Appendix D:
Geology and Soils Report
Cotton, Shires and Associates
May 12, 2010
G0079

TO: Jana Sokale
Environmental Planning
7788 Hazelnut Drive
Newark, California 94560

SUBJECT: Initial Study - Geology and Soils

RE: Hacienda/Deep Gulch Project
Almaden Quicksilver County Park

In accordance with our proposal for geotechnical services (dated July 16, 2009), we have prepared the attached Geologic and Soils section for the Initial Study.

Some geology and geotechnical aspects of the project have proved challenging. We have included suggested mitigation measures to reduce project impacts to less than significant. Please contact us with any questions or if additional geotechnical assistance is needed. It has been a pleasure working with you on this project.

Our services have been limited to review of the provided project documents, technical maps and reports from our office files, and a reconnaissance of the property. Our opinions and conclusions are made in accordance with generally accepted principles and practices of the geotechnical profession. This warranty is in lieu of all other warranties, either expressed or implied.

Respectfully submitted,

COTTON, SHIERES AND ASSOCIATES, INC.

[Signature]
Ted Sayre
Principal Engineering Geologist
CEG 1795

[Signature]
David Z. Schriner
Principal Geotechnical Engineer
GE 2334

TS: DTS: kd

Attachment: Geology and Soils Section of Initial Study
6. Disturb potential archaeological resources? [ ] [ ] [ ] [ ] [ ] [ ] 3, 10d, 41, 42
7. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? [ ] [ ] [ ] [ ] [ ] [ ] 2, 3, 4, 40, 41

DISCUSSION:

MITIGATION:

<table>
<thead>
<tr>
<th>F. ENERGY</th>
<th>IMPACT</th>
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<tr>
<td>WOULD THE PROJECT</td>
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<td>1. Use non-renewable resources in large quantities or in a wasteful manner?</td>
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<td>2. Involve the removal of vegetation capable of providing shade to a building, or significantly affect solar access to adjacent property?</td>
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DISCUSSION:

MITIGATION:

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<td>1. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:</td>
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<td>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</td>
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DISCUSSION:

MITIGATION:

H. GREENHOUSE GAS EMISSIONS

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<th>WOULD THE PROJECT</th>
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<td>NO</td>
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<td>No Impact</td>
<td>Less Than Significant Impact</td>
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January 13, 2010 Version
Geology

The geologic units mapped in the area of the proposed project include mélange, chert, and basaltic volcanic rocks of the Franciscan Complex (R.J. McLaughlin, et al., 2001). In addition, a mapped Quaternary Landslide (QLs) of approximately 2,300 feet in length and 1,000 feet in width is located on the southeastern bank of Alamitos Creek and upslope areas of Upper Hacienda Calcine deposits. The size and geomorphology of this landslide suggests a depth of landsliding exceeding 60 feet.

Seismicity

Active faults have not been mapped across the project area and the site is not located within the State’s Special Fault Study Zone. Consequently, the risk of primary fault rupture through the project area is low. State designated active Type A and B faults mapped near the project include the Monta Vista-Shannon fault (1.4 miles northwest), Sargent fault (4.2 miles southwest) and San Andreas fault (5.9 miles southwest). Very strong seismic ground shaking should be anticipated at the project site in response to a major local earthquake.

Seismic ground shaking could trigger potential liquefaction within young alluvial deposits located adjacent to Alamitos Creek. Liquefaction could result in sand boils, lateral spreading, and settlement. Impacts associated with possible liquefaction should not impact the intent of the project (removal of exposed calcine material).

Soils

Soils in the project vicinity generally consist of gravelly to sandy silt largely representing colluvial and alluvial deposits. Site soils have a moderate to high potential for erosion when unvegetated. Calcine materials are typically associated with artificial fill (mining spoil deposits). In addition, calcine materials have been mixed with local soils by water transport and by gravity mixing on slopes with colluvial soil deposits. Calcine deposits identified for removal are typically located near active drainage channels or on steep embankments near drainage channels. Calcine removal in some areas will result in exposure of underlying steep natural slopes with the potential for erosion.

Discussion

1) Would the project expose people or structures to 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 special studies Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?
   No active faults are known to pass through the project area, and the proposed project is not located within a State of California designated Fault Special Study Zone. Consequently, fault rupture through the project area is not likely to occur.
Implementation of the proposed project would not result in the construction of any structures for human habitation, nor would it significantly increase long-term human use of the project area. Consequently, there is no anticipated impact on humans or structures from fault rupture.

ii) **Strong seismic ground shaking?**
Although no known active faults have been identified within the project area, very strong ground shaking can be expected to occur at the project area during major earthquakes in the region. Impacts to the project resulting from anticipated seismic ground shaking would be less than significant.

iii) **Seismic-related ground failure, including liquefaction?**
The Upper and Lower Hacienda project areas and planned calcine removals beneath Alamitos Creek Bridge are located within a zone of potential liquefaction as delineated on the Santa Teresa Hills Quadrangle Hazard Zone Map prepared by the California Geologic Survey (CGS, 2003). The affects of potential liquefaction at or in the immediate vicinity of the project site could include sand boils, lateral spreading, and settlement. The proposed project should not increase potential hazards from liquefaction and planned calcine removal is unlikely to be impacted by potential liquefaction. Implementation of the proposed project would not result in the construction of any structures for human habitation, nor would it significantly increase long-term human use of the project area. Therefore, the potential impacts on humans from liquefaction (as a result of the project) are less than significant.

iv) **Landslides?**
An existing mapped Quaternary Landslide (Qls) underlies the Upper Hacienda calcine removal area (R. F. McLaughlin, et. al., 2001). This landslide is over 2,000 feet in length and project calcine removal in the Upper Hacienda area is not of sufficient volume to result in potential reactivation of the massive Qls deposit. Calcine removal in this vicinity is also located near the base of a steep slope. Pacific Geotechnical Engineering (Geotechnical Investigation of January 14, 2010) has concluded that native earth materials are present beneath the calcine deposits planned for removal, and that the project is not anticipated to have a significant impact on the stability of native slopes. Pacific Geotechnical Engineering has recommended that final slopes be established in accordance with the recommendations of their report, and that they provide geotechnical construction inspection services to verify anticipated earth materials, and to confirm the adequacy of presented recommendations.

Project calcine removal in areas of steep slopes has the potential to result in adverse slope stability impacts. Current project design recommendations prepared by Pacific Geotechnical Engineering are sufficient to address potential slope instability impacts. Appropriate geotechnical inspection and preparation of supplemental design recommendations (if needed) during project grading would
reduce the impact to less than significant. The following geotechnical construction inspection services are an integral part of the project:

MITIGATION

- Geotechnical inspection of all final slopes of 2:1 (horizontal:vertical) or steeper in areas of calcine removal. Exposed slopes should be inspected by the Geotechnical Consultant prior to application of erosion control measures.
- Full time geotechnical inspection during calcine removal in the Upper Hacienda area (this removal site is anticipated to be underlain by QIs materials).

2) Would the project result in substantial soil erosion or the loss of topsoil?
Construction would involve substantial ground disturbing activities, including excavation and removal of calcine deposits, establishment of temporary channel crossings along Alamitos Creek, and other temporary access routes for equipment. This process could expose unvegetated soils, which would accelerate erosion and sedimentation. Calcine removal at the Upper Hacienda and Alamitas Creek areas could expose native slopes to scour during high flow or flood events. Areas disturbed during the construction phase would be addressed by hydroseeding, natural fiber netting/erosion control blanket installation on steeper slopes, and replacement container planting. Disturbed slope areas within the limits of seasonal flooding would be addressed by placement of rip rap armor to mitigate erosion. The existing drainage pipe discharging above the Upper Hacienda area is to be extended or the flow path below the pipe outlet is to be armored to prevent erosion of steep slopes in this vicinity. All erosion protection mitigation measures are to be completed prior to initiation of seasonal rainfall (October 15).

Construction of the proposed project could accelerate erosion, and would be potentially significant. However, with the implementation of the following BMPs, the impact would be reduced to less than significant.

MITIGATION

- Stormwater Pollution Prevention Plan
- Surface Erosion Control Treatments (Hydroseeding and/or Fiber Netting)
- Replacement Planting
- Placement of rip-rap (rock slope protection) over calcine removal areas beneath Alamitos bridge
- Placement of rip-rap at the toe of slopes within the Upper Hacienda and Alamitos Creek removal areas to protect from scour under high flow conditions
- Drainage control improvements to mitigate the potential for erosion resulting from culvert discharge above the Upper Hacienda area
3) Would the project 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, collapse, shrink/swell potential, soil creep, or severe erosion?
As indicated above, the project calcine removal includes areas that have the potential for liquefaction, lateral spreading, erosion, and slope instability. The project is not anticipated to result in the aggravation of these existing conditions. With the noted mitigation measures planned to address potential erosion and landsliding for the above Items 1 and 2, the project would have less than significant impacts.

4) Would the project be located on expansive soil, as defined in the report Soils of Santa Clara County or California Building Code, creating substantial risks to life or property?
The project area may include expansive soils. However, no significant new structures are proposed for construction that could be damaged. The project would not create substantial risks related to expansive soils.

5) Would the project 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?
The proposed project would not involve the construction or operation of septic tanks or other waste disposal systems. Therefore, the proposed project would have no impacts related to wastewater disposal.

6) Would the project cause substantial compaction of over-covering of soil either on-site or off-site?
The proposed project includes removal of calcine and placement of this material in the designated San Francisco Overcut area that was previously utilized for the Jacques Gulch Restoration Project. The project would not result in substantial compaction or over-covering of on-site soil.

7) Would the project cause substantial change in topography or unstable soil conditions from excavation, grading, or fill?
The project includes isolated areas of change in topography. These changes result from removal of artificial fill material and restoration of grades that match with adjoining native slopes. Substantial grading (beyond calcine removal) is not part of the project and negative impacts to native slopes are not anticipated.

8) Would the project be located in an area designated as having a potential for major geologic hazard?
The channel of Alamitos Creek and immediately adjoining flood plains are located within State mapped liquefaction hazard zones. Moderate to steep slopes located on both sides of the creek corridor are uniformly located within State mapped earthquake-induced landslide hazard zones (Santa Teresa Hills Quadrangle Hazard Zone Map, CGS 2003). The proposed project with currently defined mitigation
measures would not result in aggravation of these existing conditions, or increased exposure of structures or the public to these potential hazards.

9) **Would the project be located on or adjacent to a known earthquake fault?**
The closest active Type A or B faults are located approximately 1.4 to 5.9 miles from the site. Consequently, the potential for fault rupture across the project site is low.

10) **Would the project be located in a Geologic Study Zone?**
The site is not located within the State’s Special Fault Study Zone. Comments about the local mapped liquefaction and earthquake-induced landslide hazard zones are addressed in Item 8 above.

11) **Would the project involve construction of building, road or septic system on a slope?**
The project does not include construction of a building, road, or septic system.
Appendix E:
Santa Clara Valley Water District Stream Maintenance Program
BEST MANAGEMENT PRACTICES
UNDER THE STREAM MAINTENANCE PROGRAM
Revised: May 17, 2002

Introduction

The District will process all routine stream maintenance activities according to the process and protocols established in Chapter 3 of the Stream Maintenance Program (SMP). The Resource Protection Protocol contained therein includes a step in the annual review process to identify appropriate Best Management Practices (BMPs) for the design and implementation of an activity. (See SMP Figure 3-1.) BMPs are methods that protect environmental quality or reduce environmental impacts from stream maintenance activities. In order to be effective, BMPs must be properly selected and implemented, applied consistently, and their effectiveness evaluated onsite to assure that they are meeting the required objective. The District’s Geographic Information System (GIS) will be developed and enhanced to facilitate the stream maintenance project environmental review, processing, and implementation process, particularly for determining potential presence of sensitive species.

Not every BMP is designed to be used in every situation. Since BMPs are meant to be specific to particular activities and resources, the selection and implementation of an appropriate set of BMPs for each project is a key element to their effectiveness. Because of variation in District facilities and the tendency of individual site conditions to change over time, conditions under which each BMP must be applied cannot be strictly prescribed. The staff involved in design and implementation of the maintenance activity must retain some flexibility to determine which BMPs should be implemented according to design objectives and site conditions.

Selection, implementation, monitoring, and improvement of BMPs are all part of the program. Following is a brief discussion of how each of these activities will be applied under the Stream Maintenance Program to assure that resource protection goals are met.

Selection of Best Management Practices

The District will use the most current BMPs when planning or designing routine stream maintenance activities. Work within the Stream Maintenance Program can be divided into two general categories. Regularly scheduled work (most vegetation management, trash pick-up, etc.) is work that occurs in the same place and the same manner with a predictable frequency. Other routine work is not undertaken on a regular annual schedule, but is done as the need arises. This work (sediment removal, bank protection) has a less predictable frequency and location. This work is identified through field surveys, prioritized, and then a work-plan for that particular job is developed. Selection of BMPs will be managed differently for these two types of work.

Selection of BMPs for regularly scheduled work will be done at the beginning of each season (coincides with activity type). Aquatic herbicide application, for example occurs in late summer/early fall. At the beginning of the season, technical staff will review all of the work areas and select appropriate BMPs to respond to site conditions. The BMPs will be incorporated into the work order. If there are questions regarding specific environmental issues, appropriate staff will be consulted and their input will be incorporated.

For work not on a regular schedule, BMP selection is called out in the Resource Protection Protocol. The watershed engineer will, as part of the project design criteria, select BMPs that are appropriate to the particular job and incorporate them into the design package. The BMPs will be
called out in the design documents and incorporated into the work order. If there are questions regarding specific environmental issues, appropriate staff will be consulted and their input will be incorporated.

**Implementation of Best Management Practices**

Best Management Practices will be implemented by lead staff assigned to a specific project. For most projects this would be the Senior Maintenance Worker. The BMPs will be implemented as they are called out in the work order. If site conditions or other factors require a BMP to be changed or make it no longer relevant to the project, the assigned lead on the job will consult with appropriate staff (watershed engineer, qualified environmental staff, etc.) and get authorization to modify the BMPs. Modifications to BMPs will be noted as an addendum to the work order.

**Monitoring of Best Management Practices**

Monitoring of BMPs will be carried out as part of the work and assigned to the lead staff on a particular project as a general rule. Exceptions would be where the individual BMP requires a particular field of expertise to carry out the monitoring (i.e. water quality sampling, fisheries monitoring). In that instance, qualified staff would be included in the work order as a resource for BMP implementation.

**Changes in Best Management Practices**

The Best Management Practices section of the Stream Maintenance Program is intended to be a living document and to change over the life of the program. The annual Resource Protection Protocol in Chapter 3 of the Stream Maintenance Program includes a “lessons learned” step to evaluate and improve all aspects of the maintenance program, including the BMPs. As BMPs are used and ways are seen to improve their effectiveness, they will be modified to reflect the changes. As new BMPs are found or technology improves, the program will incorporate them to further protect resources.

**Reporting on Best Management Practices**

Reporting on modification to BMPs made as a result of the “lessons learned” process will be done as part of the normal reporting practices called out in the Stream Maintenance Program.

**Supporting Documents**

The BMPs are supported by other District documents that provide more specificity for maintenance project design and implementation.

