



COUNCIL AGENDA: 06-17-08

ITEM: 2.16

# Memorandum

**TO:** HONORABLE MAYOR AND  
CITY COUNCIL

**FROM:** Albert Balagso

**SUBJECT:** LOS GATOS CREEK TRAIL  
REACH 5 - MASTER PLAN

**DATE:** 05-27-08

Approved

Date

6/4/08

**COUNCIL DISTRICT:** 3, 6

**SNI AREA:** Burbank/Del Monte,  
Delmas Park

## RECOMMENDATION

Approval of the Los Gatos Creek Trail Reach 5 Master Plan and adoption of a resolution incorporating environmental mitigation measures as set forth in the Mitigation Monitoring and Reporting Program for the project.

CEQA: PP06-112, Mitigated Negative Declaration

## EXECUTIVE SUMMARY

This memorandum recommends that the City Council adopt a resolution approving a trail master plan and associated environmental mitigation measures.

Los Gatos Creek Reach 5 is the final reach within the City of San Jose to be developed, and will link directly the Guadalupe River Park. This project will contribute to the Greenprint and Green Vision Goals of a 100-mile interconnected trail network.

The defined trail alignment generally follows the creek and includes an under-crossing beneath an active railway, at-grade crossings at two intersections, meanders through a future park site, and includes a short on-street alignment.

## OUTCOME

Approval of the master plan and adoption of the resolution permits the City to pursue development of construction documents upon identification and appropriation of the necessary financial resources.

## **BACKGROUND**

In 1985, the City in conjunction with the Los Gatos Creek Advisory Committee developed the Los Gatos Creek Trail Master Plan. It defined the trail system commencing at the City of Campbell boundary and concluding at the confluence with the Guadalupe River, just north of West Santa Clara Street.

On December 8, 1992, the City Council adopted the Midtown Specific Plan which defined development in the area west of Los Gatos Creek and south of West Santa Clara Street. Policy 6.1 of the plan required that an internal bicycle network within Midtown connect to the potential regional bicycle corridors whenever practical. More specifically, the plan stated that a route along Los Gatos Creek should be a Class I bike path.

In April 2000, the City Council approved the Greenprint; the City's 20-year strategic plan for development of parks, community facilities and programs. The Greenprint generally defines a 100-mile network as a primary Trail Program goal. It identifies the Los Gatos Creek Trail as one of the systems that comprise the network.

In April 2003, the Diridon/Arena Strategic Development Plan acknowledged the Los Gatos Creek Trail as an important recreational component of the area. It discussed trail development as the Fire Department Training Center transitions to parkland as well as linkage of the trail system to the Guadalupe River Park.

On October 24, 2004, the City Council authorized the City manager (10-24-04, Item 5.6) to negotiate and execute a grant agreement with the Valley Transportation Agency ("VTA") for an amount not to exceed \$2,400,000 and source a required match by negotiating and executing a \$600,000 grant agreement with the Santa Clara County Open Space Authority ("OSA").

On May 3, 2005, the City Council approved a master agreement with Callander Associates Landscape Architecture, Inc., a landscape architectural firm, for services related to development of various trail projects. On September 15, 2005, a service order was executed with the landscape architecture firm to develop the master plan and prepare environmental documents for the Los Gatos Creek Trail Reach 5.

It is estimated that design and construction of the trail system will require \$5,857,000. This figure does not include the cost of acquisition.

## **ANALYSIS**

Although a master plan was prepared in 1985 for the overall Los Gatos Creek Trail within the City's limits, significant changes since that time necessitated a new evaluation of Reach 5 of the trail. Specifically, changes in land use, property ownership, physical site characteristics, and new in-fill development have occurred since the original master plan was developed. These

items, and a more stringent regulatory environment, have impacted the feasibility of implementing the Reach 5 trail alignment as envisioned in the original master plan.

Development of a master plan is an important step in the project development process. A master plan generally identifies all potential elements of a project. It includes a description of the alignment and associated physical improvements. The planning process includes a community outreach component, a technical review of the proposed improvements, and an environmental assessment to ensure that the project has community support and can be developed.

