



NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION

This is to inform the general public that the Watershed Conservation Authority (WCA) proposes to adopt a Mitigated Negative Declaration for the following project:

Project Title: El Encanto Azusa River Wilderness Park Master Plan

Project Description: The El Encanto Azusa River Wilderness Park Master Plan project consists of several interrelated components that would maximize the outdoor visitor experience while restoring natural habitats and increasing trail access and educational opportunities. These elements include building restoration and reuse; reconfigure/reduce parking lot; habitat and San Gabriel River bank restoration; drainage improvement; expanded bike, hillside, and pedestrian trails; "special use area" development, and new educational and interpretive displays. The Mitigated Negative Declaration identified mitigation for the following environmental factors: air quality, biological resources, cultural resources, hazards/hazardous materials, and land use and planning. All impacts would be mitigated to less than significant levels.

Project Location: The El Encanto Master Plan project site is accessed from Old San Gabriel Canyon Road (Highway 39) from the Interstate 210. The site is located in the City of Azusa just south of the Angeles National Forest and south of Morris Dam.

Public Review Dates: November 21, 2008 through December 22, 2008

The Mitigated Negative Declaration and Initial Study, as well as all referenced documents, will be available for public review at the WCA office located at: 100 N. Old San Gabriel Canyon Road, Azusa, CA 91702 between the hours of 8:00 am to 5:00 pm Monday through Friday.

The document can also be reviewed at the Azusa City Library, 729 North Dalton Avenue, Azusa, CA 91702, and at the following web address:

<http://watershedconservationauthority.org/plans/azusa.html>.

Please direct your comments to Ms. Jane Beesley at the above listed address.

The Watershed Conservation Authority (WCA) is a joint powers entity of the San Gabriel and Lower Los Angeles Rivers and Mountains Conservancy (RMC) and the Los Angeles County Flood Control District (LACFCD).

**FINAL INITIAL STUDY AND
MITIGATED NEGATIVE DECLARATION**

***EL ENCANTO AZUSA RIVER WILDERNESS PARK
MASTER PLAN***

Prepared for:

**Watershed Conservation Authority
El Encanto
100 North Old San Gabriel Canyon Road
Azusa, California 91702**

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August 23, 2009

EXECUTIVE STATEMENT AND SUMMARY RESPONSE TO COMMENTS

A. Introduction

The Azusa River Wilderness Park Vision has been jointly developed by the City of Azusa and the Watershed Conservation Authority (WCA). The Watershed Conservation Authority is a joint powers entity of the San Gabriel & Lower Los Angeles Rivers & Mountains Conservancy (RMC) and the Los Angeles County Flood Control District (LACFCD). This partnership was established to conduct joint projects and provide comprehensive programs to expand and improve the open space and recreational opportunities within the San Gabriel and Lower Los Angeles Rivers watersheds with extended benefits to flood protection, water supply, groundwater recharge, and water conservation.

The Azusa River Wilderness Park is the vision of a larger river park that would include several properties for a total of 89 acres of open space. The Park has strong public support and was identified as a priority project in the San Gabriel River Corridor Master Plan. The Watershed Conservation Authority has led planning efforts that culminated in the purchase of the El Encanto property in February, 2006. The El Encanto property would serve as the core property for the Park and the WCA has been working with the public and other stakeholders to further develop plans for larger park of 89 acres..

The Azusa River Wilderness Park is of great regional importance, because it is located at a major gateway to the Angeles National Forest. Each year millions of visitors pass by this location on their way into the mountains. On a regional scale, it is envisioned that the Azusa River Wilderness Park and the El Encanto property will connect the mountains with a multitude of projects along the San Gabriel River, the Rio Hondo, and the Los Angeles River. On a local scale, there are opportunities to connect the site to the San Gabriel River Bike Path, Fish Canyon Trail, the Forest Service Entrance Station, Roberts Creek Trail, Garcia Trail, and the Glendora Ridge Motorway.

The Master Plan was a collaborative effort involving a variety of public entities and the public. The consultant team and the WCA developed a master plan coordination and outreach strategy that included a series of meetings and interviews to obtain direction and guidance from agencies and the public. The planning team met with regulatory agencies and evaluated zoning, easement, utility, access, and land use issues, and performed an extensive evaluation of physical and biological site conditions in order to identify opportunities and constraints of potential program elements.

Exhibit J - IS, NOI, Final MND, & NOD for El Encanto Azusa River Wilderness Park

A Steering Committee was created to guide the planning process, and a Technical Advisory Committee (TAC) was created to provide professional expertise on more specific planning issues. The Steering Committee consisted of the following agencies: Los Angeles County Department of Public Works, Lower Los Angeles and San Gabriel Rivers and Mountains Conservancy (RMC), City of Azusa, U.S. Forest Services and U.S. Army Corps of Engineers. The Technical Advisory Committee included the same agencies as the Steering Committee.

The following additional agencies and entities were included in a series of meetings, field trips, and interviews: California Department of Fish and Game, California Department of Transportation, Mountains Recreation and Conservation Authority, Park Rangers, Sierra Club, California Resource Connections, City of Azusa Planning and Transportation Department, County of Los Angeles Department of Public Works, Watershed Management Division, County of Los Angeles Department of Public Works, Operations and Water Resources. These agencies and interested parties provided valuable data and input to the analysis and program development. Their early involvement and understanding of the project issues and needs were critical for plan development

Three public community meetings were held between November, 2006, and May, 2007, consisting of presentations by team members that illustrated objectives, goals, and site opportunities and constraints. Presentations were followed by workshops or subgroup discussions to build consensus on project components. The public outreach process culminated in the formulation of three conceptual program alternatives for the park site, among which, the "Outdoor Visitor Experience" was heavily favored by the public. A formal Master Plan Document was drafted that explains this concept in detail. The document is available for public review at the offices of the Watershed Conservation Authority.

B. Project Location:

The El Encanto Master Plan project site is accessed from Old San Gabriel Canyon Road (Highway 39) from the Interstate 210. The site is located in the City of Azusa just south of the Angeles National Forest and south of Morris Dam.

C. Project Elements

The El Encanto Azusa River Wilderness Park Master Plan project consists of several interrelated components that are intended to maximize the outdoor visitor experience while restoring natural habitats and increasing trail access and educational opportunities. These elements include building restoration and reuse; reconfiguration and reduction of the parking lot; habitat and San Gabriel River bank restoration; drainage improvement; expanded bike, hillside, and pedestrian trails; development of a "special use area", and new educational and interpretive displays.

D. Mitigation Measures:

The Mitigated Negative Declaration identified mitigation for the following environmental factors: air quality, biological resources, cultural resources, hazards/hazardous materials, and land use and planning. All impacts would be mitigated to less than significant levels. A table that outlines all mitigation measures and responsible parties was integrated in the Draft Mitigated Negative Declaration (pages ES-2 to ES-7).

E. Public Review

The El Encanto Azusa River Wilderness Park Master Plan Draft Initial Study/Mitigated Negative Declaration (Draft IS/MND) was circulated for public review between November 21, 2008, and December 22, 2008. During this public review period, three letters of comment were received from public agencies and one letter of comment was received from citizens represented by the Mountain Cove Homeowners Association. Letters are attached hereto as "Attachment C".

F. Summary Response to Comments

Two letters were received with entirely positive comments that reinforce and support the vision and work proposed in the Master Plan. Their support is very much appreciated and no response was deemed necessary. Two letters were partially supportive, but requested additional information and clarification regarding the physical extent of the project (Mountain Cove Homeowners Association), and design procedures and design review (Vector Control District).

1. Letter by the Mountain Cove Homeowners Association

Questions raised by the Mountain Cove Community primarily focused on whether the Master Plan and the MND contemplates trail construction on their properties or trail connections to public trail easements on their properties. In particular, reference is made to a map (figure 5.20, page 59) in the Master Plan. Another concern was that trails in proximity of their properties could increase fire hazards, vandalism, and reduction of privacy.

In responding to concerns regarding Figure 5.20 on page 59, we would like to clarify that this figure merely summarizes the result of a public outreach event where the public were asked to identify meaningful and desirable regional trail connections. The trail connections displayed on Figure 5.20 are a compilation of opportunities and only serve as the regional framework for the planning of new trail connections. The trails that are actually proposed under the Master Plan are those specifically described in the text on page 58 and are shown on Figure 5.19.

It should also be emphasized, that the planning process for the Master Plan and this Mitigated Negative Declaration were specifically limited to the geographic boundaries for the Master Plan Area displayed on Figures 1.2 and 2.1. This area does not include the Mountain Cove development and it does not include development of trails surrounding the Mountain Cove development. In addition, Mitigation Measure MM 3.9-1 requires that the WCA coordinate with private or public landowners to obtain all appropriate approvals, easements, and/or use permits prior to activities on land not owned by the WCA.

Regarding the concern that trails in proximity of their properties could increase fire hazards, vandalism, and reduction of privacy we would like to emphasize that, as neighbors, the WCA has a vested interest in reducing fire hazards and vandalism and we are sensitive to other issues that may be related to public use of trails. Nevertheless, it must be noted that the trails along the San Gabriel Canyon have existed prior to the development of the Mountain Cove community. This circumstance led to the incorporation of trail easements into the development plan and an acknowledgement by the Mountain Cove Community that there is public interest for trail access in and surrounding the Mountain Cove community. As stated above, however, the intent of the Master Plan was only to acknowledge the regional trail networks and how the Azusa River Wilderness Park could contribute towards its connectivity.

2. Letter by the Vector Control District

The comments provided by the Vector Control District are generally related to planning and inter-agency coordination regarding the El Encanto Azusa River Wilderness Park Master Plan, rather than the environmental analysis presented in the Draft IS/MND. The issue of vector control is not addressed in the Draft IS/MND because the proposed project would not exacerbate vector control issues in the area; therefore, no mitigation measures would be necessary. In response to concerns that the WCA may not adequately consult with the Vector Control District prior to project implementation, this response may serve as confirmation that the WCA will present the project design plans to the Vector Control District for review and comment prior to implementation.

In particular, the proposed project would not exacerbate vector control issues in the area. A specific intention of the El Encanto Azusa River Wilderness Park Master Plan is to restore the waterways on the project site, including the banks of the San Gabriel River, to a more natural condition. By definition, habitat restoration would facilitate the development of a more natural ecosystem, which would not include poorly drained or stagnant pools that could contribute to vector breeding.

The San Gabriel River Master Plan advises consultation with vector control agencies during the “planning and design” of river corridor projects. As

such, an appropriate time to consult with the Vector Control District is when the project is approaching the final design stage. At that time, the project details and plant palette can be evaluated for ways to optimize vector control. As stated above, the WCA will present the project design plans to the Vector Control District for review and comment prior to project implementation.

The incorporation of bioswales and/or planted drainages would be designed according to State and local standards, which would ensure that the BMPs incorporated into the project would not contribute to a vector control problem. BMPs will be designed, installed, and maintained in accordance with accepted storm water BMP standards (e.g. "California Stormwater BMP Handbooks- New Development and Redevelopment" prepared by the California Stormwater Quality Association).

The mentioned use of *Typha* spp. will be a topic for discussion when the WCA consults with the Vector Control District. If it is determined that an equally effective plant species or combination of plant species would have the same water quality results and would satisfy the Vector Control District's concerns about the potential creation of mosquito habitat, then changes to the proposed plant palette will be made, subject to budgetary constraints. There are no underground storm water treatment devices or catchments proposed in the El Encanto Azusa River Wilderness Park Master Plan.

Regarding habitat restoration, the use of *Typha* spp. will be evaluated in consultation with the Vector Control District prior to project implementation. As stated in Section 3.4 of the Draft IS/MND, the proposed habitat and river bank restoration activities would improve (i.e., create a beneficial effect) the extent and quality of habitat on the project site as well as improving the hydrological characteristics of the San Gabriel River through the project site. Therefore, the proposed project would improve the existing conditions by restoring the natural river flow and would not create areas of stagnant water. The presence of *Anopheles* spp. and *Culex* spp. is understood to be an existing condition that would not be exacerbated by the proposed project, but would likely be improved by the restoration of the river bank and drainages on-site. Additionally, access to the San Gabriel River would be improved after project implementation due to the construction of terraced overview trails near the river bank.

Finally, the proposed project would not exacerbate an existing black fly problem. As discussed above, vector control issues will be evaluated in consultation with the Vector Control District prior to project implementation. If an existing vector control problem could be reduced through the incorporation of reasonable and feasible project design features not previously considered, then the WCA and/or the design consultants will consider incorporating such features into the project design, subject to budgetary constraints.

Regarding restroom facilities, as discussed on page 17 of the Draft IS/MND, two pre-fabricated waterless restroom facilities would be brought to the site for public use and a private sanitation company would maintain the restrooms. Pre-fabricated restroom facilities must meet all applicable health and safety code requirements. The WCA is fully aware of the need to comply with all applicable California Health and Safety Codes.

G. Conclusion

It is hereby determined that no changes to the existing document are required and that comments received are adequately answered in the above summary comments and do not warrant additions or changes to the Draft Initial Study and Mitigated Negative Declaration.

Through integration of this summary response, and Appendix C (Received Comment Letters), the attached copy of the Draft Initial Study and Mitigated Negative Declaration with Appendix dated November 18, 2008, shall hereby become the Final Initial Study and Mitigated Negative Declaration.



Belinda V. Faustinos
Executive Officer



DRAFT INITIAL STUDY AND MITIGATED NEGATIVE DECLARATION

EL ENCANTO AZUSA RIVER WILDERNESS PARK MASTER PLAN

Prepared for | Watershed Conservation Authority
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November 18, 2008

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Appendix A Air Quality LST Data

Appendix B Biological Constraints Report

EXECUTIVE SUMMARY

This Executive Summary presents a brief project description and a tabular summary of the potential environmental effects of the project. The reader is referred to the full text of this Initial Study/Mitigated Negative Declaration (IS/MND), as well as the technical appendices, for a complete description and analysis of the environmental effects of the project. This IS/MND was prepared pursuant to the California Environmental Quality Act (CEQA) Guidelines. The Watershed Conservation Authority (WCA) is the Lead Agency for the IS/MND.

This IS/MND has been prepared in accordance to the El Encanto Azusa Wilderness Park Master Plan (El Encanto Master Plan). Leading up to this master plan, three public meetings were held to develop and evaluate three park alternatives. At the conclusion of this process, the public chose the Nature Experience Alternative, which is evaluated in this IS/MND.

The proposed El Encanto Master Plan (proposed project) is located in the City of Azusa within the San Gabriel Canyon and just south of the Angeles National Forest. The San Gabriel River bisects the project site. Specifically, the site is located east of the Mountain Cove residential development and southerly of Morris Dam. The project site is accessed from Old San Gabriel Canyon Road (Highway 39) from the Interstate 210.

The El Encanto Azusa River Wilderness Park Master Plan (El Encanto Master Plan) was published in October 2007. The proposed project would expand and improve the existing El Encanto Park facilities through: building restoration and reuse; habitat restoration; new educational and interpretive displays; and expanded bike, river, and hillside trails with the goal of creating a low-impact project that maximizes the outdoor, nature-based, visitor experience.

The summary provided in the Executive Summary Table shows that the proposed project would result in potentially significant impacts to the following topical issues without incorporation of mitigation measures for the following topics into the project design:

- Air Quality
- Biological Services
- Cultural Resources
- Hazards and Hazardous Materials
- Land Use and Planning

Implementation of the proposed project with incorporation of the mitigation program, would mitigate all potential impacts for these topics to less than significant levels. In addition to implementing mitigation measures, the impact analysis also considers Project Design Features (PDFs) and Standard Conditions of Approval (SCs). PDFs are design elements inherent to the project that reduce or eliminate potential impacts. SCs are based on local, state, or federal regulations or laws that are frequently required independent of CEQA review yet also serve to offset or prevent certain impacts. Because PDFs and SCs are incorporated into the project, either in the project design or as part of federal, state, or local regulations, they do not constitute mitigation measures as defined by CEQA. For clarity, PDFs and SCs are described within the mitigation program and presented within the analysis of each CEQA topic in Section 3.0.

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EXECUTIVE SUMMARY TABLE

Impact	Mitigation	Responsible Entity	Level Of Significance											
3.1 Aesthetics														
The El Encanto Master Plan is designed to create a rustic, California-style park and restore the natural character of the site. Proposed architectural upgrades and related design guidelines for all components of the proposed project are defined in the Master Plan with the objective of creating a visually appealing and cohesive project.														
3.3 Air Quality														
SC 3.3-1	<p>The WCA will comply with the South Coast Air Quality Management District (SCAQMD regulations), including Rule 402, the Nuisance Rule, and Rule 403, Fugitive Dust. To ensure that the project is in full compliance with both dust regulations and that there is no significant nuisance impact generated on the project site, the WCA will be responsible for ensuring compliance with these regulations throughout project implementation. Mandatory measures set forth by these regulations include, but are not limited to, the following:</p> <ul style="list-style-type: none"> • Sweep any dirt tracked from the project site onto public streets no less than once per day. • Particulate filters will be used on all diesel equipment. • Exposed surfaces will be watered a minimum of two time daily. If fugitive dust appears to be impacting adjacent residential land uses during times of high wind, additional watering will be conducted and/or grading activities will be halted. • All stockpiles of soil will be covered with tarps. • All trucks used to haul soil from the site will be covered with a tarp to reduce fugitive dust. 	The WCA shall place these requirements in the Contractor's bid documents and the WCA's Project Manager shall monitor the Contractor's compliance with this standard condition.	Not applicable.											
Construction of Phase I and Phase II of the proposed project could result in significant local air quality impacts to on-site sensitive receptors.	<p>MM 3.3-1 Construction of Phase I and Phase II of the proposed project shall implement the following schedule of minimum work days necessary for grading/excavation and/or export of spoil to ensure that local air quality for the on-site sensitive receptors is not significantly impacted. This shall be incorporated as part of the construction contractor's bid specifications and the WCA shall be responsible for ensuring the schedule is followed.</p> <table border="1"> <thead> <tr> <th rowspan="2">Construction Activity</th> <th colspan="2">Minimum Number of Total Days</th> </tr> <tr> <th>Phase 1</th> <th>Phase 2</th> </tr> </thead> <tbody> <tr> <td>Site Prep and/or Earthmoving</td> <td align="center">3</td> <td align="center">20</td> </tr> <tr> <td>Export of Spoil and Demolition Debris*</td> <td align="center">3 (21)</td> <td align="center">31 (17)</td> </tr> </tbody> </table> <p>*Total minimum days is followed in parenthesis by the not-to-exceed number of one-way daily trips for haul trucks assuming a 30 cubic yard truck capacity based on the LST model results. Source: BonTerra Consulting. 2007 (January). <i>Air Quality LST Data</i>. (Appendix A).</p>	Construction Activity	Minimum Number of Total Days		Phase 1	Phase 2	Site Prep and/or Earthmoving	3	20	Export of Spoil and Demolition Debris*	3 (21)	31 (17)	The WCA shall place these requirements in the Contractor's bid documents and the WCA's Project Manager shall monitor the Contractor's compliance with this standard condition.	Implementation of this mitigation measure would reduce impacts to less than significant.
Construction Activity	Minimum Number of Total Days													
	Phase 1	Phase 2												
Site Prep and/or Earthmoving	3	20												
Export of Spoil and Demolition Debris*	3 (21)	31 (17)												

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EXECUTIVE SUMMARY TABLE (Continued)

Impact	Mitigation	Responsible Entity	Level Of Significance
3.4 Biological Resources			
Proposed habitat and river bank restoration activities would improve (i.e., create a beneficial effect) the extent and quality of habitat on the project site as well as improving the hydrological characteristics of the San Gabriel River through the project site.			
SC 3.4-1	<p>Prior to the construction of any phase or component of the project that involves impacting drainages, streams, or wetlands through filling, stockpiling, conversion to a storm drain, channelization, bank stabilization, road or utility line crossings, or any other modification to a jurisdictional drainage, a jurisdictional delineation shall be conducted. Any jurisdictional impacts would require permits from the USACE, the RWQCB, and the CDFG before any development could commence. Both permanent and temporary (construction-related) impacts are regulated and would therefore trigger the need for permits. Compensatory mitigation for the loss of wetland or riparian function and values is a fundamental component of the applicable regulatory programs.</p>	<p>The WCA shall place these requirements in the Contractor's bid documents and the WCA's Project Manager shall monitor the Contractor's compliance with this standard condition.</p>	<p align="center">Not applicable.</p>
<p>Implementation of the proposed project would have the potential to impact special status plants that may be present on the site.</p>	<p>MM 3.4-1</p> <p>Prior to construction initiation, a qualified biologist will conduct focused surveys for state and/or federally listed species potentially occurring in all areas of suitable habitat within or adjacent to the proposed impact area. Surveys will be conducted at the appropriate time of year and will definitively determine the absence or the presence and location of all special status species. If present, the project design will attempt to avoid, or minimize if not possible to avoid, the impacts by adjusting the location of proposed project elements. For unavoidable impacts, a mitigation plan shall be prepared and implemented to offset such impacts.</p> <p>Any impacted special status vegetation types will be restored onsite. A re-vegetation program will be implemented in accordance with an appropriate agency approved landscape palette developed for the region on all graded areas not utilized for improvements or structures. Restoration will consist of seeding and planting containers of appropriate species. For those special status plants species that may be replanted, a pre-construction survey during the peak flowering period will be conducted by the project biologist. The limits of each plant or plant population location within the impact area will be clearly delineated with lath and brightly colored flagging. If a special status plant species is located in the impact area, the loss will be mitigated by seed and bulb collection if appropriate (depending on the growth type of the species), and re-vegetation into a suitable mitigation site in the vicinity.</p> <p>A detailed re-vegetation and special status plant restoration program will be developed and implemented and will contain the following</p>	<p>The WCA's Project Manager shall implement this measure by managing the selection and oversight of the biologist(s) hired to conduct the necessary tasks.</p>	<p>Implementation of this mitigation measure would reduce impacts to less than significant.</p>

EXECUTIVE SUMMARY TABLE (Continued)

Impact	Mitigation	Responsible Entity	Level Of Significance
	<p>items: responsibilities and qualifications of the personnel to implement and supervise the plan; site selection; site preparation and planting implementation; schedule; maintenance plan/guidelines; monitoring plan; long-term preservation; and performance standards. It is recommended that long term preservation of restored areas include a permanent open space designation in perpetuity.</p> <p>In addition, if a potentially impacted species is state or federally listed as Threatened or Endangered, the CDFG and/or the USFWS will be consulted and a permit application will be submitted prior to initiation of construction activities. The requirements of the mitigation, as set forth by the appropriate agency permit(s), shall be implemented. At a minimum, the construction period will be scheduled to avoid the breeding season of such species, year-long residents shall be relocated if feasible, and loss of habitat will be replaced at a minimum ratio of 1:1.</p>		
<p>Construction of the proposed project has the potential to impact nesting birds protected under the MBTA nesting season.</p>	<p>MM 3.4-2 To ensure compliance with the Migratory Bird Treaty Act (MBTA) and Section 3503.5 of the <i>California Fish and Game Code</i>, and to avoid any potential impacts to special status bird species that may occur in the project vicinity, construction activities shall be conducted outside the bird nesting season (March 15 to September 15) to avoid any potential disturbance of avian breeding activities.</p> <p>If vegetation removal, clearing, and/or grading for the proposed project (i.e., impacting ornamental vegetation) is conducted during the bird nesting season (March 15 to September 15), then construction will be limited in the vicinity of any active nests per the recommendations of a qualified Biologist. Three days prior to the onset of construction activities, a qualified Biologist shall survey disturbance for the presence of any active bird nests within the limits of project. If no active nests are found, no further mitigation would be required. However, any active nest found during survey efforts shall be mapped on the construction plans, and an appropriate buffer area (typically 200 feet in every direction) shall be established around any active nest. Encroachment into the buffer area shall only be allowed if the proposed activity shall not disturb the nest occupants. Construction within the buffer area may resume after a qualified Biologist has determined that fledglings have left the nest.</p>	<p>The WCA's Project Manager shall implement this measure by managing the selection and oversight of the biologist(s) hired to conduct the necessary tasks.</p>	<p>Implementation of this mitigation measure would reduce impacts to less than significant.</p>

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EXECUTIVE SUMMARY TABLE (Continued)

Impact	Mitigation	Responsible Entity	Level Of Significance
Construction of a trail has the potential to impact biological resources within the Mountain Cove Conservation Easement.	MM 3.4-3 Prior to initiation of construction activities, the WCA shall perform an engineering survey under the existing bridge structure and the area west of the Highway 39 to locate and mark the boundary of the conservation easement. The WCA shall develop a trail design and construction plan and shall consult with the California Department of Fish and Game (CDFG) to determine if the plan would impact biological resources associated with the conservation easement. If warranted and/or requested by CDFG, the WCA shall conduct appropriate biological surveys and/or construction monitoring within the impacted area, and provide appropriate mitigation to the satisfaction of CDFG to compensate for impacts.	The WCA's Project Manager shall coordinate with CDFG and shall implement this measure by managing the selection and oversight of the biologist(s) hired to conduct the necessary tasks.	Implementation of this mitigation measure would reduce impacts to less than significant.
3.5 Cultural Resources			
Grading and excavation activities have the potential to impact unknown archaeological resources that may be present.	MM 3.5-1 If archaeological resources are encountered during grading, construction activities in the area of the find shall be immediately suspended the resource must be left in place until a qualified archaeologist can examine it and determine appropriate mitigation measures.	The WCA shall place these requirements in the Contractor's bid documents and the WCA's Project Manager shall monitor the Contractor's compliance with this mitigation measure.	Implementation of this mitigation measure would reduce impacts to less than significant.
Grading and excavation activities have the potential to impact unknown paleontological resources that may be present.	MM 3.5-2 If paleontological resources are encountered during grading, construction activities in the area of the find shall be immediately suspended the resource must be left in place until a qualified paleontologist can examine it and determine appropriate mitigation measures.	The WCA shall place these requirements in the Contractor's bid documents and the WCA's Project Manager shall monitor the Contractor's compliance with this mitigation measure.	Implementation of this mitigation measure would reduce impacts to less than significant.
Grading and excavation activities have the potential to impact unknown human remains that may be present.	MM 3.5-3 If human remains are encountered during grading, construction activities in the area of the find must be immediately halted and the Los Angeles County coroner must be notified within 24 hours of the discovery (California Health and Safety Code §7050.5). If the coroner determines that the remains are not recent, the coroner shall notify the Native American Heritage Commission for consultation (Public Resources Code §5097.98). The NAHC will designate a Most Likely Descendent who will make recommendations concerning the reassignment of the remains in consultation with the lead agency and Project Archaeologist.	The WCA shall place these requirements in the Contractor's bid documents and the WCA's Project Manager shall monitor the Contractor's compliance with this mitigation measure.	Implementation of this mitigation measure would reduce impacts to less than significant.
3.6 Geology and Soils			
See SC 3.8-1 below.			

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EXECUTIVE SUMMARY TABLE (Continued)

Impact	Mitigation	Responsible Entity	Level Of Significance
3.7 Hazards and Hazardous Materials			
SC 3.7-1	Any and all transport and transfer of hazardous materials during construction, if encountered, shall be transported by a properly licensed waste hauler, who shall be in compliance with all applicable state and federal requirements, including the Department of Transportation regulations under Title 49 CFR, Caltrans, and Occupational Safety and Health Administration (OSHA) standards.	The WCA shall place these requirements in the Contractor's bid documents and the WCA's Project Manager shall monitor the Contractor's compliance with this standard condition.	Not applicable.
SC 3.7-2	Renovation and construction activities at the building complex shall be performed in compliance with all applicable federal and state regulations regarding handling and disposal of materials containing lead and/or asbestos, including Cal/OSHA and SCAQMD Rule 1403 regulations and procedures.	The WCA shall place these requirements in the Contractor's bid documents and the WCA's Project Manager shall monitor the Contractor's compliance with this standard condition.	Not applicable.
Portions of the former El Encanto Restaurant and associated structures could potentially contain asbestos-containing materials and/or lead-based paint.	MM 3.7-1 Prior to the onset of any construction work related to the exterior renovation of the former El Encanto Restaurant and associated structures, both a lead-based paint (LBP) assessment and complete asbestos survey shall be conducted. If either or both LBP or asbestos-containing materials (ACM) are present, they will be removed and appropriately licensed contractors and disposed of in accordance with all applicable regulations.	The WCA shall place these requirements in the Contractor's bid documents and the WCA's Project Manager shall monitor the Contractor's compliance with this standard condition.	Implementation of this mitigation measure would reduce impacts to less than significant.
3.8 Hydrology and Water Quality			
SC 3.8-1	Prior to initiation of any construction activities, the project applicant shall obtain coverage under the NPDES General Storm Water Permit for Storm Water Discharges Associated with Construction Activities (Water Quality Order 99-08-DWQ). The project applicant shall file a Notice of Intent, prepare a SWPPP, and submit the appropriate fees to the State Water Resources Control Board, Division of Water Quality in order to obtain coverage for construction activities. Pursuant to the permit requirements, the project applicant shall minimize construction related pollutants in the site runoff through the implementation of Best Management Practices.	The WCA shall acquire the necessary permit and the WCA's Project Manager shall monitor the Contractor's compliance with this standard condition.	Not applicable.
3.9 Land Use			
Project implementation may include development on properties not owned by the WCA.	MM 3.9-1 Prior to the initiation of any construction activities on lands not owned by the WCA, the WCA shall coordinate with that private or public landowner to obtain all appropriate approvals, easements, and/or use permits to allow project implementation on their property.	The WCA shall acquire the necessary approvals, easements, and/or use permits and the WCA's Project Manager shall monitor the Contractor's compliance.	Implementation of this mitigation measure would reduce impacts to less than significant.