These documents are attached to the SMP:

- Appendix C. Nesting Migratory Bird Procedure
- Appendix D. Dryback/Fish Relocation Protocol
- Appendix E. Programmatic Impact Assessment and Mitigation for Routine Bank Protection Activities

These documents are available from the District:
District Channel Maintenance Guidelines
Bay Area Stormwater Management Agency Association BMPs (2001)

BMP List

The list of BMPs gives a BMP identification number which is used for reference in the SMP and EIR, followed by a short BMP Title, a summary Description of the measure, and the Activity to which the measure will generally apply. The abbreviation for activity is:

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<tr>
<th>General</th>
<th>All Routine Maintenance [in activity column, “all” = “general”]</th>
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<tr>
<td>SR</td>
<td>Sediment Removal</td>
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<td>VM</td>
<td>Vegetation Management</td>
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<td>BP</td>
<td>Bank Protection</td>
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<td>MM</td>
<td>Minor Maintenance</td>
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### GENERAL

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<th>BMP</th>
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<tr>
<td>0.1</td>
<td>Instream Work Window</td>
<td>In-stream sediment removal and bank protection work shall be from June 15 to October 30th or the first significant rainfall after October 15, whichever occurs first. (Significant rainfall is defined as 0.5 inch of rain in a 24-hour period). Once significant rainfall occurs, all diversion structures shall be removed and the project site winterized to prevent erosion. No new instream sediment removal and bank protection work shall start after October 15th of any year, and projects started before October 15, shall be at least 50% complete by October 15th to continue work until October 30th or first significant rainfall. Minor activities will be done in-channel at any time of year if the activity is necessary to provide immediate flood protection. These activities include removal of trash or debris that will impede flows, trash rack cleaning, and pier nose cleaning. These activities will be done in a manner that is sensitive to protection of aquatic resources. Removal of in-stream vegetation by hand can be undertaken between July 1 and March 1.</td>
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<td>0.2</td>
<td>Minor Work</td>
<td>No reporting or mitigation will be required for minor work activities which remove less than 0.01 acres of wetland and woody riparian vegetation. An equivalent area of mitigation will be provided for annual amounts greater than 0.2 acres of wetland and riparian vegetation removed by minor work activities. Individual minor work activities which affect more than 0.05 acres of wetland and woody riparian vegetation will require separate approval and mitigation. These limitations exclude those minor work activities which occur in the same area as major sediment removal and vegetation management areas included in the program as shown in Figure II-5 of the Final EIR.</td>
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<td>1.6</td>
<td>Use of Wheel and Track Mounted Vehicles in Stream Bottoms</td>
<td>District personnel shall use the appropriate equipment for the job that minimizes disturbance to the stream bottom. Appropriately-tired vehicles, either tracked or wheeled, shall be used depending on the situation: 1. Tracked vehicles (bulldozers, loaders) may cause scarification. 2. Wheeled vehicles may cause compaction. 3. Heavy equipment shall not operate in the live stream (see also BMP 1.3).</td>
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<td>2.1</td>
<td>Minimize Vegetation Removal</td>
<td>Vegetation control and removal in channels, on streambanks, and along levees and maintenance roads shall be limited to removal necessary for facility inspection purposes, removal that is necessary to meet regulatory requirements, removal that is required to comply with fire codes, and removal that is required to meet capacity requirements per Maintenance Guidelines.</td>
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<td>1. The District has developed detailed Maintenance Guidelines to address the ongoing need for maintenance of vegetation or sediment in modified streams and channels. The guidelines are engineering-based and outline the level of maintenance required to ensure adequate flood protection capacity is maintained in the streams and canals within the District’s jurisdiction.</td>
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<td>2. Decisions regarding the necessity of routine sediment removal and vegetation management activities (to restore channel flow capacities) shall be made following the thresholds established in the guidelines. This information shall be used to formulate in part an annual routine maintenance work plan.</td>
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<td>3.1</td>
<td>Minimize Impacts to Special-status Plants and Animals Via Site Assessments and Avoidance Measures</td>
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To avoid and minimize impacts to special-status plant and wildlife species, the annual work program shall be reviewed by biological staff, and each site where special status species have been found, have been known to exist in the recent past, or are likely to occur because suitable habitat exists, be visited by a biologist or qualified personnel under the direction of a biologist. For animal species the site surveys shall be no more than 30 days prior to the start of construction, to determine presence of special-status species. For mobile species (e.g. red-legged frog, western pond turtle, least Bell’s vireo, steelhead), which may occur on-site during the work period, surveys be conducted as close to the start of work as is practical (no more than 7 days prior to start of work). For plant species, the surveys be conducted during the appropriate time of the year to determine presence. Information regarding the presence of special-status species on a particular worksite shall be based on the District’s GIS database and professional experience of qualified staff.

1. The District shall use its GIS database to identify potential special-status plant and animal habitats. All projects falling within sensitive habitats shall be discussed with biological staff to identify avoidance and minimization measures.

2. All populations detected during the surveys shall be assessed and mapped. This information shall be entered into the District’s GIS system for future management purpose.

3. Avoidance of impacts to serpentine areas or other sensitive plant habitats may include storing removed sediment offsite, limiting the method of vegetation removal to manual methods, and limiting the operation of maintenance equipment to established roads whenever possible.

4. Vegetation management in sensitive plant areas shall use only hand control or backpack herbicide application by operators trained to identify and avoid the species to be protected.

5. If sensitive animals such as western pond turtles or California red-legged frogs are found, a qualified biologist will remove them to suitable habitat outside of the project limits. Moving animals will be consistent with applicable Fish and Wildlife Service and Fish and Game permits.

6. If maintenance activities are scheduled in the vicinity of extant populations, qualified biological personnel shall clearly identify the populations on site and stake or flag a buffer zone around the population in which activities are to be avoided.

7. The results of all sensitive species surveys shall be reported to the Fish and Wildlife Service, National Marine Fisheries Service and the California Department of Fish and Game in an annual report. All surveys will be reported to the California Natural Diversity Database.

8. The District shall develop and distribute informational pamphlets entitled “Sensitive Plants, Wildlife, and Fish at your Worksite.” These pamphlets are designed to inform staff about sensitive species and environmental protocols and procedures.
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<td>9.</td>
<td>If sensitive species are found on the site during pre-construction surveys, then the project biologist shall conduct additional monitoring of the work site during construction.</td>
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<td>3.2</td>
<td>Minimize Impacts to Nesting Birds Via Site Assessments and Avoidance Measures</td>
<td>District personnel shall conduct SMP work in a manner consistent with the protocols established by the most current version of the District’s Nesting Migratory Bird Procedure: 1. Project areas shall be checked by a qualified biologist for nesting birds prior to starting work if the work has the potential to impact nesting birds. 2. If nesting Raptors are found, a 300-foot buffer shall be established around the nest and maintained until the young have fledged. If other nesting birds are found, implementation of a project may be delayed until after nesting is completed. Work may occur if an adequate buffer, as determined by a qualified biologist, can be established between the maintenance activity and nests.</td>
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<td>3.3</td>
<td>Avoid serpentine habitat</td>
<td>The District shall identify serpentine areas and avoid disturbance to these areas to the extent possible. 1. The District shall use its GIS database to identify serpentine areas near work areas and avoid and minimize impacts to all stands of native vegetation that may provide suitable habitat for special-status plants and invertebrates to the greatest extent possible. 2. Avoidance measures may include storing removed sediment offsite, limiting the amount of vegetation to be sprayed and removed in serpentine areas, and limiting the operation of maintenance equipment to established roads whenever possible. 3. Facilities crossing serpentine soil grasslands shall be permanently marked in the field (and in the District GIS) and shall include 100 ft. buffer zones. No upland herbicides shall be used in these marked areas. Aquatic herbicides may be used after July 1. Upland vegetation control using hand labor may occur after June 15. 4. Facilities crossing serpentine soil shrub lands and woodlands shall be surveyed by a qualified botanist. Areas supporting sensitive species shall be permanently marked in the field (and in the District GIS) and shall include 100 ft. buffer zones. No upland herbicides shall be used in these marked areas. Aquatic herbicides may be used after July 1. The botanist shall determine what area’s vegetation management using hand labor may occur after June 15. Buffer zones around individual plants or populations shall be established</td>
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### BMP 3.19: Develop a Biodiversity Monitoring Program

The District commits to developing and implementing a biodiversity monitoring program in conjunction with the focus of the program shall be on special-status species and their habitats. Monitoring results shall be incorporated into future BMP and maintenance design through the "lessons learned" process of annual review (refer to SMP Figure 3-1) so as to more effectively conserve and restore stream habitats.

1. Monitoring protocols for sensitive species shall be approved by the Fish and Wildlife Service, National Marine Fisheries Service or California Department of Fish and Game as appropriate.
2. The results of all sensitive species monitoring shall be reported to the Fish and Wildlife Service, National Marine Fisheries Service and the California Department of Fish and Game in an annual report. All surveys will be reported to the California Natural Diversity Database.
3. Monitoring shall be conducted during the appropriate time of year for each species under investigation.
4. All populations detected during the monitoring shall be assessed and mapped. This information shall be entered annually into the District's GIS system for future management purposes.
5. Sensitive species monitoring shall cover the following species: Salt Marsh Harvest Mouse - population, habitat mapping and trend; Western Snowy Plover - population, distribution and trend; California Clapper Rail - distribution and trend; Least Bell's Vireo - monitor revegetation sites and identify new sites; California Red-Legged Frog - distribution, population and trend; California Tiger Salamander - distribution, abundance and trend; Steelhead - population, distribution and trend; Chinook Salmon - population, distribution and trend; Bay Checkerspot Butterfly - population, distribution and trend; Tiburon Paintbrush, Coyote Ceanothus, Santa Clara Dudleya, Metcalf Canyon Jewelflower and Mt. Hamilton Thistle - population, distribution and trend; Raptors - nest locations; Salt Marsh Yellowthroat - distribution; Alameda Song Sparrow - distribution; Burrowing Owl - distribution, abundance and trend.
6. The figure “Fisheries present in streams within jurisdiction of the Santa Clara Valley Water District” (Figure IVB-1) shall be updated every 5 years.
7. The District shall complete the development of the biodiversity monitoring program within 1 year of the permits being issued.
8. Surveys for listed species shall be conducted by individuals authorized by the Fish and Wildlife Service and/or California Department of Fish and Game as appropriate.

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<td>4.1</td>
<td>Notify Local Governments of Scheduled Work</td>
<td>Notify cities and the County of proposed work by submitting the Annual Work Plan to the Public Works Departments and the District’s Zone Advisory Committee.</td>
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<tr>
<td>4.2</td>
<td>Minimize Disturbances to Surrounding Neighborhoods</td>
<td>The District shall implement maintenance practices that minimize disturbances to neighborhoods surrounding work sites.</td>
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<td>1. In general, work shall be conducted during normal working hours. Extending weekday hours and working weekends may be necessary to complete some projects.</td>
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<td>2. Internal combustion engines shall be equipped with adequate mufflers.</td>
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<td>3. Excessive idling of vehicles will be prohibited.</td>
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<td>4. Levee traffic shall be limited to a speed of 15 miles per hour.</td>
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<td>5. Access roads shall be watered as needed to control dust.</td>
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<td>6. Dry sediment shall be wetted down or covered as needed to control dust during transport.</td>
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<tr>
<td>4.4</td>
<td>Sanitary/Septic Waste Management</td>
<td>Temporary sanitary facilities shall be located on jobs that last multiple days. All temporary sanitary facilities shall be placed outside of the creek channel and flood plain.</td>
</tr>
<tr>
<td>4.5</td>
<td>Vehicle and Equipment Cleaning</td>
<td>District vehicles shall be washed only at the approved area in the corporation yard. No washing of vehicles shall occur at job sites.</td>
</tr>
<tr>
<td>4.6</td>
<td>Work Site Solid Waste Management</td>
<td>District employees and contractors shall clean the work site before leaving by removing all litter and construction related materials. The District’s maintenance crews shall be responsible for all debris incurred as a result of construction and for cleaning up dumped material.</td>
</tr>
<tr>
<td>4.8</td>
<td>Implement Public Safety Measures</td>
<td>The District shall implement public safety measures during maintenance:</td>
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<tr>
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<td>1. Construction signs shall be posted at job sites warning the public of construction work and to exercise caution.</td>
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<td>2. When necessary, a person shall be provided for traffic control.</td>
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<td>3. If needed, a lane shall be blocked off to allow for trucks to pull into and out of the access points.</td>
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<td>4. Where work is proposed adjacent to a recreational trail, warning signs shall be posted several feet beyond the limits of work.</td>
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<td>5. Fencing, either the orange safety type or chain link, shall be installed above repair sites on bank stabilization projects.</td>
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<tr>
<td>4.9</td>
<td>Notify Park Departments of Trail Closures</td>
<td>As part of the Annual Work Plan, the District will notify the park departments of trails that could be subject to closure. The type of work, location and duration of each project that will affect trail closures will be identified.</td>
</tr>
</tbody>
</table>
| 6.1 | Spill Prevention | The District shall prevent the accidental release of chemicals, fuels, lubricants, and non-storm drainage water into channels.  
1. District field personnel shall be appropriately trained in spill prevention, hazardous material control, and clean-up of accidental spills.  
2. No fueling, repair, cleaning, maintenance, or vehicle washing shall be performed in the creek channel or in areas at the top of the channel bank that may flow into the creek channel. |
| 6.2 | Spill Kit Location | Spill prevention kits shall always be in close proximity when using hazardous materials (e.g., crew trucks and other logical locations).  
1. Prior to entering the work site, all field personnel shall know the location of spill kits on crew trucks and at other locations within District facilities.  
2. All field personnel shall be advised of these locations and trained in their appropriate use. |
| 6.3 | Hazardous Materials Management | The District shall implement measures to ensure that hazardous materials are properly handled and the quality of water resources is protected by all reasonable means when removing sediments from the streams.  
1. Prior to entering the work site, all field personnel shall know how to respond when toxic materials are discovered.  
2. The discharge of any hazardous or non-hazardous waste as defined in Division 2, Subdivision 1, Chapter 2 of the California Code of Regulations shall be conducted in accordance with applicable State and federal regulations.  
3. All handling and disposal of sediments shall be performed in accordance with the WDR issued by the RWQCB. The sediment shall ultimately be disposed at a permitted landfill. Any alternative use or disposal shall require RWQCB approval. |
<p>| 6.4 | Vehicle and Equipment Fueling | No fueling shall be done in the stream channel or immediate flood plain, unless equipment stationed in these locations is not readily relocated i.e., pumps, generators. For stationary equipment that must be fueled on site, containment shall be provided in such a manner that any accidental spill of fuel shall not be able to enter the water or contaminate sediments that may come in contact with water. Any equipment that is readily moved out of the channel shall not be fueled in the channel or immediate flood plain. All fueling done at the job site shall provide containment to the degree that any spill shall be unable to enter the channel or damage stream vegetation. |</p>
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| 6.5  | Vehicle and Equipment Maintenance    | No equipment servicing shall be done in the stream channel or immediate flood plain, unless equipment stationed in these locations cannot be readily relocated (i.e., pumps, generators).  
1. Any equipment that can be readily moved out of the channel shall not be serviced in the channel or immediate flood plain.  
2. All servicing of equipment done at the job site shall provide containment to the degree that any spill shall be unable to enter the channel or damage stream vegetation.  
3. If emergency repairs are required in the field, only those repairs necessary to move equipment to a more secure location shall be done in the channel or flood plain.  
4. If emergency repairs are required, containment shall be provided equivalent to that done for fueling or servicing. |
| 6.6  | Employee/Contractor Training         | All appropriate District staff and contractors shall receive annual training on Stream Maintenance Program BMPs.                                                                                               |
### BMP 7.1 Discovery of Cultural Remains or Historic Artifacts

