation ratios, description and size of the restoration or compensatory area, site preparation and design, plant species, planting design and techniques, maintenance activities, plant storage, irrigation requirements, success criteria, monitoring schedule, and remedial measures. The Plan shall be implemented by the Manila CSD.</p> <p>The Project shall also compensate for impacts to other waters by obtaining required permits from the USACE, the NCRWQCB, and Coastal Commission shall be received prior to the start of any on-site construction activity. The Manila CSD shall ensure any additional measures outlined in the permits are implemented.</p>		<p>construction; verify applicable compensatory mitigation is implemented; check jobsite compliance as necessary</p>	
Cultural Resources			
<p>MM CR-1: Cultural Monitoring and Inadvertent Archaeological Discoveries</p> <p>The Manila CSD will retain a qualified cultural resource monitor who is approved by the Wiyot Tribe, Bear River Band of the Rohnerville Rancheria, and the Blue Lake Rancheria to monitor ground disturbing activities related to this Project in areas the Tribes deem culturally sensitive, specifically:</p> <ul style="list-style-type: none"> – Any ground disturbance within ~100 feet of a recorded site – Excavation meeting or exceeding 1 foot (below historical flow line) within existing drainage channels – In locations where new culverts will be placed and excavation meets or exceeds 1 foot below existing culvert flow line – In locations where grading is occurring to construct new drainage features regardless of the excavation depth – Any excavation where the construction inspector is not present to oversee that the excavation does not exceed the lines are grades on the final design construction plans <p>The Manila CSD will contact the three Tribal Historic Preservation Officers or their functional equivalent to set up and implement a cultural monitoring contract when a construction schedule has been determined. Advanced coordination with the qualified cultural monitor is required. The Manila CSD shall provide the Harbor District with written verification for compliance with this Condition. If cultural or historic-era resources are encountered during construction activities, the contractor on site shall cease all work in the immediate area and within a 66-foot buffer of the discovery location. A qualified archaeologist, as well as the Tribal Historic Preservation Officers for the Bear River Band Rohnerville Rancheria, Blue Lake</p>	<p>Manila CSD and Manila CSD's archaeologist and contractor, Tribal Cultural Resource Monitor</p>	<p>Performance criteria – County, state, and federal standards</p> <p>Reporting actions – Verify requirements are in final plans and specifications; verify completion of DPR 513 forms, if necessary</p> <p>Schedule – Pre-construction and during construction; verify applicable protection measures are implemented</p>	

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<p>Rancheria, and Wiyot Tribe shall be contacted to evaluate the discovery and, in consultation with the applicant and lead agency, develop a treatment plan in any instance where significant impacts cannot be avoided. Prehistoric materials may include obsidian or chert flakes, tools, locally darkened midden soils, groundstone artifacts, shellfish or faunal remains, and human burials.</p>			
<p>MM CR-2: Inadvertent Discovery of Human Remains</p> <p>If human remains are discovered during Project construction, work will stop at the discovery location, within 66 feet, and any nearby area reasonably suspected to overlie adjacent to human remains (PRC, Section 7050.5). The Humboldt County Coroner will be contacted to determine if the cause of death must be investigated. If the Coroner determines that the remains are of Native American origin, it is necessary to comply with State laws relating to the disposition of Native American burials, which fall within the jurisdiction of the Native American Heritage Commission (NAHC, PRC, Section 5097). The Coroner will contact the NAHC. The descendants or most likely descendants of the deceased will be contacted, and work will not resume until they have made a recommendation to the landowner or the person responsible for the excavation work for means of treatment and disposition, with appropriate dignity, of the human remains and any associated grave goods, as provided in PRC, Section 5097.98.</p>	<p>Manila CSD and Manila CSD's archaeologist and contractor</p>	<p>Performance criteria – County, state, and federal standards</p> <p>Reporting actions – Verify inclusion of language in final plans and specifications</p> <p>Schedule – During construction; verify completion of protection measures and notifications if inadvertent discovery</p>	
Geology and Soils			
<p>MM GEO-1: Inadvertent Discovery of Paleontological Resources</p> <p>In the event that fossils are encountered during construction (i.e., bones, teeth, or unusually abundant and well-preserved invertebrates or plants), construction activities shall be diverted away from the discovery within 50 feet of the find, and a professional paleontologist shall be notified to document the discovery as needed, to evaluate the potential resource, and to assess the nature and importance of the find. Based on the scientific value or uniqueness of the find, the paleontologist may record the find and allow work to continue, or recommend salvage and recovery of the material, if it is determined that the find cannot be avoided. The paleontologist shall make recommendations for any necessary treatment that is consistent with currently accepted scientific practices. Any fossils collected from the area shall then be deposited in an accredited and permanent scientific institution where they will be properly curated and preserved.</p>	<p>Manila CSD and Manila CSD's contractor</p>	<p>Performance criteria – County, state, and federal standards</p> <p>Reporting actions – Verify inclusion of language in final plans and specifications</p> <p>Schedule – During construction; verify completion of protection measures and notifications if inadvertent discovery</p>	

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Hazards and Hazardous Materials			
MM HAZ-1: Implement Corridor Study Report Recommendations <p>All recommendations resulting from the Corridor Study Report shall be implemented by the Manila CSD prior to, during, and following construction, as appropriate.</p> <ul style="list-style-type: none"> – If Soluble Threshold Limit Concentration (STLC) analysis exceeds regulatory levels, Soil and Groundwater Management Plan (SGMP) shall be prepared which identifies soil and groundwater handling options and protocols during construction. The SGMP will identify protocols to proactively manage potentially impacted soil and groundwater within the Project Area and reduce worker exposure. – If the Corridor Study Report indicates constituent of concern impacts above STLC levels to soil and/or groundwater, then construction workers involved in excavation activities will be Hazardous Waste Operations and Emergency Response (HAZWOPER) trained (Occupational Safety and Health Administration [OSHA] 1910.120) 	Manila CSD and Manila CSD's contractor	<p>Performance criteria – County and state standards</p> <p>Reporting actions – Verify requirements are in final specifications; verify completion of SAP; verify completion of SGMP and SESTP, if applicable</p> <p>Schedule – Pre- and during construction; verify requirements are implemented; check jobsite compliance as necessary</p>	