Exhibit J - IS, NOI, Final MND, & NOD for El Encanto Azusa River Wilderness Park

*El Encanto Azusa River Wilderness Park Master Plan
Initial Study / Mitigated Negative Declaration*

EXECUTIVE SUMMARY TABLE (Continued)

Impact	Mitigation	Responsible Entity	Level Of Significance
Project implementation may include development within USDA Forest Service property.	MM 3.9-2 Prior to the initiation of any construction activities within the Angeles National Forest, the WCA shall coordinate with the USDA Forest Service to ensure that all planned activities are in compliance with the Angeles Forest Land Management Plan (Forest Plan) and shall obtain all appropriate approvals, easements, and/or use permits to allow project implementation.	The WCA shall acquire the necessary approvals, easements, and/or use permits, shall ensure compliance with the Forest Plan, and the WCA's Project Manager shall monitor the Contractor's compliance.	Implementation of this mitigation measure would reduce impacts to less than significant.
3.11 Noise			
SC 3.11-1	The project applicant shall ensure that the contractor limits all construction activity to between the hours of 7:00 AM and 6:00 PM Monday through Saturday, in accordance with the City of Azusa Municipal Code. No construction activities shall take place outside of these hours or on Sundays or holidays, unless emergency measures are required and approval is granted by the City.	The WCA shall place these requirements in the Contractor's bid documents and the WCA's Project Manager shall monitor the Contractor's compliance with this standard condition.	Not applicable.
3.15 Transportation/Traffic			
SC 3.15-1	The project applicant shall consult with the California Department of Transportation (Caltrans) regarding the installation of an at-grade crosswalk across Highway 39 that would connect the San Gabriel River Bike Trail to the project site and shall have received all appropriate approvals, including, but not limited to, an encroachment permit, prior to initiating any construction in the Caltrans right-of-way.	The WCA shall implement this standard condition.	Not applicable.

SECTION 1.0 INTRODUCTION

1.1 PURPOSE OF THE INITIAL STUDY

In accordance with the California Environmental Quality Act (CEQA) (Public Resources Code §21000 et seq.) and its Guidelines (California Code of Regulations §15000 et seq.), this Initial Study (IS) has been prepared as documentation for a Mitigated Negative Declaration (MND) for the construction of the El Encanto Azusa River Wilderness Park (proposed project). This IS/MND includes a description of the proposed project, location of the project site, evaluation of the potential environmental impacts, findings from the environmental review, and recommended mitigation measures to be incorporated into the proposed project to lessen or avoid impacts on the environment.

Pursuant to §15367 of the State CEQA Guidelines, the Watershed Conservation Authority (WCA) is the lead agency for the project. The lead agency is the public agency that has the principal responsibility for carrying out or approving a project. The WCA, as the lead agency, shall have the authority for project approval and adoption of the accompanying environmental documentation.

1.2 SUMMARY OF FINDINGS

Based on the environmental checklist form (see Section 3.0) prepared for the proposed project and supporting environmental analysis, the proposed project would have no impact or less than significant impacts in the following environmental impact areas:

- Aesthetics
- Agricultural Resources
- Geology and Soils
- Hydrology and Water Quality
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation/Traffic
- Utilities and Service Systems

The proposed project has the potential to have significant impacts in the following areas, unless the recommended mitigation measures for the following topics are incorporated into the project:

- Air Quality
- Biological Resources
- Cultural Resources
- Hazards and Hazardous Materials
- Land Use and Planning

According to the CEQA Guidelines, it is appropriate to prepare an IS/MND for the proposed project because with incorporation of recommended mitigation measures into the project, potentially significant environmental impacts would be eliminated or reduced to a level considered less than significant.

1.3 PROJECT APPROVAL

The proposed IS/MND has been submitted to potentially affected agencies. Pursuant to §15072 of the State CEQA Guidelines, a Notice of Intent to Adopt a Negative Declaration or Mitigated Negative Declaration has been posted at the Los Angeles County Clerk's Office and at the Azusa City Hall and distributed with the IS/MND for the review and comment. The IS/MND and associated technical reports are available for review at the addresses listed below.

Watershed Conservation Authority
El Encanto
100 North Old San Gabriel Canyon Road
Azusa, California 91702
(626) 815-1019

Azusa City Library
729 North Dalton Avenue
Azusa, CA 91702
(626) 812-5232

The electronic file can be viewed online at:
<http://watershedconservationauthority.org/plans/azusa.html>.

There will be a 30-day public review period for the IS/MND, in accordance with §15073 of the State CEQA Guidelines. In reviewing the IS/MND, the reviewer should focus on the sufficiency of the document in identifying and analyzing the potential impacts on the environment and ways in which the potentially significant effects of the proposed project are avoided or mitigated through components of the project. Comments on the analysis contained herein may be sent to the address listed below.

Ms. Jane Beesley
Watershed Conservation Authority
El Encanto
100 N. Old San Gabriel Canyon Road
Azusa, CA 91702
(626) 815-1019

Following receipt and evaluation of comments from agencies, organizations, and/or individuals, the WCA will determine whether any substantial new environmental issues have been raised. If not, or if the new issues do not provide substantial evidence that the proposed project will have a significant effect on the environment, the project and environmental documentation will be approved by the WCA.

1.4 ORGANIZATION OF THE INITIAL STUDY

The Initial Study is organized into the following sections:

Section 1 – Introduction: This section provides an introduction to the IS/MND process and a brief overview of the results of the IS analysis.

Section 2 – Environmental Setting and Project Description: This section provides a detailed description of the proposed project's physical and operational characteristics, the project location, the project objectives, and describes the existing environmental setting of the project area.

Section 3 – Environmental Checklist Form: The completed CEQA checklist form provides an overview of the potential impacts that may or may not result from proposed project implementation. The environmental checklist form also includes “mandatory findings of significance,” per CEQA requirements. This section also contains the analysis of environmental impacts identified in the environmental checklist and identifies mitigation measures that have been recommended to eliminate potential significant effects or reduce them to a level that is considered less than significant.

Section 4 – Report Preparers and Contributors: This section identifies those individuals responsible for preparing and contributing to the IS and proposed MND.

Section 5 – References: This section identifies those references used in preparation of the IS and proposed MND.

SECTION 2.0 ENVIRONMENTAL SETTING AND PROJECT DESCRIPTION

2.1 PROJECT LOCATION

The El Encanto Azusa River Wilderness Park Master Plan (proposed project) site is located near the mouth of San Gabriel Canyon within the northern portion of the City of Azusa and immediately south of the Angeles National Forest. Regional access to the site is available from the Azusa Avenue exit from Interstate 210 to Old San Gabriel Canyon Road (Highway 39). The regional location and local vicinity of the project site are depicted in Figure 2.1-1.

2.2 ENVIRONMENTAL SETTING

2.2.1 EXISTING LAND USES

The approximately 40-acre project site is bisected by the San Gabriel River (river), with the majority of park amenities proposed within the larger parcel (31 acres) on the south bank of the river. Approximately three acres of the El Encanto property on the south side of the river is currently developed, with the remaining area being vegetated hillside and floodplain open space. The developed area includes the former El Encanto Restaurant, an 11-unit mobile home park whose pads are leased, three rental residential units including an apartment unit attached to the former restaurant and a separate duplex currently housing the park ranger, and an approximately two-acre asphalt parking lot. The remaining project area parcel (8.9 acres) is located along the north bank and is currently leased for use by a private equestrian training facility.

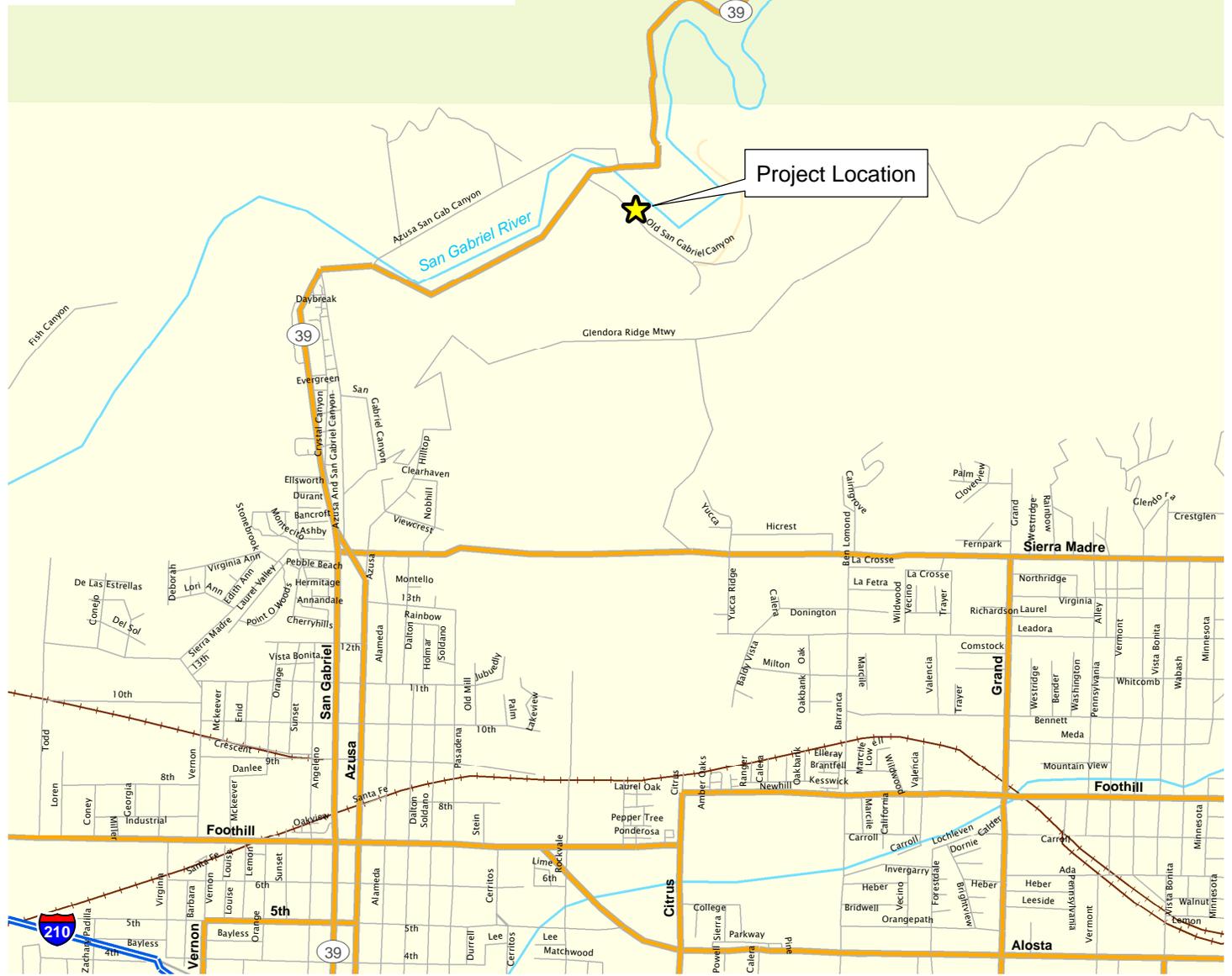
Adjacent land uses to the north include the 35-acre Rainbow Ranch equestrian facility, the historic 1.8-acre “Taylor Property”, and the former Canyon Inn Property. The Brahma Vihara Buddhist Monastery is located immediately east of the project site, and the Mountain Cove single-family gated residential community is located approximately one-half mile to the west. The bordering slopes to the south are undeveloped hillside lands and the southeastern corner of the El Encanto site abuts the Angeles National Forest. Figure 2.2-1, Project Site and Surrounding Properties, depicts the study area and adjacent land uses.

At the time of preparation of this IS/MND, the WCA, pursuant to its ownership of the land that is currently leased to the mobile home units, is in the process of negotiating the relocation of the residents in the nine occupied units in accordance with the California Code of Regulations (CCR) Title 25, the *Relocation Assistance and Real Property Acquisition Guidelines*. Two of the mobile home units were found to be abandoned at the time of purchase of the El Encanto property. Therefore, at the time of project implementation, it is anticipated that the mobile home units will be vacated.

2.2.2 SURROUNDING JURISDICTIONS

There are several jurisdictional areas and/or boundaries located in the vicinity of the project site. Federal agencies with adjacent jurisdictional areas include: the National Forest Service, which manages the Angeles National Forest lands to the north and east; and the United States Army Corps of Engineers (Corps) which manages the San Gabriel River flood control channel between the cities of Azusa and Duarte located approximately one mile downstream of the site. In addition, the Corps has a mandated interest in the management of dams and channels upstream of the site, and has jurisdiction over any changes to the stream channel at the site.

Exhibit J - IS, NOI, Final MND, & NOD for El Encanto Azusa River Wilderness Park



Regional and Local Vicinity

Figure 2.1-1

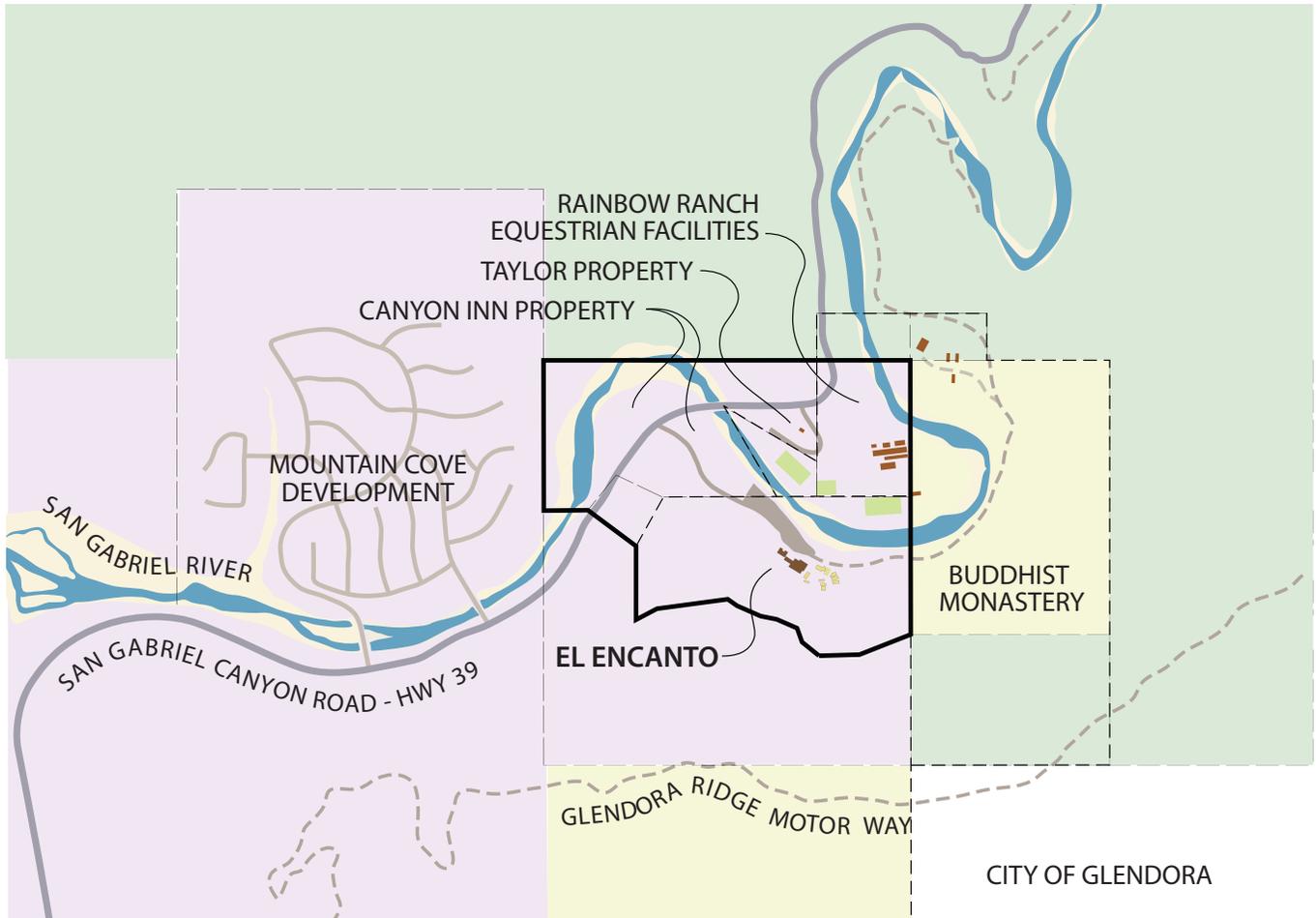
El Encanto Azusa River Wilderness Park



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Exhibit J - IS, NOI, Final MND, & NOD for El Encanto Azusa River Wilderness Park

- LOS ANGELES COUNTY (UNINCORPORATED)
- ANGELES NATIONAL FOREST
- CITY OF AZUSA



Source: WCA 2007

Project Site and Surrounding Properties

Figure 2.2-1

El Encanto Azusa River Wilderness Park



The State of California Department of Transportation (Caltrans) has jurisdiction over State Highway 39 (Old San Gabriel Canyon Road) as well as the nearby bridge crossing over the river. The California Department of Fish and Game (CDFG) has jurisdiction over the biological resources of the San Gabriel River and holds a nearby conservation easement associated with the Mountain Cove development including the river channel and banks immediately downstream of the site within the former Canyon Inn property. The State Water Resources Control Board (SWRCB) and Regional Water Quality Control Board (RWQCB) have jurisdiction over matters related to water conservation and water quality at the project site.

The San Gabriel River channel through the project site is maintained by the Los Angeles County Flood Control District (County Flood Control District). Morris Dam, the nearest upstream dam, is owned by the Metropolitan Water District (MWD), and is managed and operated by the County Flood Control District.

While the entirety of the project site is located within the City of Azusa, the eastern property boundary abuts both the City of Glendora and unincorporated area under the jurisdiction of the County of Los Angeles. In addition, a County of Los Angeles-owned and maintained dirt access road continues from the terminus of the paved access road owned by the City that traverses through the El Encanto site, which is, and connects to the County Gaging Station upstream at Morris Dam.

All three surrounding jurisdictions (i.e. City of Azusa, City of Glendora, and County of Los Angeles) were directly involved in the planning process for the Master Plan. Additional informal conversations and field visits have been held with both CDFG and Caltrans. Table 2.5-1, Required Permits and Approvals, provides details on the regulatory approvals and permits required for this project.

2.2.3 TOPOGRAPHY, HYDROLOGY, AND GEOLOGY

The most notable topographic and aesthetic feature of the El Encanto Master Plan site is the San Gabriel River that flows through a deeply incised canyon against the steep foothills of the San Gabriel Mountains. The San Gabriel River is a meandering stream, meaning that it flows in a winding pattern across a floodplain as it alternately erodes and deposits sediments along its course. Erosion is greatest on the outside of a bend, or meander, in a stream where velocity is greatest. This is referred to as a cut bank, because the erosion is cutting into the bank sediments. Conversely, sediment deposition occurs on the inner edge of a meander where the velocity is slower, forming a point bar.

The topography of the site is varied and includes the rocky alluvial river channel, a portion of a point bar, an elevated and developed terrace above the river, and the steep hillsides of the San Gabriel Mountains to the south with elevations ranging between 820 to 1,400 feet above mean sea level (msl). The southern portion of the project site constitutes a cut bank positioned opposite a sandy point bar on the northern portion of the site. There are four separate drainage channels emanating from the adjacent hillside that traverse the developed portion of the site. The locations and conditions of each of these drainages are described below in the project description. There are currently no structural improvements or channels to lead these drainages into the San Gabriel River.

Three dams within the 220-square-mile San Gabriel River Watershed regulate flows in the San Gabriel River as it passes through the project site: Cogswell, San Gabriel, and Morris. The Cogswell Dam is located along the West Fork of the San Gabriel River; the Sam Gabriel Dam, the largest of the three, is located approximately five miles upstream; and Morris Dam is located approximately two miles upstream. Approximately one mile downstream of the project site, the

Corps maintains a flood control structure with a capacity of 98,000 cubic feet per second (cfs). Stream flow of the San Gabriel River at the El Encanto property is characterized by high flood peaks of relatively short duration, substantially moderated or delayed by upstream storage (i.e., dams).

The El Encanto property is situated within the southeastern portion of the San Gabriel Mountains within the central part of the Transverse Range Geomorphic Province. This southeastern block of the San Gabriel Mountains is bounded to the north by the San Gabriel Fault and to the south by the Sierra Madre Fault Zone, and consists of a number of Cretaceous-age granitic plutons¹. The Sierra Madre Fault Zone is located less than one mile south of the project site and is poorly visible at the surface, as it is currently buried under alluvial fan deposits at the mouth of the Lower San Gabriel Canyon. More detailed plans for drainage improvements and restoration are incorporated in Section 2.3, Project Description.

2.2.4 BIOLOGICAL RESOURCES

The larger San Gabriel Canyon area supports several habitat types considered sensitive by resource agencies, primarily the CDFG, because of their scarcity and/or their being habitat for a number of state and federally-listed endangered, threatened, and rare vascular plants, as well as sensitive bird and reptile species. These habitat types include oak riparian woodland, walnut woodland, southern willow scrub, coastal sage scrub, and alluvial fan scrub.

Specific vegetation types identified on the project site include southern mixed chaparral, southern willow scrub, mule fat scrub, and coast live oak woodland. Scrub vegetation types are present along the edges of the river, while chaparral dominates the hillsides. Oak woodlands are intermixed with chaparral on the hillsides as well as stands located adjacent to the developed area along the south bank. Other areas identified on the site include open water, ruderal, disturbed, and developed.

Wildlife populations within the San Gabriel Canyon area are anticipated to be diverse and abundant due to the region's landform diversity, its relative isolation, and its location within and adjacent to the Angeles National Forest. The major canyons in the area support well-developed and diverse riparian woodlands, as well as a source of water for most, if not all, of the year. These represent stopover and over-wintering areas for a wide variety of migratory birds and essential habitat for resident species. The canyons also support seasonal and more frequent wildlife movement for wide-ranging mammals that must move over large areas. More detailed information on biological resources and survey methodology are included in the Biological Constraints Report (Appendix B).

2.3 PROJECT DESCRIPTION

2.3.1 PROJECT DEVELOPMENT HISTORY

The 40-acre El Encanto project site was purchased in 2006 by the WCA for eventual inclusion into the planned Azusa River Wilderness Park. The Azusa River Wilderness Park is envisioned as a key element of a larger river park that would include several parcels and total approximately 89 acres. Implementation of the Azusa River Wilderness Park project has been led by the City of Azusa and the WCA. The WCA is a joint powers entity of the San Gabriel and Lower Los Angeles Rivers and Mountains Conservancy (RMC) and the County Flood Control District. This larger park project is also included in the following adopted planning documents:

¹ A granitic pluton is an igneous intrusion of granite texture. An igneous intrusion is a mass of rock formed in place from molten material (magma) that was forcibly emplaced (intruded) into a body of existing rock.

the County's *San Gabriel River Corridor Master Plan* (LACDPW 2006), the City's of Azusa's *Rio San Gabriel Vision Plan* and *General Plan* (City of Azusa 2004), and the RMC's *Common Ground, from the Mountains to the Sea* (RMC 2001).

The *El Encanto Azusa River Wilderness Park Master Plan* (El Encanto Master Plan) was published in October 2007 by the WCA to describe the proposed development for the 40-acre El Encanto property. The Master Plan process involved a collaborative effort between numerous agencies, public entities, and the public. The El Encanto Master Plan outreach strategy was comprised of a series of meeting and interviews to obtain direction and guidance from the interested parties as well as determine site constraints and opportunities. A Steering Committee was created to guide the planning process and a Technical Advisory Committee (TAC) was created to provide technical expertise. The Steering Committee consisted of the following agencies: Los Angeles County Department of Public Works (LACDPW), RMC, City of Azusa, U.S. Forest Service, and the Corps. The TAC included the same agencies as the Steering Committee, with the following additional agencies and entities: CDFG, Caltrans, Mountains Recreation and Conservation Authority Park Rangers, Sierra Club, California Resource Connections, City of Azusa Planning and Transportation Department, LACDPW Watershed Management Division, and LACDPW Operations and Water Resources.

Objectives for development of the project site formulated by the Steering Committee include:

- Restore natural habitat.
- Increase connectivity to and from the Angeles National Forest, other open spaces, trails, parks and river parkways.
- Identify opportunities for multi-purpose uses.
- Provide a regional portal for research, education, and interpretive resources.
- Integrate best management practices and sustainable design elements.

A community involvement program was developed that included interviews, workshops, and focus group meetings regarding potential or desired improvements and program elements. Owners and representatives of neighboring properties were interviewed, including the owner and manager of Rainbow Ranch, the owner and manager of the former Canyon Inn site, the property manager for the Buddhist Temple, and the future managers of the Taylor House facility. Three community meetings were held between November 2006 and May 2007, which consisted of presentations by team members followed by workshops or subgroup discussions to build consensus on project components. An extensive list was then created that included all suggested project elements from the public outreach interviews and the first community meeting. This list was further expanded by input from the Steering Committee and TAC.

Concurrently, an inventory of existing site conditions was conducted, producing a set of planning requirements as well as site opportunities and constraints. The list of potential plan components was then checked against existing planning documents that include the site, such as the *San Gabriel River Corridor Master Plan* (LACDPW 2006), and the known site constraints.

Based on feedback from the participants of the first community meeting as well as the site inventory and planning document comparison, infeasible project elements were eliminated and a total of three alternatives for El Encanto site development were defined. Listed from lowest relative environmental impact to highest, these alternatives included:

- Habitat Restoration Alternative,
- Nature Experience Concept Alternative, and
- Visitor Services Alternative.

At the second community meeting, participants were introduced to each alternative and asked to comment and vote on the alternatives. The “Nature Experience” alternative was selected by the public as the preferred development plan. The final community meeting presented a more detailed Nature Experience project for the El Encanto site and further comments were solicited. The proposed Nature Experience project is described in detail below.

2.3.2 PROPOSED NATURE EXPERIENCE PROJECT

The proposed Nature Experience project developed for the El Encanto site would reduce visitor services to a minimum in exchange for increased access to natural open space in close proximity to the City. Figure 2.3-1, Nature Experience Project, depicts the proposed development of the El Encanto site. The minimization of visitor services is also intended to avoid increased traffic to and from the project site, which was considered as part of the overall environmental impact of each alternative. The proposed project aims to reduce the developed site character associated with the large parking lot that conveys the image of a service-oriented facility. The proposed project would reduce the extent of the asphalt parking lot by approximately 40 percent.

The Nature Experience alternative would also provide for habitat restoration and increased trail access. The proposed project seeks to maximize use of the existing facilities by developing necessary park services and operations within the existing footprints of these structures and implementing energy-conserving and sustainable construction practices. Overall, the goal of the proposed project is to create a rustic California-style park in a restored natural setting that provides trail access. The specific project components proposed to implement the Nature Experience alternative at the El Encanto site are described below. Please refer to the *El Encanto Azusa River Wilderness Park Master Plan*, which is available for review at the WCA offices and online at the WCA website², for further details of the proposed project.

2.3.3 PROJECT COMPONENTS

The proposed El Encanto Azusa River Wilderness Park project consists of several interrelated components that are intended to maximize the outdoor visitor experience while restoring natural habitats and increasing trail access and educational opportunities. Each of these components is described below, including the design guidelines for the project defined in the El Encanto Master Plan. Design guidelines provide an outline of style and materials for the proposed project components at the El Encanto site. The project, as presented, is consistent with RMC and WCA guidelines (please see <http://rmc.ca.gov/>). These design guidelines are intended to apply throughout the site, along trails and parking areas, and as part of the building design.

Building Renovation

History

The main El Encanto Restaurant building was originally built as a two-story residential unit with an un-reinforced masonry in a Spanish/Mediterranean style with a large stone fireplace,

² At the time of preparation of this IS/MND, the El Encanto Master Plan is available online at: <http://www.wca.ca.gov/notices/El%20Encanto/El%20Encanto%20WCA%20Master%20Plan.pdf>.



Source: WCA 2007

Nature Experience Project

Figure 2.3-1

El Encanto Azusa River Wilderness Park



clay roof tiles, and wood lintels over the windows. Later, the structure was turned into the restaurant. Increasing popularity of the restaurant necessitated multiple structural additions.

In the center of today's structure, the original home is still visible, but surrounded by the periodic structural additions in a variety of styles. Two other buildings, an apartment over a garage and a duplex, exist near the restaurant. These were both constructed to be residential units as the restaurant operations expanded.

Proposed Renovations and Courtyard

The project proposes a renovated façade in order to create a cohesive building complex as well as a unified building style. The suggested architectural style of the building façade would be that of a Columbian farm house, which relates to the style of the original home in the center of the existing structure. This style utilizes the Spanish roof tile, rough stucco texture, and porch and trellis structures. Figure 2.3-2 provides an artist's illustration of the proposed building style and additions as well as a depiction of the original residence and its placement in the existing floor plan.

Integration of the three structures would be accomplished by adding a new trellised courtyard to the area currently located in front of the garage. The new courtyard would create a new public space along the northern exterior of the buildings and would also offer some relief from the sun and allow for covered interpretive displays.

The landscape area in front of the building would be elevated to create space for the courtyard. The configuration of the exterior ADA ramps would change and allow for removal of a portion of the existing retaining walls. The walls would be waterproofed and appropriate drainage features would be added. The front side of the walls would receive a stucco finish to create continuity between buildings and other landscaping features.