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<tr>
<td>Work in areas where remains or artifacts are found will be restricted or stopped until proper protocols are met.</td>
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<tr>
<td>1. Work at the location of the find will halt immediately within 50 feet of the find. A “no work” zone shall be established utilizing appropriate flagging to delineate the boundary of this zone, which shall measure at least 50 feet in all directions from the find.</td>
</tr>
<tr>
<td>2. The District shall retain the services of a Consulting Archaeologist, who shall visit the discovery site as soon as practicable, and perform minor hand-excavation to describe the archaeological resources present and assess the amount of disturbance.</td>
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<tr>
<td>3. The Consulting Archaeologist shall provide to the District and the Corps, at a minimum, written and digital-photographic documentation of all observed materials, utilizing the guidelines for evaluating archaeological resources for the California Register of Historic Places (CRHP) and National Register of Historic Places (NRHP). Based on the assessment, the District and Corps shall identify the CEQA and Section 106 cultural-resources compliance procedure to be implemented.</td>
</tr>
<tr>
<td>4. If the find appears to not meet the CRHP or NRHP criteria of significance, and the Corps archaeologist concurs with the Consulting Archaeologist’s conclusions, construction shall continue while monitored by the Consulting Archaeologist. The authorized maintenance work shall resume at the discovery site only after the District has retained a Consulting Archaeologist to monitor and the Watershed Manager has received notification from the Corps to continue work.</td>
</tr>
<tr>
<td>5. If the find appears significant, avoidance of additional impacts is the preferred alternative. The Consulting Archaeologist shall determine if adverse impacts to the resources can be avoided.</td>
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<tr>
<td>6. When avoidance is not practical (e.g., maintenance activities cannot be deferred or they must be completed to satisfy the SMP objective), the District shall develop an Action Plan and submit it to the Corps within 48 hours of Consulting Archaeologist’s evaluation of the discovery. The action Plan may be submitted via e-mail (<a href="mailto:rstradford@spd.usace.army.mil">rstradford@spd.usace.army.mil</a>). The Action Plan is synonymous with a data-recovery plan. It shall be prepared in accordance with the current professional standards and State guidelines for reporting the results of the work, and shall describe the services of a Native American Consultant and a proposal for curation of cultural materials recovered from a non-grave context.</td>
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<tr>
<td>7. The recovery effort will be detailed in a report prepared by the archaeologist in accordance with current archaeological standards. Any non-grave artifacts will be placed with an appropriate repository.</td>
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<td>8. In the event of discovery of human remains (or the find consists of bones suspected to be human), the field crew supervisor shall take immediate steps to secure and protect such remains from vandalism during periods when...</td>
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|       |                             | **A cultural resources specialist will conduct a review and evaluation of those sites that would involve disturbance / excavation of native soil previously undisturbed by contemporary human activities to determine their potential for affecting significant cultural resources.** The evaluation of the potential to disturb cultural resources will be based on an initial review of archival information provided by the California Historical Resources System/Northwest Information Center (CHRIS/NWIC) in regard to the project area based on a 0.25 mile search radius. It is recommended that this initial archival review be completed by a professional archaeologist who will be able to view confidential site location data and literature to arrive at a preliminary sensitivity determination. If necessary, a further archival record search and literature review (including a review of the Sacred Lands Inventory of the Native American Heritage Commission); and a field inventory of the project area will be conducted to determine the presence/absence of surface cultural materials associated with either prehistoric or historic occupation. The results along with any mitigation and/or management recommendations would be presented in an appropriate report format and include any necessary maps, figures, and correspondence with interested parties. A summary table indicating appropriate management actions (e.g., monitoring during construction, presence/absence testing for subsurface resources; data recovery, etc.) will be developed for each project.
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<td>site reviewed. The management actions will be implemented on site to avoid significant effects to cultural resources.</td>
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### SEDIMENT REMOVAL

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| 1.2 | Tidal Work Areas   | For tidal areas, a downstream cofferdam shall be constructed to prevent the work area from being inundated by tidal flows. By isolating the work area from tidal flows, water quality impacts are minimized. Downstream flows continue through the work area and through pipes within the cofferdam.  
1. Installation of coffer dams shall begin at low tide.  
2. Waters discharged through tidal coffer dam bypass pipes shall not exceed 50 NTUs over the background levels of the tidal waters into which they are discharged.  
3. Coffer dams in tidal areas may be made from earthen material. If earth is used, the downstream and upstream faces shall be covered by a protected covering (e.g., plastic or fabric) if needed to minimize erosion. |
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| 1.3 | Dewater/Bypass Water at Non-tidal Sites                              | When work in a flowing stream in unavoidable, the entire streamflow shall be diverted around the work area by a barrier. Construction of the barrier shall normally begin in the upstream area and continue in an downstream direction, and the flow shall be diverted only when construction of the diversion is completed. The water diversion plan shall allow stream flows to gravity flow around or through the work site using temporary culverts or stream flow is pumped around the work site using pumps and screened intake hoses. Coffer dam construction shall be adequate to prevent seepage into or from the work area. Coffer dams shall be constructed of river run gravel with a fines content that is less than 15%. Fines are defined as material that is able to pass through a #20 sieve. Coffer dams may also be constructed of sheet piles, inflatable dams, and sand bags. Coffer dams shall be installed both upstream and downstream not more than 100 feet from the extent of the work areas. In-channel berms that only deflect water to one side of the channel during sediment removal, may be constructed of channel material. The enclosure and the supportive material shall be removed when the work is completed and the removal shall normally proceed from downstream in an upstream direction. Normal flows shall be restored to the affected stream immediately upon completion of work at that location.  
1. All water shall be discharged in a non-erosive manner (e.g., gravel or vegetated bars, on hay bales, on plastic, on concrete, or in storm drains when equipped with filtering devices, etc.).  
2. Sumps or basins may also be used to collect water, where appropriate (e.g., in channels with low flows).  
3. Where feasible and appropriate, diversion structures shall be installed on concrete sections of the channels or constructed of materials specified above. Earth fill shall not be used for cofferdams in non-tidal areas.  
4. In conjunction with diversion structures, pumps or gravity-fed pipe systems are used to de-water sites.  
5. Depending on the channel configurations, sediment removal may occur where the flows are not bypassed around the work site; as long as during excavation activities, a berm of sediment is left between the work area and stream flows to minimize water quality impacts.  
6. Diversions shall maintain ambient stream flows below the diversion, and waters discharged below the project site shall not be diminished or degraded by the diversion. |
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| 1.4 | Avoid Erosion When Restoring Flows | All temporary diversion structures and the supportive material shall be removed when the work is completed, but no more than 48 hours after work is completed. The removal shall normally proceed from downstream in an upstream direction. Normal flows shall be restored to the affected stream immediately upon completion of work at that location. Flows shall be restored in a manner that minimizes erosion.  
1. When diversion structures are removed, to the extent practicable, the ponded flows shall be directed into the low-flow channel within the work site to minimize downstream water quality impacts.  
2. Flows shall gradually be restored to the channel to avoid a surge of water that would cause erosion or scouring.  
3. Bypassed flows may be slowly reintroduced into the dewatered area by leaving a silt barrier in place to allow water to slow and drop sediment to the extent possible. |
| 1.7 | Pump/Generator Set Operations and Maintenance | Pumps and generators shall be maintained and operated in a manner that minimizes impacts to water quality and aquatic species.  
1. Pumps and generators shall be maintained according to manufacturers’ specifications to regulate flows to prevent dryback or washout conditions.  
2. Pumps shall be operated and monitored to prevent low water conditions, which could pump muddy bottom water, or high water conditions, which creates ponding.  
3. Pump intakes shall be screened to prevent uptake of fish and other vertebrates. |
| 1.8 | Handle Sediments So As to Minimize Water Quality Impacts | Sediments shall be stored and transported in a manner that minimizes water quality impacts.  
1. Wet sediments may be stockpiled outside of a live stream or may be stockpiled within a dewatered stream so water can drain or evaporate before removal. This measure applies to saturated, not damp, sediments and depends upon the availability of a stockpile site.  
2. For those stockpiles located outside the channel, water draining from them shall not be allowed to flow back into the creek or into local storm drains that enter the creek, unless water quality protection measures recommended by the RWQCB are implemented.  
3. Trucks may be lined with an impervious material (e.g., plastic), or the tail gate blocked with dry dirt or hay bales, for example, or trucks may drain excess water by slightly tilting their loads and allowing the water to drain out.  
4. Water shall not drain directly into channels (outside of the work area) or onto city streets without providing water quality control measures.  
5. Streets shall be cleaned of mud and/or dirt by street sweeping, as necessary, and not by hosing down the street. |
<p>| 1.9 | Soil Stockpiles | If soil is to be stockpiled, no run-off shall be allowed to flow back to creek. |</p>
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<tr>
<td>1.12</td>
<td>Groundwater Management</td>
<td>If high levels of groundwater in a work area are encountered, the water is pumped out of the work site. If necessary to protect water quality, the water shall be directed into specifically constructed infiltration basins, into holding ponds, or onto areas with vegetation to remove sediment prior to the water re-entering a creek. Water pumped into vegetated areas shall be pumped in a manner that will not create erosion around vegetation.</td>
</tr>
<tr>
<td>1.13</td>
<td>Prevent Scour Downstream of Sediment Removal</td>
<td>Sites in the transport zone on alluvial fans may cause increased scour downstream if they experience rapid sediment accumulation after sediment removal. Channel reaches up to 500 feet downstream from such sediment removal sites shall be monitored to determine whether accelerated erosion is occurring. If downstream monitoring indicates that erosion is occurring, then remedial action such as rock vortex weirs or similar protection shall be carried out.</td>
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| 2.2 | Minimize Stream Access Impacts | District personnel shall use existing access ramps and roads where possible. If temporary access points are necessary, they shall be constructed in a manner that minimizes impacts to streams:  
1. Temporary project access points shall be created as close to the work area as possible to minimize running equipment down stream channels and shall be constructed so as to minimize adverse impacts, such as tree removal.  
2. When temporary access is removed, remaining disturbed soil shall be stabilized and seeded immediately after construction.  
3. Any temporary fill used for access shall be removed upon completion of the project. Channel topography and geometry shall be restored to pre-project conditions to the extent possible. |
| 2.7 | Seeding | For banks that are scraped during sediment removal, an erosion control seed mix shall be used.  
1. A typical mix may consist of California native grasses (e.g., *Hordeum brachyantherum*, *Elymus glaucus* ‘Berkeley’, *Bromus carinatus*) on slopes flatter than 3:1. *Vulpia microstachyes* may be added to the mix where slopes are steeper (e.g., 2:1).  
2. Another seed mix may be of ‘Escort’ sterile wheat to provide a year’s worth of protection. This mix is used only if further work is required the following year.  
3. Temporary earthen access roads will be seeded when site and horticultural conditions are suitable. |
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<tr>
<td>3.4</td>
<td>Mitten Crab Control Measures</td>
<td>Sediment from the San Francisco Bay Watershed, including that for reuse, will not be removed to areas any farther south than Metcalf Road in south San Jose. This measure is to avoid transporting mitten crabs, a highly invasive, exotic species, to areas where they are not currently found.</td>
</tr>
<tr>
<td>3.6</td>
<td>Remove Sediment from One Side of Large Channels in Alternate Years</td>
<td>Some channels are large in the sense that sediment removal operations must be conducted from both sides of the channel. Remove sediment in large channels from one side only in alternate years to minimize vegetation removal and retain emergent vegetation, which is used for food, cover, fish spawning areas, and wildlife movement corridors. According to the Maintenance Guidelines, this measure applies to the following channel reaches (Station Nos.): 1. Stevens Ck. (0+00–146+00) 2. Calabazas Ck. (0+00–102+00) 3. San Tomas Ck. (0+00–151+40) 4. Alamitos Ck. (42+65–218+00) 5. Guadalupe River (230+00–387+50) 6. Berryessa Ck. (0+00–200+00) 7. Lower Penitencia (0+00–40+00) 8. Silver Ck. (100+00–315+40) 9. Thompson Ck. (0+00–48+00)</td>
</tr>
<tr>
<td>3.7</td>
<td>Salvage Native Aquatic Vertebrates from Dewatered Channels</td>
<td>If fisheries or native aquatic vertebrate are present when cofferdams, water bypass structures, and silt barriers are to be installed, a fish and native aquatic vertebrate relocation plan shall be implemented to ensure that fish and native aquatic vertebrates are not stranded: 1. In non-tidal channels, where water is to be diverted, prior to the start of work or during the installation of water diversion structures, native aquatic vertebrates shall be captured in the work area and transferred to another reach as determined by a qualified biologist (refer to Fish Relocation Guidelines) 2. Aquatic invertebrates will not be transferred (other than incidental catches) because of their anticipated abundance and colonization after completion of the repair work.</td>
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### BMP 3.8 Minimize Effects of Bypass Structures on Steelhead

1. To prevent increases in temperature and decreases in dissolved oxygen (DO), if bypass pipes are used, they shall be properly sized (i.e., larger diameter pipes to better pass the flows). Bypass pipes may also be avoided by creating a low-flow channel or using other methods to isolate the work area.

2. In Non-tidal Areas, diversions on the Guadalupe River, Calero, Los Gatos, Guadalupe, Alamitos, Coyote, Upper Penitencia, Stevens, San Francisquito, Bodfish, Little Arthur, Uvas and Llagas Creeks shall maintain conditions required for fish passage. Diversions shall maintain fish passage when the project meets the following conditions: 1) the length of the area dewatered exceeds 500 feet, and/or 2) the length of time the stream is dewatered exceeds two weeks in length. Conditions for fish passage shall be met as long as the diversion 1) maintains contiguous flows through a low flow channel in the channel bed or an artificial open channel, 2) presents no vertical drops exceeding six (6) inches and follows the natural grade of the site, 3) maintains water velocities that shall not exceed eight feet per second (8 ft/sec), and 4) maintains adequate water depths consistent with normal conditions in the project reach. An artificial channel used for fish passage shall be lined with cobble/gravel. A closed conduit pipe shall not be used for fish passage. The inlets of diversions shall be checked daily to prevent accumulation of debris.

### BMP 3.10 Conduct In-Channel Work During the Dry Season

Avoid and minimize impacts to salmonids by timing stream maintenance projects in streams where there are or could be salmonids so that the use of heavy equipment in the channel is conducted outside of the migration and spawning season.

1. Minor maintenance activities that occur above ordinary high water and do not impact the riparian corridor may be done at any time of the year. These activities include fence repair, graffiti removal, revegetation maintenance, rodent control, etc.

2. Minor activities will be done in channel if the activity is necessary to provide immediate flood protection. These activities include removal of trash or debris that will impede flows, trash rack cleaning, and pier nose cleaning. These activities will be done in a manner that is sensitive to protection of aquatic resources.
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<td>3.11</td>
<td>Avoid Dewatering an Entire Isolated Stream Reach</td>
<td>Construction sites may be isolated by upstream or downstream barriers, such as culverts. In reaches that contain deep pools, the District shall maintain these pools as refuges by constructing temporary fencing so as to avoid pool destruction when preservation of the pool is not in the construction footprint or a barrier to project access. This BMP does not apply to sediment removal activities that require the removal of all sediment to restore the design capacity.</td>
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<tr>
<td>3.12</td>
<td>Maintain Low-flow Fish Passage</td>
<td>If a nontidal stream channel has been altered during the operations, its low flow channel shall be returned as nearly as possible to its approximate prior location with appropriate depth for fish passage without creating a possible future bank erosion problem.</td>
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<tr>
<td>3.13</td>
<td>Remove Temporary Fills as Appropriate</td>
<td>Temporary fills, such as for access ramps, diversion structures, or cofferdams, shall be completely removed upon finishing the work.</td>
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| 3.15 | Restore Pool Configuration of Channel Bottom | The District shall re-grade the channel bottom at the end of the work project to as close to original conditions as possible.  
1. In areas used for migration by salmonids as designated on the District GIS Fisheries coverage, the depth and size of the low flow channel and pools shall emulate the pre-construction conditions as closely as possible, within the finished channel topography.  
2. All material used to construct temporary fills shall be removed upon completion of the project. |
| 3.16 | Restore Spawning Gravels in Work Site Areas | The District shall replace gravels at the end of construction in potential salmonid spawning reaches.  
1. Spawning gravels removed as a result of stream maintenance activities shall be replaced using a gravel/cobble mixture representing the size and relative abundance of gravel/cobbles present pre-project impact.  
2. Spawning gravel replacement will be configured to maximize functional benefits including salmonid spawning, aquatic invertebrate production, and juvenile escape cover. |
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<td>3.17</td>
<td>Reuse Sediments and Gravels As Appropriate</td>
<td>Where practical, the District will reuse removed sediments and gravels. Sediments that are considered for re-use will be tested for hazardous materials and graded for structure as necessary in order to determine their appropriateness for re-use and consistency with BMPs 1.3 and 3.16. When sediments or gravels are reused, the District will ensure that the reuse does not cause any additional erosion, siltation, or other negative environmental consequences. Reuse will be considered within the context of environmental, regulatory, and fiscal consequences.</td>
</tr>
<tr>
<td>4.3</td>
<td>Stabilized Construction Entrance</td>
<td>The District shall implement measures to minimize soil from being tracked onto streets near work sites: 1. Methods used to prevent mud from being tracked out of work sites onto roadways include installing a layer of geotextile mat, followed by a 4-inch thick layer of 1-3- inch diameter gravel on unsurfaced access roads. 2. Access shall be provided as close to the work area as possible, using existing ramps where available and planning work site access so as to minimize disturbance to the creek bed, creek banks, and the surrounding land uses.</td>
</tr>
<tr>
<td>5.1</td>
<td>Bay Area Quality Management District Basic Dust Control Measures</td>
<td>The District shall implement Bay Area Quality Management District Basic Control Measures at maintenance sites less than four acres in size. Current measures stipulated by the Bay Area Quality Management District CEQA Guidelines include the following: 1. Active maintenance areas shall be watered at least twice per day unless soils are already sufficiently moist to avoid dust. 2. Trucks hauling sediments and other loose material shall be covered or shall maintain at least two feet of freeboard. 3. Tailgates of trucks shall be sealed. 4. Trucks shall be brushed down before leaving the maintenance site. 5. Unpaved access roads and staging areas that are being used for the maintenance activity shall be watered three times daily, or non-toxic soil stabilizers shall be applied to control dust generation. 6. Paved maintenance site access roads shall be swept when visible soil material is carried onto the roadway.</td>
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### 5.2 Bay Area Quality Management District Enhanced Dust Control Measures

For single maintenance sites greater than four acres, the District shall implement Bay Area Quality Management District Enhanced Dust Control Measures. These measures include the following:

1. Inactive areas shall be sprayed with soil stabilizer or seeded.
2. Exposed stockpiles shall be watered, enclosed, covered, or sprayed with soil stabilizers.
3. Traffic speeds shall be limited to 15 mph.
4. Sandbags or other bank protections shall be installed to prevent silt runoff to roadways.
5. Vegetation in disturbed areas shall be replanted as soon as horticulturally appropriate. For example, plant material may not be ready as soon as the job is done (e.g. willow cuttings have to be collected during winter dormancy).