In general, an Environmental Impact Report (EIR) is prepared when substantial evidence exists, based on the whole record, that a project may have a significant adverse effect on the environment. For the Reach 5 project, because the proposed draft alignment included an under-crossing at West Santa Clara Street, staff from the Department of Planning, Building, and Code Enforcement (PBCE) believed that there would be unavoidable impacts that could not be mitigated to a less than significant level and that there may be residual impacts as a result. Because of these anticipated environmental impacts, PBCE required that an EIR be prepared. Staff wished to proceed with the study of the under-crossing because uninterrupted trail access is a primary goal for the program and the relationship to the Guadalupe River Park suggested that future usage would be high.

Preparation of the EIR required a public scoping meeting and comment period, an evaluation of alternative alignments, and additional technical studies to assess the project's impact. One such study included an analysis of hydrological impacts to the creek channel. It was found that implementation of the West Santa Clara Street under-crossing would result in a rise in the 100 year flood elevation and would not meet criteria established by the Water Resources Protection Collaborative endorsed by the Santa Clara Valley Water District (SCVWD). The study also documented the potential for overflow and possible flooding in this area of the creek. As a result, the SCVWD indicated that it could not support the project with the West Santa Clara Street under-crossing as a component. Approximately 22 months were expended assessing potential flooding and biological resource impacts. With the SCVWD's determination, the City revised the project to avoid the West Santa Clara Street under-crossing, thereby eliminating significant environmental impacts. The revised project then qualified for a Mitigated Negative Declaration since impacts from the remaining project elements can be mitigated to less than significant levels.

The Los Gatos Creek Trail Reach 5 Master Plan defines the following trail alignment:

1. From Auzerais Avenue to West San Carlos Street, the alignment is already defined by trail improvements constructed by KB Home as part of the Monte Vista housing development. This reach of trail will open upon final inspection and acceptance by the City.
2. At West San Carlos Street, a paved under-crossing will be constructed to traverse beneath an existing railway bridge and the West San Carlos Street overpass.
3. From West San Carlos Street to South Montgomery Street, the trail will follow directly along the top of creek bank in the short-term, making use of an existing SCVWD maintenance

- road. As land uses change at the existing City Fire Department Training Center, the trail will meander further within the property and provide space for future mitigation plantings.
4. At South Montgomery Street and Park Avenue, the trail alignment will utilize the at-grade traffic signal. An existing box culvert structure beneath the intersection prevents an under-crossing from being developed either in the short or long-term.
  5. From the South Montgomery Street/Park Avenue intersection, the trail follows the west bank to West San Fernando Street and will require acquisition of one parcel and coordination with other property owners for parking impacts. Coordination with the City's Department of Transportation has occurred so that additional acquisitions associated with the Autumn Street widening project will permit development of open space and parkland along the trail.
  6. Trail users will cross West San Fernando Street at the existing traffic signal, and pedestrians will use the existing sidewalk to reach West Santa Clara Street, from which point they will enter the Guadalupe River Park. Bicyclists will use the existing Class III bike routes along South Montgomery Street and South Autumn Street to reach Guadalupe River Park.
  7. Planned development between the San Fernando Light Rail Station and West Santa Clara Street (existing surface parking lot) will include a pathway along the east bank of the creek to support access from the park to public transit.

Preparation of the Master Plan included coordination with several agencies and the community. A Technical Advisory Committee (TAC) was formed, which included City staff, as well as representatives from local agencies. State and Federal agency representatives were copied with meeting materials. The input gathered from the TAC meetings was incorporated into the plans. Community outreach for the project was completed as part of the overall outreach conducted by the City for the larger Los Gatos Creek Trail and Downtown Strategy Plan projects. The trail alignment presented in the Master Plan represents the efforts and participation of these groups. In addition, a public scoping meeting was held on September 18, 2006 to receive input on the content of the environmental analysis.