In summary, the building finish and color, windows, doors, porch and trellis, and landscaping would all be updated to reflect a cohesive style that complements the original building's history as well as the future setting of the proposed park improvements. The footprint of proposed additions (such as the courtyard) and renovations would not extend beyond already disturbed areas.

No consumer services (e.g., food or gift shop) would be provided at the buildings or elsewhere on the site. Available services would be limited to restrooms, water, and trash disposal. In addition, self-guided outdoor educational/interpretive elements would be added in the immediate proximity of the buildings.

Building Uses

The total area of the buildings would be 8,480 square feet. The main building would include space for offices for park staff, restrooms, storage, and a conference/meeting room also available for public use. The office occupants would be the staff of the RMC and the WCA. The unit above the garage would also be used for operational offices for park staff. The duplex unit would continue to be used for living quarters for the park ranger.

Energy and Resource Conservation Guidelines

Sustainable and energy-saving construction materials, including local, salvaged, certified and/or recycled materials, as well as upgrades to energy systems, would be integrated into the building renovations. Building materials and methods that would contribute to energy conservation

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Early watercolor of the original residence

Existing floor plan highlighting the original residential structure



Source: WCA 2007

Proposed Building Complex Design

Figure 2.3-2

El Encanto Azusa River Wilderness Park



include efficient natural ventilation, passive solar heating, water spray radiant cooling, solar panels for water heating and electric, high-performance glazing, sunshades, insulation, low heat absorbing roofing and day lighting for interior spaces. The buildings and structures would be painted with low-emitting materials or low-VOC emissions paints and coatings.

Special Use Area

The area currently used for the mobile home community is proposed to be developed into a “special use area”. This area would be regraded and reshaped to a more natural hillside topography. Infrastructure remaining from the mobile home park, including asphalt pads and roadways, would be removed and the area planted with appropriate native vegetation.

The special use area would have multiple possible uses including picnic tables, an outdoor classroom amphitheater, restroom, trailhead, observation overlook with park shelter and interpretive displays.

The picnic tables would be metal and powder coated, and ADA picnic tables would be sited at appropriate locations. The park shelter would be located near the trailhead and would provide a shaded rest stop and opportunities for orientation, way-finding, and interpretive displays. Constructed with local rock and metal beams finished to resemble heavy timbers, and a clay tile roof, the shelter would have a rustic character and share style elements with the Columbian farmhouse style of the main buildings.

Finally, the steep access road would be removed and replaced by a new stabilized earthen road that would continue to provide access to the two potable water tanks that would remain. The special use area would be available for special group gatherings by special permit. A trailhead would lead to an observation overlook to be located either within the special use area or along a loop hiking trail that could traverse the slope above.

Parking Lot

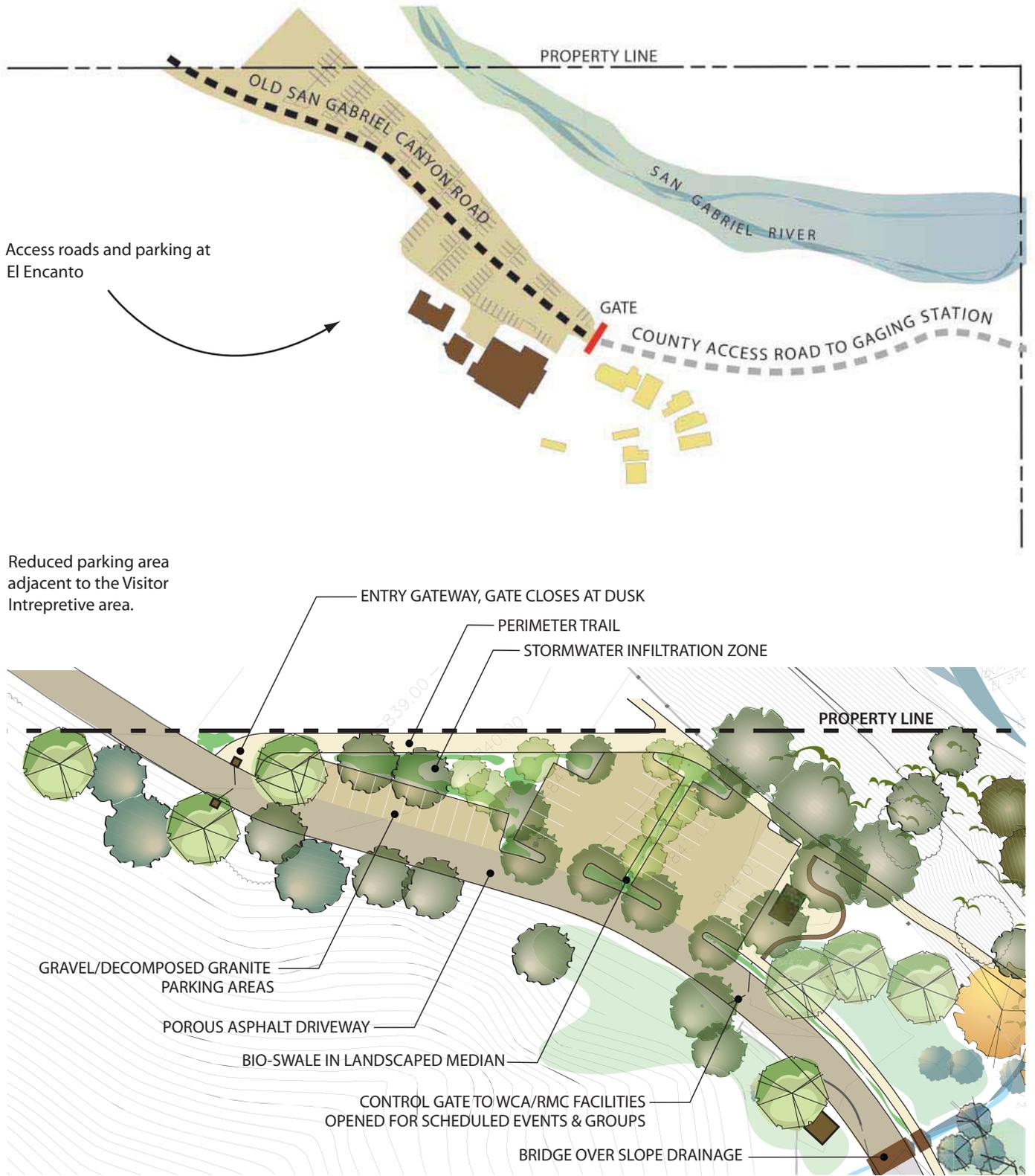
Reconfiguration of Parking

The project proposes a reduction and reconfiguration of the existing two-acre asphalt parking lot. Figure 2.3-3, Existing and Proposed Parking and Access, illustrates the changes in parking areas and site access. All of the existing asphalt lot as well as the 600-foot long and three feet high slump stone block wall would be removed. The San Gabriel River bank near the parking lot area would be regraded and existing habitat would be restored to create a more naturalized appearance. The restoration of the river bank is discussed in more detail below.

Parking areas would be reconstructed using gravel, permeable concrete and decomposed granite surfaces; ADA parking bays would be constructed of permeable concrete with integrated color compatible with native materials. The parking areas would be heavily planted and would incorporate bioswales to accept and infiltrate site drainage. These types of Best Management Practices (BMPs) manage stormwater and reduce pollutant loads.

Currently, no entry gates exist and the site is openly accessible. The proposed project would include a total of three gates that would separate parking and roadway areas from the building complex and natural areas. The river bank restoration would eliminate the center portion of the existing parking lot and would create a new visitor parking area, a river trail access point, and a staff parking area. Surrounding the renovated building complex would be a second parking area that would be used for RMC operations and special uses. The visitor parking area would allow for the unloading of visitors arriving by bus and would have temporary parking for buses and

Exhibit J - IS, NOI, Final MND, & NOD for El Encanto Azusa River Wilderness Park



Source: WCA 2007

Existing and Proposed Parking and Access

Figure 2.3-3

El Encanto Azusa River Wilderness Park



vans along the access road. The area would also allow truck deliveries to the building and to the adjacent special use area. The unpaved County access road would be gated and would be publicly accessible only to foot and bike traffic.

The new visitor parking lot would be available from dawn to dusk. Interpretive signage would be added and public access to trails leading down the newly restored river terrace (discussed below) would begin at the east end of the parking lot. An observation and interpretive shelter would be placed at the same location. As described for the special use area, the covered shelters and related signs and structures would be designed to share materials and stylistic elements with the building complex architecture.

Parking Requirements

The project area’s *General Plan* land use designation is Open Space and the site is zoned as Retreat (R), which allows for a wide variety of uses. As such, there are no set parking requirements for these land use designation. Therefore, the following minimum parking allowances have been proposed for the site based on the proposed land uses.

**TABLE 2.3-1
PROPOSED MINIMUM PARKING ALLOWANCES**

Land Use	Proposed Parking
Park Area	10 (car) spaces, 2 bus spaces
Office Space	20 spaces
Storage Space	1 space
Apartments	3 garage spaces ¹
Total	34 car spaces & 2 bus spaces
¹ If all three apartments are used this would require three covered garage spaces. If they are used for administrative purposes, the spaces can be calculated as office space. Source: WCA 2007	

Therefore, the minimum required parking for the project site would be 34 car spaces and two bus spaces as well as truck access to the special use area. The current project design provides a total of 40 visitor parking spaces, including two ADA spaces, plus the staff and special use parking areas near the building complex. However, the final parking count would be determined with the City of Azusa.

San Gabriel River Bank Improvements

One of the primary goals of the proposed project is to provide better public access to the river, while also protecting natural resources. The project proposes improved access to and restoration of the river banks but without allowing human contact with the water, not only for safety, but for downstream water quality protection as well.

Southern Bank

The goal of the proposed southern bank restoration is to remove a substantial portion of the parking lot and subsurface artificial fill and to then re-contour a portion of the bank slope to a more natural profile. This would allow for the planting of native vegetation to reflect a more natural transition from upland to riparian zones. The newly contoured slope would also allow for the construction of a river bank trail (discussed below under “trails”) that would provide access

to a small river terrace near the river's edge. This terrace would be at an approximate elevation of 820 feet above msl, and about 25 feet below the existing parking surface. This elevation would be within riparian forest vegetation area, but still far above the San Gabriel River's typical water surface level. A low cobble rock wall adjacent to the river would enclose the river terrace, and a rock-faced retaining wall would be constructed against the slope, into which seating would be integrated. Rockwall materials would be local river cobble to aesthetically blend into the surrounding stream environment. Retaining walls would only be used to protect an ADA compliant trail from erosion and to maintain a natural bank slope that would not exceed 3H:1V to allow for maximum revegetation. Wall height will vary from 2ft-6ft. Figure 2.3-4, South Bank River Trail and Terrace, depicts the proposed design of the south bank restoration from the parking lot to the river.

Northern Bank

The future use of the northern river bank parcel has proven to be a complex planning issue for the WCA due to the constrained accessibility of the northern bank from the planned facilities on the southern bank. Currently, the only way to access the northern bank of the river is by crossing the Highway 39 bridge. With short sight distances and without formal sidewalks, crossing the bridge can be hazardous for pedestrians.

Ideally, future access to the northern bank and the Taylor House property would be provided by a pedestrian bridge across the San Gabriel River. The preferred location for a bridge would be at the western edge of the El Encanto property, at the downstream limit of the parking lot and extending from the river terrace. However, due to financial and permitting constraints, this potential project component is described as optional in the Master Plan and is considered speculative at this time for the purposes of the CEQA analysis and therefore is not considered a component of the proposed project. Future CEQA documentation would be completed for any proposed changes to uses that currently exist on the northern parcel.

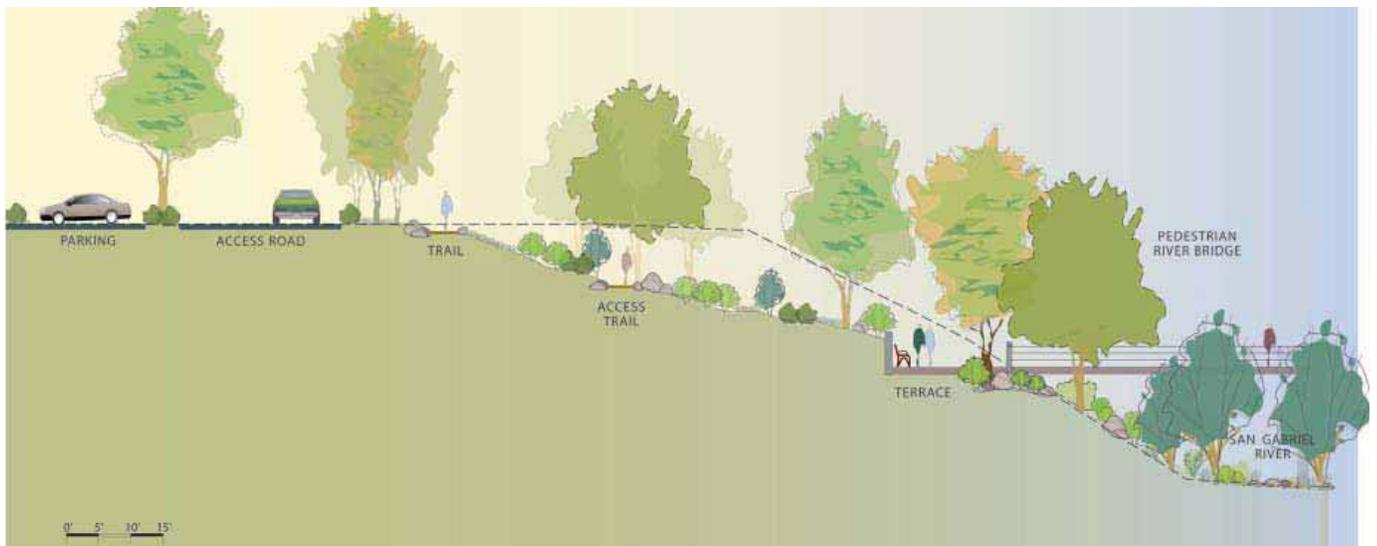
There are also existing limitations to development on the northern parcel. The northern parcel is currently leased to a private equestrian training facility, the Rainbow Ranch. Even if the lease ended, direct access to the Taylor House and surrounding area would be limited and additional site improvements, such as parking and access road improvements, would be required. Public sentiment during the stakeholder process favored a low-impact, restoration-focused approach to the northern bank.

In response to these constraints, the WCA has negotiated a land swap with the owners of the equestrian facility, who have continued interest in maintaining a horse arena on the northern parcel. The land swap would involve the equestrian facility gaining property rights to the horse arena, instead of a lease, while transferring property ownership of the entire river bank and a portion of land that would connect the bank to the Taylor House to the WCA. The advantage of this arrangement for the equestrian facility is that their continued operation is not negatively impacted by public access to the northern bank. From a restoration and conservation perspective, this arrangement would allow for a more substantial restoration of the northern bank, particularly the riparian zone, which represents the most sensitive habitat in the area. The land swap would allow for the creation of a desired linkage between the Taylor House and the river bank and a northern bank river trail.

Habitat Restoration

The proposed project includes habitat restoration activities both along the San Gabriel River banks, as mentioned above, and elsewhere throughout the project site. The focus of the project landscape and restoration design is to restore the character and function of various natural

Cross section of the south bank from the parking area to the riverside terrace



Source: WCA 2007

South Bank River Trail and Terrace

Figure 2.3-4

El Encanto Azusa River Wilderness Park

Bonterra
CONSULTING

habitats that occur on the site including riparian zones, woodland, scrub areas, and forested slopes. Riparian restoration will include native species plantings, in addition to removal of artificial fill and exotic vegetation above the 5-year flood level. Permanent trail and other improvements will be located above the 820 ft level of elevation, equivalent to the 30 year flood elevation.

The restoration plan proposes re-contouring and replanting both river banks, including primarily minor alterations to the bank slope angle. Laying back the existing overly steep slope would widen the riparian bank zone outside the boulder-filled channel. This area tends to contain finer sedimentary materials that allow growth and establishment of riparian habitat.

Particularly on the northern bank, selective removal of fill along the bank edge would increase the width of the riparian zone. Outside of the riparian zone, oak woodland and coastal sage scrub communities would be restored. Around the buildings, structures, and special use areas, larger-specimen native trees would be added. Invasive non-native vegetation and exotic trees would be removed from the project site. An on-going program to eradicate weeds and non-native grasses would also be implemented. Areas would be restored to enhance habitat values and revegetated through planting and seeding with appropriate local native species.

Drainage

A total of four existing drainages emanate from the adjacent hillside areas and flow between and around the developed portion of the site. As part of the El Encanto Master Plan process, these drainages have been labeled, from east to west, Drainages 1 through 4. Slope stability and drainage improvements are proposed based on a preliminary hydrogeologic investigation. The goal of these improvements is to provide better flow of runoff through and around the building complex and to facilitate the management and clean-up of debris. Figure 2.3-5, Proposed Drainage Improvements, illustrates the location and type of drainage improvements proposed on the site. Further investigation of the slopes and drainage patterns to the north of the structures will be performed by geotechnical consultants prior to the preparation of final plans and specifications, and all further improvements deemed necessary to ensure the safety of the building and surrounding park facilities would be implemented.

The four drainages currently drain into the San Gabriel River by flowing across the parking lot and down the artificial bank slope through incised gullies. The purpose of the drainage improvements is to rehabilitate these drainages, stabilize slopes, and restore habitat. This process would not increase flow or result in creation of new discharges into the San Gabriel River.

Drainage 1

Drainage 1 borders the mobile home area to the east. This channel has been eroded to the level of the Old San Gabriel Canyon Road, resulting in an unstable slope. The gully outlet across the road is blocked by debris and roadway materials.

The project proposes to retain this drainage channel in the current position, and to construct an Arizona crossing³ that allows stormflows and sediment to cross the road and enter the San Gabriel River channel. Slope improvements would include grading the western gully and restoring part of the drainage bank to prevent future slope collapse. Another option if re-grading the bank is not implemented is to install a low barrier or fence at the top of the slope to prevent visitor access to the gully area.

³ An Arizona crossing is a reinforced concrete dip in the road that conveys stormwater.

Schematic plan showing suggested drainage improvements.

Drainage 2
Day-light drainage, restore channel, construct Arizona crossing at roadway

Drainage 3
Construct wall and maintenance path to cut off sediment, merge with Drainage 4

Drainage 4
Day-light and restore channel, construct bridge over channel at roadway.

Drainage 1
Restore Bank and construct Arizona crossing at roadway



Source: WCA 2007

Proposed Drainage Improvements

Figure 2.3-5

El Encanto Azusa River Wilderness Park

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Drainage 2

Drainage 2 traverses the center of the mobile home community and enters into a large drain pipe under the access road to the mobile home area. This drain is currently filled with debris and does not function properly. This debris accumulates in the center of the mobile home area and excess water runs down the driveway, where it exits onto the road. The project proposes to completely re-grade and daylight (i.e., expose to the surface) this drainage and construct an Arizona crossing to allow flood waters to traverse the road.

Drainage 3

Drainage 3 currently passes between the main building and the apartment through the breezeway connecting the two structures, and is the most problematic of the four drainages. The project proposes to reroute flow and sediment from Drainage 3 into Drainage 4 and to only retain the breezeway as an emergency overflow channel. This would require construction of a small retaining structure or slough wall with adjacent service road that would also function as the new debris channel. However, this would also require use of a portion of the back patio and backyard area of the apartment and duplex units. This solution would reduce long-term maintenance activities as sediment captured behind the buildings could be removed seasonally using bobcat-type machinery.

Drainage 4

Drainage 4 passes the main building structure on the west side and currently exits onto the parking lot. Sediment also spills onto the road and parking lot. The project proposes to combine Drainage 3 and 4 into one naturalized channel traversing the existing road under a small bridge. The channel would be designed to meet the re-graded slope of the San Gabriel River. In addition, the new channel and bridge would create the planned boundary between the public parking area and the limited access parking and staging area near the building complex.

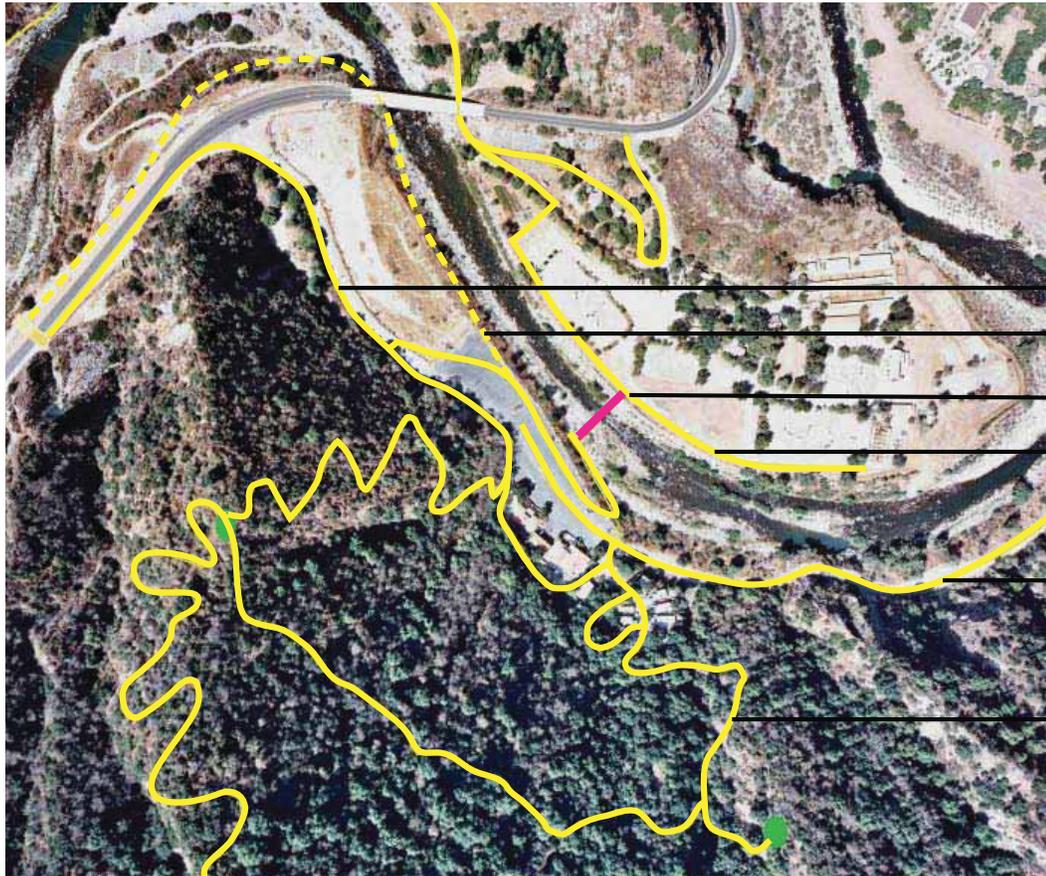
Trails

The project proposes increased access to and enhancement of the recreational trail system on and around the site. A series of new and improved trails are proposed for the project site, including a connection to the San Gabriel River Bike Trail, improving Old San Gabriel Road to the old river gaging station, a new mountain trail to the Glendora Ridge Motorway, a hillside loop trail to lookout areas above the site, a fully accessible trail to a river terrace on the southern bank and a river trail along the northern bank. These proposed trails are discussed below and illustrated on Figure 2.3-6, Proposed Trails and Trail Connections.

Bikeway Connection and Trail Extension

The San Gabriel River Bike Trail (bike trail) is a significant recreational resource of regional importance. The bike trail extends along the east side of the river from the Pacific Ocean at Seal Beach to the San Gabriel Mountains. The trail currently ends a few hundred yards from the El Encanto entrance. The proposed five-foot-wide extension of the bike trail would require crossing Highway 39; however, high speeds and short sightlines make such a crossing hazardous. Therefore, a crosswalk with button-activated flashing lights is proposed at this location.

In the eventuality of the acquisition of the former Canyon Inn property, part of the larger Azusa River Wilderness Park, a crossing under the highway bridge and connection to the restored southern bank would be constructed. However, this crossing would traverse a portion of the



Open Space Connections and Trails

- BIKEWAY CONNECTION
- ALTERNATE BIKEWAY CONNECTION
- BRIDGE CROSSING (OPTIONAL)
- NORTHERN RIVER BANK TRAIL
- TRAIL TO GAGING STATION
- HILLSIDE LOOP TRAIL

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Source: WCA 2007

Proposed Trails and Trail Connections

Figure 2.3-6

El Encanto Azusa River Wilderness Park



CDFG conservation easement and would require additional permits and approvals, which are discussed below.

In addition to connecting the San Gabriel River Bike Trail to the El Encanto site, the project proposes the extension of the trail along the Old San Gabriel Road to the gaging station below Morris Dam. This trail is proposed to be ten feet wide. Although local residents currently use this trail, it is unmarked and gated, and is therefore unlikely to be explored by the casual visitor.

Hillside Trails

Several hillside trail options are presented in the proposed project. The highest priority trail would connect the ridgeline south of the El Encanto property to the Glendora Ridge Motorway and the Garcia Trail. The Garcia Trail is an informal, steep trail that extends from the City to the ridge. The new trail would start up the slope on the west side of the building complex and reach a lookout point at the southern property boundary. It would cross land currently owned by the City of Pasadena then continue up to the ridge.

In addition to this connection, a loop trail to a second lookout point above the future special use area would be constructed. The loop trail would traverse the slope behind the building complex along the southern property boundary. The hillside trails would be a minimum of two feet wide, with clearance maintained on either side of the trail to a maximum of four feet and a height clearance of eight feet. A series of steps, landings, and water bars would be necessary in the steep sections to prevent the trail bed from eroding. Priorities for these steep trails include regular maintenance, restricting bike and equestrian access, and the immediate repair of unsafe conditions.

River Trails

As discussed above, river bank trails would be developed on both the southern and northern banks. A trail along the northerly river bank would provide access near the river for educational and interpretive activities associated with the Taylor House. On the southern bank, a new trail would extend from the parking lot to the river terrace. This trail would be ADA compliant, typically eight feet in width, with stabilized decomposed granite over a native granite base. As this trail would be heavily used, a small maintenance vehicle may be used to collect trash, maintain vegetation of the slope, and perform general repairs to the trail. The proposed project will not allow new access into the San Gabriel River or allow recreational activities within the river.

Other Park-Wide Features

Watershed Management

The proposed project emphasizes integrated watershed management and associated BMPs. Parking area BMPs would include bioswales, naturalized drainages, infiltration areas, and permeable paving. Surface runoff and trash would be handled so that pollutants do not enter the San Gabriel River. Use of BMPs would be emphasized in park regulations and interpretive signage.

Fire Protection

A single fire hydrant is connected to the existing water tanks located near the buildings. Fire prevention systems would be designed and implemented as part of each proposed component. Fire resistant materials would be used, such as stucco, clay roof tiles, and masonry. The

building chimney would have proper screening. Fire extinguishers would be located both inside and outside of the structures and readily available for use by park employees and visitors. Each employee would have direct instruction on evacuation, safe storage of materials, and safe operation of potentially flammable equipment and materials, such as mechanical gardening and other equipment and herbicides, cleaning products, etc. Vegetation near structures would be open, irrigated and maintained to prevent a “fire ladder” condition. No open fires or smoking would be allowed anywhere on the project site, and signage posting these regulations would be visible in all public areas.

Interpretive Signage and Way Finding

An interpretive trail would begin in the parking lot and continue along the top of the terrace to the eastern edge of the property. Interpretive signage would provide information about the site, such as its location, history, and natural resources. Interpretive signage about the environment would be placed along the upper parking lots to the entryway of the County road that leads to the gaging station. At the bend in the County road is an ideal place for a wildlife/bird observation point with a variety of interpretive elements.

Way-finding signage would inform the visitors about the site layout and amenities. At kiosks and trailheads, park rules and interpretive signage would also be combined in an educational presentation and be located in areas where people would naturally stop or pause with directional or observational questions. Each trailhead would have signage that provides information regarding trail distance, ranking of difficulty, and the locations of specific features and amenities to be found along the trail.

Signage displays would also emphasize the site restorations efforts. Additional interpretive elements could be integrated into paving surfaces, wall, and site furnishing like trash receptacles. These could include metal inlays of images and tracks of animals whose habitats have been restored. Other inlays, wall impressions, or small illustrative signs could display the food and shelter created through restoration.

Benches and Rest Stops

Areas where visitors wait for a group member are ideal locations for benches, including trailheads, in front of distinctive elements such as the buildings, and also at the far edge of the site and the beginning of the County road. Seating would be designed to blend into the site and include split logs and large flat boulders along trails and informal areas. Rock benches would be incorporated into the river terrace retaining wall and into the park shelters. These waiting areas and rest stops would ideally be located near the most scenic views.

Trash Cans and Dumpsters

Trash containers and dumpsters would be ADA compliant as well as bear and animal resistant. The trash containers could incorporate interpretive graphics and would have a forest brown color. Dumpsters would be located behind enclosures. A trash enclosure for dumpsters to be used at the building complex would be located in the maintenance area near the current duplex unit.

Drinking Fountains and Water Spigots

Drinking fountains would be constructed with a river rock base, have backflow protection, and would be ADA compliant. Water from drinking fountains and water spigots would drain into gravel basins.

Restrooms

Two pre-fabricated waterless restroom facilities would be brought to the site for public use. These would be located near the parking lot and in the special use area. A private sanitation company would maintain the restrooms. No new septic tanks or connection to public sewer service would be necessary for the public-use restroom facilities. The restrooms would be screened with walled enclosures that integrate into the park environment. The enclosures would be built with a combination of stone and stucco walls with clay roof tiles that match the other buildings.