### 5.3 Avoid Stockpiling Potentially Odorous Sediments

Some of the sediment removal sites will have sediment that is rich in organic matter decaying in an anaerobic conditions, which generates assorted malodorous gases, such as reduced sulfur compounds. These sediments shall be handled in a manner that avoids impacting sensitive receptors.

1. The District shall avoid stockpiling potentially odorous sediments within 1000 feet of residential areas or other odor sensitive land uses.
2. Where appropriate, odorous stockpiles shall be disposed of at an appropriate landfill.
## VEGETATION MANAGEMENT

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<td>1.14</td>
<td>Minimize Sediment Transport Downstream from In-channel Herbicide Sites</td>
<td>Where sediment has accumulated due to vegetation in-channel, herbicide application may result in release of sediment downstream. Prior to herbicide application within active channels, the potential for significant sediment release shall be assessed. If the site has the potential for significant sediment release, then one of two techniques will be considered: 1. Where an area has not been routinely treated with herbicides, new herbicide applications shall be phased over several seasons, or 2. Remove the excess sediment through mechanical means after the vegetation is killed.</td>
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<tr>
<td>1.16</td>
<td>Minimize Local Erosion Increase from In-channel Vegetation Removal</td>
<td>In-channel vegetation removal may result in increased local erosion due to increased flow velocity. To minimize the effect, the toe of the bank shall be protected by leaving vegetation to the maximum extent possible consistent with the maintenance guidelines.</td>
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<td>3.18</td>
<td>Herbicide Use in Aquatic Areas</td>
<td>Only herbicides and surfactants registered for aquatic use shall be applied within the banks of channels within 20 feet of any water present. Aquatic herbicide use shall be limited to July 1st through October 15th, except on Guadalupe River, where it is limited to July 1st to August 15th. If rain is forecast within 72 hours, then application of aquatic herbicide shall be rescheduled.</td>
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| 3.20 | Minimize Adverse Effects of Herbicides on Non-target Species         | Herbicides are a key component of vegetation management under the SMP. Herbicides shall be used in a manner that minimizes negative environmental effects by avoiding impacts to non-target species. Herbicide use shall be guided by label restrictions and any advisories published by the California Department of Pesticide Regulation (CDPR) or the County Agricultural Commission. The US EPA bulletin Protecting Endangered Species, Interim Measures for Use of Pesticides in Santa Clara County provides additional guidelines for herbicide use (US EPA 2000).  
1. Herbicide use shall be reviewed annually prior to application using information from CDPR and US EPA maintained in the District GIS database to determine the potential presence of special-status species that could be adversely affected, and the target areas and chemicals used will be modified as necessary.  
2. To avoid toxic effects to all life stages of California Red-legged Frogs (RLF), whenever herbicides are to be used in within 1.25 miles of known RLF locations, the District shall refer to both the product label for the material being used and the Endangered Species Database maintained by the California Department of Pesticide Regulation and use the lower of the two recommended rates if there is a difference. |
| 3.22 | Herbicide Use in Upland Areas                                        | Application of herbicides to upland areas shall not be made within 72 hours of predicted rainfall.                                                                                                      |
| 4.7  | Herbicide Use Requirements                                            | All herbicide use shall be consistent with approved product specifications. Applications shall be made by, or under the direct supervision of, State Certified applicators under the direction of a licensed Pest Control Advisor.         |
## BANK PROTECTION

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<td>1.3</td>
<td>Dewater/ Bypass Water at Non-tidal Sites</td>
<td>When work in a flowing stream in unavoidable, the entire streamflow shall be diverted around the work area by a barrier. Construction of the barrier shall normally begin in the upstream area and continue in an downstream direction, and the flow shall be diverted only when construction of the diversion is completed. The water diversion plan shall allow stream flows to gravity flow around or through the work site using temporary culverts or stream flow is pumped around the work site using pumps and screened intake hoses. Coffer dam construction shall be adequate to prevent seepage into or from the work area. Coffer dams shall be constructed of river run gravel with a fines content that is less than 15%. Fines are defined as material that is able to pass through a #20 sieve. Coffer dams may also be constructed of sheet piles, inflatable dams, and sand bags. Coffer dams shall be installed both upstream and downstream not more than 100 feet from the extent of the work areas. In-channel berms that only deflect water to one side of the channel during sediment removal, may be constructed of channel material. The enclosure and the supportive material shall be removed when the work is completed and the removal shall normally proceed from downstream in an upstream direction. Normal flows shall be restored to the affected stream immediately upon completion of work at that location. 1. All water shall be discharged in a non-erosive manner (e.g., gravel or vegetated bars, on hay bales, on plastic, on concrete, or in storm drains when equipped with filtering devices, etc.). 1. Sumps or basins may also be used to collect water, where appropriate (e.g., in channels with low flows). 2. Where feasible and appropriate, diversion structures shall be installed on concrete sections of the channels or constructed of materials specified above. Earth fill shall not be used for cofferdams in non-tidal areas. 3. In conjunction with diversion structures, pumps or gravity-fed pipe systems are used to de-water sites. 4. Depending on the channel configurations, sediment removal may occur where the flows are not bypassed around the work site; as long as during excavation activities, a berm of sediment is left between the work area and stream flows to minimize water quality impacts. 5. Diversions shall maintain ambient stream flows below the diversion, and waters discharged below the project site shall not be diminished or degraded by the diversion.</td>
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<td>1.4</td>
<td>Avoid Erosion When Restoring Flows</td>
<td>All temporary diversion structures and the supportive material shall be removed when the work is completed, but no more than 48 hours after work is completed. The removal shall normally proceed from downstream in an upstream direction. Normal flows shall be restored to the affected stream immediately upon completion of work at that location. Flows shall be restored in a manner that minimizes erosion. 1. When diversion structures are removed, to the extent practicable, the ponded flows shall be directed into the low-flow channel within the work site to minimize downstream water quality impacts. 2. Flows shall gradually be restored to the channel to avoid a surge of water that would cause erosion or scouring. 3. Bypassed flows may be slowly reintroduced into the dewatered area by leaving a silt barrier in place to allow water to slow and drop sediment to the extent possible.</td>
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| 1.5 | Erosion and Sediment Control Measures| Erosion control methods shall be used as appropriate during all phases of routine maintenance projects to control sediment and minimize water quality impacts. The District shall prevent erosion on steep slopes by using erosion control material according to manufacturer’s specifications. All construction related erosion control methods shall be removed at the completion of the project. Appropriate measures include, but are not limited to, the following: 1. Silt Fences 2. Straw Bale Barriers 3. Brush or Rock Filters 4. Storm Drain Inlet Protection 5. Sediment Traps 6. Sediment Basins 7. Erosion Control Blankets and Mats 8. Soil Stabilization i.e. Tackified straw with seed, jute or geotextile blankets, etc.  
The following Bay Area Stormwater Management Agency Association BMPs provide guidance and specifications as to implementation of the erosion control measures described:  
SC-3. Sediment Basins  
SC-4. Straw or Sand Bag Barriers  
SC-5. Sediment Traps  
SC-6. Silt Fences  
SS-1. Erosion Control Blankets, Mats, and Geotextiles  
VR-1. Brush or Rock Filters  
VR-2. Check Dams  
VR-4b. Temporary Outlet Protection  
VR-4b. Storm Drain Inlet Protection  
WD-1. Earth Dike  
WD-1. Slope Drain  
WD-3. Temporary Drains and Swales |
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| 1.7  | Pump/Generator Set Operations and Maintenance                         | Pumps and generators shall be maintained and operated in a manner that minimizes impacts to water quality and aquatic species.  
1. Pumps and generators shall be maintained according to manufacturers’ specifications to regulate flows to prevent dryback or washout conditions.  
2. Pumps shall be operated and monitored to prevent low water conditions, which could pump muddy bottom water, or high water conditions, which creates ponding.  
3. Pump intakes shall be screened to prevent uptake of fish and other vertebrates. |
| 1.10 | Avoid Exposing Soils with High Mercury Levels                        | Bank Protection projects in portions of the Guadalupe River watershed affected by historical mercury mining may expose soils containing mercury which may affect stream water quality.  
1. In the specified channel reaches in the Guadalupe River Basin, soils that are likely to be disturbed or excavated shall be tested for Mercury (Hg). Soils shall be remediated if:  
   a. disturbed or excavated soils exposed to flood flows below the 2.33-year channel flow level exceed 1 ppm Hg, or  
   b. disturbed or excavated soils above the 2.33-year flow level exceed 20 ppm Hg.  
2. Remediation may be accomplished either by:  
   a. treating the site so that contaminated soils excavated for the purpose of installing bank protection shall not be susceptible to erosion, or  
   b. by further excavating contaminated soils and replacing them with clean fill or other bank protection materials that are free from contaminants.  
   c. Soils with mercury concentrations exceeding 20 mg/kg shall be removed and disposed of in a Class I landfill following established work practices and hazard control measures.  
3. To ensure worker safety is protected during bank protection projects with elevated mercury concentrations in the exposed surfaces, personal protective equipment will be required during project construction to maintain exposure below levels established by the Occupational Safety and health Agency (OSHA). |
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<td>1.11</td>
<td>Concrete Use Near Waterways</td>
<td>Concrete that has not been cured is alkaline and can increase the pH of the water; fresh concrete shall be isolated until it no longer poses a threat to water quality using the following appropriate measures:</td>
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<td>3. Wet sacked concrete shall be excluded from the wetted channel for a period of two weeks after installation. During that time, the wet sacked concrete shall be kept moist (such as covering with wet carpet) and runoff from the wet sacked concrete shall not be allowed to enter a live stream.</td>
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<td>4. Poured concrete shall be excluded from the wetted channel for a period of two weeks after it is poured. During that time, the poured concrete shall be kept moist, and runoff from the wet concrete shall not be allowed to enter a live stream. Commercial sealants (e.g., Deep Seal, Elasto-Deck Reservoir Grade) may be applied to the poured concrete surface where difficulty in excluding water flow for a long period may occur. If a sealant is used, water shall be excluded from the site until the sealant is dry.</td>
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<td>5. Dry sacked concrete shall not be used in any channel.</td>
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<td>6. An area outside of the channel and floodplain shall be designated to clean out concrete transit vehicles.</td>
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<td>1.12</td>
<td>Groundwater Management</td>
<td>If high levels of groundwater in a work area are encountered, the water is pumped out of the work site. If necessary to protect water quality, the water shall be directed into specifically constructed infiltration basins, into holding ponds, or onto areas with vegetation to remove sediment prior to the water re-entering a creek. Water pumped into vegetated areas shall be pumped in a manner that will not create erosion around vegetation.</td>
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</table>
| 1.15 | Prevent Erosion Downstream of Bank Protection Sites | Increased water velocity at bank protection sites may increase erosion downstream. Bank stabilization site design shall assess hydraulic effects immediately upstream and downstream of the work area.  
If the hardscape revetment would cause significant increase in erosion potential, downstream energy dissipation features such as pools or grade control structures shall be considered in the design.  
If the evaluation identifies possible downstream impacts, proactive protection of these areas shall be provided. Such measures include, but are not limited to, appropriately keyed-in coir logs, riparian enhancement planting, strategic placement of rock, and flow deflectors. |
### Minimize Stream Access Impacts

District personnel shall use existing access ramps and roads where possible. If temporary access points are necessary, they shall be constructed in a manner that minimizes impacts to streams:

3. Temporary project access points shall be created as close to the work area as possible to minimize running equipment down stream channels and shall be constructed so as to minimize adverse impacts, such as tree removal.

4. When temporary access is removed, remaining disturbed soil shall be stabilized and seeded immediately after construction.

5. Any temporary fill used for access shall be removed upon completion of the project. Channel topography and geometry shall be restored to pre-project conditions to the extent possible.

### Minimize Hardscape in Bank Protection Design

The District shall select bank repair techniques appropriate to a given site based on hydraulic and other site conditions. Refer to SMP Appendix E. Programmatic Impact Assessment and Mitigation for Routine Bank Protection Activities.

1. Biotechnical repair methods include live construction, willow wattling, erosion control blankets, brush matting, and installation of root wads and boulders in banks.