### **POLICY ALTERNATIVES**

**Alternative #:** Do Nothing

**Pros:** Requires no further investment of resources to define or develop the trail system.

**Cons:** Does not advance development of the trail system.

**Reason for not recommending:** Inconsistent with past City Council actions defining a 100 mile interconnected trail network.

### **PUBLIC OUTREACH/INTEREST**



**Criteria 1:** Requires Council action on the use of public funds equal to \$1 million or greater.

**(Required: Website Posting)**

- Criteria 2:** Adoption of a new or revised policy that may have implications for public health, safety, quality of life, or financial/economic vitality of the City. **(Required: E-mail and Website Posting)**
- Criteria 3:** Consideration of proposed changes to service delivery, programs, staffing that may have impacts to community services and have been identified by staff, Council or a Community group that requires special outreach. **(Required: E-mail, Website Posting, Community Meetings, Notice in appropriate newspapers)**

The above criteria does not apply to this recommendation, this memorandum is posted to the City's website for the June 17, 2008 City Council Agenda.

Development of the project included the following outreach:

- 1) A community meeting was scheduled on September 18, 2006 as part of the EIR process.
- 2) The Trail Program Web site has detailed alignment plans posted.
- 3) The Trail Program Web Site includes a Network Map that indicates the future Los Gatos Creek Trail alignment.

### **COORDINATION**

This project and memorandum have been coordinated with the Departments of Planning, Building and Code Enforcement, Public Works, Transportation, Police, General Services, Fire, Real Estate, and the City Attorney's Office, San José Redevelopment Agency, Council District 3 Office, and the City Manager's Budget Office.

Additionally, the following agencies had representation on the Technical Advisory Committee: Santa Clara Valley Water District, California Department of Fish and Game, Regional Water Quality Control Board, U. S. Army Corps of Engineers, Santa Clara County, U.S. Fish and Wildlife Service, Santa Clara Valley Transportation Authority, California Public Utilities Commission, San Mateo County Transit, Joint Powers Board, San Jose Water Company, and Guadalupe-Coyote Resource Conservation District.

### **FISCAL/POLICY ALIGNMENT**

This project is consistent with the Council-approved Budget Strategy Economic Recovery section and makes use of grant funding to spur construction. Additionally, the project is consistent with the Greenprint objective and Mayor's Green Vision of delivering a 100-mile Trail Network.



Environmental Impacts	Mitigation Measures	Responsibility for Compliance	Method of Compliance	Timing of Compliance
<b>Biological Resources</b>				
<p>The project would result in significant direct impacts to riparian woodland habitat.</p>	<p>1. To compensate for direct impacts to riparian resources from trail construction, the City shall implement a mitigation program that provides riparian revegetation at a 3:1 replacement ratio to compensate for direct impacts to riparian woodland of 0.18 acre.</p> <p>The revegetation plan for riparian plantings shall specify the detailed location of all plantings, the use of locally native riparian plant species (collected from Los Gatos Creek area), and identify a 10-year maintenance and monitoring program. The plan shall include monitoring of the revegetation areas a minimum of once a year. During each year of the first 5-year monitoring periods, plantings shall achieve a minimum 80% survival rate with a health rating of “good” or better for the revegetation to be deemed successful. Between years 6-10, monitoring shall show a trend of increasing native plant cover. A preliminary list of recommended plant species for revegetation is provided in Table 3 of the IS/MND. Yearly monitoring reports shall be prepared and submitted to the San Jose Planning Department and any required environmental resource agencies at the end of each monitoring year. The reports shall identify the plant survival rate, maintenance actions at the site and include photographs documenting the revegetation status. Remedial measures shall be implemented if the success criteria is not achieved in any of the monitoring years, which may include replacement plantings, increased maintenance, or changes to the irrigation regime. (See also mitigation for trees below.)</p> <p>2. For mitigation for Waters of the U.S., see mitigation below under Steelhead Trout and Chinook Salmon (last bulleted mitigation).</p>	<p>Department of Public Works, City Facilities Architectural Services Division</p>	<p>Retain qualified biologist to prepare mitigation and monitoring program. Obtain permits from agencies and incorporate riparian mitigation and monitoring program into the contract specifications and documents. Retain qualified biologist to conduct monitoring and prepare status reports. Send monitoring reports to Environmental Principal Planner.</p> <p>See below.</p>	<p>Prepare riparian mitigation and monitoring program prior to construction. Permits from regulatory agencies to be secured prior to construction. Monitor plantings for 10 years following construction.</p> <p>See below.</p>
<p>The project would result in significant indirect impacts to riparian woodland.</p>	<p>1. The City shall implement the following BMPs during all phases of construction to avoid indirect impacts to the riparian habitat:</p> <ul style="list-style-type: none"> <li>•Prepare and implement a Stormwater Pollution Prevention Plan (SWPPP).</li> </ul>	<p>Department of Public Works, City Facilities Architectural Services Division</p>	<p>Incorporate BMPs into the contract specifications and documents; submit documentation verifying compliance with identified mitigation to Environmental Principal Planner prior to project</p>	<p>Prepare SWPPP prior to construction. Implement BMPs during construction. Maintain permanent BMPs after project</p>