Gates and Fencing

Gates and fencing would be minimal, low-profile, and have an open, rustic character reflecting the mountain environment and a park service aesthetic. The entry gate would consist of rock pilasters with metal swing gates. Pilasters would be asymmetrical, constructed of local stone, with a rustic lantern mounted on one and the park entry sign on the other. Two additional metal swing gates would be sited to control traffic. One would be located just beyond the main public parking area. The second would be located at the entrance to the Old San Gabriel Canyon Road trail to the gaging station. In areas where access should be limited, wood lodge pole fencing that matches the fencing along the City's reach of the San Gabriel River Bikeway would be used.

Walls

Walls would reflect the natural environment and round river boulders would be featured in walls supporting the river terrace and river trails. Adjacent to the buildings, Spanish/Mediterranean stucco would be used. The existing slump stone retaining walls would be waterproofed and refinished with stucco to match the new architectural façade.

Surfacing and Paving

Permeable surfaces would be used throughout the site. Paving near the buildings and from the parking areas to the structures would be ADA compliant. Hardscape paving options include:

- Hardened decomposed granite as trail bed material;
- Porous concrete for ADA parking bays;
- Porous asphalt along Old San Gabriel Canyon Road;
- Pavers on paths near buildings;
- Flagstone paving at overlooks.

Softscape surface options include:

- Mulch;
- Gravel;
- Decomposed granite;
- Native soil trail bed;
- Grasses, wildflowers, and ground cover plantings (only native plants shall be included).

Lighting

There are currently five street lights illuminating the parking lot, with remnants of older light fixtures along the parking lot wall. The parking lot lights are currently turned on overnight for public safety purposes. With implementation of the proposed project, there would be no additional lighting installed.

Utilities and Other Infrastructure

The El Encanto property has its own water supply from a well on the northern parcel along the river bank. The water runs through a pipe under the river, and is pumped to the set of water tanks located just above the mobile home park. The water is chlorinated and tested daily. There are currently five potable water tanks on the project site, two of which are operable. The three unused tanks would be removed. The structures on the project site are not connected to the City of Azusa sewer system and rely on the existing set of septic tanks and leach fields. Any new toilets installed in the renovated building complex would be low-flow toilets. Electrical service to the site is provided by Southern California Edison (SCE) via a series of overhead lines extending from Highway 39 to the site structures and lights. Figure 2.3-7, Existing Utilities, depicts the locations of existing water and sewer utilities.

2.4 CONSTRUCTION

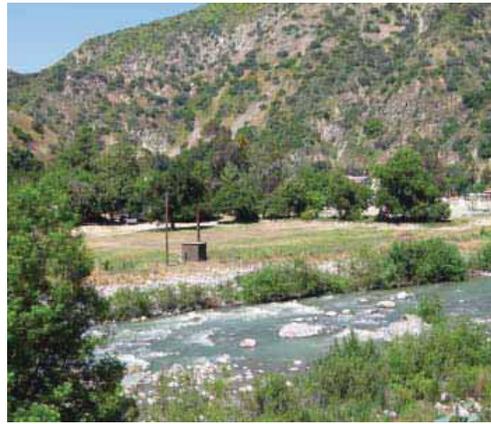
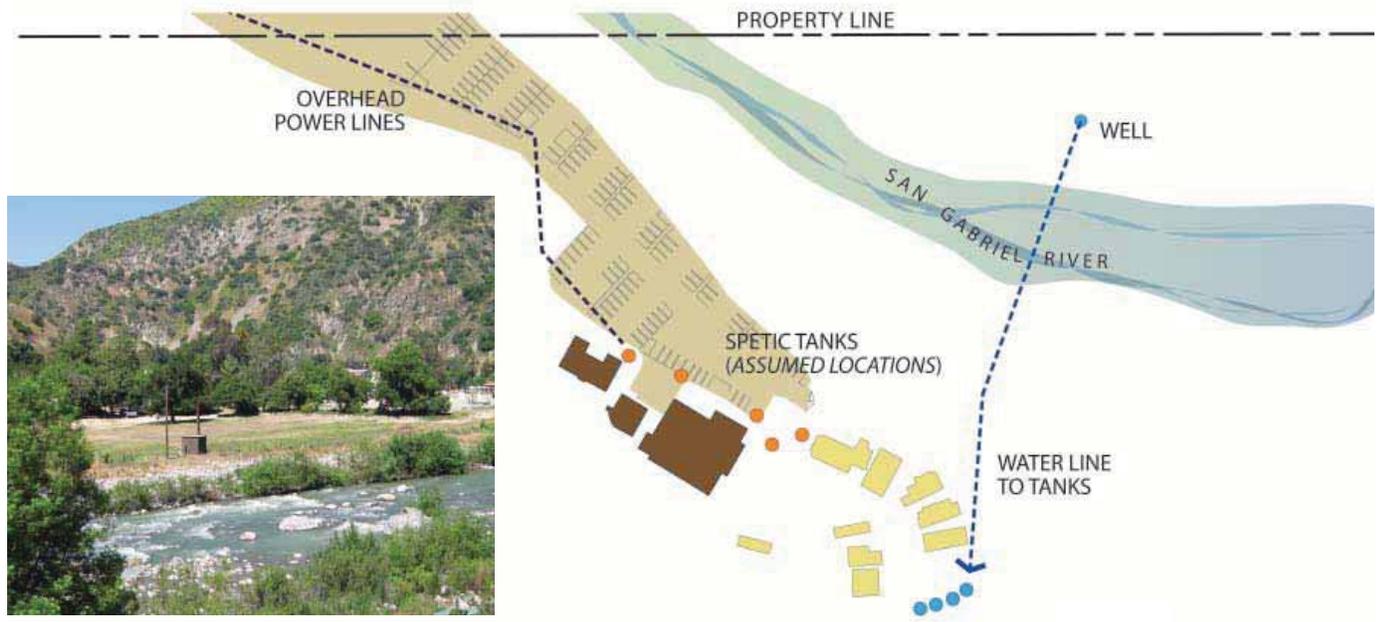
2.4.1 PHASING

The Azusa River Wilderness Park components would be constructed in three phases over a 12-year period. Table 2.4-1 summarizes the major tasks proposed for each phase. A more detailed description of the construction phasing can be found in Appendix B6 of the El Encanto Master Plan.

**TABLE 2.4-1
CONSTRUCTION PHASING SUMMARY**

Phase	Summary of Proposed Tasks
I	<ul style="list-style-type: none"> • Develop Special Use Area including Drainage Improvements • Initiate Building Renovations (Including Back Terrace) • Infrastructure and Structural Improvements • Install Interpretive/Education Elements • Install Entry Gates • Initiate Hillside Trail Development
II	<ul style="list-style-type: none"> • Reconfigure Parking Lot • Building Renovations (Façade Upgrade and Trellised Courtyard) • Infrastructure and Structural Improvements • Stormwater Management BMPs • River Terrace • River Trails on South and North Banks • Initiate Habitat Restoration • Connection to San Gabriel River Bike Path (across Highway 39) • Continue Hillside Trail Development • Rainbow Ranch Land Swap
III	<ul style="list-style-type: none"> • Complete Habitat Restoration • Complete Hillside Trail Development • Connection to San Gabriel River Bike Path (below bridge on Highway 39 if alternative crosswalk in Phase II not implemented)
Source: WCA October 2007	

Exhibit J - IS, NOI, Final MND, & NOD for El Encanto Azusa River Wilderness Park



Water well on far side of river

Water tanks above mobile home park

Existing utilities map

Source: WCA 2007

Existing Utilities

Figure 2.3-7

El Encanto Azusa River Wilderness Park



2.4.2 GRADING AND HAULING

As shown in Table 2.4-1, the largest portion of project implementation would occur in Phase II. Grading would be limited to development of the special use area in Phase I and the parking lot reconfiguration in Phase II.

The mobile home park occupies approximately one acre total, of which approximately 0.75 acre would be disturbed for grading associated with development of the special use area. The estimated 600 cubic yards (cy) of earthmoving would be balanced within this portion of the site.

The Phase II parking lot and south river bank restoration work area is a total of approximately 2.7 acres, of which 1.9 acres is occupied by the asphalt lot. This project component would involve approximately 14,796 cy of earthmoving (10,101 cy of cut and 4,695 cy of fill). The balance, approximately 5,406 cy including an estimated 350 cy of asphalt, would be exported as inert materials and disposed at a permitted landfill facility.

Implementation of the trail system would involve limited grading, largely related to the bikeway extensions. These extensions would be five feet wide and graded to a depth adequate to create a stable subbase with a permeable asphalt finish. The hillside trails would be constructed using hand tools and involve minimal surface disturbance, mostly related to grubbing and vegetation removal.

2.5 PERMITS AND APPROVALS

This IS/MND is intended to serve as the primary environmental document for all actions associated with the proposed project, including all discretionary approvals from other agencies requested or required to implement the project. Table 2.5-1 lists other agencies with discretionary authority over the proposed project and the anticipated permits and/or approvals from these agencies that would be required.

**TABLE 2.5-1
REQUIRED PERMITS AND APPROVALS**

Agency	Approval Required
Watershed Conservation Authority	Approval/Certification of Mitigated Negative Declaration
Watershed Conservation Authority	Approval of El Encanto Azusa River Wilderness Master Plan
California Department of Fish and Game	Section 1603 Permit (Streambed Alteration Agreement)
Regional Water Quality Control Board	Section 401 Certification
U.S. Army Corps of Engineers	Section 404 Permit
California Department of Transportation District 7	Encroachment Permit for SR-39 Crossing

SECTION 3.0 ENVIRONMENTAL CHECKLIST FORM

This section includes the completed environmental checklist form. The checklist form is used to assist in evaluating the potential environmental impacts of the proposed project. The checklist form identifies whether the proposed project is expected to have potential significant impacts. Substantiation and clarification for each checklist response is provided below each environmental topic.

1. Project title: El Encanto Azusa River Wilderness Park
2. Lead agency name and address: Watershed Conservation Authority
El Encanto
100 N. Old San Gabriel Canyon Road
Azusa, CA 91702
3. Contact person and phone number: Ms. Jane Beesley, Project Manager
(626) 815-1019
4. Project Location: Near the mouth of San Gabriel Canyon in the northeast corner of the City of Azusa immediately south of the Angeles National Forest.
5. Project sponsor's name and address: Lynne Dwyer
BlueGreen Open Space Planning and Design
570 W. Avenue 26, Suite 700
Los Angeles, CA 90065
(323) 225-1221
6. General Plan designation: Recreation/Open Space
7. Zoning: R (Retreat)

8. Description of Project:

The proposed El Encanto Azusa River Wilderness Park project consists of several interrelated components that would maximize the outdoor visitor experience while restoring natural habitats and increasing trail access and educational opportunities. These elements include building restoration and reuse; habitat and San Gabriel River bank restoration; expanded bike, hillside, and pedestrian trails; "special use area" development, and new educational and interpretive displays.

9. Surrounding land uses and setting:

North Old San Gabriel Canyon Road runs in a southeast direction, roughly parallel to the San Gabriel River, and eventually divides the north and south project areas. The Mountain Cove residential community is approximately 0.5 miles northwesterly of the site, the Rainbow Canyon Ranch equestrian facility is located immediately north, a Buddhist Temple lies immediately to the east, and natural, forested slope lie to the south.

10. Other public agencies whose approval is required:

California Department of Fish and Game, U.S. Army Corps of Engineers, Regional Water Quality Control Board, Caltrans.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

- | | | |
|---|---|---|
| <input type="checkbox"/> Aesthetic/Visual | <input type="checkbox"/> Agricultural Resources | <input checked="" type="checkbox"/> Air Quality |
| <input checked="" type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural Resources | <input type="checkbox"/> Geology/Soils |
| <input checked="" type="checkbox"/> Hazards & Hazardous Materials | <input type="checkbox"/> Hydrology/Water Quality | <input checked="" type="checkbox"/> Land Use/Planning |
| <input type="checkbox"/> Mineral Resources | <input type="checkbox"/> Noise | <input type="checkbox"/> Population/Housing |
| <input type="checkbox"/> Public Services | <input type="checkbox"/> Recreation | <input type="checkbox"/> Transportation/Traffic |
| <input type="checkbox"/> Utilities/Service Systems | <input type="checkbox"/> Mandatory Findings of Significance | |

DETERMINATION:

On the basis of this initial evaluation:

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

Belinda V Faustinos
Signature of Lead Agency Representative

BELINDA V. FAUSTINOS
Printed name

11/17/08
Date

Waterbird Conservation Authority
Agency

ENVIRONMENTAL ASSESSMENT

3.1	<u>AESTHETICS</u>	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
Would the project:					
a)	Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c)	Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3.1.1 AESTHETICS ANALYSIS

a,c) **Less Than Significant Impact.** The most notable feature of the project site is the scenic natural setting composed of the San Gabriel River flowing through the site against the steep hillsides of the San Gabriel Mountain foothills. The site is itself considered to represent a scenic vista.

As described in detail in Section 2.3, Project Description, the overriding goal of the proposed project design is to restore the natural character of the site and maximize the outdoor visitor experience through the restoration of native habitats and the San Gabriel River banks, increased trail and open space access, parking lot reduction, and using an architectural style (Spanish/Mediterranean) in the renovated building complex and other structures throughout the site to project the image of a rustic, California-style park. The El Encanto Master Plan includes design guidelines that provide an outline of style and materials to be used for all components at the site to ensure a visually cohesive design. Additionally, the proposed components and design details have been developed with extensive consideration of public and agency feedback on the site’s development.

During construction, the visual character of the project site would be temporarily affected by construction activities. Residents and RMC/WRC employees on the site as well as visitors would have temporary views of construction equipment staging and operations such as parking lot demolition, grading, and façade renovations. However, construction activities would be short-term and would ultimately result in beneficial changes to the scenic character of the park.

Therefore, implementation of the proposed project would result in less than significant impacts related to changes to a scenic vista, and the proposed project would be considered to have a long-term beneficial impact to the visual quality of the site.

b) **Less than Significant Impact.** Pursuant to the California Scenic Highway Program, Highway 39 is an eligible scenic highway (Caltrans 2008). There are no officially-designated State scenic highways in the project vicinity. The project site is

located immediately east of Highway 39 and portions of the site are within its viewshed.

As discussed above under “a”, the proposed project would result in beneficial impacts to the long-term scenic quality of the site. Short-term views would be adversely affected by construction activity; however, views of construction activity would be of relatively short duration and temporary. Therefore, the proposed project would result in less than significant impacts related to changes to scenic resources within the viewshed of a State scenic highway.

- d) **No Impact.** The proposed project would not introduce new sources of light or glare, either during construction or operation. All construction activities would be performed during the day, and would not require supplemental lighting.

There are currently five light standards illuminating the parking lot, which are left on overnight for public safety purposes. The reconfigured parking lot would include similarly appropriate lighting for safety and security. However, because the El Encanto Park would operate between dawn and dusk, additional lighting across the site would not be necessary. Regarding sources of glare, the proposed materials to be used for the various site components are largely composed of wood, stone, cement/mortar, and other materials appropriate for the intended naturalized setting of the park that do not reflect light. The renovations to the building façade do not propose new or larger windows, and the renovation also includes a large trellised courtyard that would shade a large portion of the building’s front. Therefore, the amount of glare produced by the building complex would be similar or reduced from the existing condition.

Therefore, the proposed project would not create any new sources of substantial light or glare that would adversely affect day or nighttime views in the area and there would be no impact.

3.1.2 MITIGATION PROGRAM

Project Design Features

- The El Encanto Master Plan is designed to create a rustic, California-style park and restore the natural character of the site. Proposed architectural upgrades and related design guidelines for all components of the proposed project are defined in the Master Plan with the objective of creating a visually appealing and cohesive project.

Standard Conditions of Approval

None

Mitigation Measures

There are no significant impacts; therefore no mitigation measures are required.

Exhibit J - IS, NOI, Final MND, & NOD for El Encanto Azusa River Wilderness Park

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3.2	<u>AGRICULTURAL RESOURCES</u>	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
Would the project:					
a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c)	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.2.1 AGRICULTURAL RESOURCES ANALYSIS

- a) **No Impact.** There are no agricultural activities on or near the project site. The proposed project would not convert farmland to non-agricultural uses and there would be no impact.
- b) **No Impact.** The project site is zoned “Retreat”, consistent with the current and proposed uses, and, therefore, would not conflict with agricultural zoning. The project site is not covered by a Williamson Act contract. There would be no impact.
- c) **No Impact.** There are no agricultural activities or lands in the project vicinity. Additionally, the proposed project would maintain some of the same land uses (i.e., open space and recreation) as are currently offered at the site. Therefore, implementation of the project would not indirectly impact farmland.

3.2.2 MITIGATION PROGRAM

Project Design Features

None

Standard Conditions of Approval

None

Mitigation Measures

There are no significant impacts; therefore no mitigation measures are required.

Exhibit J - IS, NOI, Final MND, & NOD for El Encanto Azusa River Wilderness Park

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3.3 AIR QUALITY	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3.3.1 AIR QUALITY ANALYSIS

The proposed project is located in the South Coast Air Basin (SCAB) and is within the jurisdiction of the South Coast Air Quality Management District (SCAQMD) and the California Air Resources Board (CARB). Other important agencies in the air quality management of the basin include the U.S. Environmental Protection Agency (EPA) and the Southern California Association of Governments (SCAG). The U.S. EPA implements the provisions of the Federal Clean Air Act (CAA).

SCAQMD and SCAG, in coordination with local governments and the private sector, have developed the Air Quality Management Plan (AQMP) for the air basin. The AQMP is the most important air management document for the basin because it provides the blueprint for meeting state and federal ambient air quality standards.

a) No Impact. The South Coast AQMP is the air quality plan applicable to the proposed project. Under the AQMP, local governments are responsible for implementing the transportation and land-use measures identified in the AQMP. For this reason, 34 cities within the San Gabriel Valley agreed to participate in the preparation of a regional air-quality plan. A proposed project is considered to be consistent with the plan if it furthers one or more policies and does not obstruct implementation of other policies. The plan identifies two key indicators of consistency:

- (1) Whether the project will result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP (except as provided for carbon monoxide [CO] in Section 9.4 for relocating CO hot spots).
- (2) Whether the project will exceed the assumptions in the AQMP in 2010 or increments based on the year of project buildout and phase.

The results of the air quality analysis, described further below under “b”, indicate that the emissions generated by the proposed project would not exceed the

significance thresholds for any pollutants, with the incorporation of the mitigation program. Therefore, the proposed project's emissions would not increase the frequency or severity of existing SCAB air quality violations associated with mandated compliance with federal and state rules and regulations and there would be a less than significant impact.

b,d) Less Than Significant With Mitigation. Under federal law, the SCAB has been designated by the EPA as a non-attainment area for ozone and suspended particulates. Each of these pollutants impact the health of the Basin population through short-term acute exposure and long term chronic impacts. The SCAB was recently redesignated to be in attainment for carbon monoxide and has met the federal nitrogen dioxide standards for several years.

The SCAQMD has divided the SCAB into 38 air-monitoring areas with a designated ambient air monitoring station representative of each area. The project site is located in sub-area 9 (East San Gabriel Valley) represented by air quality data measured at the Azusa Monitoring Station, which is located at 803 N. Loren Avenue, in the City of Azusa. Carbon monoxide (CO), nitrous oxide (NO₂), ozone (O₃), and particulate matter (PM₁₀ and PM_{2.5}) conditions are measured at the Azusa Station.

The monitoring data show that the County of Los Angeles is most greatly impacted by O₃. In 2006 (the most recent year for which data are available), the SCAB experienced 102 days exceeding the state 1-hour standard, 130 days exceeding the state 8-hour standard, and 85 days exceeding the national 8-hour standard. PM₁₀ is the second major contributing pollutant to air quality in the County. CO is considered a third pollutant of concern but to a much lesser extent having not exceeded the national standard since 1990.

Air quality impacts are usually divided into short-term construction and long-term operational impacts. Construction of the proposed project would result in a short-term and temporary increase in emissions, which are quantified below. Construction emissions due to fugitive dust and equipment emissions from internal combustion engines would result from demolition, grading, export of demolition waste and spoil, grubbing and vegetation removal, exterior building renovations, and construction and/or installation of shelters, benches, walls, signage, and other proposed features. As with the current condition, vehicle trips would be the primary source of operational emissions. As discussed in detail in Section 3.15.1, Transportation/Traffic, implementation of the proposed project would not result in a long-term increase in vehicles at the project because of the reduction in permanent residents on the project site, the minimization of visitor services, and the fact that the site is already utilized as a public recreation resource with associated vehicle trips. Therefore, the proposed project would result in a negligible change to long-term operational emissions.

Construction of the proposed project has been divided into three phases (Phase I, Phase II, and Phase III) implemented over an approximate 12-year period. The proposed construction efforts for each phase are summarized in Table 2.4-1 in Section 2.0, Environmental Setting and Project Description. The construction emissions for Phase I and Phase II have been estimated and are summarized below. Further, because these phases would occur sequentially in time, they have been treated as separate "projects" for the purposes of the air quality analysis. Emissions for Phase III were not estimated because this phase would result in only

negligible emissions related to habitat restoration activities and completion of hillside trail development. The majority of construction emissions would occur in Phase II, largely from grading and export of asphalt and excavated fill and soil (spoil) related to the approximately 2.73-acre parking lot reconfiguration and river bank restoration. An estimated 5,406 cubic yards (including 350 cy of asphalt) of material would be exported for disposal during this phase. Limited construction emissions would occur during Phase I, largely related to the demolition and grading activities associated with development of the special use area. Approximately 600 cy of earthwork would occur and would be balanced on site, requiring no export of soil. However, demolition materials from the mobile homes and asphalt pads would be exported for disposal.

Construction spoil and demolition debris would be loaded into haul trucks and transferred to a landfill accepting inert waste in the project vicinity. As discussed in Section 3.16.1, Utilities and Service Systems, two nearest such facilities with known permitted capacity to accept the project's solid waste include Peck Road Gravel Pit in the City of Monrovia and Sunshine Canyon Landfill County Extension in the City of Sylmar. However, there are several landfills within approximately 40 miles of the project site that could accept the project's waste during construction; therefore, the air quality analysis assumed a worst-case scenario of disposal at a site located 40 miles from the project site for all truck trips.

The SCAQMD adopted the CEQA Air Quality Handbook in 1993 to guide public agencies when preparing an air quality analysis for CEQA analyses. More recently, as part of the SCAQMD's environmental justice program, the focus of attention shifted to localized effects of air quality. The Localized Significance Threshold (LST) methodology was provided to determine local thresholds that would represent the maximum emissions from a project that will not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard, and are developed based on the ambient concentrations of that pollutant for each source receptor area.

Due to the presence of sensitive receptors (i.e., residences located within 25 meters of the project site) in the project vicinity, in this case the existing residences and newly converted WRC offices immediately adjacent to the work areas in Phase I and Phase II, emissions were quantified using the Localized Significance Threshold Analysis (LST) procedures developed by the SCAQMD. The LST Analysis is included in Appendix A.

Because there would be no long-term increase in vehicle trips or other sources of operational emissions, regional emissions were not estimated using the URBEMIS model. The local emissions quantified using the LST methodology have been compared to the SCAQMD's regional thresholds of significance, resulting in a more conservative analysis for regional construction emissions. The findings of the LST analysis for Phase I and Phase II are summarized in Table 3.3-1 and Table 3.3-2.

**TABLE 3.3-1
PHASE I PEAK DAILY CONSTRUCTION EMISSIONS SUMMARY
(POUNDS PER DAY)**

Construction Activity	CO	NO_x	SO_x	PM₁₀	PM_{2.5}	ROG
Demolition	55.9	80.2	74.9	3.8	2.7	7.2
Grading	17.3	36.9	0.4	2.2	1.8	2.4
Building	1.7	3.3	0.1	0.3	0.2	2.8
SCAQMD Significance Threshold	550	100	150	150	150	75
SCAQMD Localized Significance Threshold*	664	192	N/A	5	3	N/A
Significant?	NO	NO	NO	NO	NO	NO
* Localized significance thresholds for a one-acre project in SRA 9. Source: BonTerra Consulting. 2007 (January). <i>Air Quality LST Data</i> . (Appendix A).						

**TABLE 3.3-2
PHASE II PEAK DAILY CONSTRUCTION EMISSIONS SUMMARY
(POUNDS PER DAY)**

Construction Activity	CO	NO_x	SO_x	PM₁₀	PM_{2.5}	ROG
Demolition	29.4	90.0	71.4	5.1	4.3	7.5
Site Preparation	17.8	43.6	13.2	3.4	2.2	4.5
Grading	30.6	89.4	62.1	6.2	4.7	4.9
Building	7.6	16.9	1.5	1.1	1.0	2.4
Architectural Coatings and Paving	19.5	40.0	1.3	2.8	2.6	6.3
SCAQMD Significance Threshold	550	100	150	150	150	75
SCAQMD Localized Significance Threshold*	1,017	277	N/A	7	5	N/A
Significant?	NO	NO	NO	NO	NO	NO
*Localized significance thresholds for a three-acre project in SRA 9. Source: BonTerra Consulting. 2007 (January). <i>Air Quality LST Data</i> . (Appendix A).						

The LST emissions summarized for Phase I and Phase II assume 60 percent control of fugitive dust from watering and associated dust control measures required by SCAQMD's mandatory Rule 402 and 403. Rule 403 governs fugitive dust emissions from construction projects. Rule 403 set forth a list of control measures that must be undertaken for all construction projects to ensure that no dust emissions from the project are visible beyond the property boundaries, as well as minimizing visible emissions of PM₁₀. SCAQMD Rule 402, Nuisance, also would apply to this project. Most of the fugitive dust associated with construction is comprised of particles larger than 10 microns in diameter. While these larger particles settle out quickly and do not cause the health effects associated with the smaller sized particles (PM₁₀ and PM_{2.5}), they can damage plants and property sufficiently to qualify as a nuisance. Rule 402 prohibits visible dust emissions from extending beyond the project boundaries. To ensure that construction does not adversely affect adjacent land uses, SCAQMD Rule 402 and Rule 403 would be implemented as described under SC 3.3-1 below.

The emissions of most concern due to the close proximity of on-site sensitive receptors are particulates (PM₁₀ and PM_{2.5}) generated during grading and NO_x emissions generated by haul truck trips. To ensure there would be no significant air

quality impacts to these sensitive receptors even with implementation of Rules 402 and 403, the LST model was used to determine the number of total days over which grading and any exporting (either from demolition or excavation) for each phase, as appropriate, would be required to ensure LSTs are not exceeded. For example, the longer the time period taken to implement a given volume of grading, the less the daily emissions and the less impact to local air quality. Therefore, a longer construction period is an effective mitigation for potential air quality impacts. Mitigation Measure 3.3-1 summarizes the minimum number of days that would be required to implement the indicated construction activity based on the LST model and reflected in the estimated emissions for the proposed project summarized above.

With implementation of SC 3.3-1 and MM 3.3-1, emissions generated by construction of the proposed project would not exceed any local or regional significance thresholds for any pollutants.

- c) **Less Than Significant With Mitigation.** Emissions from construction of the proposed project would be temporary and not exceed any LSTs or SCAQMD thresholds with standard conditions and mitigation, as discussed above [Response 3.3.1(b)]. Further, construction emissions would be short-term and operation of the project would not result in a change to long-term emissions. Therefore, the proposed project would not incrementally contribute to a cumulatively considerable increase of any air quality criteria pollutant and impacts would be less than significant.
- e) **Less Than Significant Impact.** The proposed project may create odors during construction, from diesel equipment and operation. Diesel equipment would result in temporary odor impacts from equipment exhaust fumes emitted by tractor loaders and haul trucks. However, odors generated by diesel equipment on the project site would be temporary in nature and would not be expected to affect a substantial number of people. Therefore, impacts relative to odor generation from the proposed project would be considered less than significant.

3.3.2 MITIGATION PROGRAM

Project Design Features

None

Standard Conditions of Approval

SC 3.3-1 The WCA will comply with the South Coast Air Quality Management District (SCAQMD regulations), including Rule 402, the Nuisance Rule, and Rule 403, Fugitive Dust. To ensure that the project is in full compliance with both dust regulations and that there is no significant nuisance impact generated on the project site, the WCA will be responsible for ensuring compliance with these regulations throughout project implementation. Mandatory measures set forth by these regulations include, but are not limited to, the following:

- Sweep any dirt tracked from the project site onto public streets no less than once per day.
- Particulate filters will be used on all diesel equipment.

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- Exposed surfaces will be watered a minimum of two times daily. If fugitive dust appears to be impacting adjacent residential land uses during times of high wind, additional watering will be conducted and/or grading activities will be halted.
- All stockpiles of soil will be covered with tarps.
- All trucks used to haul soil from the site will be covered with a tarp to reduce fugitive dust.

Mitigation Measures

MM 3.3-1 Construction of Phase I and Phase II of the proposed project shall implement the following schedule of minimum work days necessary for grading/excavation and/or export of spoil to ensure that local air quality for the on-site sensitive receptors is not significantly impacted. This shall be incorporated as part of the construction contractor's bid specifications and the WCA shall be responsible for ensuring the schedule is followed.

Construction Activity	Minimum Number of Total Days	
	Phase I	Phase 2
Site Prep and/or Earthmoving	3	20
Export of Spoil and Demolition Debris*	3 (21)	31 (17)

*Total minimum days is followed in parenthesis by the not-to-exceed number of one-way daily trips for haul trucks assuming a 30 cubic yard truck capacity based on the LST model results.
Source: BonTerra Consulting. 2007 (January). *Air Quality LST Data*. (Appendix A).