2. The repair shall be designed and installed so that it will be self-sustaining and use vegetation that adds structural integrity to the stream bank.
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<td>2.4</td>
<td>Success Criteria for Bank Protection Plantings</td>
<td>Monitoring shall be conducted annually for a minimum period of five (5) years or until success criteria for planting is met a minimum of two years after irrigation has been removed at the planting densities stated in the FEIR (See FEIR, Appendix E, page X-2)). Revegetation will be judged successful and meeting full compliance if it meets these criteria: 1. 70% of the original number of plants installed are alive and healthy at the end of 5 years or 2. A site has 50% absolute cover of native vegetation within the 5-year period. If a site meets either of these requirements it will be judged as successful and monitoring will cease. 3. There will be no requirement for species diversity on bank protection projects. A variety of species replicating the natural plant community will be installed but ratios may adjust due to site conditions. A site will not be penalized due to a change in ratios or individual species dropping out. 4. Plants will be installed per the Protocol for Revegetation of Bank Protection Projects. Trees will have an average spacing of 10-12 feet and shrubs an average spacing of 6-8 feet. 5. New plantings may be installed at any time during the 5-year period. No approvals will be required for additional planting or design changes such as species selection, container size, etc. 6. Pole plantings done at the toe of the bank or in rock will be exempt from these criteria in regard to spacing and survival. Pole plantings will be installed wherever possible but, due to the highly variable success rate related to soil and water conditions, these plantings should not be evaluated in the same manner. The success of pole planting efforts will be included in annual reports but this particular planting element will not be factored into the quantitative success criteria. 7. A site that has extraordinary constraints may have a separate revegetation design submitted for approval at the time of the design review. Upon regulatory approval, the success criteria associated with individual designs shall supercede these general criteria.</td>
</tr>
<tr>
<td>2.5</td>
<td>Planting</td>
<td>Planting for erosion control and habitat restoration shall be in accordance with District revegetation guidelines with the following exception: a. Dri-Water shall not be used as a method of irrigation.</td>
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| 2.6 | Mulching                                             | Bark and other wood products shall be used as needed to prevent erosion of bare soil after construction is completed.  
1. All newly planted and/or bare soil (excluding bare channel bottoms) in maintenance areas shall have a minimum 3" thick layer of bark or mulch installed except when the area is seeded. In that case, the thickness of the mulch layer shall not exceed ½ inch.  
2. This bark or mulch can be ground-up woody products and/or leaves from either native material or from soil suppliers.  
3. No non-native material that has allelopathic compounds (*Eucalyptus* spp.) or weed seeds shall be used as mulch in areas where it has the potential to inhibit native revegetation. Such areas would include flood plains and revegetation sites.  
4. Any material imported from outside the District that is to be used as mulch shall be certified as weed-free. |
| 2.8 | Replace Trees                                        | The District shall replace trees as follows:  
1. Native trees that are lost to bank protection impacts shall be replaced at a 3:1 ratio and non-native trees that are lost shall be replaced at a 2:1 ratio.  
2. Trees removed for installation of bank protection measures shall be replaced at the site, if feasible, or at the mitigation site created for that bank protection activity.  
3. The Plant Selection Criteria, Planting Techniques, Maintenance, and Monitoring/Reporting protocols prescribed by the "Protocol for Revegetation Associated with Bank Protection" (Appendix E of SMP) shall be implemented, as applicable to tree replacement.  
4. Replacement of heritage-sized trees (greater than 18 inches dbh) will be consistent with local ordinances. |
| 2.9 | Site Maintenance for Bank Protection Plantings       | Follow-up maintenance shall be performed on sites that have been seeded and planted.  
1. Maintenance shall include replacing dead or dying plants where appropriate, weeding, removing non-native plant colonizers, and ensuring that all plants receive sufficient water.  
2. Irrigation shall be implemented as needed throughout the establishment period. |
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<td>3.5</td>
<td>Minimize Loss of Aquatic Habitat from Bank Protection Work</td>
<td>Follow SMP Appendix E. Programmatic Impact Assessment and Mitigation for Routine Bank Protection Activities.</td>
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</table>
| 3.7 | Salvage Native Aquatic Vertebrates from Dewatered Channels           | If fisheries or native aquatic vertebrate are present when cofferdams, water bypass structures, and silt barriers are to be installed, a fish and native aquatic vertebrate relocation plan shall be implemented to ensure that fish and native aquatic vertebrates are not stranded:  
1. In non-tidal channels, where water is to be diverted, prior to the start of work or during the installation of water diversion structures, native aquatic vertebrates shall be captured in the work area and transferred to another reach as determined by a qualified biologist (refer to Fish Relocation Guidelines)  
2. Aquatic invertebrates will not be transferred (other than incidental catches) because of their anticipated abundance and colonization after completion of the repair work. |
| 3.8 | Minimize Effects of Bypass Structures on Steelhead                   | 1. To prevent increases in temperature and decreases in dissolved oxygen (DO), if bypass pipes are used, they shall be properly sized (i.e., larger diameter pipes to better pass the flows). Bypass pipes may also be avoided by creating a low-flow channel or using other methods to isolate the work area.  
2. In Non-tidal Areas, diversions on the Guadalupe River, Calero, Los Gatos, Guadalupe, Alamitos, Coyote, Upper Penitencia, Stevens, San Francisquito, Bodfish, Little Arthur, Uvas and Llagas Creeks shall maintain conditions required for fish passage. Diversions shall maintain fish passage when the project meets the following conditions: 1) the length of the area dewatered exceeds 500 feet, and/or 2) the length of time the stream is dewatered exceeds two weeks in length. Conditions for fish passage shall be met as long as the diversion 1) maintains contiguous flows through a low flow channel in the channel bed or an artificial open channel, 2) presents no vertical drops exceeding six (6) inches and follows the natural grade of the site, 3) maintains water velocities that shall not exceed eight feet per second (8 ft/sec), and 4) maintains adequate water depths consistent with normal conditions in the project reach. An artificial channel used for fish passage shall be lined with cobble/gravel. A closed conduit pipe shall not be used for fish passage. The inlets of diversions shall be checked daily to prevent accumulation of debris. |
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| 3.9   | Retain Woody Materials and Vegetation                                | Woody material (including live leaning trees, dead trees, tree trunks, large limbs, and stumps) will be retained unless it is threatening a structure or impedes reasonable access.  
1. Retain and flag stumps, snags, and branches in channels that can create fish habitat.  
2. Ensure that this woody debris does not impede water flow and does not contribute to erosion.  
3. When woody material is removed, priority will be given to reuse of the materials in bank protection projects. Non-native species containing allelopathic compounds shall not be used for construction of bank protection projects. Woody materials may also be used as mulch. (See BMP 2.6)  
4. When retention will not compromise flood management system reliability, woody vegetation shall be left in place. |
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<td>3.15</td>
<td>Restore Pool Configuration of Channel Bottom</td>
<td>District shall re-grade the channel bottom at the end of the work project to The as close to original conditions as possible.</td>
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<td>1. In areas used for migration by salmonids as designated on the District GIS Fisheries coverage, the depth and size of the low flow channel and pools shall emulate the pre-construction conditions as closely as possible, within the finished channel topography.</td>
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<td>2. All material used to construct temporary fills shall be removed upon completion of the project.</td>
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<td>3.16</td>
<td>Restore Spawning Gravels in Work Site Areas</td>
<td>The District shall replace gravels at the end of construction in potential salmonid spawning reaches.</td>
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<td>1. Spawning gravels removed as a result of stream maintenance activities shall be replaced using a gravel/cobble mixture representing the size and relative abundance of gravel/cobbles present pre-project impact.</td>
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<td>2. Spawning gravel replacement will be configured to maximize functional benefits including salmonid spawning, aquatic invertebrate production, and juvenile escape cover.</td>
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<td>4.3</td>
<td>Stabilized Construction Entrance</td>
<td>The District shall implement measures to minimize soil from being tracked onto streets near work sites:</td>
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<td>1. Methods used to prevent mud from being tracked out of work sites onto roadways include installing a layer of geotextile mat, followed by a 4-inch thick layer of 1-3-inch diameter gravel on unsurfaced access roads.</td>
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<td>2. Access shall be provided as close to the work area as possible, using existing ramps where available and planning work site access so as to minimize disturbance to the creek bed, creek banks, and the surrounding land uses.</td>
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<td>5.1</td>
<td>Bay Area Quality Management District Basic Dust Control Measures</td>
<td>The District shall implement Bay Area Quality Management District Basic Control Measures at maintenance sites less than four acres in size. Current measures stipulated by the Bay Area Quality Management District CEQA Guidelines include the following:</td>
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<td>1. Active maintenance areas shall be watered at least twice per day unless soils are already sufficiently moist to avoid dust.</td>
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<td>2. Trucks hauling sediments and other loose material shall be covered or shall maintain at least two feet of freeboard.</td>
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<td>3. Tailgates of trucks shall be sealed.</td>
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<td>4. Trucks shall be brushed down before leaving the maintenance site.</td>
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<td>5. Unpaved access roads and staging areas that are being used for the maintenance activity shall be watered three times daily, or non-toxic soil stabilizers shall be applied to control dust generation.</td>
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<td>6. Paved maintenance site access roads shall be swept when visible soil material is carried onto the roadway.</td>
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<td>5.2</td>
<td>Bay Area Quality Management District Enhanced Dust Control Measures</td>
<td>For single maintenance sites greater than four acres, the District shall implement Bay Area Quality Management District Enhanced Dust Control Measures. These measures include the following:</td>
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<td>1. Inactive areas shall be sprayed with soil stabilizer or seeded.</td>
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<td>2. Exposed stockpiles shall be watered, enclosed, covered, or sprayed with soil stabilizers.</td>
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<td>3. Traffic speeds shall be limited to 15 mph.</td>
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<td>4. Sandbags or other bank protections shall be installed to prevent silt runoff to roadways.</td>
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<td>5. Vegetation in disturbed areas shall be replanted as soon as horticulturally appropriate. For example, plant material may not be ready as soon as the job is done (e.g. willow cuttings have to be collected during winter dormancy).</td>
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## MINOR MAINTENANCE

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<td>1.1</td>
<td>Conduct Work During Low Flow Periods</td>
<td>For minor work activities that will occur in the channel, work shall be conducted from the top of the bank if access is available and there are flows in the channel.</td>
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</table>
| 1.7 | Pump/Generator Set Operations and Maintenance | Pumps and generators shall be maintained and operated in a manner that minimizes impacts to water quality and aquatic species.  
1. Pumps and generators shall be maintained according to manufacturers’ specifications to regulate flows to prevent dryback or washout conditions.  
2. Pumps shall be operated and monitored to prevent low water conditions, which could pump muddy bottom water, or high water conditions, which creates ponding.  
3. Pump intakes shall be screened to prevent uptake of fish and other vertebrates. |
| 3.9 | Retain Woody Materials and Vegetation      | Woody material (including live leaning trees, dead trees, tree trunks, large limbs, and stumps) will be retained unless it is threatening a structure or impedes reasonable access.  
1. Retain and flag stumps, snags, and branches in channels that can create fish habitat.  
2. Ensure that this woody debris does not impede water flow and does not contribute to erosion.  
3. When woody material is removed, priority will be given to reuse of the materials in bank protection projects. Non-native species containing allelopathic compounds shall not be used for construction of bank protection projects. Woody materials may also be used as mulch. (See BMP 2.6)  
4. When retention will not compromise flood management system reliability, woody vegetation shall be left in place. |
3.21 Minimize Rodenticide Impacts on Non-target Species

Burrowing rodents are controlled to minimize damage to levees on streams and canals. Rodent control areas shall be reviewed for the potential presence of special-status species and the rodent control methods tailored to minimize non-target species impacts. When chemical control is necessary, the use shall be guided by label restrictions and any advisories published by the California Department of Pesticide Regulation (CDPR) or the County Agricultural Commission. The EPA bulletin *Protecting Endangered Species, Interim Measures for Use of Pesticides in Santa Clara County* provides additional guidelines for rodenticide use (USEPA 2000).

1. Within the potential range of salt marsh harvest mouse (SMHM) (as designated on the District’s GIS), lethal rodent control methods shall not be used. The District defines potential SMHM habitat as all areas north of Highway 237 as shown in Figure IV B11, and will refine this definition as surveys are conducted to eliminate areas that are separated by barren ground by at least 30 yards from any halophytic vegetation.

2. Prior to rodent control measures being employed, a qualified biologist shall conduct protocol surveys to determine the presence of Burrowing Owls.
   a. The location of Burrowing Owls shall be identified on the District’s GIS system.
   b. A ½ mile buffer zone around burrowing owl locations shall be established.
   c. If necessary alternative methods of rodent control shall be determined by a qualified biologist.

3. The rodenticide applicator shall remove carcasses of poisoned animals, when they are found, to minimize secondary toxic effects on Raptors or other wildlife. Carcass survey and disposal shall be performed in the treated area beginning on the third day following the initial exposure of toxic baits. Any exposed carcasses shall be disposed of in a manner inaccessible to wildlife. Carcass surveys shall continue for at least 5 days after toxic baiting has ceased and thereafter, at least once a week, until no more carcasses are found. Any dead Raptors or other wildlife found in the treated area during the carcass surveys shall be turned over to CDFG’s pesticide lab for analysis.
Appendix F:
Comments and Responses to Comments
RESPONSES TO COMMENTS
Hacienda and Deep Gulch Remediation Project -
Almaden Quicksilver County Park
Draft Initial Study/Mitigated Negative Declaration (Draft IS/MND)
August 24, 2010

Agencies, Organizations, Businesses and Individuals Who Received the Draft IS/MND
- David Cooke, Allen Matkins Esq. for Myers Industries, Inc. and Buckhorn, Inc.
- Jerry George, Pillsbury Law, (County legal advisor)
- Gamini Rajapakse, Senior Civil Engineer, Santa Clara County Roads and Airports Department
- California Department of Fish and Game
- California Department of Toxic Substance Control
- California Regional Water Quality Control Board - San Francisco Bay Region
- County of Santa Clara, County Counsel, Katherine Harasz
- County of Santa Clara Planning Department
- County of Santa Clara Roads and Airports Department
- Santa Clara Valley Water District
- U.S. Fish & Wildlife Service

Comment Letters Received on the Draft IS/MND
1) California Regional Water Quality Control Board, San Francisco Bay Region – Brian Wines
2) Santa Clara County Roads and Airports Department – Amir Douraghy
3) Santa Clara County Roads and Airports Department – Gamini Rajapakse
4) Santa Clara Valley Water District – Ben Davis
5) Myers Industries, Inc. and Buckhorn, Inc. – David Cooke
6) Kitty Monahan
7) Mike Boulland
8) Oral Comments Received at the New Almaden Public Hearing, August 9, 2010

RESPONSES TO COMMENTS

Comment Letter 1:
California Regional Water Quality Control Board, San Francisco Bay Region – Brian Wines

Comment 1-1. Section 1.3, Interagency Collaboration, Regulatory Review and Permitting, page 2 and Table 1. The discussion of Water Board regulation of jurisdictional waters should be expanded to clarify that the Water Board has regulatory authority over wetlands and waterways under both the federal Clean Water Act (CWA) and the State of California’s Porter-Cologne Water Quality Control Act (California Water Code, Division 7). Under the CWA, the Water Board has regulatory authority over actions in waters of the United States, through the issuance of water quality certifications (certifications) under Section 401 of the CWA, which are issued in combination with permits issued by the Army Corps of Engineers (ACOE), under Section 404 of the CWA. When the Water Board issues Section 401 certifications, it
simultaneously issues general Waste Discharge Requirements for the project, under the Porter-Cologne Water Quality Control Act. Activities in areas that are outside of the jurisdiction of the ACOE (e.g., isolated wetlands, vernal pools, or stream banks above the ordinary high water mark) are regulated by the Water Board, under the authority of the Porter-Cologne Water Quality Control Act. Activities that lie outside of ACOE jurisdiction may require the issuance of either individual or general waste discharge requirements (WDRs) from the Water Board.

Response: This language has been added to Section 1.3:

—Also, on a state level, the RWQCB has regulatory authority over wetlands and waterways under both the federal Clean Water Act (CWA) and the State of California’s Porter-Cologne Water Quality Control Act (California Water Code, Division 7). Under the CWA, the RWQCB has regulatory authority over actions in waters of the United States, through the issuance of water quality certifications (certifications) under Section 401 of the CWA, which are issued in combination with permits issued by the Army Corps of Engineers (ACOE), under Section 404 of the CWA. Activities that lie outside of ACOE jurisdiction may also require the issuance of either individual or general waste discharge requirements (WDRs) from the RWQCB.”

Comment 1-2. Section 2.12, Temporary Dewatering and Crossings of Alamitos Creek, pages 13 and 14. Text in this section of the ISMND proposes to place clean earthen fill over geotextile fabric above culverted, temporary creek crossings. In the event of unexpected high flows, this dirt could be washed down stream and potentially foul spawning gravel in the creek. Because of this, the Water Board only allows clean gravel to be used as temporary fill in streams with anadromous fish populations.

Response: Check dams and temporary fill will be constructed of either sand bags or clean gravel and visqueen plastic sheeting. All fill material placed in the creek will be removed after completion of work. Sentence 3 in the first paragraph under section 2.12 has been revised as follows:

—At a minimum, these crossings would consist of check dams, culverts and temporary clean gravel earthen fill to channel stream flows into a culverted crossings.”

Comment 1-3. BIO-9 Measures, page 42. Text in this section of the ISMND states that a Riparian Mitigation and Monitoring Plan (MMP) will be developed as part of the Streambed Alteration Agreement. The text should be revised to clarify that the MMP will also be required as a component of the CWA Section 401 certification/Waste Discharge Requirements that will be issued for the Project by the Water Board (See Comment 1).

Response: BIO-9 Measure (b) has been revised as follows:

—b. Develop a Riparian Mitigation and Monitoring Plan as part of the Streambed Alteration Agreement required by the CDFG and as a component of the CWA Section 401 certification/Waste Discharge Requirements that will be issued for the Project by the RWQCB. The plan will mitigate tree loss on a 3:1 basis and will restore the riparian understory and ground cover on at least a 1:1 area (SF) basis. The plan will be developed by qualified biologist and must be approved by the CDFG appropriate agencies.”

Comment 1-4. Text in this section also proposes to monitor vegetation at the site for three years after the Riparian MMP is implemented. Three years is an unacceptably short monitoring period
when trees must be planted as part of the Project’s mitigation measures. Trees usually require about 3 years of irrigation before their roots are well enough established to sustain them. Several years of monitoring are needed to verify that the root systems of the trees are sufficiently well established to support the trees in wet and dry years. The Water Board usually requires a minimum of 10 years of monitoring of riparian trees.