	<ul style="list-style-type: none"> <li>•Conduct construction activities during the dry season.</li> <li>•Divert concentrated runoff away from channel banks.</li> <li>•Minimize vegetation removal.</li> <li>•Identify with construction fencing all areas that require clearing, grading revegetation or otherwise disturbed.</li> <li>•Stabilize disturbed soils to minimize erosion and sediment input to the creek.</li> <li>•Implement erosion control measures to prevent sediment from entering the creek channel, including the use of silt fencing or fiber rolls to trap sediments.</li> <li>•Provide hydroseeding of all disturbed areas as soon as practicable after disturbance following construction.</li> <li>•Provide dewatering to manage discharge of pollutants when non-storm water and accumulated precipitation must be removed from a work location.</li> <li>•Monitor the effectiveness of the erosion control measures during the first year's rainy season and implement remedial measures (e.g., reseeding, repair of silt fencing) if sedimentation or erosion is noted.</li> <li>•Obtain all necessary permits from U.S. Army Corps of Engineers, California Department of Fish and Game, and Regional Water Quality Control Board for the trail construction within the creek bed, including consultation with NOAA Fisheries on measures to avoid/minimize impacts to steelhead and Chinook salmon during trail construction. Trail construction shall follow all measures outlined by the regulatory agencies.</li> </ul> <p>2. The City shall implement a mitigation program that provides for riparian revegetation at a 1:1 replacement ratio to compensate for indirect impacts to riparian habitat where the trail is located within 10 feet of the riparian woodland, totaling a minimum of 0.17 acre. Suitable mitigation area has been identified on City-owned land within the project area.</p> <p>3. The City shall prepare and implement a revegetation plan following the guidelines presented in the mitigation for direct impacts to riparian woodland (see also Table 3).</p>		<p>completion.</p> <p>Retain qualified biologist to prepare mitigation program; incorporate riparian mitigation program into the contract specifications and documents.</p> <p>See requirements for direct riparian impacts above.</p>	<p>completion. Regulatory agency permits to be secured prior to construction.</p> <p>Prepare mitigation program prior to construction.</p> <p>See requirements for direct riparian impacts above.</p>
<p>The project would significantly impact shaded riverine aquatic habitat (SRA) by removing approximately 250 linear feet of SRA.</p>	<p>1. To compensate for direct impacts to SRA habitat from trail construction the City shall implement a mitigation program that provides for the following:</p> <ul style="list-style-type: none"> <li>•SRA revegetation at a 1:1 replacement ratio, totaling a minimum of 250 linear feet. A total of 100 linear feet of the required 250 linear feet would be created by the undercut bank mitigation described under "Impacts to</li> </ul>	<p>Department of Public Works, City Facilities Architectural Services Division</p>	<p>Retain qualified biologist to prepare SRA mitigation program; incorporate program into the contract specifications and documents. Refer to mitigation below for undercut bank requirements.</p>	<p>Prepare mitigation program prior to construction. Refer to mitigation below for undercut bank.</p>