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3.4 <u>BIOLOGICAL RESOURCES</u>	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modification, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3.4.1 BIOLOGICAL RESOURCES ANALYSIS

The following analysis is based on the Biological Reconnaissance Survey and Constraints Analysis Report (Biological Constraints Report) prepared by BonTerra Consulting in October 2008. In addition to conducting a literature search and mapping the vegetation, biologists evaluated existing resources to identify potential biological constraints to the proposed project. The Biological Constraints Report is included as Attachment B.

- a) **Less Than Significant Impact.** The California Native Plant Society’s (CNPS) Inventory of Rare and Endangered Vascular Plants of California and California Department of Fish and Game’s (CDFG) California Natural Diversity Database were reviewed, as part of the Biological Constraints Report, to identify special status plants, wildlife, and habitats known to occur in the vicinity of the project site. Several special status habitats, considered to be “depleted” by the CDFG and other resource agencies, occur within the project site including: California sagebrush scrub, scalebroom scrub, southern willow scrub, mulefat scrub, and coast live oak woodland.

In its current configuration, the proposed project would likely impact all of the above-listed vegetation types to some degree. However, these impacts would be relatively small in size and are not expected to substantially affect the persistence of these vegetation types within the region. Therefore, impacts on special status vegetation types are considered less than significant and no mitigation would be required. Please note that impacts on these vegetation types where defined as jurisdictional resources, discussed below, may be significant.

- b) *Less Than Significant With Mitigation.*** The following special status plant and wildlife species have been determined to have some potential to occur on-site based on the range of the species and the habitat available on and surrounding the site:

Plants

- Greata's aster (*Aster greatae*)
- Braunton's milk-vetch (*Astragalus brauntonii*)
- Nevin's barberry (*Berberis nevinii*)
- Thread-leaved brodiaea (*Brodiaea filifolia*)
- Slender mariposa lily (*Calochortus clavatus* var. *gracilis*)
- Plummer's mariposa lily (*Calochortus plummerae*)
- Slender-horned spineflower (*Dodecahema leptoceras*)
- San Gabriel River dudleya (*Dudleya cymosa* ssp. *crebrifolia*)
- San Gabriel Mountains dudleya (*Dudleya densiflora*) – *thought to occur on the site
- Mesa horkelia (*Horkelia cuneata* ssp. *puberula*)
- Robinson's pepper-grass (*Lepidium virginicum* var. *robinsonii*)
- Rayless ragwort (*Senecio aphanactis*)
- San Bernardino aster (*Symphyotrichum defoliatum*)
- Sonoran maiden fern (*Thelypteris puberula* var. *sonorensis*)

Wildlife

- Cooper's hawk (*Accipiter cooperii*)
- Sharp-shinned hawk (*Accipiter striatus*)
- Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*)
- Coastal western whiptail (*Aspidoscelis tigris stejnegeri*)
- Santa Ana sucker (*Catostomus santaanae*)
- Yellow warbler (*Dendroica petechia brewsteri*)
- Southwestern willow flycatcher (*Empidonax traillii extimus*)
- Southwestern pond turtle (*Emys* (= *Clemmys*) *marmorata pallida*)
- Arroyo chub (*Gila orcuttii*)
- Yellow-breasted chat (*Icteria virens*)
- San Diego black-tailed jackrabbit (*Lepus californicus bennettii*)
- Big free -tailed bat (*Nyctinomops macrotis*)

- Los Angeles pocket mouse (*Perognathus longimembris brevinasus*)
- Coast (San Diego) horned lizard (*Phrynosoma coronatum* [blainvillii population])
- Santa Ana speckled dace (*Rhinichthys osculus* ssp. 3)
- Coast Range newt (*Taricha torosa torosa*)
- American badger (*Taxidea taxus*)
- Two-striped garter snake (*Thamnophis hammondi*)
- Least Bell's vireo (*Vireo bellii pusillus*)

Of these species, eight are either state or federally listed as threatened or endangered: thread-leaved brodiaea, Nevin's barberry, Braunton's milk-vetch, slender-horned spineflower, Santa Ana sucker, southwestern willow flycatcher, least Bell's vireo, and coastal California gnatcatcher. The project site provides potential habitat for all eight species; however, the coastal sage scrub habitat for the coastal California gnatcatcher is limited in amount and confined to topography that is considered not suitable for the species. Therefore, the coastal California gnatcatcher is not expected to occur on the project site. There is potential for the other seven species to occur on the project site, though the potential is considered very low. One species, the San Gabriel River dudleya, although not a listed species, is very rare and is known to occur in the immediate vicinity of the property. Proposed plans should avoid impacts to this species if feasible.

If present, implementation of the proposed project may impact special status plants, which may affect the persistence of these species within the region. Such impacts would be considered significant and would require implementation of Mitigation Measure 3.4-1 to reduce the impact to a less than significant level.

Impacts on non-listed special status wildlife species, if present, are considered less than significant due to the minimal amount of habitat impacted. However, if listed wildlife species are determined to be present, implementation of the proposed project may impact such species. Impacts on listed species would be considered significant and would require implementation of Mitigation Measure 3.4-1 to reduce the impact to a less than significant level.

In addition, many bird species that have the potential to occur on the project site would fall under the jurisdiction of the Migratory Bird Treaty Act (MBTA). In 1918, the MBTA established the federal prohibition (unless permitted by regulations) to pursue, hunt, take, capture, or kill any migratory bird species or any part, nest, or egg of any such migratory bird species covered by the MBTA. Active bird nests are also protected under the California Fish and Game Code. Implementation of the proposed project could result in the direct loss of active bird nests or the abandonment of active nests by adult birds, depending on the number and extent of bird nests on the site that may be disturbed or removed by construction. The loss of active bird nests would be considered a significant impact. With implementation of MM 3.4-2, which restricts construction activities in the vicinity of any active nest observed during the breeding season, this impact would be reduced to a less than significant level.

- c) **Less Than Significant Impact.** Several drainages and associated habitat occur on the site and are likely to be considered jurisdictional as regulated by the ACOE, CDFG, and the RWQCB. The proposed project would likely to impact such areas

and would require regulatory permits prior to implementation, as described in Standard Condition of Approval 3.4-1. With compliance with SCA 3.4-1, impacts would be less than significant.

- d) **Less Than Significant Impact.** The proposed project is located within an area which is likely to be a substantial wildlife movement route as a result of the San Gabriel River corridor and associated resources. However, implementation of the proposed project would not be expected to impede wildlife movement to any greater degree than the current site conditions. As a result, proposed project impacts are considered less than significant.
- e) **No Impact.** Within the City of Azusa, parkway trees and trees on public property may not be removed without approval from the director of public works (City of Azusa 2007a). Although the proposed project would result in loss of trees, none of the trees on site are expected to qualify as parkway trees and they do not occur on private property. Therefore, the proposed project would not conflict with this or any other local ordinance and there would be no impact.
- f) **Less Than Significant With Mitigation.** The proposed project would not impact any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. However, the El Encanto Master Plan does propose an extension to an existing hiking/biking trail that may, depending on details of final design, impact a conservation easement associated with the adjacent Mountain Cove residential development located to the west of the project site. The conservation easement was recorded with the Land Program of the CDFG, which is the responsible agency for overseeing the easement, which is intended to remain as open space in perpetuity. Construction of the trail could impact vegetation and/or habitat that was established as mitigation for biological impacts associated with the Mountain Cove development. It is the intent of El Encanto Master Plan to avoid the easement by constructing the trail between the conservation easement and Highway 39. As such, the trail would either be integrated into the existing abutment underneath the bridge or structurally suspended from the existing bridge structure. As stated in MM 3.4-3, any impacts to the conservation easement and associated vegetation/habitats must be either avoided or mitigated to the satisfaction of CDFG. With incorporation of MM 3.4-3, potential impacts would be less than significant.

3.4.2 MITIGATION PROGRAM

Project Design Features

- Proposed habitat and river bank restoration activities would improve (i.e., create a beneficial effect) the extent and quality of habitat on the project site as well as improving the hydrological characteristics of the San Gabriel River through the project site.

Standard Conditions of Approval

- SC 3.4-1** Prior to the construction of any phase or component of the project that involves impacting drainages, streams, or wetlands through filling, stockpiling, conversion to a storm drain, channelization, bank stabilization, road or utility line crossings, or any other modification to a jurisdictional drainage, a jurisdictional delineation shall be conducted. Any jurisdictional impacts would require permits from the USACE, the RWQCB, and the CDFG before any development could commence.

Both permanent and temporary (construction-related) impacts are regulated and would therefore trigger the need for permits. Compensatory mitigation for the loss of wetland or riparian function and values is a fundamental component of the applicable regulatory programs.

Mitigation Measures

MM 3.4-1 Prior to construction initiation, a qualified biologist will conduct focused surveys for state and/or federally listed species potentially occurring in all areas of suitable habitat within or adjacent to the proposed impact area. Surveys will be conducted at the appropriate time of year and will definitively determine the absence or the presence and location of all special status species. If present, the project design will attempt to avoid, or minimize if not possible to avoid, the impacts by adjusting the location of proposed project elements. For unavoidable impacts, a mitigation plan shall be prepared and implemented to off set such impacts.

Any impacted special status vegetation types will be restored onsite. A re-vegetation program will be implemented in accordance with an appropriate agency approved landscape palette developed for the region on all graded areas not utilized for improvements or structures. Restoration will consist of seeding and planting containers of appropriate species. For those special status plants species that may be replanted, a pre-construction survey during the peak flowering period will be conducted by the project biologist. The limits of each plant or plant population location within the impact area will be clearly delineated with lath and brightly colored flagging. If a special status plant species is located in the impact area, the loss will be mitigated by seed and bulb collection if appropriate (depending on the growth type of the species), and re-vegetation into a suitable mitigation site in the vicinity.

A detailed re-vegetation and special status plant restoration program will be developed and implemented and will contain the following items: responsibilities and qualifications of the personnel to implement and supervise the plan; site selection; site preparation and planting implementation; schedule; maintenance plan/guidelines; monitoring plan; long-term preservation; and performance standards. It is recommended that long term preservation of restored areas include a permanent open space designation in perpetuity.

In addition, if a potentially impacted species is state or federally listed as Threatened or Endangered, the CDFG and/or the USFWS will be consulted and a permit application will be submitted prior to initiation of construction activities. The requirements of the mitigation, as set forth by the appropriate agency permit(s), shall be implemented. At a minimum, the construction period will be scheduled to avoid the breeding season of such species, year-long residents shall be relocated if feasible, and loss of habitat will be replaced at a minimum ratio of 1:1.

MM 3.4-2 To ensure compliance with the Migratory Bird Treaty Act (MBTA) and Section 3503.5 of the *California Fish and Game Code*, and to avoid any potential impacts to special status bird species that may occur in the project vicinity, construction activities shall be conducted outside the bird nesting season (March 15 to September 15) to avoid any potential disturbance of avian breeding activities.

If vegetation removal, clearing, and/or grading for the proposed project (i.e., impacting ornamental vegetation) is conducted during the bird nesting season (March 15 to September 15), then construction will be limited in the vicinity of any active nests per the recommendations of a qualified Biologist. Three days prior to the onset of construction activities, a qualified Biologist shall survey disturbance for the presence of any active bird nests within the limits of project. If no active nests are found, no further mitigation would be required. However, any active nest found during survey efforts shall be mapped on the construction plans, and an appropriate buffer area (typically 200 feet in every direction) shall be established around any active nest. Encroachment into the buffer area shall only be allowed if the proposed activity shall not disturb the nest occupants. Construction within the buffer area may resume after a qualified Biologist has determined that fledglings have left the nest.

- MM 3.4-3** Prior to initiation of construction activities, the WCA shall perform an engineering survey under the existing bridge structure and the area west of Highway 39 to locate and mark the boundary of the conservation easement. The WCA shall develop a trail design and construction plan and shall consult with the California Department of Fish and Game (CDFG) to determine if the plan would impact biological resources associated with the conservation easement. If warranted and/or requested by CDFG, the WCA shall conduct appropriate biological surveys and/or construction monitoring within the impacted area, and provide appropriate mitigation to the satisfaction of CDFG to compensate for impacts.

Exhibit J - IS, NOI, Final MND, & NOD for El Encanto Azusa River Wilderness Park

*El Encanto Azusa River Wilderness Park Master Plan
Initial Study / Mitigated Negative Declaration*

3.5	<u>CULTURAL RESOURCES</u>	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
Would the project:					
a)	Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d)	Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3.5.1 CULTURAL RESOURCES ANALYSIS

a) **No Impact.** The former El Encanto Restaurant and associated structures are not listed in the City of Azusa’s *Potential Historic Landmarks* list. The *Potential Historic Landmarks* list is compiled and maintained by the City’s Cultural and Historical Preservation Commission and the current list was adopted by the City on February 20, 2001 (Cole 2008). In addition, the City of Azusa has been a primary stakeholder in the ongoing El Encanto Master Plan process. During this process, the City of Azusa nor any other agencies or interested parties have raised concerns regarding the existing or potential historic significance of any on-site structures. Therefore, there would be no impact related to historic resources.

b) **Less Than Significant With Mitigation.** The footprint of proposed site grading and development, specifically additions and renovations to the building complex, development of the special use area, and the parking lot reconfiguration, would largely be limited to already disturbed areas. However, portions of the stream bank restoration areas may require disturbance of native (i.e., undisturbed) soils, and the hillside trail development, bike trail extensions, and installation of individual structures (park shelters, interpretive signage, etc.) would require some surface soil disturbance. Although the extent and depth of grading in native soils would be limited, there is always a possibility that excavation in undisturbed soils could encounter unknown archaeological resources. Impacts to archaeological resources would be significant.

Therefore, in order to ensure that impacts would be less than significant, Mitigation Measure 3.5-1 requires that in the event that archaeological resources are encountered during grading, all grading activities would be suspended and the resource left in place until a qualified archaeologist can examine the find and determine appropriate mitigation measures. Implementation of Mitigation Measure 3.5-1 would reduce potential impacts to archaeological resources to a less than significant level.

c) **Less Than Significant With Mitigation.** As discussed under “b” above, although grading in native soils would be limited, there is always a possibility of encountering unknown cultural resources, including paleontological resources. The potential to encounter paleontological resources; however, is more unlikely than for

archaeological resources because of the relatively shallow depth of excavation and the fact that the project would not excavate to bedrock. However, a remote potential exists to encounter a paleontological resource and impacts to such a resource would be considered significant.

Therefore, similar to Mitigation Measure 3.5-1 described above, Mitigation Measure 3.5-2 requires that in the event that paleontological resources are encountered during grading, all grading activities would be suspended and the resource left in place until a qualified paleontologist can examine the find and determine appropriate mitigation measures. Implementation of Mitigation Measure 3.5-2 would reduce potential impacts to paleontological resources to a less than significant level.

- d) ***Less Than Significant Impact.*** As discussed above, due to the limited anticipated disturbance of native soils, it would be unlikely for construction of the proposed project to adversely affect any human resources, including those interred outside of formal cemeteries. However, when performing excavation, there is always a remote possibility that these resources could be encountered. Therefore, Mitigation Measure 3.5-3 requires that construction activity in the area of a potential find will be halted and the Los Angeles County Coroner will be notified, consistent with State regulations. Implementation of Mitigation Measure 3.5-3 would reduce potential impacts to human remains to a less than significant level.

3.5.2 MITIGATION PROGRAM

Project Design Features

None

Standard Conditions of Approval

None

Mitigation Measures

- MM 3.5-1** If archaeological resources are encountered during grading, construction activities in the area of the find shall be immediately suspended the resource must be left in place until a qualified archaeologist can examine it and determine appropriate mitigation measures.
- MM 3.5-2** If paleontological resources are encountered during grading, construction activities in the area of the find shall be immediately suspended the resource must be left in place until a qualified paleontologist can examine it and determine appropriate mitigation measures.
- MM 3.5-3** If human remains are encountered during grading, construction activities in the area of the find must be immediately halted and the Los Angeles County coroner must be notified within 24 hours of the discovery (California Health and Safety Code §7050.5). If the coroner determines that the remains are not recent, the coroner shall notify the Native American Heritage Commission for consultation (Public Resources Code §5097.98). The NAHC will designate a Most Likely Descendent who will make recommendations concerning the reassignment of the remains in consultation with the lead agency and Project Archaeologist.

Exhibit J - IS, NOI, Final MND, & NOD for El Encanto Azusa River Wilderness Park

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

3.6.1 GEOLOGY AND SOILS ANALYSIS

a i-iv) No Impact. The project site is not located within an Alquist Priolo Earthquake Fault Zone and there are no known active faults traversing the project site. The majority of the State of California, including the project site, lies within Seismic Zone 4, the highest-level hazard zone designated by the Uniform Building Code (UBC). The nearest active fault to the site is the Sierra Madre Fault, located less than one mile south of the project site. Therefore, the project site could be expected to experience strong ground shaking during the life of the project. Secondary seismic conditions that may affect the site and surrounding area during an earthquake could include liquefaction and landslides (California Geological Survey 1999).

However, the proposed project includes no new habitable structures or other components that could pose a substantial risk to people or other structures in the event of an earthquake. The only habitable structure that would be on the project site is the renovated building complex, which would be reused as office space and also continue to be used as residential units. Of the 11 mobile home units

present, 2 are abandoned and 9 are occupied. With project implementation, the residents of the mobile home park would be relocated, consistent with Title 25 requirements, to other addresses off the project site. Therefore, there would be fewer permanent residents than currently exist on the site, and a similar or reduced number of visitors compared to recently when the former restaurant was operational. Therefore, the proposed project would not introduce a new or expanded population onto the site that could be exposed to seismic risks.

The redevelopment of the mobile home area with the special use area in combination with the proposed drainage improvements would reduce the existing potential for seismic-related risks on this portion of the project site. All building renovations, slope improvements, and on-site structures such as shelters, retaining walls, etc. would be required to comply with the grading and seismic building standards in the 2007 California Building Code (CBC), adopted in the City of Azusa effective January 1, 2008. The stand-alone park structures would not represent a substantial risk to visitors in the event of strong seismic ground shaking.

Therefore, there would be no impact related to the potential for surface rupture; seismic ground shaking; or liquefaction, landslides, or other ground failures as secondary effects of ground shaking and no mitigation would be required.

- b) *Less Than Significant Impact.*** The largest source of erosion, particularly in an urban environment, is uncontrolled drainage during construction. Erosion potential during construction of the proposed project would be managed to the maximum extent practicable with Best Management Practices (BMPs). As discussed below in Section 3.8 Hydrology and Water Quality, the proposed project is required to be covered under the National Pollutant Discharge Elimination System (NPDES) General Construction permit if one acre or more of ground disturbance is anticipated; therefore construction BMPs will be implemented on the project site as part of Storm Water Pollution Prevention Plan (SWPPP) implementation during construction activities to minimize erosion impacts.

Implementation of the BMPs would reduce construction-related impacts to the maximum extent feasible. Additionally, proposed improvements to the four on-site drainages and the watershed management BMPs described for the parking lot upgrade would improve the existing site drainage. Therefore, there would be less than significant impacts related to erosion during construction and beneficial impacts with project implementation.

- c-d) *No Impact.*** There would be no new habitable structures or other components constructed as part of the proposed project that would be susceptible to damage related to location on unstable geologic units or expansive soil. All building renovations, slope improvements, and on-site structures such as shelters, retaining walls, etc. would be required to comply with the grading and seismic building standards in the 2007 California Building Code (CBC), adopted in the City of Azusa effective January 1, 2008. Therefore, the proposed project would not expose people or structures to geologic hazards. There would be no impact and no mitigation would be required.

- e) *No Impact.*** The proposed project does not include additional septic tanks or alternative wastewater disposal systems. New public-use restrooms proposed for the site include two pre-fab, waterless (i.e., chemical) restrooms that would be maintained by a private contractor. There would be no impact.

3.6.2 MITIGATION PROGRAM

Project Design Features

None

Standard Conditions of Approval

See SC 3.8-1

Mitigation Measures

There are no significant impacts; therefore no mitigation measures are required.

Exhibit J - IS, NOI, Final MND, & NOD for El Encanto Azusa River Wilderness Park

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

3.7.1 HAZARDS AND HAZARDOUS MATERIALS ANALYSIS

- a) **Less Than Significant Impact.** Operation of the proposed project would not involve the routine transport and use of hazardous materials that would adversely affect the residents, employees, or visitors to the site. Herbicides would be stored on site and used to control exotic (i.e., non-native) vegetation. The project proposes to use only EPA-approved, glyphospate base, systemic herbicides (Round-up®) for foliar application on grasses and annual weeds on the slopes and areas adjacent to the roads and trails. Rodeo® or an equivalent formulation shall be used when applying herbicides within 100 feet of the San Gabriel River. These herbicides are publicly-available formulations and their storage and use on the project site would not pose a hazard to the public or the environment. Therefore, long-term operation of the proposed project would not result in an impact related to the routine use and storage of hazardous materials.

- b) *Less Than Significant With Mitigation.*** Construction activities would include the renovation of the previous El Encanto Inn Restaurant and associated structures. The additions to the original structure began in the 1960s and continued until as recently as 5 to 6 years ago. Therefore, there is the potential to encounter lead-based paint (LBP) and/or asbestos-containing materials (ACM) during the renovations. Additionally, the act of transporting these materials off-site to an appropriate hazardous waste handling facility could facilitate the accidental dispersal of these materials. Mitigation Measure 3.7-1 would require testing for the presence of both ACM and LBP prior to initiation any construction activities related to the building renovations. If determined to be present, the risks associated with construction activities involving LBP and/or ACM and the transport of hazardous materials are fully addressed by existing federal and State laws, discussed below.

In order to minimize the potential impacts of construction activities on the health of construction workers, the California Code of Regulations, Title 8, California Occupational Safety and Health Administration (Cal/OSHA) developed safety and health management standards to minimize workplace hazards. Chapter 4 Division of Industry Standards, Subchapter 4 Construction and Safety Orders, Article 4, describes regulations relating to dust, fumes, mists, vapors, and gases. Section 1529 details the requirements for construction and demolition activities as they relate to asbestos and Section 1532.1 presents the requirements related to the handling of materials containing lead.

The South Coast Air Quality Management District (SCAQMD) regulates demolition and construction activities that may release asbestos into the air. Rule 1403 specifies procedures and requirements for asbestos surveying, notification, removal, handling and clean-up procedures, and storage, disposal and landfilling requirements.

The Hazardous Materials Transportation Act (Code of Federal Regulations Title 49), administered by the U.S. Department of Transportation, governs the handling and transport of hazardous materials. The California Department of Transportation (Caltrans) implements this Act in California. With the inclusion of the standard conditions of approval described below, which includes these regulations, potential impacts from construction activities and potential short-term transport of hazardous waste materials from the project site would be less than significant.

- c) *No Impact.*** The project site is not located within one-quarter mile of a school. There would be no impact.
- d) *No Impact.*** The project site is not listed as a hazardous materials site pursuant to Government Code Section 65962.5, the "Cortese List". There would be no impact.
- e-f) *No Impact.*** The project site is not located within an airport land use plan, a crash hazard zone, or in proximity to a private airstrip.
- g) *No Impact.*** The project site is not in the path of existing emergency routes, and would not interfere with the implementation of an emergency response plan. There would be no impact.

- h) **No Impact.** The project is located along the San Gabriel Mountains, an area designated as a Very High Fire Hazard Severity Zone (VHFHSZ) in the Los Angeles County Building Code. The VHFHSZ is defined in Section 223-V and appendix VIII of the County of Los Angeles Municipal Code, Title 32, Fire Code. Title 32 is intended to provide minimum standards to safeguard the public's safety and welfare. Section 1117.2.1 describes requirements for fuel modification plans in VHFHSZs.

The proposed project would neither increase the square footage of the existing structure by 50 percent, nor introduce a new resident population on or adjacent to the project site. Therefore, the project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires and, pursuant to County guidelines, is not required to provide a fuel modification plan. Nonetheless, all development within the VHSFHZ is required to meet the building construction requirements specified in the County Building and Safety Code for VHFHSZ areas.

Additionally, as discussed under "a" above, implementation of the proposed project would reduce the resident population on the project site, and public visitation of the site would be similar or reduced from that experienced during previous restaurant operations. As described in Section 2.3, Project Description, the building complex renovations include fire protection features. Fire resistant materials would be used across the site, such as stucco, clay roof tiles, and masonry. The building chimney would have proper screening. Fire extinguishers would be located both inside and outside of the structures and readily available for use by park employees and visitors. Each employee would have direct instruction on evacuation, safe storage of materials, and safe operation of potentially flammable equipment and materials, such as mechanical gardening and other equipment and herbicides, cleaning products, etc. Vegetation near structures would be open, irrigated and maintained to prevent a fire ladder condition. No open fires or smoking would be allowed anywhere on the project site, and signage posting these regulations would be visible in all public areas. Therefore, the proposed project would not result in an impact related to exposing people or structures to risk of wildfires.

3.7.2 MITIGATION PROGRAM

Project Design Features

None

Standard Conditions of Approval

- SC 3.7-1** Any and all transport and transfer of hazardous materials during construction, if encountered, shall be transported by a properly licensed waste hauler, who shall be in compliance with all applicable state and federal requirements, including the Department of Transportation regulations under Title 49 CFR, Caltrans, and Occupational Safety and Health Administration (OSHA) standards.
- SC 3.7-2** Renovation and construction activities at the building complex shall be performed in compliance with all applicable federal and state regulations regarding handling and disposal of materials containing lead and/or asbestos, including Cal/OSHA and SCAQMD Rule 1403 regulations and procedures.

Mitigation Measures

- MM 3.7-1** Prior to the onset of any construction work related to the exterior renovation of the former El Encanto Restaurant and associated structures, both a lead-based paint (LBP) assessment and complete asbestos survey shall be conducted. If either or both LBP or asbestos-containing materials (ACM) are present, they will be removed and appropriately licensed contractors and disposed of in accordance with all applicable regulations.

Exhibit J - IS, NOI, Final MND, & NOD for El Encanto Azusa River Wilderness Park

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3.8	<u>HYDROLOGY AND WATER QUALITY</u>	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
Would the project:					
a)	Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b)	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation onsite or offsite?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding onsite or offsite?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e)	Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of pollutant runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f)	Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g)	Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h)	Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i)	Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j)	Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.8.1 HYDROLOGY AND WATER QUALITY ANALYSIS

a, e-f) Less Than Significant Impact. Construction activities on the site have the potential to contribute sediment-laden runoff and pollutants from earth disturbance and equipment leaks into the storm sewer system during rain events. The State Water Resources Control Board (SWRCB), Division of Water Quality issues NPDES stormwater permit for general construction activities. The Los Angeles Regional Water Quality Control Board (LARWQCB) enforces the NPDES program for the State of California within its jurisdiction, which includes the City of Azusa. Dischargers whose projects disturb one or more acres of soil are required to obtain

coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit, 99-08-DWQ).

Coverage under the Construction General Permit is accomplished by completing and filing a Notice of Intent with the SWRCB and by preparing and implementing a Storm Water Pollution Prevention Plan (SWPPP) prior to grading. The primary objective of the SWPPP is to identify, construct, implement, and maintain Best Management Practices (BMPs) to reduce or eliminate pollutants in stormwater discharges from the construction site. The SWPPP must include BMPs the discharger would use to protect storm water runoff during construction and the placement of those BMPs. Additionally, a SWPPP must include a site map, a visual monitoring program, and a chemical monitoring program for “non-visible” pollutants to be implemented if there is a failure of a BMP.

BMPs are most often used during construction activities include surrounding the construction site with sand bags and/or silt fencing to minimize sediment-laden runoff from entering the storm drain system, temporary desilting basins, and timing the grading activities to avoid the rainy season. Appropriate BMPs would be applied during grading and construction activities, which would ensure that potential short-term construction-related water quality impacts would be less than significant.

Operational activities on the site would not violate water quality standards or exceed the capacity of the storm drain system. The proposed project would reduce the coverage of impervious surfaces, primarily through the reduction of the asphalt parking lot as well as the removal of the asphalt pads in the mobile home area. Additionally, an objective of the proposed project is to improve site drainage and water quality through improvements to the four major site drainages, implementation of a bioswale and related water quality BMPs in the new parking lot, use of permeable pavement and other porous surface paving materials throughout the site, and stream bank restoration. Thus, there would be no increase in the amount of stormwater entering the storm drain system and no adverse water quality impacts during operation of the proposed project.

- b) *No Impact.*** The project site has its own water supply that is supplied by a groundwater well on the northern bank of the San Gabriel River; the well water is piped to potable water tanks located above the mobile home area. The employees, continued residents, and visitor water features (fountains and spigots) would be served by this water supply. The proposed project would reduce the permanent resident population on site. Although the water supply would be used during park hours by park staff (excluding the full-time park ranger) and visitors, the overall water demand on the site would decrease with the reduction in residents on the site. Also, as discussed above, implementation of the proposed project would reduce the impervious coverage of the project site and the project includes several water quality and drainage improvements. Therefore, water supply and groundwater recharge would not be impacted by the proposed project.
- c-d) *Less Than Significant Impact.*** The proposed project would alter the drainage pattern on the project site. However, as discussed above and in Section 2.3, Project Description, the drainage and water quality components of the proposed project are designed to improve the site hydrology, reducing flooding and sediment accumulation (including siltation) on San Gabriel Canyon Road and throughout the site, particularly related to the four major drainages flowing across the southern

portion of the project site. Therefore, implementation of the proposed project would result in less than significant impacts to site hydrology, and would result in a long-term beneficial impact.

g-h) No Impact. According to the City of Azusa General Plan, the northern bank portion of the project site would be within the San Gabriel River's 100-year floodplain (City of Azusa 2004). There are no housing or other structures proposed for the northern bank. Therefore, the proposed project would not place housing within the 100-year flood plain, as mapped by on a Federal Flood Hazard Boundary or Flood Insurance Rate Map, or other flood hazard delineation map, or place structures within the 100-year floodplain that would impede or redirect flows and there would be no impact.

i-j) No Impact. The proposed project would not result in additional risks associated with exposing people or structures to inundation by seiche, tsunami, or mudflow, or flooding as a result of failure of a levee or dam. The project site is susceptible to mudflows emanating from the San Gabriel Mountain foothills. Also, flows in the San Gabriel River at the project site are managed via three upstream dams.