Response: The *Final Almaden Quicksilver Restoration Plan and Environmental Assessment* (USFWS & CDFG, 2008) in the section, *Success Criteria and Monitoring*, states “Re-establishment and survival of native species will be inspected annually for up to three years after project completion.” In the absence of other requirements, County is using this statement as guidance for the vegetation monitoring period.

**Comment 1-5. BIO Impact 10, page 42.** Text in this section of the ISMND only discusses waters subject to federal jurisdiction. The text should be revised to cover waters that are subject to State jurisdiction (See Comment 1).

Response: The appropriate place to discuss the RWCQB authority is in the Discussion section of Biological Resources. The first paragraph under the Discussion section will be revised as follows:

- Natural communities in the project area include stream/aquatic, freshwater wetland, foothill riparian woodland, foothill oak woodland, chaparral, and open grassland. Several of these communities as well as species or individuals within these communities are protected by law. Stream and wetland communities are protected by the Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors Act. California Department of Fish and Game (CDFG) Code Section 1602 requires that lead agencies work with CDFG to develop a Stream Alteration Agreement when stream habitats and riparian zones are impacted by a project. Riparian zone protection is also required by the County of Santa Clara General Plan (1994). The Regional Water Quality Control Board (RWQCB) has regulatory authority over wetlands and waterways under both the federal Clean Water Act (CWA) and the State of California’s Porter-Cologne Water Quality Control Act (California Water Code, Division 7). Under the CWA, the RWQCB has regulatory authority over actions in waters of the United States, through the issuance of water quality certifications (certifications) under Section 401 of the CWA, which are issued in combination with permits issued by the Army Corps of Engineers (ACOE), under Section 404 of the CWA. When the RWCQB issues Section 401 certifications, it simultaneously issues general Waste Discharge Requirements for the project, under the Porter-Cologne Water Quality Control Act. Activities in areas that are outside of the jurisdiction of the ACOE (e.g., isolated wetlands, vernal pools, or stream banks above the ordinary high water mark) are regulated by the RWCQB under the authority of the Porter-Cologne Water Quality Control Act. Activities that lie outside of ACOE jurisdiction may require the issuance of either individual or general waste discharge requirements (WDRs) from the Water Board.”

**Comment 1-6. BIO Impact 10, page 43.** Text in this section of the ISMND proposes to monitor any created wetlands for 3 years. The Water Board requires a minimum of five years of monitoring for created wetlands.

Response: The *Final Almaden Quicksilver Restoration Plan and Environmental Assessment*
(USFWS & CDFG, 2008) in the section, Success Criteria and Monitoring, states —Re
establishment and survival of native species will be inspected annually for up to three years after
project completion.” In the absence of other requirements, the County is using this statement as
guidance for the vegetation monitoring period.

Comment 1-7. HYD-2 Measures, page 72. The preferred erosion repair methods in Table 6
include the use of vegetated geogrids and cellular confinement systems. The Water Board
strongly prefers that all such materials be composed of biodegradable materials.

Response: As noted in the Public Draft IS/MND, the County will implement measures and
techniques for preventing soil erosion as given in the Guidelines and Standards for Land Use
Near Streams. These methods focus on bioengineering for slope stabilization and erosion
control. The County will use biodegradable materials to the extent feasible and recognizes that
methods such as concrete crib walls, gabions, concrete block, sacked concrete, and gunite slope
protection are not recommended under most conditions. Some hardscape erosion control—
potentially including a concrete cut-off wall and boulders—will be required in targeted areas of
slope instability and intense stream erosion. Such features will be kept to a minimum.

Comment 1-8. HYD-2 Measures, page 73. Text describing work in the creek channel and
mitigation measures should be modified to require that a fluvial geomorphologist be present to
design and oversee restoration of the creek channels. If the bed and/or banks of a creek are
altered by excavation, this can trigger headcuts or other erosion mechanisms. Care must be taken
to prevent Project-related excavation from destabilizing the creek channels.

Response: Very little excavation in creek channels will occur in this project, but for what will
occur, County staff and their consultants have the expertise to design the calcine removal and
creek channel restoration. A geotechnical consultant will observe operations where calcine is
along creeks and in unstable areas are removed to prevent slides or changes to creek
morphology.

Comment 1-9. HYD-2 Measures, page 74. Text on page 74 describes temporarily bypassing
creek flows around the work site. The text states that a permit will be required from the
California Department of Fish and Game and that the Water Board will issue a Clean Water Act
Section 402 permit for the diversion. The design and operation of the diversion structure will
actually be subject to Water Board jurisdiction under a Clean Water Act Section 401
certification.

Response: The answer under Question 22 on page 74 will be revised as follows:
—The project will temporarily divert stream water into pipes along approximately 600 ft of
Alamitos Creek. These diversions will be temporary, occurring from approximately April 15 to
October 15. The County will obtain a CDFG Stream Bed Alteration Agreement and permits
from the RWQCB, related to Clean Water Act Section 402 which regulates construction-related
stormwater discharges to surface waters through the National Pollutant Discharge Elimination
System (NPDES) program. The design and operation of the diversion structure will be subject to
RWQCB jurisdiction under a Clean Water Act Section 401 certification. Less than significant
with mitigations incorporated (BIO-9).”
Comment Letter 2:
Santa Clara County Roads and Airports Department – Amir Douraghy

Thank you for the opportunity to comment on the subject project. I visited the site and have no comments.

Comment Letter 3:
Santa Clara County Roads and Airports Department – Gamini Rajapakse

We have no comments on the Draft Initial Study/ Mitigated Negative Declaration for the project. Please send the updated schedule for the project, so we can secure the anticipated funding for the project.

Comment Letter 4:
Santa Clara Valley Water District – Ben Davis

The Santa Clara Valley Water District (District) has reviewed the Draft Initial Study and Mitigated Negative Declaration for the Hacienda Deep Gulch Remediation Project received on July 20, 2010.

Comment 4-1. As the proposed remediation project on the subject site is not located on District easement or fee title right of way, therefore in accordance with District Water Resource Protection Ordinance, a District permit is not required for this project. Though the project does not require a District permit the District recommends that plants used for mitigation be grown from the Alamitos Creek watershed to protect the genetic integrity of the local native riparian plants and in accordance with the "Guidelines and Standards for land use near streams".

Response: Trees are being grown for the mitigation and the material has come from local watersheds. The same will be true for understory plants, to the greatest extent feasible. No plants known to be invasive or non-native will be planted in the mitigation. The County will follow the direction for plant material in Guidelines and Standards for Land Use near Streams to the greatest extent feasible.

Comment Letter 5:
Myers Industries, Inc. and Buckhorn, Inc. – David Cooke

Comment 5-1. Section 2.2, page 7 of 100. The PMND states: "The County purchased 3,600 acres from the New Idria Mining Chemical Company, the predecessor to Meyers Industries [sic], in 1973 and 1975 to create AQS County Park." This statement is inaccurate and should be corrected. Records demonstrate that the County acquired real property that now comprises a portion of the AQS County Park from the New Idria Mining & Chemical Company ("NIMCC") in two transactions, the first in 1973, the second in 1975. NIMCC is not a predecessor to Myers Industries, Inc. Additionally, the area historically known as the "Hacienda Furnace Yard" area,
which comprises all or a large majority of the Project area, was not owned by NIMCC and was not conveyed to the County in either of these two transactions. Rather, Buckhorn understands that the Hacienda Furnace Yard area and surrounding properties were acquired by the County in one or more subsequent transactions from one or more other prior owners in the late 1970's or early 1980's, and that the County thereafter incorporated these areas into the AQS County Park. Since the focus of the PMND is on the Project area, this historical section should be revised not only to correct the errors described above but also to explain the history of the County's acquisition of the real property on which the Project is situated.

Response: The second paragraph under section 2.2 will be revised as follows:

The County purchased 3,600 acres from the New Idria Mining Chemical Company, the predecessor to Meyers Industries, in 1973 and 1975 to create AQS County Park. The Hacienda Furnace Yard and Jacques Ridge areas were purchased later and added to the Park.”

Comment 5-2. Section 2.2, page 8 of 100. The PMND states: "The elevated mercury levels and the highly detrimental effect of methylated mercury on wildlife and humans have been well documented. The historic mercury mining operations and remaining calcine piles at AQS County Park are one part of this mercury pollution problem." While it is true that, as a general matter, significant documentation exists regarding the detrimental effect of methylated mercury on wildlife and humans, the residual impacts, if any, of remaining calcine deposits on human and ecological receptors after the major remediation projects conducted at the AQS Park from 1998-2000 have not, to Buckhorn's knowledge, been subjected to systematic or detailed studies. The PMND's description of current conditions relating to human and ecological health impacts of residual mercury-bearing materials should be revised to reflect the fact that major remediation activities have already taken place.

Response: While this project description is mostly derived from the Final Almaden Quicksilver Restoration Plan and Environmental Assessment, nevertheless, we will delete this paragraph in Section 2.2 on page 8 from the text:

"Mercury occurs naturally in this area and continues to seep from the landscape and the piles of remaining calcines into Alamitos Creek, a tributary to the Guadalupe River. Mercury mining and the remaining calcines have delivered mercury to the local rivers in the watershed and have contributed to the mercury contamination of the South San Francisco Bay. The elevated mercury levels and the highly detrimental effect of methylated mercury on wildlife and humans have been well documented. The historic mercury mining operations and remaining calcine piles at AQS County Park are one part of this mercury pollution problem.”

Comment 5-3. The PMND states: "County Parks is required under the federal Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), also known as the Superfund Law, to proceed with remediation and restoration of the former mining lands." This statement is inaccurate, as it implies that the AQS is a Superfund site subject to remedial action under the supervision of the federal government, which is not the case. Furthermore, CERCLA does not require the remediation and restoration of "former mining lands." Rather, the County is required to perform the Project pursuant to the terms of a settlement, documented in a federal consent decree entered in 2005, of a threatened claim by public agency trustees of natural resources for alleged natural resource damages under CERCLA. The PMND should be corrected accordingly.
Response: The appropriate paragraph on page 8 will be changed as follows:

The County of Santa Clara Parks is required pursuant to terms of the settlement agreement, document in the 2005 consent decree, under the federal Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), also known as the Superfund Law, to proceed with removal of visible calcines deposited at Upper Hacienda, Lower Hacienda and Deep Gulch and remediation and restoration of these areas. The U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Game (CDFG) were appointed as the natural resource Trustee agencies for this action. The Trustees undertook a natural resource damage assessment (NRDA) with the potentially responsible parties (current and former owners of the lands mined for mercury) to and develop the Final Almaden Quicksilver Restoration Plan and Environmental Assessment (RP/EA) (USFWS & CDFG, 2008). This plan follows previous remediation actions undertaken at AQS County Park in 1998-2000. The RP/EA (2008) states that remedial actions were completed at five former mercury ore extraction or processing areas in Almaden Quicksilver Park from 1998-2000.

Comment 5-4. The PMND goes on to state: "The Trustees undertook a natural resource damage assessment (NRDA) with the potentially responsible parties (current and former owners of the lands mined for mercury) to develop the Final Almaden Quicksilver Restoration Plan and Environmental Assessment (RP/EA) (USFWS & CDFG, 2008)." This is inaccurate, While it is true that the Trustee agencies undertook to conduct a natural resource damages assessment and that they communicated during the course of that assessment with public agency and private entities that had been identified as parties potentially responsible for those damages, it is not true that the NRDA was conducted with the potentially responsible parties to develop the Final RP/EA. The Final RP/EA was prepared after the 2005 consent decree resolved the Trustees' natural resource damages claim, and at least some of the potentially responsible parties who were involved in the 2005 settlement were not involved in the development of the RP/EA or in the activities that led up to its adoption. The PMND should be corrected accordingly.

Response: This sentence in Section 2.2 on page 8 has been revised as follows:

The Trustees undertook a natural resource damage assessment (NRDA) with the potentially responsible parties (current and former owners of the lands mined for mercury) to develop the Final Almaden Quicksilver Restoration Plan and Environmental Assessment (RP/EA) (USFWS & CDFG, 2008).

Comment 5-5. In the same section, the PMND goes on to state: "The Final RP/EA evaluates five additional restoration projects for removing the remaining calcines. There are two primary projects – Jacques Gulch and Hacienda Furnace Yard - and three compensatory projects, Coyote Creek Arundo Removal, Hillsdale Bridge Fish Barrier Removal, and Ravenswood Marsh Predator Control." This statement should be corrected to state, more accurately, that "[T]he Final RP/EA evaluates two additional restoration projects for removing the remaining calcines - the primary projects known as the Jacques Gulch and Hacienda Furnace Yard projects - and three compensatory projects ...."

Response: The appropriate paragraph in Section 2.2 on page 8 has been revised as follows:

The Final RP/EA evaluates two additional restoration projects for removing the remaining calcines - the primary projects known as the Jacques Gulch and Hacienda Furnace Yard projects - and three compensatory projects...."
resource damages, removing the remaining calcines. There are two primary projects, Jacques Gulch and Hacienda Furnace Yard, which involve the removal of remaining calcines, and three compensatory projects, Coyote Creek *Arundo* Removal, Hillsdale Bridge Fish Barrier Removal, and Ravenswood Marsh Predator Control.”

**Comment 5-6. Section 2.4. page 9 of 100.** The PMND states: "In April 2000, the County of Santa Clara with other local municipalities and companies were identified as potentially responsible parties (PRP) by the U.S. Department of Interior and the State of California (the Trustees) for natural resources damages act (NRDA)." This statement is inaccurate. The Trustees who alleged the occurrence of natural resource damages were the U.S. Department of the Interior and the State Department of Fish & Game (not the State of California as such). Also, these Trustees identified parties potentially responsible for natural resource damages, not for "natural resource damages act," or for "NRDA" (initials which, as used previously in the PMND, stand for "natural resource damages assessment").

**Response:** The text on page 9 will be revised as follows:

–In April 2000, the County of Santa Clara with other local municipalities and companies were identified as potentially responsible parties (PRP) by the U.S. Department of Interior and the State of California Department of Fish and Game (the Trustees) for natural resources damages.

"In July 2005, a Consent Decree settlement was reached between PRP and the Trustees.”

**Comment 5-7. Section 4. page 52 of 100.** The PMND states: "The project is required under the Superfund Law to remove and/or stabilize the mercury containing calcine deposits that remain from mining activities and restore the natural contours of the landscape and native foothill riparian and oak woodland vegetation." As noted above, the reference to the Superfund Law is incorrect, and this statement should be corrected as recommended above. Additionally, the RP/EA requires removal and/or stabilization of visible mercury containing calcine deposits within specified areas, along with specified post-removal restoration activities. These areas comprise the project area as defined in the PMND. The PMND should be corrected accordingly.

**Response:** The paragraph in Cultural Resources under question 4 will be revised as follows:

–The project site is located within the New Almaden Historic District. The project requires removal and/or stabilization of visible mercury containing calcine deposits within specified areas is required under the Superfund Law to remove and/or stabilize the mercury containing calcine deposits that remain from mining activities and the project will restore the natural contours of the landscape and native foothill riparian and oak woodland vegetation.”

**Comment 5-8. Appendix B - Identification of Wetlands and Waters of the US. Section 1.3. page 1.** The second and third paragraphs of this section contain numerous factual errors similar to those detailed above, and should be corrected in the same manner and for the same reasons discussed above.

**Response:** The appropriate changes have been made to these sections.

**Comment 5-9. Appendix C - Technical Report for Cultural Resources Initial Study. Section**
2.0. page 2. The second paragraph of this section contains factual errors similar to those detailed above, and should be corrected in the same manner and for the same reasons discussed above.

Response: The appropriate changes have been made to this section.

Comment Letter 6:

Kitty Monahan

Comment 6-1. Page 5: Cul-2 Measures. The retort along Deep Gulch Creek is of historic significance and must be saved.

Response: The IS/MND identifies the retort as a historic structure. Mitigation measures (Mitigation Measure Cul-2 A. Historic Resource #y44 – Retort) to develop an appropriate historic context and document the historic resource are included in the project.