	<p>Fisheries” below; the additional 150 linear feet would be created elsewhere along Los Gatos Creek.</p> <ul style="list-style-type: none"> <li>•The City shall prepare and implement a revegetation plan following the guidelines presented for direct impacts to riparian woodland.</li> </ul>		<p>See requirements for direct riparian impacts above.</p>	<p>See requirements for direct riparian impacts above.</p>
<p>The project would significantly impact trees through direct removal and indirect impacts from construction activities.</p>	<p>1. All trees to be removed shall be replaced in accordance with the City’s ratios unless the replacement is part of the riparian revegetation plan identified in the mitigation for direct riparian woodland impacts.</p> <p>2. The City shall implement measures to protect trees that are to be retained during construction. To mitigate potential damage to retained trees, trees shall be safeguarded during construction through implementation of the measures below. A final report shall be submitted to the Environmental Principal Planner stating whether or not tree protection standards were successful and identifying the number and location of mitigation trees.</p> <p><u>Pre-construction</u></p> <ul style="list-style-type: none"> <li>•Barricades shall be constructed around the trunks of trees (tree protection zone) so as to prevent injury to trees making them susceptible to disease causing organisms; barricades shall be in place prior to demolitions, site grubbing or grading.</li> <li>•Prune trees to be preserved to clean the crown and to provide clearance. All pruning shall be completed or supervised by a Certified Arborist and adhere to the Best Management Practices for Pruning of the International Society of Arboriculture.</li> </ul> <p><u>During Construction</u></p> <ul style="list-style-type: none"> <li>•No grading, construction, demolition or other work shall occur within the tree protection zone. Any modifications must be approved and monitored by the consulting arborist.</li> <li>•Any root pruning required for construction purposes shall receive the prior approval of, and be supervised by, the consulting arborist.</li> </ul> <p>Supplemental irrigation shall be applied as determined by the consulting arborist.</p> <ul style="list-style-type: none"> <li>•If injury should occur to any tree during construction, the consulting arborist shall evaluate it as soon as possible so that appropriate treatments can be applied.</li> <li>•No excess soil, chemicals, debris, equipment or other materials shall be dumped or stored within the tree protection zone.</li> <li>•Any additional tree pruning needed for clearance during</li> </ul>	<p>Department of Public Works, City Facilities Architectural Services Division</p>	<p>Incorporate tree replacement plantings into contract specifications and documents.</p> <p>Incorporate tree protection measures into the contract specifications and documents. Retain certified arborist to monitor work in field. Provide final report to the Environmental Principal Planner.</p>	<p>During construction. Provide final status report to the Environmental Principal Planner on results after construction.</p>

	<p>construction must be performed or supervised by an arborist and not by construction personnel.</p> <ul style="list-style-type: none"> <li>•As trees withdraw water from soil, expansive soils may shrink within the root area. Foundations, footings, and pavements on expansive soils near trees shall be designed to withstand differential displacement.</li> </ul>			
<p>The project would result in significant impacts to steelhead trout and Chinook salmon.</p>	<p>1. To avoid construction related impacts to steelhead trout and Chinook salmon associated with channel dewatering, the following measures shall be implemented to relocate fish prior to commencement of all construction activities:</p> <ul style="list-style-type: none"> <li>•Place block nets at the upper and lower extent of the diversions to ensure that salmonids upstream and downstream do not enter the areas proposed for dewatering. Block nets shall extend across the entire wetted channel, and shall not be removed until installation of all cofferdams, bypass pipes or channels, diversion dams or other facilities designed to dewater or divert flow are completed.</li> <li>•If electrofishing techniques are utilized during fish relocation activities, at least one member of the field crew shall be familiar with NOAA Fisheries' electrofishing guidelines and have a minimum of 100 hours of field experience with electrofishing techniques.</li> <li>•Electrofishing shall not be performed if water temperatures exceed 64oF (18o Celsius), or could reasonably be expected to rise above this temperature during the activities.</li> <li>•Electrofishing shall not be utilized in areas where water conductivity is greater than 350 uS/cm. Only direct current (DC) shall be used. At least one assistant shall aid the biologist during electrofishing by netting stunned fish and other aquatic vertebrates.</li> <li>•Each electrofishing session shall start with all equipment settings (voltage, pulse width, and pulse rate) set to the minimums needed to capture fish. These settings shall be gradually increased only to the point where fish are immobilized and captured, and not allowed to exceed the specified maxima: Voltage = 100V (Initial) – 400V (Max); Pulse width= 500 uS (Initial) – 5 uS (Max); Pulse rate = 30 Hz (Initial) – 70 Hz (Max).</li> </ul>	<p>Department of Public Works, City Facilities Architectural Services Division</p>	<p>Retain a qualified biologist/fisheries expert to relocate fish. Submit report to NOAA.</p>	<p>Prior to construction. Submit report to NOAA before Nov 15 of year relocation work is completed.</p>