However, the proposed project would reduce the permanent population on the project site and promote continued use of the site as a community recreation resource. The risks associated with site inundation are part of the existing condition. Therefore, because implementation of the proposed project would not result in a new or expanded population on the site, there would be no impact.

3.8.2 MITIGATION PROGRAM

Project Design Features

None

Standard Conditions of Approval

SC 3.8-1 Prior to the initiation of any construction activities, the project applicant shall obtain coverage under the NPDES General Storm Water Permit for Storm Water Discharges Associated with Construction Activities (Water Quality Order 99-08-DWQ). The project applicant shall file a Notice of Intent, prepare a SWPPP, and submit the appropriate fees to the State Water Resources Control Board, Division of Water Quality in order to obtain coverage for construction activities. Pursuant to these requirements, the project applicant shall minimize construction related pollutants in the site runoff through the implementation of Best Management Practices.

Mitigation Measures

There are no significant impacts; therefore no mitigation measures are required.

Exhibit J - IS, NOI, Final MND, & NOD for El Encanto Azusa River Wilderness Park

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3.9 <u>LAND USE AND PLANNING</u>	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.9.1 LAND USE AND PLANNING ANALYSIS

- a) **No Impact.** The proposed project would not divide an established community. There would be no impact.

- b) **Less Than Significant with Mitigation.** The project site is designated “Open Space” and zoned “Retreat”. The proposed project components comply with these land use policies; therefore, there would be no impact due to conflicts with applicable land use plans, policies, or regulations. The proposed project site does encompass land owned by various entities. The City of Azusa owns the Taylor House and the roadways throughout the project site. The City of Pasadena owns some of the undeveloped open space lands on the southern slopes of the project site. The Rainbow Ranch Equestrian Center is privately owned, as is the Buddhist Monastery. The USDA Forest Service has jurisdiction over the Angeles National Forest, within which trail improvements to the gaging station are proposed. The Forest Service prepared a revised Land Management Plan (Forest Plan) for the Angeles National Forest in 2005, which guides forest managers in site-specific planning and decision making. Any projects within the Angeles National Forest must be in compliance with the Forest Plan.

Although project components are not proposed on lands owned by all of these property owners, final project designs could result in adjustments to the current planned improvements. As such, MM 3.9-1 and MM 3.9-2 would ensure that appropriate approvals are obtained for any project components that are not owned by the WCA and potential land use impacts would be less than significant.

- c) **No Impact.** The project site is not located within any habitat conservation plan or within a natural community conservation plan. There would be no impact.

3.9.2 MITIGATION PROGRAM

Project Design Features

None

Standard Conditions of Approval

None

Mitigation Measures

MM 3.9-1 Prior to the initiation of any construction activities on lands not owned by the WCA, the WCA shall coordinate with that private or public landowner to obtain all appropriate approvals, easements, and/or use permits to allow project implementation on their property.

MM 3.9-2 Prior to the initiation of any construction activities within the Angeles National Forest, the WCA shall coordinate with the USDA Forest Service to ensure that all planned activities are in compliance with the Angeles Forest Land Management Plan (Forest Plan) and shall obtain all appropriate approvals, easements, and/or use permits to allow project implementation.

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

3.10.1 MINERAL RESOURCES ANALYSIS

- a) **No Impact.** The project site and surrounding area is not used for mineral extraction, and is not known to contain mineral resources of value. Therefore, the proposed project would not involve the development of land that would result in the loss of a known mineral resource of value to the region or the state. There would be no impact.

- b) **No Impact.** The project site is designated as a locally important mineral resource recovery site in the City of Azusa General Plan. The sites close proximity to the San Gabriel River are typically composed of deep alluvial fan deposits at the base of the San Gabriel Mountains. These mineral deposits are classified as MRZ 3 by the State Department of Conservation, Division of Mines and Geology. While these deposits are important resources, the City of Azusa envisions only the continued operation of existing quarries, and no additional mining sites. Since the site is neither reducing nor contaminating the mineral resources in the project site vicinity, the proposed use of the site for open space and related used would not create any impacts to mineral resources.

3.10.2 MITIGATION PROGRAM

Project Design Features

None

Standard Conditions of Approval

None

Mitigation Measures

There are no significant impacts; therefore no mitigation measures are required.

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3.11 NOISE	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.11.1 NOISE ANALYSIS

a, c-d) Less Than Significant With Mitigation. Operation of the proposed project, which would be similar to existing conditions, would not result in an impact to ambient noise levels, to either on-site or off-site receptors. However, construction of the proposed project would increase ambient noise levels that would affect the on-site residents and RMC/WRC park staff. Construction noise would be generated by both trucks and equipment, such as backhoes, excavators, and powered hand tools used for vegetation removal and implementation of the façade improvements.

The City of Azusa Municipal Code Section 46-403 states the following with regard to construction-related noise: “(a) *Noise level limitations.* No use, activity, or process within the city shall generate noise in excess of the levels identified by Tables 1 and 2, as the noise is measured at the property line of a noise sensitive land use identified in Tables 1 and 2” (City of Azusa 2007b). Table 3.11-1 provides the maximum allowable noise levels by land use, cited as “Table 1” in the municipal code. Table 3.11-2 below presents City’s noise standards for short-duration noise events near residential land uses, cited as “Table 2” in the municipal code.

**TABLE 3.11-1
AZUSA MAXIMUM ALLOWABLE NOISE LEVELS**

Land Use	Outdoor Activity Areas ^{1,2} (dBA Ldn)	Interior	
		dBA Ldn	dBA Leq
Residential	65	45	NA
Transient lodging	65	45	NA
Hospitals, extended care	65	45	NA
Theater, auditorium	Subject to an acoustical analysis per Section 46-403(b)	45	35
Meeting facility, public or private	65	45	40
Offices	65	45	45
School, library, museum	65	45	45
Playground, park	70	NA	NA
Notes: dBA = A-weighted decibals Ldn = Day-night sound level Leq = Equivalent noise level NA = Not Applicable ¹ Where the location of outdoor activity areas is unknown, the exterior noise level standard shall be applied to the property line of the receiving land use. ² Where it is not possible to reduce noise in outdoor activity areas to 65 dB Ldn/CNEL or less using a practical application of the best-available noise reduction measures, an exterior noise level of up to 70 dB Ldn/CNEL may be allowed provided that available exterior noise level reduction measures have been implemented and interior noise levels are in compliance with this table. Source: City of Azusa Municipal Code Section 46-403.			

**TABLE 3.11-2
NOISE STANDARDS FOR SHORT-DURATION NOISE EVENTS
NEAR RESIDENTIAL AREAS**

Sound Level Measurement	Maximum Allowable Sound Level	
	Day/Evening dB (7 am to 10 pm)	Night dB (10 pm to 7 am)
Hourly Leq dB	50	45
Maximum Level dB	70	65
Impulsive Noise Maximum Level dB	65	60
Notes: dB = Decibels Leq = Equivalent noise level Source: City of Azusa Municipal Code Section 46-403.		

Table 3.11-3 summarizes typical construction equipment noise levels in dBA at a distance of 50 feet. As shown, depending on the types and combinations of equipment used, anticipated exterior noise levels at 50 feet could range from 75 dBA to 85 dBA.

**TABLE 3.11-3
TYPICAL CONSTRUCTION EQUIPMENT NOISE LEVELS**

Equipment Type	Typical Average Equipment Noise Level at 50 ft. in dB(A) ¹
Air Compressor	75
Backhoe	75
Compactor	80
Concrete Mixer	80
Concrete Pump	75
Dozer	75
Generator	75
Grader	85
Loader	75
Pneumatic Tools	80
Power Hand Saw	75
Roller	80
Tractor	85
Trucks	75
¹ With noise controls applied. Obtainable by selecting quieter procedures or machines and implementing noise-control features such as improved mufflers, use of silencers, shields, shrouds, ducts, and engine enclosures. Source: U.S. Environmental Protection Agency 1971. <i>Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances.</i>	

While construction noise is highly variable and noise attenuates at a rate of approximately six dBA over each doubling of distance, due to the close proximity of the building complex to the majority of the main construction activity area on the project site, exceedances of exterior, and possibly interior, noise levels at the residential and office land uses on the site would be expected.

The City of Azusa noise standards recommend mitigation measures to reduce noise impacts. For construction noise, the Municipal Code recommends a limitation to permissible construction hours. Specifically, construction must occur between the hours of 7:00 AM and 6:00 PM Monday through Saturday. Extended construction hours, or construction on Sundays and/or national holidays would only be permissible with approval of the City. Construction noise would be temporary and would be limited to the prescribed hours. Therefore, construction noise would be an adverse, but a less than significant impact of the proposed project.

- b) No Impact.** The proposed project would not generate create excessive groundborne vibrations and there would be no impact.
- e-f) No Impact.** The project site is not located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport, private airstrip, or public use airport. There would be no impact.

3.11.2 MITIGATION PROGRAM

Project Design Features

None

Standard Conditions of Approval

SC 3.11-1 The project applicant shall ensure that the contractor limits all construction activity to between the hours of 7:00 AM and 6:00 PM Monday through Saturday, in accordance with the City of Azusa Municipal Code. No construction activities shall take place outside of these hours or on Sundays or holidays, unless emergency measures are required and approval is granted by the City.

Mitigation Measures

There are no significant impacts; therefore no mitigation measures are required.

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

3.12.1 POPULATION AND HOUSING ANALYSIS

a) **No Impact:** The proposed project would not include housing or extension of infrastructure, or otherwise induce population growth. There would be no impact.

b-c) **Less Than Significant Impact:** As of the preparation of this IS / MND, the WCA, pursuant to their ownership of the land leased for each of the mobile home units, is in the process of negotiating relocations of the residents in the nine occupied units in accordance with the California Code of Regulations Title 25, the *Relocation Assistance and Real Property Acquisition Guidelines*. Two of the units were abandoned at the time of purchase of the El Encanto property. The existing residential units in the main building complex would continue to be used by the renters and the park ranger.

Assuming all mobile home residents chose to relocate in the immediate San Gabriel Valley area, accommodation of nine households would not be a burden to the existing housing market. Because the relocations are being pursued in compliance with State regulations and the total number of households displaced would not necessitate replacement housing, there would be a less than significant impact.

3.12.2 MITIGATION PROGRAM

Project Design Features

None

Standard Conditions of Approval

None

Mitigation Measures

There are no significant impacts; therefore no mitigation measures are required.

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

3.13.1 PUBLIC SERVICES ANALYSIS

- a) **No Impact.** The proposed project does not involve the development of residential land uses nor would it otherwise induce population growth. Therefore, there would not be an increased demand in fire and police protection services, schools, parks, or other public facilities. There would be no impact.

3.13.2 MITIGATION PROGRAM

Project Design Features

None

Standard Conditions of Approval

None

Mitigation Measures

There are no significant impacts; therefore no mitigation measures are required.

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

3.14.1 RECREATION ANALYSIS

- a) **No Impact.** The proposed project would not induce population growth or introduce a new population onto the project site that would increase the use of existing neighborhood and regional parks. There would be no impact.
- b) **No Impact.** The proposed project consists of improving a current recreational facility that does not require the construction or expansion of any other recreational facilities. The environmental effects of the proposed project is evaluated in this IS/MND. There would be no impact.

3.14.2 MITIGATION PROGRAM

Project Design Features

None

Standard Conditions of Approval

None

Mitigation Measures

There are no significant impacts; therefore no mitigation measures are required.

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3.15 TRANSPORTATION/TRAFFIC	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
Would the project:				
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Result in inadequate parking capacity?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.15.1 TRANSPORTATION/TRAFFIC ANALYSIS

- a) **Less Than Significant Impact.** The traffic study performed in support of the *City of Azusa General Plan and Development Code Environmental Impact Report (EIR)* evaluated the traffic level of service (LOS) for arterial roadways throughout the City. The roadway segment nearest to the project site that was analyzed in the EIR was San Gabriel Canyon Road between Sierra Madre Road (on the south) and Mirador Drive (on the north). This segment is located approximately 1.5 miles south on San Gabriel Canyon Road at the intersection with Mirador Drive, the nearest point. The EIR traffic study determined this segment was operating at LOS "A", the highest (best) level, as of 2003. Additionally, the traffic study determined that there were no significant arterial roadway deficiencies in the City (City of Azusa 2003).

Construction activities, particularly during Phase II, would temporarily increase traffic along San Gabriel Canyon Road (Highway 39) and, to a lesser degree, arterial roadways connecting Highway 39 and Interstate 210 and other major thoroughfares. All construction traffic would not be anticipated to take the same route to and from San Gabriel Canyon Road and the project site.

Based on the air quality analysis prepared for the proposed project (Section 3.2.1 and Appendix A), peak construction traffic would occur within Phase II, because of grading and exporting activity associated with the parking lot reconfiguration, and would be limited to 17 daily one-way truck trips spread over a minimum of 31 days per Mitigation Measure 3.3-1 to limit air pollutant emissions. Considering the peak

construction traffic to be a worst case, because San Gabriel Canyon Road near the project site has been recently measured to operate at LOS A and because construction truck traffic would be temporary, the addition of project-related construction vehicles would be considered to have a less than significant impact of traffic patterns and service levels. Implementation of the proposed project would also reduce the permanent resident population at the site, with a commensurate reduction in vehicles associated with these households.

The project would not result in a long-term increase in vehicles at the project site. The site is currently used as a recreation resource by the local community and these visitors largely drive to the site. A goal of the proposed project, based on public feedback, is to minimize visitor services. A minimization of visitor services reduces the anticipated level of traffic that would be generated in comparison to a project with greater visitor services, particularly bus traffic and other group visitation traffic. The proposed project offers a passive outdoor experience with self-guided interpretive and educational displays. This type of park typically draws fewer total visitors than a location with more active uses. The anticipated level of traffic is also reflected in the proposed parking allowance. The reconfigured parking lot would be substantially reduced from its current allotment of over 170 spaces to approximately 40 spaces (including ADA and bus spaces) in the main visitor lot plus a smaller lot for park staff, continued residents, and special event bus and truck parking. Therefore, operation of the proposed project would not result in significant traffic impacts.

- b) ***Less Than Significant Impact.*** The Los Angeles County Congestion Management Program (CMP) is mandated by State of California law. This law is administered locally by MTA and requires that the traffic generated by individual development projects be analyzed for potential impacts to the regional roadway system. Interstate 210, passing through the City, is a CMP highway. There are no CMP arterial roadways in Azusa (MTA 2004). The proposed project would not result in traffic that exceeds a level of service standard established by the Los Angeles County CMP for designated highways. As indicated above, increases in traffic and congestion would be short-term and less than significant.
- c) ***No Impact.*** The project would not have any impact on air traffic patterns. There would be no impact.
- d) ***Less Than Significant Impact.*** The proposed project would not include additions or alterations to the existing street configuration that could increase traffic-related hazards. However, one of two options for extension of the San Gabriel River Bike Path to the project site would include a crossing of Highway 39 near the current terminus of the bikeway. To reduce potential traffic hazards between vehicular and bike traffic, the proposed project would include a crosswalk with button-activated flashing lights at this location. Because Highway 39 is a State highway and therefore under Caltrans' jurisdiction, implementation of a crosswalk across Highway 39 would require consultation with and receipt of an encroachment permit from Caltrans, as described in Standard Condition of Approval 3.15-1. Therefore, there would be less than significant traffic hazard impacts from implementation of the proposed project.
- e) ***No Impact.*** The proposed project would not create a hindrance to adequate emergency access. As described above, the addition of construction traffic would result in less than significant impacts and would be temporary.

- f) **No Impact.** The proposed project would provide on-site parking for construction workers. The proposed project would not result in the need for additional public parking because the project includes an on-site parking lot for visitors and would reduce the long-term traffic patterns associated with park users.

- g) **No Impact.** The proposed project does not include any permanent changes to public roadways and there would be no impacts related to the use of alternative transportation.

3.15.2 MITIGATION PROGRAM

Project Design Features

None

Standard Conditions of Approval

- SC 3.15-1** The project applicant shall consult with the California Department of Transportation (Caltrans) regarding the installation of an at-grade crosswalk across Highway 39 that would connect the San Gabriel River Bike Trail to the project site and shall have received all appropriate approvals, including, but not limited to, an encroachment permit, prior to initiating any construction in the Caltrans right-of-way.

Mitigation Measures

There are no significant impacts; therefore no mitigation measures are required.

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3.16 UTILITIES AND SERVICE SYSTEMS	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.16.1 UTILITIES AND SERVICE SYSTEMS ANALYSIS

- a) **No Impact.** The proposed project would not generate additional wastewater beyond that generated by existing onsite uses; therefore, the wastewater treatment requirements of the Regional Water Quality Control Board would not be exceeded. There would be no impact.
- b) **No Impact.** The proposed project would not require additional water or wastewater treatment facilities of any kind. There would be no impact.
- c) **No Impact.** The proposed project would not require or result in the construction of new storm water drainage facilities or the expansion of existing facilities. There would be no impact.
- d) **No Impact.** No additional water supplies would be needed for the completion and operation of this project. There would be no impact.
- e) **No Impact.** The proposed project would not be connected to a sewer line, and therefore would not require sewage disposal or treatment. There would be no impact.

- f) **Less than Significant Impact.** The proposed project would require the disposal of approximately 5,406 cy of material, including an estimated 350 cy of asphalt, related to the parking lot reconfiguration. Other solid waste that would be generated during construction would include vegetation removed during habitat restoration activities, demolition debris from removal of the mobile home units and underlying asphalt pads, and construction materials generated from the building façade improvements, such as packaging and replaced façade materials (i.e., window frames, etc.). This solid waste would be produced in varying amounts over the approximately 12-year construction period, with the majority generated within the first two construction phases over an 8-year horizon.

This solid waste can be disposed of at any landfill facility that accepts inert waste, which is the majority, generally for a per ton disposal fee. There are several solid waste disposal facilities within 40 miles of the project site that could accept this volume of inert solid waste over the length of the construction period. The Peck Road Gravel Pit in the City of Monrovia and Sunshine Canyon Landfill County Extension in the City of Sylmar are operated by the Los Angeles County Sanitation Districts. The Peck Road facility has a maximum daily permitted capacity of 3,400 tons per day and the Sunshine Canyon facility has a maximum daily permitted capacity of 6,600 tons per day.

Based on the available solid waste capacity at the various landfills and the length of the construction period, the disposal of the estimated 5,000 cubic yards of soil and other construction-related debris would be anticipated to be accommodated through the existing permitted capacity. Additionally, the waste disposal requirements of the proposed project are primarily for short-term construction related activities. The proposed would require nominal long-term or on-going disposal capacity. Therefore, the proposed project would not significantly impact solid waste disposal facilities or capacity.

- g) **No Impact.** All solid waste materials generated during construction of the proposed project would be disposed of in accordance with applicable state, federal, and local statutes and regulations. There would be no impact.

3.16.2 MITIGATION PROGRAM

Project Design Features

None

Standard Conditions of Approval

None

Mitigation Measures

There are no significant impacts; therefore no mitigation measures are required.

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3.17 <u>MANDATORY FINDINGS OF SIGNIFICANCE</u>	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
Does the project:				
a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a) **Less Than Significant With Mitigation.** The proposed project has the potential to impact biological resources and cultural resources. However, with the incorporation of the mitigation measures described in each section, construction and operation of the proposed project would have less than significant impacts on the environment.
- b) **No Impact.** The proposed project would not have considerable cumulative impacts. Proposed project impacts related to construction would be temporary, of short duration, and limited to the project site. Operation of the project would not result in significant long-term impacts. Therefore, the proposed project would not incrementally contribute to cumulative impacts and no mitigation would be required.
- c) **No Impact.** The proposed project would not have any environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly, as previously discussed within the text of each environmental analysis.

SECTION 4.0 REPORT PREPARERS AND CONTRIBUTORS

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GIS/Graphics Chris Starbird

SECTION 5.0 REFERENCES

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Appendix A

Air Quality LST Data

**EL ENCANTO
PHASE I**

**SUMMARY OF EL ENCANTO PHASE I
RESULTS BY PHASE**

El Encanto Phase 1				
Total On-Site				
	CO	NO_x	PM10	PM2.5
Demolition	55.9	80.2	3.8	2.7
Grading	17.3	36.9	2.2	1.8
Building	1.7	3.3	0.3	0.2
Localized Significance Threshold*	664	192	5	3
Exceed Significance?	NO	NO	NO	NO

**SUMMARY OF EL ENCANTO PHASE I
RESULTS BY PHASE AND EQUIPMENT**

Demolition

Vehicle Description	No. of Vehicle	Hours	Trips	Length	CO	NOx	PM10	PM2.5	Combustion PM10	Fugitive PM10
Concrete/Industrial Saws	1	8.0			3.59	6.11	0.51	0.47	0.51	
Tractors/Loaders/Backhoes	2	8.0			6.63	13.29	1.57	1.06	1.02	0.55
Rubber Tired Dozers	1	1.0			1.69	3.41	0.70	0.25	0.15	0.55
Haul Trucks			21	40.0	43.96	57.38	1.052	0.968	1.052	
Total Onsite Emissions					55.87	80.19	3.83	2.75	1.68	1.10
Localized Significance Threshold*					664	192	5	3		
Exceed Significance?					NO	NO	NO	NO		

PM2.5 Fractions		
Combustion (Offroad)	Combustion (Onroad)	Fugitive
0.92	0.964	0.21

3.83 2.79

Grading

Vehicle Description	No. of Vehicle	Hours	Trips	Length	CO	NOx	PM10	PM2.5	Combustion PM10	Fugitive PM10
Rubber Tired Dozers	1	6.0			10.17	20.49	0.89	0.82	0.88	0.01
Graders	1	6.0			4.03	10.32	0.54	0.49	0.53	0.01
Tractors/Loaders/Backhoes	1	7.0			2.90	5.81	0.81	0.49	0.45	0.36
Haul Trucks			7	0.1	0.04	0.05	0.0009	0.0008		
Water Trucks			3	1.1	0.17	0.23	0.0041	0.004		
Total Onsite Emissions					17.31	36.89	2.25	1.80	1.86	0.38
Localized Significance Threshold*					664	192	5	3		
Exceed Significance?					NO	NO	NO	NO		

2.25 1.80

Building

Vehicle Description	No. of Vehicle	Hours	Trips	Length	CO	NOx	PM10	PM2.5
Tractors/Loaders/Backhoes	1	4.0			1.66	3.32	0.26	0.24
Haul Trucks			3	0.1	0.02	0.02	0.0004	0.0004
Total Onsite Emissions					1.67	3.34	0.26	0.24
Localized Significance Threshold*					664	192	5	3
Exceed Significance?					NO	NO	NO	NO
Localized Significance Threshold*					664	192	5	3
Exceed Significance?					NO	NO	NO	NO

0.26 0.24

**EL ENCANTO PHASE I
DEMOLITION PHASE**

Example	Construction Activity
Encanto Phase 1	Demolition of Existing 32,670 Square Foot Structure ^a
Demolition Schedule	3 days ^a

Equipment Type ^{a,b}	No. of Equipment	hr/day	Crew Size
Concrete/Industrial Saws	1	8.0	8
Tractors/Loaders/Backhoes	2	8.0	
Rubber Tired Dozers	1	1.0	

Construction Equipment Emission Factors			
	CO	NOx	PM10
Equipment Type ^c	lb/hr	lb/hr	lb/hr
Concrete/Industrial Saws	0.449	0.764	0.064
Tractors/Loaders/Backhoes	0.414	0.830	0.064
Rubber Tired Dozers	1.695	3.414	0.147

Building Dimensions			
Description ^a	Width of Building	Length of Building	Height of Building
	ft	ft	ft
Total Project	20	50	15

Fugitive Dust Material Handling			
Aerodynamic Particle Size Multiplier ^d	Mean Wind Speed ^e	Moisture Content ^f	Debris Handled ^g
	mph		ton/day
0.35	10	2.0	501

Construction Vehicle (Mobile Source) Emission Factors			
	CO	NOx	PM10
	lb/mile	lb/mile	lb/mile
Heavy-Duty Truck ^h	0.026167	0.034155	0.000626

**EL ENCANTO PHASE I
DEMOLITION PHASE (Continued)**

On-Site Number of Trips and Trip Length		
Vehicle	No. of One-Way Trips/Day ⁱ	One-Way Trip Length ^j (miles)
Haul Truck	21	40

Incremental Increase in Onsite Combustion Emissions from Construction Equipment			
Equation: Emission Factor (lb/hr) x No. of Equipment x Work Day (hr/day) = Onsite Construction Emissions (lb/day)			
Equipment Type	CO lb/day	NOx lb/day	PM10 lb/day
Concrete/Industrial Saws	3.59	6.11	0.51
Tractors/Loaders/Backhoes	6.63	13.29	1.02
Rubber Tired Dozers	1.69	3.41	0.15
Total	11.91	22.81	1.68

Incremental Increase in Onsite Fugitive Dust Emissions from Construction Equipment		
Material Handling ^k : $(0.0032 \times \text{Aerodynamic Particle Size Multiplier} \times (\text{wind speed (mph)/5})^{1.3} / (\text{moisture content/2})^{1.4} \times \text{debris handled (ton/day)}) \times (1 - \text{control efficiency}) = \text{PM10 Emissions (lb/day)}$		
Description	Control Efficiency %	PM10 ^m lb/day
Material Handling (Demolition) ^l	60	0.55
Material Handling (Debris)	60	0.55
Total		1.10

Incremental Increase in Onsite Combustion Emissions from Onroad Mobile Vehicles			
Equation: Emission Factor (lb/mile) x No. of One-Way Trips/Day x 2 x Trip length (mile) = Mobile Emissions (lb/day)			
Vehicle	CO lb/day	NOx lb/day	PM10 lb/day
Haul Truck	43.96	57.38	1.052
Total	43.96	57.38	1.052

**EL ENCANTO PHASE I
DEMOLITION PHASE (Continued)**

Total Incremental Localized Emissions from Construction Activities			
Sources	CO lb/day	NOx lb/day	PM10 lb/day
On-site Emissions	55.9	80.2	3.8
Significance Thresholdⁿ	664	192	5
Exceed Significance?	NO	NO	NO

Combustion and Fugitive Summary	PM2.5 Fraction^o	PM10 lb/day	PM2.5 lb/day	Percentage Contribution
Combustion (Offroad)	0.92	1.7	1.5	55.42%
Combustion (Onroad)	0.96	1.052	1.014	36.31%
Fugitive	0.21	1.10	0.23	8.27%
Total		3.8	2.8	
Significance Thresholdⁿ			3	
Exceed Significance?			NO	

Notes:
 Project specific data may be entered into shaded cells. Changing the values in the shaded cells will not affect the integrity of the worksheets. Verify that units of values entered match units for cell.
 Adding lines or entering values with units different than those associated with the shaded cells may alter the integrity of the sheets or produce incorrect results.

- a) SCAQMD, estimated from survey data, Sept 2004
- b) Equipment name must match CARB Off-Road Model (see Off-Road Model EF worksheet) equipment name for sheet to look up EFs automatically.
- c) SCAB values provided by the ARB, Oct 2006. Assumed equipment is diesel fueled.
- d) USEPA, AP-42, Jan 1995, Section 13.2.4 Aggregate Handling and Storage Piles, p 13.2.4-3 Aerodynamic particle size multiplier for < 10 µm
- e) Mean wind speed - maximum of daily average wind speeds reported in 1981 meteorological data.
- f) USEPA, Fugitive Dust Background Document and Technical Information Document for Best Available Control Measures, equation 2-13, p 2-28
- g) USEPA, Fugitive Dust Background Document and Technical Information Document for Best Available Control Measures, p 2-28. Debris weight to area ratio = 0.046 ton/sq ft
 (32,670 sq ft x 0.046 ton/sq ft)/3 days = 501 ton/day
- h) CARB, EMFAC2007 (version 2.3) Burden Model, Winter 2007, 75 F, 40% RH: EF, lb/yr = (EF, ton/yr x 2,000 lb/ton)/VMT
- i) Assumed 30 cubic yd truck capacity [(501 ton/day x 2,000 lb/ton x cyd/1,620 lb = 619 cyd)/30 cyd/truck = 21 one-way truck trips/day, building debris density is assumed to be 1,620 lb/cyd]
 Multiple trucks can be used.
- j) Assumed trucks travel 0.1 mile through project site.
- k) USEPA, Fugitive Dust Background Document and Technical Information Document for Best Available Control Measures, equation 2-13, p 2-28.
- l) EPA suggests using the material handling equation for demolition emission estimates.
- m) Includes watering at least three times a day per Rule 403 (68% control efficiency)
- n) For illustration purposes only, this analysis is based on the most stringent LSTs. Please consult App. C of the Methodology Paper for applicable LSTs.
- o) ARB's CEIDARS database PM2.5 fractions - construction dust category for fugitive and diesel vehicle exhaust category for combustion.