Comment 6-2. Remove the retort and place it next to the historic equipment in the overflow parking area of Hacienda Park Entrance. Members of The New Almaden Quicksilver County Park Association will restore it and eventually add it to their out-door display.

Response: County Parks will instruct the contractor to remove the metal elements of the retort and place them in a secure location in the park. Contractor shall follow the mitigation measures for hazardous materials because of possible mercury contamination of the retort structure.

Comment Letter 7:

Mike Boulland

7-1 Jacque Gulch

Comment 7-1-1. Is the Jacque Gulch project completed?

Response: Jacques Gulch is a Santa Clara Valley Water District (SCVWD) project, substantially completed in 2009. Contact SCVWD for additional information.

7-2 Hacienda Project - Los Alamitos Road Washout

Comment 7-2-1. Why did the erosion occur and cause the Los Alamitos road to wash out?

Response: Los Alamitos Road was investigated and the repair work was designed and constructed by the County Roads and Airports Department. Please refer to this Department for further information.

Comment 7-2-2. Will the erosion below of the Los Alamitos Road washout be addressed and repaired during Hacienda project?
Response: Our task in this project is to remove the remaining calcine material at the site. The Los Alamitos Road washout was repaired by R&A in 2008. County Parks and Recreation Department (County Parks) is not aware of any other major erosion problems at the site.

**Comment 7-2-3.** What are you going to do to make sure there is no erosion below the road washout?

Response: The County Roads and Airport Department are the owners of Alamitos Road. R&A repaired the washout in 2008. County Parks task is to remove the remaining calcine material in the project site. In order to minimize erosion, the current design calls for installation of riprap or other appropriate erosion control methods at all creek bank areas that will be exposed after removal of calcine material.

**Comment 7-2-4.** Do your plans include measures to prevent erosion downstream? In the park? In the Village?

Response: Erosion is a natural phenomena and it may be controlled or minimize, but can not be prevented. The current project design calls for installation of various erosion control measures at all areas that will be disturbed in the process of removal of calcine materials. Control of erosion in the Village is not the responsibility of County Parks.

**Comment 7-2-5.** Last time repairs took a long time to fix the road, if damage occurs to the road or downstream how quickly it be repaired?

Response: Road repair is the responsibility of County Roads and Airport Department, not County Parks. The current project design calls for installation of various erosion control measures at all areas that will be disturbed in the process of removal of calcine materials.

**Comment 7-2-6.** Have you undertaken a hydrologic engineering study to make sure the channel improvement and straightening of Los Alamitos Creek will not cause trouble downstream?

Response: County Parks’ consultant (CH2M HILL) conducted hydraulic studies for the 1998 remediation at the site. This study was revised for the current project. This project’s aim is to remove the remaining calcine material at the site, not to improve the channel or straighten Alamitos Creek. As a result of calcine removal at UH-1, UH-2 and AC-2, the project design calls for the creek channel at these locations to be made wider by 3' to 5'. This may tend to reducing the creek channel flow velocity, which is beneficial.

**Comment 7-2-7.** There is a logjam downstream next to the road washout? What will happen to the logjam? Could the Logjam area be included in the Hydrological study?

Response: The logjam opposite the previous road washout will be removed in order to install a check dam to divert the creek flow away from the calcine deposits at the Upper Hacienda Area. Logjams can cause the creek to meander and change course. The creek meandering at this location started soil erosion below the road and was one of the causes of the washout.
**Comment 7-2-8.** Will new stream boundaries be designed to slow the speed of the water?

**Response:** There will be no change in the stream boundaries other than the areas mentioned in the response to Comment 7-2-6, above. The stream velocity (speed of water) is a factor of the creek bottom slope, creek configurations, and flow quantity. Construction of the project will not negatively alter any of these parameters.

**7-3 Deep Gulch Creek**

**Comment 7-3-1.** Do you plan to straighten out Deep Gulch Creek like you did at Jacques Gulch creek?

**Response:** No, the project will not change the basic morphology of Deep Gulch or Alamitos Creek and neither will be straightened. As noted previously, Jacques Gulch is a Santa Clara Valley Water District (SCVWD) project.

**Comment 7-3-2.** Did you have a hydrologist look at the engineering of the Deep Gulch creek?

**Response:** No, since work at Deep Gulch area will be limited to removal of calcine material at certain locations from the eastern creek bank and stabilizing the newly formed bank. There is no work planned in the creek proper.

**Comment 7-3-3.** We are concerned that at the confluence of Deep Gulch Creek and Los Alamitos Creek will be affected by your project. We are concerned with the increased speed of channel improvement and downstream erosions.

**Response:** The project will not affect the confluence of Deep Gulch and Alamitos Creek. There is no work planned for that area and so there will be no effect. See responses to Comments 7-2-6, 7-2-7 and 7-2-8, above.

**Comment 7-3-4.** What plans are being designed to slow the flow of the creek during a high flood season?

**Response:** This is not a flood control project and work will not address water flow issues. This project will remove calcine material along the creek slopes. Also see responses to Comments 7-2-6, 7-2-7 and 7-2-8, above.

*Negative Declaration - The CEQUA is declaring a Negative Declaration or no environmental impact with this project.*

**Comment 7-3-5.** If you are doing a Hydrological Report and not straightening for both creeks we agree with the statement of declaring a Negative Declaration. If you are not doing a Hydrological Report for both creeks and straightening the stream banks, we disagree the statement of declaring a negative declaration for the project and feel the change in the speed of the water flow will have a direct environmental impact on all downstream property owners.

**Response:** The project is a remediation and restoration project to remove calcine materials. As
mentioned above, the project does not involve alterations to the creek or straightening of the creek channel. Information about the project can be found in the project description and Initial Study/Mitigated Negative Declaration (IS/MND) that was prepared for the project. The IS/MND provides the environmental review for the removal of the remaining visible calcine deposits and identifies potential environmental impacts. The IS/MND proposes mitigation measures that would reduce such impacts to less than significant levels. These Mitigation Measures are identified in the Mitigation Monitoring and Reporting Program included in the IS/MND.

8) **Oral Comments – Summary of Comments Received at the Public Meeting in New Almaden August 9, 2010**

a. How old are the trees to be removed from along the Mine Hill Trail? Will the view be the same in our lifetime? Is the big oak near the interpretive sign being removed? Are the trees growing in the calcine? Will the loss of the bay trees results in stress on the oak trees? Are you replanting trees?

**Response:** We don’t know the ages of the trees for certain, but they are probably in the 75-100 year range. The project will remove 4 trees along Mine Hill Trail and the view will not be the same in our lifetimes. The County will be replacing trees on a 3:1 basis, and some of these trees will take many decades to become large trees. However, we will also plant fast growing native species that, within a decade or less, will provide habitat and aesthetically enhance the Deep Gulch area. We don’t know specifically which tree is meant by the “big oak near the interpretive sign”, but 4 trees in the vicinity of the sign will be removed, 3 valley oaks approximately 15/20 inches (double trunk), 24 inches and 44 inches in diameter and a multi-trunk bay laurel, with trunks 3-10 inches in diameter. Some of the trees are growing in the calcine. Loss of bay trees may stress the oaks, but we will plant native understory and fast growing tree species to enhance the oak community and benefit existing trees.

b. Do you plan to use riprap like at Jacques Gulch? Will the rip-rap be as extensive as the existing? Will the creek have more of the same “artificial” look as exists now as a result of the previous rip-rap?

**Response:** No, this project will not use riprap as was used at Jacques Gulch. This project is very different. Riprap, engineered elements, and artificial materials will be used only when absolutely needed to prevent significant stream or hillside erosion. The project will use bioengineered elements such as root wads, plantings and tree trunks to stabilize slopes and will use biodegradable materials to the greatest extent feasible. The creek will not have an “artificial look”. A primary goal of the project is to leave the affected areas with natural contours and to revegetate those areas with native species. The Draft IS/MND states, under **HYD-2 Measures** that the County will:

- Implement measures and techniques for preventing soil erosion as given in the *Guidelines and Standards for Land Use Near Streams*. In particular Chapter 4, pages 4.81-4.84 and 4.92-4.106 provides a range of recommended soil and slope stabilization methods (See Table 6 – Preferred Erosion Repair Methods from Chapter 4). Methods not recommended are given on pages 4.107-4.109 and include concrete crib walls, gabions, concrete block, sacked concrete, and gunite slope protection.”
c. The erosion coming from the street at Upper Hacienda is also the result of a pond draining from Cinnabar Hills Road. Will the erosion protection around the outfall accommodate this added drainage?

Response: The erosion protection around the outfall will be sized and implemented to accommodate the drainage coming through the outfall, no matter where that water originates.

d. Why did Almaden Road washout? Will this project affect Almaden Road? Whom do we contact if the road fails?

Response: Please see responses to Comment letter 7. Alamitos Road is owned by the County of Santa Clara Roads and Airports Department. The Roads & Airports Department phone number is (408) 573-2400.

e. Where will the calcine material be hauled? Will it be trucked on the weekends or weekdays? Is there room remaining at the disposal site?

Response: The calcine will be hauled to the “San Francisco Open Cut” using Mine Hill Trail and Wood Road as haul routes to the consolidation area. Hauling would be limited to weekdays between 7am and 5pm. There is adequate capacity at the disposal site.

f. Is the speed of the water being addressed? Will the logjam near the Upper Hacienda site be removed? Will the creek flows affect our properties located downstream of the project? If you remove the logjam will the water speed up and cause damage or flooding on my property? We do not want the creek straightened. We want more sinuosity.

Response: The creek flow velocity (speed of water) will not be addressed because this is not a creek channel modification or alteration project. The project is to remove calcine material from portions of the creek bank. The logjam at Upper Hacienda will be removed in order to install a temporary check dam to divert the creek flow away from the calcine deposits and to enable a creek crossing in order to access and remove calcine material. Removal of the logjam should not affect the creek velocity. This project’s aim is to remove the remaining calcines material at the site and it is not to improve the channel or straighten Alamitos Creek.

g. We do not want riprap. How do we get away from riprap? Can you use round boulders? We want a more natural approach to creek bank armoring. We want trees and natural materials.

Response: As noted in the response to question b, above, riprap, engineered elements, and artificial materials will be used only when absolutely needed to prevent significant stream or hillside erosion. A primary goal of the project is to return the slopes to natural contours and to cover with native vegetation. The project will use a more natural approach to creek bank armoring such as bioengineered elements such as root wads, plantings and tree trunks to stabilize slopes and will use biodegradable materials to the greatest extent feasible.
h. How long does geo-fabric last?

**Response:** Such materials may last 5-10 years, depending on the material. The County will use biodegradable material whenever possible.

i. Did you find the Vichy Springs Well?

**Response:** Yes, it is located under the Almaden Road Bridge. This feature is discussed in the Cultural Section of the project’s Initial Study/Mitigated Negative Declaration.

j. We know of a 14” metal pipe upstream of the Almaden Road Bridge. Did you find it?

**Response:** None of the consultants nor the County staff planning this project found such a pipe.

k. How far up Deep Gulch will the project extend?

**Response:** The project extends no further than approximately 20ft up the Gulch from the retort. The project stops short of where the path bends sharply to the right.

l. There seems to be many project uncertainties. How will contractors bid this project?

**Response:** The project design is 60% complete and this document, in order not to limit the design Engineer choice, provides options and discusses the impacts of these options then provides mitigations to these impacts. As we progress in the project design and design choices are made these uncertainties will disappear.

m. What is the construction schedule?

**Response:** The Project is expected to begin in Fall/Winter 2010 and end in Winter 2012. As noted in the IS/MND Project Description, “The Hacienda and Deep Gulch Remediation Project is proposed to occur in two phases. The project will begin with tree removal and brushing in the winter between November 1 and January 31. This first phase will be undertaken outside of the breeding bird season to facilitate construction the following summer. Calcine removal, grading, any possibly additional tree removal and revegetation will occur the following summer during the permitted in stream work window which typically begins April 15 and runs through October 15. A certified arborist will be on site to supervise tree pruning, removal and protection. Revegetation planting will extend into the fall and early winter to ensure the highest potential for planting success during the cooler, rainy season. Construction will typically occur on weekdays.”

n. Who is paying for this project?

**Response:** County Parks applied for and received tentative approval for a grant from the Federal Coast Impact Program for the project. Furthermore, the County has a cost sharing agreement with Myers Industries, Inc. and Buckhorn, Inc. (collectively, “Buckhorn”) for the project design and construction.
o. Who do we contact if there is downstream flooding or damage to our property after the project is completed?

**Response:** Santa Clara Valley Water District (SCVD) is the authority who controls the creek flow and they operate under the guidelines of the State Division of Safety of Dams, Department of Water Resources (DOSOD) regulations. SCVWD phone number is (408) 265-2600 and DOSOD phone number is (916) 227-4644.
COMMENTS
Hacienda and Deep Gulch Remediation Project -
Almaden Quicksilver County Park
August 18, 2010

Mohamed Assaf  
County of Santa Clara, Parks and Recreation Department  
298 Garden Hill Drive  
Los Gatos, CA 95070  

Subject: Hacienda and Deep Gulch Remedian Project, Almaden Quicksilver County Park  
SCH#: 2010072049  

Dear Mohamed Assaf:

The State Clearinghouse submitted the above named Negative Declaration to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on August 17, 2010, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project’s ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

"A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

Scott Morgan  
Director, State Clearinghouse

Enclosures  
cc: Resources Agency
### SCH# 2010072049

**Project Title** | Hacienda and Deep Gulch Remediation Project, Almaden Quicksilver County Park  
**Lead Agency** | Santa Clara County

**Type** | Neg  
**Description** | The Hacienda and Deep Gulch Remediation Project (Project) is a mercury remediation and habitat restoration project in the Hacienda Furnace Yard Area of Almaden Quicksilver County Park (AQS County Park) and beneath the Alamitos Creek Bridge on Alamitos Road. AQS Park is a 3,977 acres area owned and operated by County of Santa Clara Roads and Airports Department. The project includes the removal of remnant mining waste material, grading to create stable creek banks at Alamitos Creek and Deep Gulch area, stabilizing and hydro-seeding all disturbed areas, and re-vegetation of the creek banks along Alamitos Creek and Deep Gulch within Almaden Quicksilver County Park.

### Lead Agency Contact

**Name** | Mohamed Assaf  
**Agency** | County of Santa Clara, Parks and Recreation Department  
**Phone** | (408) 355-2201  
**Fax** |  
**Address** | 298 Garden Hill Drive  
**City** | Los Gatos  
**State** | CA  
**Zip** | 95070

### Project Location

**County** | Santa Clara  
**City** |  
**Region** |  
**Lat / Long** | 37° 10' 39" N / 121° 49' 53" W  
**Cross Streets** | Almaden Road, Alamitos Road  
**Parcel No.** | 583-20-004, 583-23-019  
**Township** | 09S  
**Range** | 01E  
**Section** | 02  
**Base** |  

### Proximity to:

- **Highways**  
- **Airports**  
- **Railways**  
- **Waterways** | Alamitos Creek  
- **Schools**  
- **Land Use** | Parks Recreation/Hillside & H1 - Historic Preservation Zoning District/Regional Parks Existing.