•Utilize a minimum of three passes with the electrofisher to ensure maximum capture probability of steelhead within the area proposed for dewatering, unless the number of fish captured in the second pass is less than 10 percent of the first pass. In that case, two passes are adequate. If steelhead are present on any pass, a minimum of 20 minutes shall separate the beginning of each pass through the project reach to allow time for fish that are not captured to become susceptible to electrofishing again.

•Hold all captured fish in water with temperatures not greater than ambient in-stream temperatures. If cooling is used, water temperatures shall be maintained not more than three degrees Celsius less than ambient in-stream temperatures. All captured fish shall be held in well-oxygenated water, with a dissolved oxygen level of not less than seven parts per million. Prior to release, the following information shall be recorded: 1) fish by species, 2) visual determination of age of steelhead, 3) steelhead injuries and fatalities by age class, 4) successfully relocated steelhead by age class for each relocation site, and 5) date/time of release of steelhead to each relocation site. Steelhead shall be subject to the minimum handling and holding times required. All captured fish shall be allowed to recover from electrofishing and other capture gear before being returned to the stream. All captured fish shall be processed and released prior to any subsequent electrofishing pass or netting effort.

•Release all captured fish upstream of the block nets to facilitate redistribution into dewatered areas following construction activities.

•In order to monitor the disturbance associated with fish relocation activities, submit a report to NOAA Fisheries personnel no later than November 15 of the year in which the work was completed. The report shall include the results of any incidental mortality that occurred during implementation of the project that included fish relocation. The report shall include: 1) information collected on each captured fish, as outlined previously, 2) other relevant information regarding fish injuries or mortalities, 3) extent of the area dewatered and duration of dewatering, and 4) water and air temperatures taken at the beginning and end of the fish relocation effort.