**EL ENCANTO PHASE I
GRADING PHASE**

Example	Construction Activity
Encanto Phase 1	Grading 32,670 Square Feet ^a
Grading Schedule -	3 days^a

Equipment Type ^{a,b}	No. of Equipment	hr/day	Crew Size
Rubber Tired Dozers	1	6.0	8
Graders	1	6.0	
Tractors/Loaders/Backhoes	1	7.0	

Construction Equipment Emission Factors			
	CO	NOx	PM10
Equipment Type^c	lb/hr	lb/hr	lb/hr
Rubber Tired Dozers	1.695	3.414	0.147
Graders	0.671	1.720	0.089
Tractors/Loaders/Backhoes	0.414	0.830	0.064

Fugitive Dust Grading Parameters	
Vehicle Speed (mph)^d	Vehicle Miles Traveled^e
3	0.19

Fugitive Dust Stockpiling Parameters				
Silt Content^f	Precipitation Days^g	Mean Wind Speed Percent^h	TSP Fraction	Areaⁱ (acres)
6.9	10	100	0.5	0.02

**EL ENCANTO PHASE I
GRADING PHASE (Continued)**

Fugitive Dust Material Handling				
Aerodynamic Particle Size Multiplier^j	Mean Wind Speed^k	Moisture Content^f	Dirt Handled^a	Dirt Handled^l
	mph		cy	lb/day
0.35	10	7.9	600	500,000

Construction Vehicle (Mobile Source) Emission Factors			
	CO	NOx	PM10
	lb/mile	lb/mile	lb/mile
Heavy-Duty Truck ^m	0.026167	0.034155	0.000626

On-Site Number of Trips and Trip Length		
Vehicle	No. of One-Way Trips/Day	One-Way Trip Length (miles)
Haul Truck ⁿ	7	0.1
Water Truck ^o	3	1.1

Incremental Increase in Onsite Combustion Emissions from Construction Equipment			
Equation: Emission Factor (lb/hr) x No. of Equipment x Work Day (hr/day) = Onsite Construction Emissions (lb/day)			
Equipment Type	CO	NOx	PM10
	lb/day	lb/day	lb/day
Rubber Tired Dozers	10.17	20.49	0.88
Graders	4.03	10.32	0.53
Tractors/Loaders/Backhoes	2.90	5.81	0.45
Total	17.1	36.6	1.9

Incremental Increase in Fugitive Dust Emissions from Construction Operations
Equations:

**EL ENCANTO PHASE I
GRADING PHASE (Continued)**

Grading^p: PM10 Emissions (lb/day) = 0.60 x 0.051 x mean vehicle speed^{2.0} x VMTx (1 - control efficiency)
 Storage Piles^q: PM10 Emissions (lb/day) = 1.7 x (silt content/1.5) x ((365-precipitation days)/235) x wind speed percent/15 x TSP fraction x Area) x (1 - control efficiency)
 Material Handling^r PM10 Emissions (lb/day) = (0.0032 x aerodynamic particle size multiplier x (wind speed (mph)/5)^{1.3}/(moisture content/2)^{1.4} x dirt handled (lb/day)/2,000 (lb/ton) (1 - control efficiency)

Description	Control Efficiency %	Unmitigated PM10 ^s lb/day
Earthmoving	60	0.02
Storage Piles	60	0.32
Material Handling	60	0.04
Total		0.38

Incremental Increase in Onsite Travel Emissions from Onroad Mobile Equipment

Equation: Emission Factor (lb/mile) x No. of One-Way Trips/Day x 2 x Trip length (mile) = Mobile Emissions (lb/day)

Vehicle	CO lb/day	NOx lb/day	PM10 lb/day
Haul Truck	0.0366	0.0478	0.0009
Water Truck	0.1727	0.2254	0.0041
	0.209	0.273	0.005

Total Incremental Localized Emissions from Construction Activities

Sources	CO lb/day	NOx lb/day	PM10 lb/day
On-site Emissions	17.3	36.9	2.2
Significance Threshold^t	664	192	5
Exceed Significance?	NO	NO	NO

**EL ENCANTO PHASE I
GRADING PHASE (Continued)**

Combustion and Fugitive Summary	PM2.5 Fraction^u	PM10	PM2.5	Percentage Contribution
		lb/day	lb/day	
Combustion (Offroad)	0.92	1.9	1.7	95.296%
Combustion (Onroad)	0.96	0.005	0.005	0.268%
Fugitive	0.21	0.38	0.08	4.435%
Total		2.2	1.8	
Significance Threshold^t			3	
Exceed Significance?			NO	

Notes:
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Adding lines or entering values with units different than those associated with the shaded cells may alter the integrity of the sheets or produce incorrect results.

a) SCAQMD, estimated from survey data, Sept 2004

b) Equipment name must match CARB Off-Road Model (see Off-Road Model EF worksheet) equipment name for sheet to look up EFs automatically.

c) SCAB values provided by the ARB, Oct 2006. Assumed equipment is diesel fueled.

d) Caterpillar Performance Handbook, Edition 33, October 2003 Operating Speeds, p 2-3.

e) Assumed 13 foot wide blade with 2 foot overlap (11 foot wide). Vehicle miles traveled (VMT) = (32,670 sq ft/11 foot x mile/5,280 ft)/3 days = 0.19 mile

f) USEPA, AP-42, July 1998, Table 11.9-3 Typical Values for Corection Factors Applicable to the Predictive Emission Factor Equations

g) Table A9-9-E2, SCAQMD CEQA Air Quality Handbook, 1993

h) Mean wind speed percent - percent of time mean wind speed exceeds 12 mph. At least one meteorological site recorded wind speeds greater than 12 mph over a 24-hour period in 1981.

i) Assumed storage piles are 0.02 acres in size

j) USEPA, AP-42, Jan 1995, Section 13.2.4 Aggregate Handling and Storage Piles, p 13.2.4-3 Aerodynamic particle size multiplier for < 10 µm

k) Mean wind speed - maximum of daily average wind speeds reported in 1981 meteorological data.

l) Assuming 600 cubic yards of dirt handled [(600 cyd x 2,500 lb/cyd)/3 days = 500,000 lb/day]

m) CARB, EMFAC2007 (version 2.3) Burden Model, Winter 2007, 75 F, 40% RH: EF, lb/yr = (EF, ton/yr x 2,000 lb/ton)/VMT

n) Assumed 30 cubic yd truck capacity for 600 cy of dirt [(600 cy x truck/30 cy)/2 days = 7 one-way truck trips/day]. Assumed haul truck travels 0.1 miles through facility

o) Assumed six foot wide water truck traverses over 32,670 square feet of disturbed area

p) USEPA, AP-42, July 1998, Table 11.9-1, Equation for Site Grading ≤ 10 µm

q) USEPA, AP-42, Jan 1995, Section 13.2.4 Aggregate Handling and Storage Piles, Equation 1

r) USEPA, Fugitive Dust Background Document and Technical Information Document for Best Available Control Measures, Sept 1992, EPA-450/2-92-004, Equation 2-12

s) Includes watering at least three times a day per Rule 403 (68% control efficiency)

t) For illustration purposes only, this analysis is based on the most stringent LSTs. Please consult App. C of the Methodology Paper for applicable LSTs.

u) ARB's CEIDARS database PM2.5 fractions - construction dust category for fugitive and diesel vehicle exhaust category for combustion.

**EL ENCANTO PHASE I
STRUCTURE CONSTRUCTION**

Example	Construction Activity
Encanto Phase 1	Building 10,000 Square Foot Structure ^a

Construction Schedule			
Equipment Type^{a,b}	No. of Equipment	hr/day	Crew Size
Tractors/Loaders/Backhoes	1	4.0	8

Construction Equipment Combustion Emission Factors			
Equipment Type^c	CO lb/hr	NOx lb/hr	PM10 lb/hr
Tractors/Loaders/Backhoes	0.414	0.830	0.064

Construction Vehicle (Mobile Source) Emission Factors			
	CO lb/mile	NOx lb/mile	PM10 lb/mile
Heavy-Duty Truck ^d	0.026167	0.034155	0.000626

On-Site Number of Trips and Trip Length		
Vehicle	No. of One-Way Trips/Day	One-Way Trip Length (miles)
Flatbed Trucks ^e	3	0.1

Incremental Increase in Onsite Idling Emissions from Onroad Mobile Vehicles			
Equation: Emission Factor (lb/hr) x No. of Equipment x Work Day (hr/day) = Onsite Construction Emissions (lb/day)			
Equipment Type	CO lb/day	NOx lb/day	PM10 lb/day

**EL ENCANTO PHASE I
STRUCTURE CONSTRUCTION (Continued)**

Tractors/Loaders/Backhoes	1.66	3.32	0.26
Total	1.66	3.32	0.26

Incremental Increase in Onsite Combustion Emissions from Onroad Mobile Vehicles			
Equation: Emission Factor (lb/mile) x No. of One-Way Trips/Day x 2 x Trip length (mile) = Mobile Emissions (lb/day)			
	CO	NOx	PM10
Vehicle	lb/day	lb/day	lb/day
Flatbed Trucks	0.016	0.020	0.0004
Total	0.02	0.02	0.000

Total Incremental Combustion Emissions from Construction Activities			
	CO	NOx	PM10
Sources	lb/day	lb/day	lb/day
On-Site Emissions	1.7	3.3	0.3
Significance Threshold^g	664	192	5
Exceed Significance?	NO	NO	NO

Combustion and Fugitive Summary				
	PM2.5 Fraction^h	PM10	PM2.5	Percentage Contribution
		lb/day	lb/day	
Combustion (Offroad)	0.92	0.3	0.2	99.8%
Combustion (Onroad)	0.96	0.000	0.000	0.2%
Fugitive	0.21	0	0	0.0%
Total		0.3	0.2	
Significance Threshold^g			3	
Exceed Significance?			NO	

**EL ENCANTO PHASE I
STRUCTURE CONSTRUCTION (Continued)**

- Notes:**
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- a) SCAQMD, estimated from survey data, Sept 2004
 - b) Equipment name must match CARB Off-Road Model (see Off-Road Model EF worksheet) equipment name for sheet to look up EFs automatically.
 - c) SCAB values provided by the ARB, Oct 2006. Assumed equipment is diesel fueled.
 - d) CARB, EMFAC2007 (version 2.3) Burden Model, Winter 2007, 75 F, 40% RH: $EF, \text{ lb/yr} = (EF, \text{ ton/yr} \times 2,000 \text{ lb/ton})/\text{VMT}$
 - e) Assumed haul truck travels 0.1 miles through facility
 - f) Assumed six foot wide water truck traverses over 40,000 square feet of disturbed area
 - g) For illustration purposes only, this analysis is based on the most stringent LSTs. Please consult App. C of the Methodology Paper for applicable LSTs.
 - h) ARB's CEIDARS database PM2.5 fractions - construction dust category for fugitive and diesel vehicle exhaust category for combustion.

ARB OFFROAD MODEL EMISSION FACTORS

Sum of Ems Factor #/hr		Year	Pollutant			
		2007				
Eq Name	Hp	CO	NOx	PM10	SOx	VOC
Aerial Lifts	Composite	0.225	0.403	0.028	0.000	0.078
Air Compressors	Composite	0.387	0.830	0.058	0.001	0.129
Bore/Drill Rigs		0.539	1.473	0.065	0.002	0.146
Cement and Mortar Mixers	Composite	0.046	0.069	0.005	0.000	0.012
Concrete/Industrial Saws	Composite	0.449	0.764	0.064	0.001	0.156
Cranes	Composite	0.637	1.695	0.075	0.001	0.188
Crawler Tractors	Composite	0.709	1.622	0.099	0.001	0.218
Crushing/Proc. Equipment	Composite	0.782	1.655	0.105	0.001	0.250
Dumpers/Tenders	Composite	0.038	0.071	0.005	0.000	0.014
Excavators	Composite	0.598	1.423	0.078	0.001	0.182
Forklifts	Composite	0.250	0.643	0.035	0.001	0.086
Generator Sets	Composite	0.355	0.725	0.045	0.001	0.113
Graders	Composite	0.671	1.720	0.089	0.001	0.206
Off-Highway Tractors	Composite	0.927	2.274	0.111	0.002	0.269
Off-Highway Trucks	Composite	0.913	2.914	0.106	0.003	0.288
Other Construction Equipment	Composite	0.475	1.241	0.054	0.001	0.131
Other General Industrial Equipment	Composite	0.699	1.901	0.085	0.002	0.211
Other Material Handling Equipment	Composite	0.630	1.836	0.082	0.002	0.204
Pavers	Composite	0.600	1.129	0.080	0.001	0.206
Paving Equipment	Composite	0.469	1.033	0.071	0.001	0.156
Plate Compactors	Composite	0.026	0.035	0.002	0.000	0.005
Pressure Washers	Composite	0.070	0.108	0.008	0.000	0.023
Pumps	Composite	0.324	0.622	0.044	0.001	0.109
Rollers	Composite	0.442	0.907	0.063	0.001	0.141
Rough Terrain Forklifts	Composite	0.493	0.963	0.080	0.001	0.158
Rubber Tired Dozers	Composite	1.695	3.414	0.147	0.002	0.379
Rubber Tired Loaders	Composite	0.555	1.382	0.077	0.001	0.173
Scrapers	Composite	1.525	3.399	0.147	0.003	0.368
Signal Boards	Composite	0.097	0.181	0.011	0.000	0.025
Skid Steer Loaders	Composite	0.273	0.337	0.033	0.000	0.098
Surfacing Equipment	Composite	0.765	1.850	0.071	0.002	0.186
Sweepers/Scrubbers	Composite	0.567	1.028	0.082	0.001	0.196
Tractors/Loaders/Backhoes	Composite	0.414	0.830	0.064	0.001	0.131
Trenchers	Composite	0.517	0.858	0.071	0.001	0.194
Welders	Composite	0.234	0.319	0.030	0.000	0.092

**EL ENCANTO PHASE 1
NON-LST EMISSIONS**

DEMOLITION

Equipment Type ^{a,b}	No. of Equipment	hr/day	Crew Size
Concrete/Industrial Saws	1	8.0	4
Tractors/Loaders/Backhoes	2	8.0	
Rubber Tired Dozers	1	1.0	
	VOC	SOx	
Equipment Type^c	lb/hr	lb/hr	
Concrete/Industrial Saws	0.156	0.001	
Tractors/Loaders/Backhoes	0.131	0.001	
Rubber Tired Dozers	0.379	0.002	
Construction Vehicle (Mobile Source) Emission Factors			
	VOC	SOx	
	lb/mile	lb/mile	
Heavy-Duty Truckh	0.003516	0.044580	

Construction Worker Number of Trips and Trip Length

Vehicle	No. of One-Way Trips/Day ⁿ	One-Way Trip Length Miles ^a
	Haul Truck	21

Incremental Increase in Onsite Combustion Emissions from Construction Equipment

Equation: Emission Factor (lb/hr) x No. of Equipment x Work Day (hr/day) = Onsite Construction Emissions (lb/day)

Equipment Type	VOC lb/day	SOx lb/day
Concrete/Industrial Saws	1.25	0.02
Tractors/Loaders/Backhoes	2.09	0.00
Rubber Tired Dozers	0.38	0.00
Total	1.2	0.0

Incremental Increase in Onsite Combustion Emissions from Onroad Mobile Vehicles

Equation: Emission Factor (lb/mile) x No. of One-Way Trips/Day x 2 x Trip length (mile) = Mobile Emissions (lb/day)

Vehicle	VOC lb/day	SOx lb/day
Haul Truck	5.91	74.89
Total	5.91	74.89

Total Onsite Emissions	7.16	74.92
SCAQMD Threshold	75	150
Exceed Significance?	NO	NO

**EL ENCANTO PHASE 1
NON-LST EMISSIONS (Continued)**

GRADING

Equipment Type ^{a,b}	No. of Equipment	hr/day	Crew Size
Rubber Tired Dozers	1	6.0	8
Graders	1	6.0	
Tractors/Loaders/Backhoes	1	7.0	

Construction Equipment Emission Factors

Equipment Type ^c	VOC lb/hr	SOx lb/hr
Rubber Tired Dozers	0.379	0.002
Graders	0.206	0.001
Tractors/Loaders/Backhoes	0.131	0.001

Construction Vehicle (Mobile Source) Emission Factors

	VOC lb/mile	SOx lb/mile
Heavy-Duty Truckm	0.014462	0.047182

Construction Worker Number of Trips and Trip Length

Vehicle	No. of One-Way Trips/Day ⁿ	One-Way Trip Length (miles) ^{n, a}
Haul Truckn	7	0.1
Water Trucko	3	1.1

Incremental Increase in Onsite Combustion Emissions from Construction Equipment

Equation: Emission Factor (lb/hr) x No. of Equipment x Work Day (hr/day) = Onsite Construction Emissions (lb/day)

Equipment Type	VOC lb/day	SOx lb/day
Total	2.27	0.01
Total	2.3	0.0

Incremental Increase in Onsite Combustion Emissions from Onroad Mobile Vehicles

Equation: Emission Factor (lb/mile) x No. of One-Way Trips/Day x 2 x Trip length (mile) = Mobile Emissions (lb/day)

Vehicle	VOC lb/day	SOx lb/day
Haul Truckn	0.02	0.07
Water Trucko	0.1	0.31
Total	0.12	0.38

**EL ENCANTO PHASE 1
NON-LST EMISSIONS (Continued)**

Total Incremental Localized Emissions from Construction Activities			
Sources	VOC lb/day	SOx lb/day	
On-site Emissions	2.4	0.4	
Significance Threshold	75	150	
Exceed Significance?	NO	NO	

BUILDING

Equipment Type^{a,b}	No. of Equipment	hr/day	Crew Size
Tractors/Loaders/Backhoes	3	7.0	8

Construction Equipment Combustion Emission Factors

Equipment Type^c	VOC lb/hr	SOx lb/hr
Tractors/Loaders/Backhoes	0.131	0.001

Construction Vehicle (Mobile Source) Emission Factors

	VOC lb/mile	SOx lb/mile
Heavy-Duty Truck ^d	0.014462	0.047182

Construction Worker Number of Trips and Trip Length

Vehicle	No. of One-Way Trips/Day	One-Way Trip Length (miles)
Flatbed Trucks	3	0.1

Incremental Increase in Onsite Combustion Emissions from Construction Equipment

Equation: Emission Factor (lb/hr) x No. of Equipment x Work Day (hr/day) = Onsite Construction Emissions (lb/day)

Equipment Type	VOC lb/day	SOx lb/day
Tractors/Loaders/Backhoes	2.74	0.02
Total	2.74	0.02

Incremental Increase in Onsite Combustion Emissions from Onroad Mobile Vehicles

Equation: Emission Factor (lb/mile) x No. of One-Way Trips/Day x 2 x Trip length (mile) = Mobile Emissions (lb/day)

Vehicle	VOC lb/day	SOx lb/day
Haul Truck Delivery	0.01	0.03
Total	0.01	0.03

**EL ENCANTO PHASE 1
NON-LST EMISSIONS (Continued)**

Total Incremental Combustion Emissions from Construction Activities					
Sources	VOC lb/day	SOx lb/day			
On-Site Emissions	2.8	0.1			
Significance Threshold	75	150			
Exceed Threshold?	NO	NO			

**EL ENCANTO
PHASE II**

**SUMMARY OF EL ENCANTO PHASE 2
RESULTS BY PHASE**

El Encanto Phase 2				
Total On-Site				
	CO	NOx	PM10	PM2.5
Demolition	29.4	90.0	5.1	4.3
Site Preparation	17.8	43.6	3.4	2.2
Grading	30.6	89.4	6.2	4.7
Building	7.6	16.9	1.1	1.0
Arch Coating and Paving	19.5	40.0	2.8	2.6
Localized Significance Threshold*	1017	277	7	5
Exceed Significance?	NO	NO	NO	NO

SUMMARY OF EL ENCANTO PHASE 2 RESULTS BY PHASE AND EQUIPMENT

Demolition

Vehicle Description	No. of Vehicle	Hours	Trips	Length	CO	NOx	PM10	PM2.5	Combustion PM10	Fugitive PM10
Tractors/Loaders/Backhoes	1	7.0			2.90	5.81	0.45	0.41	0.45	
Rubber Tired Dozers	1	7.0			3.32	8.69	0.93	0.46	0.38	0.55
Haul Trucks			20	40	23.14	75.49	3.694	3.399	3.694	
Water Truck			3	3.8	0.33	1.08	0.053	0.048	0.053	
Total Onsite Emissions					29.4	90.0	5.1	4.3	0.82	0.55
Localized Significance Threshold*					1017	277	7	5		
Exceed Significance?					NO	NO	NO	NO		

PM2.5 Fractions		
Combustion (Offroad)	Combustion (Onroad)	Fugitive
0.92	0.964	0.21

5.62 5.00

Site Preparation

Vehicle Description	No. of Vehicle	Hours	Trips	Length	CO	NOx	PM10	PM2.5	Combustion PM10	Fugitive PM10
Scrapers	1	7.0			10.67	23.79	1.43	1.03	1.03	0.40
Tractors/Loaders/Backhoes	1	7.0			2.90	5.81	1.25	0.58	0.45	0.80
Haul Trucks			2	40	2.31	7.55	0.369	0.340	0.369	
Water Trucks			3	22.6	1.96	6.40	0.31	0.285	0.310	
Total Onsite Emissions					17.8	43.6	3.4	2.2	1.47	1.20
Localized Significance Threshold*					1017	277	7	5		
Exceed Significance?					NO	NO	NO	NO		

3.35 2.26

Grading

Vehicle Description	No. of Vehicle	Hours	Trips	Length	CO	NOx	PM10	PM2.5	Combustion PM10	Fugitive PM10
Graders	1	7.0			4.70	12.04	1.02	0.65	0.62	0.40
Tractors/Loaders/Backhoes	2	7.0			5.80	11.62	1.98	1.05	0.89	1.09
Haul Trucks			50	0.1	0.14	0.47	0.0231	0.021	0.0231	
Haul Trucks (Disposal)			50	0.1	19.67	64.17	3.1402	2.889	3.1402	
Water Trucks			3	3.8	0.33	1.08	0.05	0.05	0.050	
Total Onsite Emissions					30.6	89.4	6.2	4.7	0.89	1.09

6.22 4.81

**SUMMARY OF EL ENCANTO PHASE 2
RESULTS BY PHASE AND EQUIPMENT (Continued)**

Localized Significance Threshold*	1017	277	7	5
Exceed Significance?	NO	NO	NO	NO

Building

Vehicle Description	No. of Vehicle	Hours	Trips	Length	CO	NOx	PM10	PM2.5
Forklifts	1	7.0			1.75	4.50	0.24	0.22
Tractors/Loaders/Backhoes	1	7.0			2.90	5.81	0.45	0.41
Generator Sets	1	7.0			2.48	5.07	0.31	0.29
Electric Welders	1	7.0			N/A	N/A	N/A	N/A
Haul Trucks			30	0.1	0.09	0.28	0.014	0.013
Water Trucks			3	4.5	0.39	1.27	0.06	0.06
Total Onsite Emissions					7.6	16.9	1.1	1.0
Localized Significance Threshold*	1017							
Exceed Significance?	NO				NO	NO	NO	NO

1.08 0.99

* Illustration purpose showing the most stringent LSTs. Please consult App. C of the Methodology Paper for applicable LSTs.

Architectural Coating and Asphalt Paving

Vehicle Description	No. of Vehicle	Hours	Trips	Length	CO	NOx	PM10	PM2.5
Pavers	1	8.0			4.80	9.03	0.64	0.59
Paving Equipment	1	8.0			3.75	8.27	0.57	0.52
Rollers	2	8.0			7.07	14.52	1.01	0.93
Cement and Mortar Mixers	1	3.0			0.14	0.21	0.01	0.01
Tractors/Loaders/Backhoes	1	8.0			3.31	6.64	0.51	0.47
Haul Trucks			9	0.1	0.03	0.08	0.004	0.004
Water Trucks			3	4.5	0.39	1.27	0.06	0.06
Total Onsite Emissions					19.5	40.0	2.8	2.6
Localized Significance Threshold*	1017							
Exceed Significance?	NO				NO	NO	NO	NO

2.80 2.58

**EL ENCANTO PHASE 2
DEMOLITION PHASE**

Example	Construction Activity
El Encanto Phase 2	Demolition of Existing 118,920 Square Foot Structure ^a
Demolition Schedule -	11 days ^a

Equipment Type ^{a,b}	No. of Equipment	hr/day	Crew Size
Tractors/Loaders/Backhoes	1	7.0	10
Other Construction Equipment	1	7.0	

Construction Equipment Emission Factors			
	CO	NOx	PM10
Equipment Type ^c	lb/hr	lb/hr	lb/hr
Tractors/Loaders/Backhoes	0.414	0.830	0.064
Other Construction Equipment	0.475	1.241	0.054

Building Dimensions			
Description ^a	Width of Building	Length of Building	Height of Building
	ft	ft	ft
Total Project	10	35	1

Fugitive Dust Material Handling			
Aerodynamic Particle Size Multiplier ^d	Mean Wind Speed ^e	Moisture Content ^f	Debris Handled ^g
	mph		ton/day
0.35	10	2.0	497

Construction Vehicle (Mobile Source) Emission Factors

**EL ENCANTO PHASE 2
DEMOLITION PHASE (Continued)**

	CO lb/mile	NOx lb/mile	PM10 lb/mile
Heavy-Duty Truck ^h	0.014462	0.047182	0.002309

Construction Worker Number of Trips and Trip Length		
Vehicle	No. of One-Way Trips/Dayⁱ	One Way Trip Length^j (miles)
Haul Truck	20	40
Water Truck	3	3.8

Incremental Increase in Onsite Combustion Emissions from Construction Equipment			
Equation: Emission Factor (lb/BHP-hr) x No. of Equipment x Work Day (hr/day) x Equipment rating (hp) x Load Factor (%/100) = Onsite Construction Emissions (lb/day)			
Equipment Type	CO lb/day	NOx lb/day	PM10 lb/day
Tractors/Loaders/Backhoes	2.90	5.81	0.45
Breakers	3.32	8.69	0.38
Total	6.2	14.5	0.8

Incremental Increase in Onsite Fugitive Dust Emissions from Construction Equipment		
Material Handling ^k : $(0.0032 \times \text{Aerodynamic Particle Size Multiplier} \times (\text{wind speed (mph)} / 5)^{1.3} / (\text{moisture content} / 2)^{1.4} \times \text{debris handled (ton/day)}) \times (1 - \text{control efficiency}) = \text{PM10 Emissions (lb/day)}$		
Description	Control Efficiency %	PM10 Mitigated^m lb/day
Material Handling (Demolition) ^l	60	0.55
Material Handling (Debris)	60	0.55
Total		1.10

**EL ENCANTO PHASE 2
DEMOLITION PHASE (Continued)**

Incremental Increase in Onsite Combustion Emissions from Onroad Mobile Vehicles			
Equation: Emission Factor (lb/mile) x No. of One-Way Trips/Day x 2 x Trip length (mile) = Mobile Emissions (lb/day)			
Vehicle	CO lb/day	NOx lb/day	PM10 lb/day
Haul Truck	23.14	75.49	3.694
Water Truck	0.33	1.08	0.05
Total	23.14	75.49	3.694

Total Incremental Localized Emissions from Construction Activities			
Sources	CO lb/day	NOx lb/day	PM10 lb/day
On-site Emissions (Mitigated)	29.4	90.0	5.6
Significance Thresholdⁿ	1017	277	7
Exceed Significance?	NO	NO	NO

Combustion and Fugitive Summary	PM2.5 Fraction^o	PM10 lb/day	PM2.5 lb/day	Percentage Contribution
Combustion (Offroad)	0.92	0.8	0.8	16.7%
Combustion (Onroad)	0.96	3.694	3.561	78.3%
Fugitive	0.21	1.10	0.23	5.1%
Total		5.6	4.6	
Significance Thresholdⁿ			5	
Exceed Significance?			NO	

Notes:
 Project specific data may be entered into shaded cells. Changing the values in the shaded cells will not affect the integrity of the worksheets. Verify that units of values entered match units for cell.
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 a) SCAQMD, estimated from survey data, Sept 2004

**EL ENCANTO PHASE 2
DEMOLITION PHASE (Continued)**

- b) Equipment name must match CARB Off-Road Model (see Off-Road Model EF worksheet) equipment name for sheet to look up EFs automatically.
- c) SCAB values provided by the ARB, Oct 2006. Assumed equipment is diesel fueled.
- d) USEPA, AP-42, Jan 1995, Section 13.2.4 Aggregate Handling and Storage Piles, p 13.2.4-3 Aerodynamic particle size multiplier for $< 10 \mu\text{m}$
- e) Mean wind speed - maximum of daily average wind speeds reported in 1981 meteorological data.
- f) USEPA, Fugitive Dust Background Document and Technical Information Document for Best Available Control Measures, equation 2-13, p 2-28
- g) USEPA, Fugitive Dust Background Document and Technical Information Document for Best Available Control Measures, p 2-28. Debris weight to area ratio = 0.046 ton/sq ft
(118,920 sq ft x 0.046 ton/sq ft)/11 days =
497 ton/day
- h) CARB, EMFAC2007 (version 2.3) Burden Model, Winter 2007, 75 F, 40% RH: EF, lb/yr = (EF, ton/yr x 2,000 lb/ton)/VMT
- i) Assumed 30 cubic yd truck capacity [(497 tons/day x 2,000 lb/ton x cyd/1,620 lb = 614 cyd)/30 cyd/truck = 20 one-way truck trips/day, where building debris density is assumed to be 1,620 lb/cyd]
Multiple trucks may be used.
- j) Assumed trucks travel 0.1 mile through project site.
- k) USEPA, Fugitive Dust Background Document and Technical Information Document for Best Available Control Measures, equation 2-13, p 2-28. EPA suggests using the material handling equation for demolition emission estimates.
- l) EPA suggests using the material handling equation for demolition emission estimates.
- m) Includes watering at least three times a day per Rule 403 (68% control efficiency)
- n) Illustration purpose showing the most stringent LSTs. Please consult App. C of the Methodology Paper for applicable LSTs..
- o) ARB's CEIDARS database PM2.5 fractions - construction dust category for fugitive and diesel vehicle exhaust category for combustion.