### Project Issues

- Aesthetic/Visual  
- Agricultural Land  
- Air Quality  
- Archaeologic-Historic  
- Biological Resources  
- Geologic/Seismic  
- Noise  
- Recreation/Parks  
- Soil Erosion/Compaction/Grading  
- Toxic/Hazardous  
- Traffic/Circulation  
- Vegetation  
- Water Quality  
- Wetland/Riparian  
- Landuse

### Reviewing Agencies

- Resources Agency  
- Department of Fish and Game, Region 5  
- Department of Parks and Recreation  
- Department of Water Resources  
- California Highway Patrol  
- Caltrans, District 7  
- Regional Water Quality Control Board, Region 2  
- Department of Toxic Substances Control  
- Native American Heritage Commission

### Date Received

07/19/2010  
**Start of Review** | 07/19/2010  
**End of Review** | 08/17/2010

Note: Blanks in data fields result from insufficient information provided by lead agency.
August 16, 2010
CIWQS Place ID No. 756038

Sent via electronic mail: No hardcopy to follow
Count of Santa Clara, Parks and Recreation Department
298 Garden Hill Drive
Los Gatos, CA 95070
Attn: Mohamed Assaf (mohamed.assaf@prk.sccgov.org)

Re: Comments on the Draft Initial Study / Mitigated Negative Declaration for the Hacienda and Deep Gulch Remediation Project, Almaden Quicksilver County Park
SCH No.: 2010072049

Dear Mr. Assaf:

San Francisco Bay Regional Water Quality Control Board (Water Board) staff appreciate the opportunity to review the Draft Initial Study / Mitigated Negative Declaration (ISMND) for the Hacienda and Deep Gulch Remediation Project, Almaden Quicksilver County Park. The ISMND evaluates potential environmental impacts associated with the removal of historic calcine deposits from Alamitos Creek and Deep Gulch in the Almaden Quicksilver County Park (Project). The Project’s goal is to provide long-term benefits to the watershed by removing historic mercury deposits, but the removal actions will have temporary impacts to waters of the State. Water Board staff have the following comment on aspects of the Project that may impact waters of the State.

Comment 1
Section 1.3, Interagency Collaboration, Regulatory Review and Permitting, page 2 and Table 1
The discussion of Water Board regulation of jurisdictional waters should be expanded to clarify that the Water Board has regulatory authority over wetlands and waterways under both the federal Clean Water Act (CWA) and the State of California’s Porter-Cologne Water Quality Control Act (California Water Code, Division 7). Under the CWA, the Water Board has regulatory authority over actions in waters of the United States, through the issuance of water quality certifications (certifications) under Section 401 of the CWA, which are issued in combination with permits issued by the Army Corps of Engineers (ACOE), under Section 404 of the CWA. When the Water Board issues Section 401 certifications, it simultaneously issues general Waste Discharge Requirements for the project, under the Porter-Cologne Water Quality Control Act. Activities in areas that are outside of the jurisdiction of the ACOE (e.g., isolated wetlands, vernal pools, or stream banks above the ordinary high water mark) are regulated by the Water Board, under the authority of the Porter-Cologne Water Quality Control Act. Activities
that lie outside of ACOE jurisdiction may require the issuance of either individual or general waste discharge requirements (WDRs) from the Water Board.

**Comment 2.**

*Section 2.12, Temporary Dewatering and Crossings of Alamitos Creek, pages 13 and 14.*

Text in this section of the ISMND proposes to place clean earthen fill over geotextile fabric above culverted, temporary creek crossings. In the event of unexpected high flows, this dirt could be washed down stream and potentially foul spawning gravel in the creek. Because of this, the Water Board only allows clean gravel to be used as temporary fill in streams with anadromous fish populations.

**Comment 3.**

*BIO-9 Measures, page 42.*

Text in this section of the ISMND states that a Riparian Mitigation and Monitoring Plan (MMP) will be developed as part of the Streambed Alteration Agreement. The text should be revised to clarify that the MMP will also be required as a component of the CWA Section 401 certification/Waste Discharge Requirements that will be issued for the Project by the Water Board (See Comment 1).

Text in this section also proposes to monitor vegetation at the site for three years after the Riparian MMP is implemented. Three years is an unacceptably short monitoring period when trees must be planted as part of the Project’s mitigation measures. Trees usually require about 3 years of irrigation before their roots are well enough established to sustain them. Several years of monitoring are needed to verify that the root systems of the trees are sufficiently well established to support the trees in wet and dry years. The Water Board usually requires a minimum of 10 years of monitoring of riparian trees.

**Comment 4.**

*BIO Impact 10, page 42.*

Text in this section of the ISMND only discusses waters subject to federal jurisdiction. The text should be revised to cover waters that are subject to State jurisdiction (See Comment 1).

**Comment 5.**

*BIO Impact 10, page 43.*

Text in this section of the ISMND proposes to monitor any created wetlands for 3 years. The Water Board requires a minimum of five years of monitoring for created wetlands.

**Comment 6.**

*HYD-2 Measures, page 72.*

The preferred erosion repair methods in Table 6 include the use of vegetated geogrids and cellular confinement systems. The Water Board strongly prefers that all such materials be composed of biodegradable materials.
Comment 7.
HYD-2 Measures, page 73.
Text describing work in the creek channel and mitigation measures should be modified to require that a fluvial geomorphologist be present to design and oversee restoration of the creek channels. If the bed and/or banks of a creek are altered by excavation, this can trigger headcuts or other erosion mechanisms. Care must be taken to prevent Project-related excavation from destabilizing the creek channels.

Comment 8.
HYD-2 Measures, page 74.
Text on page 74 describes temporarily bypassing creek flows around the work site. The text states that a permit will be required from the California Department of Fish and Game and that the Water Board will issue a Clean Water Act Section 402 permit for the diversion. The design and operation of the diversion structure will actually be subject to Water Board jurisdiction under a Clean Water Act Section 401 certification.

If you have any questions, please contact me at (510) 622-5680, or via e-mail at bwines@waterboards.ca.gov.

Sincerely,

Brian Wines
Water Resources Control Engineer
South and East Bay Watershed Section

cc: State Clearinghouse (state.clearinghouse@opr.ca.gov)
Mohamed,

Thank you for the opportunity to comment on the subject project. I visited the site and have no comments.

Amir

http://www.parkhere.org/portal/site/parks/parkschp?path=%2Fv7%2FParks%20and%20Recreation%2C%20Department%20of%20DEP%29%2FPlanning%20and%20Development%2FHacienda%20%26%20Deep%20Gulch%20Remediation%20Project%20Almaden%20Quicksilver%20County%20Park

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Comment Letter 3

From: Gamini Rajapakse [mailto:Gamini.Rajapakse@rda.sccgov.org]
Sent: Friday, August 13, 2010 11:04 AM
To: Assaf, Mohamed
Cc: Amir Douraghy; Barni Roncal
Subject: Hacienda Deep Gulch Remediation Project - 37C0160

Mohamed,

We have no comments on the Draft Initial Study/ Mitigated Negative Declaration for the project.


Please send the updated schedule for the project, so we can secure the anticipated funding for the project.

Thank you,

Gamini Rajapakse
Senior Civil Engineer
County of Santa Clara
Roads and Airports Department
101 Skyport Drive
San Jose, CA 95110
Ph. (408) 573-2497
Fx. (408) 441-0276

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August 5, 2010

Mr. Mohamed Assaf, P.E.
Project Manager
County of Santa Clara
Department of Parks and Recreation
298 Garden Hill Drive
Los Gatos, CA 95032-7669

Subject: Hacienda Deep Gulch Remediation Project, Almaden Quicksilver County Park
Draft Initial Study/ Mitigated Negative Declaration (July 2010)

Dear Mr. Assaf:

The Santa Clara Valley Water District (District) has reviewed the Draft Initial Study and Mitigated Negative Declaration for the Hacienda Deep Gulch Remediation Project received on July 20, 2010.

As the proposed remediation project on the subject site is not located on District easement or fee title right of way, therefore in accordance with District Water Resource Protection Ordinance, a District permit is not required for this project. Though the project does not require a District permit the District recommends that plants used for mitigation be grown from the Alamitos Creek watershed to protect the genetic integrity of the local native riparian plants and in accordance with the "Guidelines and Standards for land use near streams".

We appreciate the opportunity to comment on the Mitigated Negative Declaration and Draft Initial Study. If you have any questions or need further information, please contact me at (408)265-2607, extension 3276.

Sincerely,

Ben Davis
Assistant Engineer
Community Projects Review Unit

cc: S. Tippets, K. Turner, C. Haggerty, B. Davis, File

23231_53311bd08-05
Via FedEx

August 11, 2010

County of Santa Clara
Department of Parks & Recreation
Planning and Development Section
298 Garden Hill Drive
Los Gatos, CA 95032
Attn.: Mohamed Assaf, Senior Facilities Engineer

Re: Hacienda and Deep Gulch Remediation Project
Proposed Mitigated Negative Declaration

Dear Mr. Assaf:

On behalf of Myers Industries, Inc. and Buckhorn, Inc. (collectively, "Buckhorn"), I take this opportunity to provide the following brief comments on the Proposed Mitigated Negative Declaration ("PMND") for the Hacienda and Deep Gulch Remediation Project, dated July 12, 2010.

Section 2.2, page 7 of 100:

The PMND states: "The County purchased 3,600 acres from the New Idria Mining Chemical Company, the predecessor to Meyers Industries [sic], in 1973 and 1975 to create AQS County Park." This statement is inaccurate and should be corrected. Records demonstrate that the County acquired real property that now comprises a portion of the AQS County Park from the New Idria Mining & Chemical Company ("NIMCC") in two transactions, the first in 1973, the second in 1975. NIMCC is not a predecessor to Myers Industries, Inc. Additionally, the area historically known as the "Hacienda Furnace Yard" area, which comprises all or a large majority of the Project area, was not owned by NIMCC and was not conveyed to the County in either of these two transactions. Rather, Buckhorn understands that the Hacienda Furnace Yard area and surrounding properties were acquired by the County in one or more subsequent transactions from one or more other prior owners in the late 1970's or early 1980's, and that the County thereafter incorporated these areas into the AQS County Park. Since the focus of the PMND is on the Project area, this historical section should be revised not only to correct the errors described above but also to explain the history of the County's acquisition of the real property on which the Project is situated.
Section 2.2, page 8 of 100:

The PMND states: "The elevated mercury levels and the highly detrimental effect of methylated mercury on wildlife and humans have been well documented. The historic mercury mining operations and remaining calcine piles at AQS County Park are one part of this mercury pollution problem." While it is true that, as a general matter, significant documentation exists regarding the detrimental effect of methylated mercury on wildlife and humans, the residual impacts, if any, of remaining calcine deposits on human and ecological receptors after the major remediation projects conducted at the AQS Park from 1998-2000 have not, to Buckhorn's knowledge, been subjected to systematic or detailed studies. The PMND's description of current conditions relating to human and ecological health impacts of residual mercury-bearing materials should be revised to reflect the fact that major remediation activities have already taken place.

The PMND states: "County Parks is required under the federal Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), also known as the Superfund Law, to proceed with remediation and restoration of the former mining lands." This statement is inaccurate, as it implies that the AQS is a Superfund site subject to remedial action under the supervision of the federal government, which is not the case. Furthermore, CERCLA does not require the remediation and restoration of "former mining lands." Rather, the County is required to perform the Project pursuant to the terms of a settlement, documented in a federal consent decree entered in 2005, of a threatened claim by public agency trustees of natural resources for alleged natural resource damages under CERCLA. The PMND should be corrected accordingly.

The PMND goes on to state: "The Trustees undertook a natural resource damage assessment (NRDA) with the potentially responsible parties (current and former owners of the lands mined for mercury) to develop the Final Almaden Quicksilver Restoration Plan and Environmental Assessment (RP/EA) (USFWS & CDFG, 2008)." This is inaccurate. While it is true that the Trustee agencies undertook to conduct a natural resource damages assessment and that they communicated during the course of that assessment with public agency and private entities that had been identified as parties potentially responsible for those damages, it is not true that the NRDA was conducted with the potentially responsible parties to develop the Final RP/EA. The Final RP/EA was prepared after the 2005 consent decree resolved the Trustees' natural resource damages claim, and at least some of the potentially responsible parties who were involved in the 2005 settlement were not involved in the development of the RP/EA or in the activities that led up to its adoption. The PMND should be corrected accordingly.

In the same section, the PMND goes on to state: "The Final RP/EA evaluates five additional restoration projects for removing the remaining calcines. There are two primary projects – Jacques Gulch and Hacienda Furnace Yard – and three compensatory projects, Coyote Creek Arundo Removal, Hillsdale Bridge Fish Barrier Removal, and Ravenswood Marsh Predator Control." This statement should be corrected to state, more accurately, that "[T]he Final RP/EA evaluates two
additional restoration projects for removing the remaining calcines – the primary projects known as the Jacques Gulch and Hacienda Furnace Yard projects – and three compensatory projects . . .

Section 2.4, page 9 of 100:

The PMND states: "In April 2000, the County of Santa Clara with other local municipalities and companies were identified as potentially responsible parties (PRP) by the U.S. Department of Interior and the State of California (the Trustees) for natural resources damages act (NRDA)." This statement is inaccurate. The Trustees who alleged the occurrence of natural resource damages were the U.S. Department of the Interior and the State Department of Fish & Game (not the State of California as such). Also, these Trustees identified parties potentially responsible for natural resource damages, not for "natural resource damages act," or for "NRDA" (initials which, as used previously in the PMND, stand for "natural resource damages assessment").

Section 4, page 52 of 100:

The PMND states: "The project is required under the Superfund Law to remove and/or stabilize the mercury containing calcine deposits that remain from mining activities and restore the natural contours of the landscape and native foothill riparian and oak woodland vegetation." As noted above, the reference to the Superfund Law is incorrect, and this statement should be corrected as recommended above. Additionally, the RP/EA requires removal and/or stabilization of visible mercury containing calcine deposits within specified areas, along with specified post-removal restoration activities. These areas comprise the project area as defined in the PMND. The PMND should be corrected accordingly.

Appendix B – Identification of Wetlands and Waters of the U.S., Section 1.3, page 1:

The second and third paragraphs of this section contain numerous factual errors similar to those detailed above, and should be corrected in the same manner and for the same reasons discussed above.

Appendix C – Technical Report for Cultural Resources Initial Study, Section 2.0, page 2:

The second paragraph of this section contains factual errors similar to those detailed above, and should be corrected in the same manner and for the same reasons discussed above.

Although it has provided these comments in writing, Buckhorn reserves the right to provide additional comments at the public hearing on the PMND and the Project approval.
Buckhorn appreciates the opportunity to comment on the PMND. Please do not hesitate to contact me if you have any questions.

Very truly yours,

David D. Cooke

DDC

cc: Sal Incanno
    Scott James
Report to Proposed Mitigated Negative Declaration

DEEP GULCH

Page 5: Cul-2Measures:
The retort along Deep Gulch Creek is of historic significance and must be saved. Remove the retort and place it next to the historic equipment in the overflow parking area of Hacienda Park Entrance. Members of The New Almaden Quicksilver County Park Association will restore it and eventually add it to their out-door display.

Kitty Monahan
408-288-6541
To: Julie Mark  
Santa Clara County Parks and Recreation  

From: FOLAW  
Mike Boulland  
P.O. Box 5  
New Almaden, Ca 95042  
Ph 408 268 2703  

Date: 8/9/10  
Re: Hacienda Project - CEQUA Questions

Jacque Gulch

1. Is the Jacque Gulch project completed?

Hacienda Project  
Los Alamitos Road Washout
1. Why did the erosion occur and cause the Los Alamitos road to wash out?

2. Will the erosion below of the Los Alamitos Road washout be addressed and repaired during Hacienda project?

3. What are you going to do to make sure there is no erosion below the road washout?

4. Do your plans include measures to prevent erosion downstream? In the park? In the Village?

5. Last time repairs took a long time to fix the road, if damage occurs to the road or downstream how quickly it be repaired?

6. Have you undertaken a hydrologic engineering study to make sure the channel improvement and straightening of Los Alamitos Creek will not cause trouble downstream?

8. There is a log jam downstream next to the road washout? What will happen to the log jam? Could the Log Jam area be included in the Hydrological study?

9. Will new stream boundaries be designed to slow the speed of the water?
Deep Gulch Creek

1. Do you plan to straighten out Deep Gulch Creek like you did at Jacques Gulch creek?

2. Did you have a hydrologist look at the engineering of the Deep Gulch creek?

3. We are concerned that at the confluence of Deep Gulch Creek and Los Alamitos Creek will be affected by your project? We are concerned with the increased speed of channel improvement and downstream erosions?

4. What plans are being designed to slow the flow of the creek during a high flood season?

Negative Declaration

The CEQUA is declaring a Negative Declaration or no environmental impact with this project.

1. If you are doing a Hydrological Report and not straightening for both creeks we agree with the statement of declaring a Negative Declaration.

2. If you are not doing a Hydrological Report for both creeks and straightening the stream banks, we disagree the statement of declaring a negative declaration for the project and feel the change in the speed of the water flow will have a direct environmental impact on all downstream property owners.