	<p>•Conduct a worker education program for construction employees and contractors at the project site addressing the potential for steelhead in the project area, how personnel should respond if they encounter steelhead, and the importance of protecting essential habitat features for steelhead. Employees shall be instructed regarding construction impact minimization methods.</p> <p>2. The City shall replace 100 linear feet of high quality undercut bank habitat at a ratio of 1:1, in the form of constructed habitat elements that provide cover, along the west bank of Los Gatos Creek immediately upstream of the W. San Carlos Street railroad bridge. The conceptual mitigation design is presented in Appendix B of the IS/MND and consists of large woody debris and rootwads integrated into the embankment design to replicate complex cover habitat. Rootwads and large woody debris would be placed at the toe of the embankment structure, providing cover during all flow conditions and refuge habitat under high flow conditions. Native riparian vegetation would be integrated into the design to allow for long-term development of complex cover habitat via growth of live root wads at the toe of the embankment.</p>		Retain qualified biologist to prepare the final undercut bank habitat design and incorporate into the contract specifications and documents.	Submit plans prior to construction. Complete habitat feature during construction.
Removal of trees and trimming of other vegetation along the project corridor could result in direct and indirect impacts to nesting raptors and migratory birds if they are present during construction.	Schedule construction to occur outside the nesting season for bird species, including raptors and migratory species (February through July). If it is not possible to schedule tree removal and construction to occur outside the nesting season for sensitive riparian bird species, the City shall hire a qualified biologist to conduct preconstruction nesting bird surveys. These surveys shall be conducted no more than 30 days prior to any vegetation removal or construction. If nesting sensitive bird species are observed, the qualified biologist shall determine an appropriate buffer zone around the nest, and construction within the buffer zone shall be postponed until all young have fledged, as determined by monitoring by a qualified biologist.	Department of Public Works, City Facilities Architectural Services Division	Retain a qualified biologist to conduct preconstruction surveys for nesting birds.	Surveys shall be conducted no more than 14 days prior to construction. Create buffers and postpone construction until all young have fledged as determined by the monitoring biologist. Notify the City's Environmental Principal Planner of status.
Work within the creek channel, including the removal of in-stream wetland vegetation and creek diversions, could temporarily impact western pond turtle.	1. Retain a qualified biologist immediately prior to vegetation removal or construction within the creek channel to conduct preconstruction surveys for pond turtles. If any pond turtles are observed and they do not leave the construction area on their own, the biologist shall capture and relocate the pond turtle to suitable habitat upstream of the project area. If turtles must be relocated, the biologist shall monitor the construction	Department of Public Works, City Facilities Architectural Services Division	Retain a qualified biologist to conduct preconstruction surveys for pond turtles. If turtles are found, biologist will relocate the turtles and monitor construction in the creek channel.	Surveys shall be conducted no more than 14 days prior to construction. Monitoring by biologist as specified during construction. Notify the City's

	<p>within the creek channel until all removal of vegetation and creek diversion is complete to ensure that the turtle does not return to the work area.</p> <p>2. Retain a qualified biologist to conduct employee training for all personnel involved in work within the creek channel prior to commencement of construction to educate workers on how to avoid direct impacts to the species.</p>		<p>Provide training program and show in the contract specifications and documents.</p>	<p>Environmental Principal Planner of status.</p> <p>Prior to construction.</p>
<b>Geology and Soils</b>				
<p>The project site is susceptible to potentially significant soil and geologic hazards.</p>	<p>1. The final trail shall be designed and constructed in accordance with the specific recommendations of a design-level geotechnical investigation. Prior to the issuance of a Public Works Clearance for the project, a design-level geotechnical analysis shall be prepared to the satisfaction of the Director of the Department of Public Works and include the following analysis:</p> <ul style="list-style-type: none"> <li>•Evaluation of soil liquefaction and lateral spreading potential and identification of appropriate measures to remediate these conditions.</li> <li>•Delineation of areas of slope instability and identification of appropriate mitigation, such as retaining walls, rock bolting, or other measures to remediate these conditions.</li> </ul>	<p>Department of Public Works, City Facilities Architectural Services Division</p>	<p>Incorporate geotechnical recommendations into the contract specifications and documents.</p>	<p>Prior to construction. Submit documentation verifying compliance to Environmental Principal Planner during construction.</p>
<b>Hazards and Hazardous Materials</b>				
<p>Development of the project could uncover hazardous materials during demolition, excavation, and off-hauling of soils, which represents a significant impact.</p>	<p>1. Prior to trail construction, the applicant shall arrange for site-specific soil sampling to be conducted in order to assess the presence of potential soil contamination. If results indicate the presence of hazardous materials in excess of applicable screening levels, a soil management plan shall be prepared and implemented to reduce contamination to acceptable levels, maintain the safety of construction workers, and assure proper management of contaminated materials in accordance with state and local regulatory requirements. This plan shall be subject to review and approval by the City's Environmental Compliance Division and/or the appropriate regulatory agency.</p>	<p>Department of Public Works, City Facilities Architectural Services Division</p>	<p>Retain a qualified engineer to perform soil sampling. If contamination is found, retain qualified engineer to prepare a soil management plan. Incorporate recommendations of soil management plan into the contract specifications and documents.</p>	<p>Prior to construction. Submit documentation verifying compliance with regulatory requirements to Environmental Principal Planner.</p>