**EL ENCANTO PHASE 2
PREPARATION PHASE**

Example	Construction Activity
El Encanto Phase 2	Site Preparation 118,920 Square Feet ^a
Site Preparation Schedule -	10 days^a

Equipment Type ^{a,b}	No. of Equipment	hr/day	Crew Size
Scrapers	1	7.0	8
Tractors/Loaders/Backhoes	1	7.0	

Construction Equipment Emission Factors			
	CO	NOx	PM10
Equipment Type ^c	lb/hr	lb/hr	lb/hr
Scrapers	1.525	3.399	0.147
Tractors/Loaders/Backhoes	0.414	0.830	0.064

Fugitive Dust Clearing Parameters - Scraping		
Silt Content ^d	Mean Vehicle Weight ^e ton	Vehicle Miles Traveled ^f
6.9	88.73	0.24

Fugitive Dust Stockpiling Parameters				
Silt Content ^d	Precipitation Days ^g	Mean Wind Speed Percent ^h	TSP Fraction	Area ⁱ (acres)
6.9	10	100	0.5	0.05

Fugitive Dust Material Handling					
Aerodynamic Particle Size Multiplier ^j	Mean Wind Speed ^k	Moisture Content ^d	Dirt Handled ^a	Debris Handled ^a	Dirt Handled ^l

**EL ENCANTO PHASE 2
PREPARATION PHASE (Continued)**

	mph		cy	cy	lb/day
0.35	10	7.9	350	96	87,500

Construction Vehicle (Mobile Source) Emission Factors

	CO lb/mile	NOx lb/mile	PM10 lb/mile
Heavy-Duty Truck ^m	0.014462	0.047182	0.002309

Construction Worker Number of Trips and Trip Length

Vehicle	No. of One-Way Trips/Day	One Way Trip Length (miles)
Haul Truck ⁿ	2	40
Water Truck ^o	3	22.6

Incremental Increase in Onsite Combustion Emissions from Construction Equipment

Equation: Emission Factor (lb/hr) x No. of Equipment x Work Day (hr/day) = Onsite Construction Emissions (lb/day)

Equipment Type	CO lb/day	NOx lb/day	PM10 lb/day
Scrapers	10.67	23.79	1.03
Tractors/Loaders/Backhoes	2.90	5.81	0.45
Total	13.6	29.6	1.5

Incremental Increase in Fugitive Dust Emissions from Construction Operations

Equations:

Scraping^p: PM10 Emissions (lb/day) = 1.5 x (silt content/12)^{0.9} x (mean vehicle weight)^{0.45} x VMT x (1 - control efficiency)

Storage Piles^q: PM10 Emissions (lb/day) = 1.7 x (silt content/1.5) x ((365-precipitation days)/235) x wind speed percent/15 x TSP fraction x Area) x (1 - control efficiency)

Material Handling^r: PM10 Emissions (lb/day) = (0.0032 x aerodynamic particle size multiplier x (wind speed (mph)/5)^{1.3}/(moisture content/2)^{1.4} x

**EL ENCANTO PHASE 2
PREPARATION PHASE (Continued)**

dirt handled (lb/day)/2,000 (lb/ton) x (1 - control efficiency)

Description	Control Efficiency %	Unmitigated PM10 ^t lb/day
Scraping	60	0.40
Storage Piles	60	0.79
Material Handling	60	0.01
Total		1.20

Incremental Increase in Onsite Combustion Emissions from Onroad Mobile Vehicles

Equation: Emission Factor (lb/mile) x No. of One-Way Trips/Day x 2 x Trip length (mile) = Mobile Emissions (lb/day)

Vehicle	CO lb/day	NOx lb/day	PM10 lb/day
Haul Truck	2.31	7.55	0.369
Water Truck	1.96	6.4	0.31
Total	4.27	13.95	0.68

Total Incremental Localized Emissions from Construction Activities

Sources	CO lb/day	NOx lb/day	PM10 lb/day
On-site Emissions	17.8	43.6	3.4
Significance Threshold^u	1017	277	7
Exceed Significance?	NO	NO	NO

Combustion and Fugitive Summary	PM2.5 Fraction ^v	PM10 lb/day	PM2.5 lb/day	Percentage Contribution
Combustion (Offroad)	0.92	1.5	1.4	59.9%
Combustion (Onroad)	0.96	0.68	0.65	29.0%
Fugitive	0.21	1.2	0.25	11.1%
Total		3.4	2.3	

**EL ENCANTO PHASE 2
PREPARATION PHASE (Continued)**

**Significance Threshold^u
Exceed Significance?**

**5
NO**

Notes:

Project specific data may be entered into shaded cells. Changing the values in the shaded cells will not affect the integrity of the worksheets. Verify that units of values entered match units for cell.

Adding lines or entering values with units different than those associated with the shaded cells may alter the integrity of the sheets or produce incorrect results.

- a) Data provided by Blue Green
- b) Equipment name must match CARB Off-Road Model (see Off-Road Model EF worksheet) equipment name for sheet to look up EFs automatically.
- c) SCAB values provided by the ARB, Oct 2006. Assumed equipment is diesel fueled.
- d) USEPA, AP-42, July 1998, Table 11.9-3 Typical Values for Corection Factors Applicable to the Predictive Emission Factor Equations
- e) Mean vehicle weight (120,460 pound empty with a 75,000 pound capacity) estimated from 631G Model Scraper Caterpillar Performance Handbook, Edition 33. Scraper in the same horsepower range (450-490 hp) as the composite ARB emission factors.
- f) Caterpillar G31G has a 11.5 foot wide blade, with an assumed 2 foot overlap (9.5 foot wide). Vehicle miles traveled (VMT) = $(118,920 \text{ sq ft} / 9.5 \text{ foot} \times \text{mile} / 5,280 \text{ ft}) / 10 \text{ days} = 0.24 \text{ miles}$
- g) Table A9-9-E2, SCAQMD CEQA Air Quality Handbook, 1993
- h) Mean wind speed percent - percent of time mean wind speed exceeds 12 mph
- i) Assumed storage piles are 0.05 acres in size
- j) USEPA, AP-42, Jan 1995, Section 13.2.4 Aggregate Handling and Storage Piles, p 13.2.4-3 Aerodynamic particle size multiplier for $< 10 \mu\text{m}$
- k) Mean wind speed - maximum of daily average wind speeds reported in 1981 meteorological data.
- l) Assuming 350 cubic yards of dirt handled $[(350 \text{ cyd} \times 2,500 \text{ lb/cyd}) / 10 \text{ days} = 87,500 \text{ lb/day}]$
- m) CARB, EMFAC2007 (version 2.3) Burden Model, Winter 2007, 75 F, 40% RH: $\text{EF, lb/yr} = (\text{EF, ton/yr} \times 2,000 \text{ lb/ton}) / \text{VMT}$
- n) Assumed 30 cubic yd truck capacity for 350 cyd of dirt and 96 cyd of debris $[(446 \text{ cyd} \times \text{truck} / 30 \text{ cyd}) / 10 \text{ days} = 2 \text{ one-way truck trips/day}]$. Assumed haul truck travels 0.1 miles through facility
- o) Assumed six foot wide water truck traverses over 118,920 square feet of disturbed area
- p) USEPA, AP-42, July 1998, Equation 1b and Table 13.2.2-2, AP-42, December 2003. Also see comment g of Table 11.9-1
- r) USEPA, Fugitive Dust Background Document and Technical Information Document for Best Available Control Measures, Sept 1992, EPA-450/2-92-004, Equation 2-12
- s) USEPA, AP-42, Jan 1995, Section 13.2.4 Aggregate Handling and Storage Piles, Equation 1
- t) Includes watering at least three times a day per Rule 403 (68% control efficiency reduced to 60% control efficiency following personal communication with James Koizumi).
- u) LSTs for Source Receptor Area 8 as identified in Appendix C of the Methodology Paper for LSTs.
- v) ARB's CEIDARS database PM2.5 fractions - construction dust category for fugitive and diesel vehicle exhaust category for combustion.

**EL ENCANTO PHASE 2
GRADING PHASE**

Example	Construction Activity
El Encanto Phase 2	Grading 118,920 Square Feet ^a
Site Preparation Schedule -	10 days ^a

Equipment Type ^{a,b}	No. of Equipment	hr/day	Crew Size
Graders	1	7.0	
Tractors/Loaders/Backhoes	2	7.0	

Construction Equipment Emission Factors			
	CO	NOx	PM10
Equipment Type ^c	lb/hr	lb/hr	lb/hr
Graders	0.671	1.720	0.089
Tractors/Loaders/Backhoes	0.414	0.830	0.064

Fugitive Dust Clearing Parameters - Scraping		
Silt Content ^d	Mean Vehicle Weight ^e ton	Vehicle Miles Traveled ^f
6.9	88.73	0.24

Fugitive Dust Stockpiling Parameters				
Silt Content ^d	Precipitation Days ^g	Mean Wind Speed Percent ^h	TSP Fraction	Area ⁱ (acres)
6.9	10	100	0.5	0.05

**EL ENCANTO PHASE 2
GRADING PHASE (Continued)**

Fugitive Dust Material Handling					
Aerodynamic Particle Size Multiplier^j	Mean Wind Speed^k mph	Moisture Content^f	Dirt Handled^a cy	Dirt Handled^l lb/day	Dirt Disposed^a cy
0.35	10	7.9	14,796	3,699,000	5,056

Construction Vehicle (Mobile Source) Emission Factors			
	CO lb/mile	NOx lb/mile	PM10 lb/mile
Heavy-Duty Truck ^m	0.014462	0.047182	0.002309

Construction Worker Number of Trips and Trip Length		
Vehicle	No. of One-Way Trips/Day	One Way Trip Length (miles)
Haul Truck ⁿ	50	0.1
Haul Truck (Disposal) ⁿ	17	40
Water Truck ^o	3	3.8

Incremental Increase in Onsite Combustion Emissions from Construction Equipment			
Equation: Emission Factor (lb/hr) x No. of Equipment x Work Day (hr/day) = Onsite Construction Emissions (lb/day)			
Equipment Type	CO lb/day	NOx lb/day	PM10 lb/day
Graders	4.70	12.04	0.62
Tractors/Loaders/Backhoes	5.80	11.62	0.89
Total	10.5	23.7	1.5

**EL ENCANTO PHASE 2
GRADING PHASE (Continued)**

Incremental Increase in Fugitive Dust Emissions from Construction Operations

Equations:

Scraping^p: PM10 Emissions (lb/day) = 1.5 x (silt content/12)^{0.9} x (mean vehicle weight)^{0.45} x VMT x (1 - control efficiency)

Storage Piles^q: PM10 Emissions (lb/day) = 1.7 x (silt content/1.5) x ((365-precipitation days)/235) x wind speed percent/15 x TSP fraction x Area) x (1 - control efficiency)

Material Handling^r: PM10 Emissions (lb/day) = (0.0032 x aerodynamic particle size multiplier x (wind speed (mph)/5)^{1.3}/(moisture content/2)^{1.4} x dirt handled (lb/day)/2,000 (lb/ton) (1 - control efficiency)

Description	Control Efficiency %	PM10 ^s lb/day
Scraping	60	0.40
Storage Piles	60	0.79
Material Handling	60	0.30
Total		1.49

Incremental Increase in Onsite Combustion Emissions from Onroad Mobile Vehicles

Equation: Emission Factor (lb/mile) x No. of One-Way Trips/Day x 2 x Trip length (mile) = Mobile Emissions (lb/day)

Vehicle	CO lb/day	NOx lb/day	PM10 lb/day
Haul Truck	0.14	0.47	0.02
Haul Truck (Disposal)	19.67	64.17	3.14
Water Truck	0.33	1.08	0.05
Total	20.14	65.72	3.21

**EL ENCANTO PHASE 2
GRADING PHASE (Continued)**

Total Incremental Localized Emissions from Construction Activities			
Sources	CO lb/day	NOx lb/day	PM10 lb/day
On-site Emissions	30.6	89.4	6.2
Significance Threshold^t	1017	277	7
Exceed Significance?	NO	NO	NO

Combustion and Fugitive Summary	PM2.5 Fraction^u	PM10 lb/day	PM2.5 lb/day	Percentage Contribution
Combustion (Offroad)	0.92	1.5	1.4	29.1%
Combustion (Onroad)	0.96	3.21	3.10	64.4%
Fugitive	0.21	1	0.3	6.5%
Total		6.2	4.8	
Significance Threshold^t			5	
Exceed Significance?			NO	

Notes:
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a) Data provided by Blue Green

b) Equipment name must match CARB Off-Road Model (see Off-Road Model EF worksheet) equipment name for sheet to look up EFs automatically.

c) SCAB values provided by the ARB, Oct 2006. Assumed equipment is diesel fueled.

d) USEPA, AP-42, July 1998, Table 11.9-3 Typical Values for Corection Factors Applicable to the Predictive Emission Factor Equations

e) Mean vehicle weight (120,460 pound empty with a 75,000 pound capacity) estimated from 631G Model Scraper Caterpillar Performance Handbook, Edition 33. Scraper in the same horsepower range (450-490 hp) as the composite ARB emission factors.

f) Caterpillar G31G has a 11.5 foot wide blade, with an assumed 2 foot overlap (9.5 foot wide). Vehicle miles traveled (VMT) = (118,920 sq ft/9.5 foot x mile/5,280 ft)/10 days = 0.24 miles

g) Table A9-9-E2, SCAQMD CEQA Air Quality Handbook, 1993

h) Mean wind speed percent - percent of time mean wind speed exceeds 12 mph. At least one meteorological site recorded wind speeds greater than 12 mph over a 24-hour period in 1981.

i) Assumed storage piles are 0.05 acres in size

**EL ENCANTO PHASE 2
GRADING PHASE (Continued)**

- j) USEPA, AP-42, Jan 1995, Section 13.2.4 Aggregate Handling and Storage Piles, p 13.2.4-3 Aerodynamic particle size multiplier for < 10 µm
- k) Mean wind speed - maximum of daily average wind speeds reported in 1981 meteorological data.
- l) Assuming 14796 cubic yards of dirt handled [(14796 cyd x 2,500 lb/cyd)/ days = 3,699,000 lb/day]
- m) CARB, EMFAC2007 (version 2.3) Burden Model, Winter 2007, 75 F, 40% RH: EF, lb/yr = (EF, ton/yr x 2,000 lb/ton)/VMT
- n) Assumed 30 cubic yd truck capacity for 14796 cyd of dirt [(14796 cy x truck/30 cy)/10 days = 50 one-way truck trips/day]. Assumed haul truck travels 0.1 miles through facility. Multiple trucks may be used.
- o) Assumed six foot wide water truck traverses over 118,920 square feet of disturbed area
- p) USEPA, AP-42, July 1998, Equation 1b and Table 13.2.2-2, AP-42, December 2003. Also see comment g of Table 11.9-1
- q) USEPA, AP-42, Jan 1995, Section 13.2.4 Aggregate Handling and Storage Piles, Equation 1
- r) USEPA, Fugitive Dust Background Document and Technical Information Document for Best Available Control Measures, Sept 1992, EPA-450/2-92-004, Equation 2-12
- s) Includes watering at least three times a day per Rule 403 (68% control efficiency reduced to 60% control efficiency following personal communication with James Koizumi).
- t) LSTs for Source Receptor Area 8 as identified in Appendix C of the Methodology Paper for LSTs.
- u) ARB's CEIDARS database PM2.5 fractions - construction dust category for fugitive and diesel vehicle exhaust category for combustion.

**EL ENCANTO PHASE 2
STRUCTURE CONSTRUCTION**

Example	Construction Activity
El Encanto Phase 2	Building 42,000 Square Foot Structure ^a

Construction Schedule Unknown			
Equipment Type^{a,b}	No. of Equipment	hr/day	Crew Size
Forklifts	1	7.0	10
Tractors/Loaders/Backhoes	1	7.0	
Generator Sets	1	7.0	
Electric Welders	1	7.0	

Construction Equipment Combustion Emission Factors			
Equipment Type^c	CO	NOx	PM10
	lb/hr	lb/hr	lb/hr
Forklifts	0.250	0.643	0.035
Tractors/Loaders/Backhoes	0.414	0.830	0.064
Generator Sets	0.355	0.725	0.045
Electric Welders	N/A	N/A	N/A

Construction Vehicle (Mobile Source) Emission Factors			
	CO	NOx	PM10
	lb/mile	lb/mile	lb/mile
Heavy-Duty Truck ^d	0.014462	0.047182	0.002309

Construction Worker Number of Trips and Trip Length		
Vehicle	No. of One-Way Trips/Day	Trip Length (miles)
Flatbed Truck ^e	30	0.1

**EL ENCANTO PHASE 2
STRUCTURE CONSTRUCTION (Continued)**

Water Truck ^f	3	4.5
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Incremental Increase in Onsite Combustion Emissions from Construction Equipment

Equation: Emission Factor (lb/hr) x No. of Equipment x Work Day (hr/day) = Onsite Construction Emissions (lb/day)

Equipment Type	CO lb/day	NOx lb/day	PM10 lb/day
Fork Lifts	1.75	4.50	0.24
Tractors/Loaders/Backhoes	2.90	5.81	0.45
Generator Sets	2.48	5.07	0.31
Electric Welders	N/A	N/A	N/A
Total	7.1	15.4	1.0

Incremental Increase in Onsite Combustion Emissions from Onroad Mobile Vehicles

Equation: Emission Factor (lb/mile) x No. of One-Way Trips/Day x 2 x Trip length (mile) = Mobile Emissions (lb/day)

Vehicle	CO lb/day	NOx lb/day	PM10 lb/day
Flatbed Truck	0.09	0.28	0.01
Water Truck	0.39	1.27	0.062
Total	0.48	1.55	0.08

Total Incremental Combustion Emissions from Construction Activities

Sources	CO lb/day	NOx lb/day	PM10 lb/day
On-Site Emissions	7.6	16.9	1.1
Significance Threshold^g	1017	277	7
Exceed Significance?	NO	NO	NO

**EL ENCANTO PHASE 2
STRUCTURE CONSTRUCTION (Continued)**

Combustion and Fugitive Summary	PM2.5 Fraction^h	PM10 lb/day	PM2.5 lb/day	Percentage Contribution
Combustion (Offroad)	0.92	1.0	0.9	92.6%
Combustion (Onroad)	0.96	0.08	0.07	7.4%
Fugitive	0.21	0	0.0	0.0%
Total		1.1	1.0	
Significance Threshold^g			5	
Exceed Significance?			NO	

Notes:
 Project specific data may be entered into shaded cells. Changing the values in the shaded cells will not affect the integrity of the worksheets. Verify that units of values entered match units for cell.
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- a) Data provided by Blue Green
- b) Equipment name must match CARB Off-Road Model (see Off-Road Model EF worksheet) equipment name for sheet to look up EFs automatically.
- c) SCAB values provided by the ARB, Oct 2006. Assumed equipment is diesel fueled except the welders which are powered by the generator.
- d) CARB, EMFAC2007 (version 2.3) Burden Model, Winter 2007, 75 F, 40% RH: EF, lb/yr = (EF, ton/yr x 2,000 lb/ton)/VMT
- e) Assumed haul truck travels 0.1 miles through facility
- f) Assumed six foot wide water truck traverses over 42,000 square feet of disturbed area
- g) LSTs for Source Receptor Area 8 as identified in Appendix C of the Methodology Paper for LSTs.
- h) ARB's CEIDARS database PM2.5 fractions - construction dust category for fugitive and diesel vehicle exhaust category for combustion.

**EL ENCANTO PHASE 2
ARCHITECTURAL COATING AND ASPHALT PAVING**

Example El Encanto Phase 2	Construction Activity Architectural Coating and Asphalt Paving of Parking Lot
Construction Schedule -	10 days^a

Equipment Type^{a,b}	No. of Equipment	hr/day	Crew Size
Pavers	1	8.00	8
Paving Equipment	1	8.00	
Rollers	2	8.00	
Cement and Mortar Mixers	1	3.00	
Tractors/Loaders/Backhoes	1	8.00	

Construction Equipment Combustion Emission Factors			
	CO	NOx	PM10
Equipment Type^c	lb/hr	lb/hr	lb/hr
Pavers	0.600	1.129	0.080
Paving Equipment	0.469	1.033	0.071
Rollers	0.442	0.907	0.063
Cement and Mortar Mixers	0.046	0.069	0.005
Tractors/Loaders/Backhoes	0.414	0.830	0.064

Construction Vehicle (Mobile Source) Emission Factors			
	CO	NOx	PM10
	lb/mile	lb/mile	lb/mile
Heavy-Duty Truck ^d	0.014462	0.047182	0.002309

Construction Worker Number of Trips and Trip Length		
Vehicle	No. of One-Way Trips/Day	Trip Length (miles)

**EL ENCANTO PHASE 2
ARCHITECTURAL COATING AND ASPHALT PAVING (Continued)**

Delivery Truck ^e	9	0.1
Water Truck ^f	3	4.5

Incremental Increase in Onsite Combustion Emissions from Construction Equipment

Equation: Emission Factor (lb/hr) x No. of Equipment x Work Day (hr/day) = Onsite Construction Emissions (lb/day)

Equipment Type	CO lb/day	NOx lb/day	PM10 lb/day
Pavers	4.80	9.03	0.64
Paving Equipment	3.75	8.27	0.57
Rollers	7.07	14.52	1.01
Cement and Mortar Mixers	0.14	0.21	0.01
Tractors/Loaders/Backhoes	3.31	6.64	0.51
Total	19.1	38.7	2.7

Incremental Increase in Onsite Combustion Emissions from Onroad Mobile Vehicles

Equation: Emission Factor (lb/mile) x No. of One-Way Trips/Day x 2 x Trip length (mile) = Mobile Emissions (lb/day)

Vehicle	CO lb/day	NOx lb/day	PM10 lb/day
Delivery Truck	0.03	0.08	0.004
Water Truck	0.39	1.27	0.06
Total	0.42	1.35	0.06

Total Incremental Combustion Emissions from Construction Activities

Sources	CO lb/day	NOx lb/day	PM10 lb/day
On-Site Emissions	19.5	40.0	2.8
Significance Threshold^g	1017	277	7
Exceed Significance?	NO	NO	NO

**EL ENCANTO PHASE 2
ARCHITECTURAL COATING AND ASPHALT PAVING (Continued)**

Combustion and Fugitive Summary	PM2.5 Fraction^h	PM10 lb/day	PM2.5 lb/day	Percentage Contribution
Combustion (Offroad)	0.92	2.7	2.5	97.6%
Combustion (Onroad)	0.96	0.06	0.06	2.4%
Fugitive	0.21	0	0.0	0.0%
Total		2.8	2.6	
Significance Threshold^g			5.0	
Exceed Significance?			NO	
Notes:				
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Adding lines or entering values with units different than those associated with the shaded cells may alter the integrity of the sheets or produce incorrect results.				
a) Data provided by Blue Green				
b) Equipment name must match CARB Off-Road Model (see Off-Road Model EF worksheet) equipment name for sheet to look up EFs automatically.				
c) SCAB values provided by the ARB, Oct 2006. Assumed equipment is diesel fueled.				
d) CARB, EMFAC2007 (version 2.3) Burden Model, Winter 2007, 75 F, 40% RH: EF, lb/yr = (EF, ton/yr x 2,000 lb/ton)/VMT				
e) Assumed haul truck travels 20 miles to pick up supplies				
f) Assumed six foot wide water truck traverses over 140,000 square feet of disturbed area				
g) LSTs for Source Receptor Area 8 as identified in Appendix C of the Methodology Paper for LSTs.				
h) ARB's CEIDARS database PM2.5 fractions - construction dust category for fugitive and diesel vehicle exhaust category for combustion.				

ARB OFFROAD MODEL EMISSION FACTORS

Sum of Ems Factor #/hr		Year	Pollutant				
		2007	CO	NOx	PM10	SOx	VOC
Eq Name	Hp						
Aerial Lifts	Composite	0.225	0.403	0.028	0.000	0.078	
Air Compressors	Composite	0.387	0.830	0.058	0.001	0.129	
Bore/Drill Rigs	Composite	0.539	1.473	0.065	0.002	0.146	
Cement and Mortar Mixers	Composite	0.046	0.069	0.005	0.000	0.012	
Concrete/Industrial Saws	Composite	0.449	0.764	0.064	0.001	0.156	
Cranes	Composite	0.637	1.695	0.075	0.001	0.188	
Crawler Tractors	Composite	0.709	1.622	0.099	0.001	0.218	
Crushing/Proc. Equipment	Composite	0.782	1.655	0.105	0.001	0.250	
Dumpers/Tenders	Composite	0.038	0.071	0.005	0.000	0.014	
Excavators	Composite	0.598	1.423	0.078	0.001	0.182	
Forklifts	Composite	0.250	0.643	0.035	0.001	0.086	
Generator Sets	Composite	0.355	0.725	0.045	0.001	0.113	
Graders	Composite	0.671	1.720	0.089	0.001	0.206	
Off-Highway Tractors	Composite	0.927	2.274	0.111	0.002	0.269	
Off-Highway Trucks	Composite	0.913	2.914	0.106	0.003	0.288	
Other Construction Equipment	Composite	0.475	1.241	0.054	0.001	0.131	
Other General Industrial Equipment	Composite	0.699	1.901	0.085	0.002	0.211	
Other Material Handling Equipment	Composite	0.630	1.836	0.082	0.002	0.204	
Pavers	Composite	0.600	1.129	0.080	0.001	0.206	
Paving Equipment	Composite	0.469	1.033	0.071	0.001	0.156	
Plate Compactors	Composite	0.026	0.035	0.002	0.000	0.005	
Pressure Washers	Composite	0.070	0.108	0.008	0.000	0.023	
Pumps	Composite	0.324	0.622	0.044	0.001	0.109	
Rollers	Composite	0.442	0.907	0.063	0.001	0.141	
Rough Terrain Forklifts	Composite	0.493	0.963	0.080	0.001	0.158	
Rubber Tired Dozers	Composite	1.695	3.414	0.147	0.002	0.379	
Rubber Tired Loaders	Composite	0.555	1.382	0.077	0.001	0.173	
Scrapers	Composite	1.525	3.399	0.147	0.003	0.368	
Signal Boards	Composite	0.097	0.181	0.011	0.000	0.025	
Skid Steer Loaders	Composite	0.273	0.337	0.033	0.000	0.098	
Surfacing Equipment	Composite	0.765	1.850	0.071	0.002	0.186	
Sweepers/Scrubbers	Composite	0.567	1.028	0.082	0.001	0.196	
Tractors/Loaders/Backhoes	Composite	0.414	0.830	0.064	0.001	0.131	
Trenchers	Composite	0.517	0.858	0.071	0.001	0.194	
Welders	Composite	0.234	0.319	0.030	0.000	0.092	

**EL ENCANTO PHASE 2
NON-LST EMISSIONS**

DEMOLITION

Equipment Type ^{a,b}	No. of Equipment	hr/day	Crew Size
Tractors/Loaders/Backhoes	1	7.0	10
Other Construction Equipment	1	7.0	

Construction Equipment Emission Factors

Equipment Type ^c	VOC lb/hr	SOx lb/hr
Tractors/Loaders/Backhoes	0.131	0.001
Other Construction Equipment	0.131	0.001

Construction Vehicle (Mobile Source) Emission Factors

	VOC lb/mile	SOx lb/mile
Heavy-Duty Truck ^h	0.003516	0.044580

Construction Worker Number of Trips and Trip Length

Vehicle	No. of One-Way Trips/Day ⁱ	One Way Trip Length ^j (miles)
Haul Truck	20	40
Water Truck	3	3.8

Incremental Increase in Onsite Combustion Emissions from Construction Equipment

Equation: Emission Factor (lb/BHP-hr) x No. of Equipment x Work Day (hr/day) x Equipment rating (hp) x Load Factor (%/100) = Onsite Construction Emissions (lb/day)

Equipment Type	VOC lb/day	SOx lb/day
----------------	---------------	---------------

**EL ENCANTO PHASE 2
NON-LST EMISSIONS (Continued)**

Tractors/Loaders/Backhoes	0.91	0.05
Breakers	0.92	0.00
Total	1.8	0.1

Incremental Increase in Onsite Combustion Emissions from Onroad Mobile Vehicles

Equation: Emission Factor (lb/mile) x No. of One-Way Trips/Day x 2 x Trip length (mile) = Mobile Emissions (lb/day)

	VOC	SOx
Vehicle	lb/day	lb/day
Haul Truck	5.63	71.33
Water Truck	0.08	1.02
Total	5.63	71.33

Total Incremental Localized Emissions from Construction Activities

Sources	VOC	SOx
	lb/day	lb/day
On-site Emissions (Mitigated)	7.5	71.4
Significance Thresholdⁿ	75	150
Exceed Significance?	NO	NO

SITE PREPARATION

Equipment Type^{a,b}	No. of Equipment	hr/day	Crew Size
Scrapers	1	7.0	8
Tractors/Loaders/Backhoes	1	7.0	

Construction Equipment Emission Factors

	VOC	SOx
Equipment Type^c	lb/hr	lb/hr
Scrapers	0.368	0.003

**EL ENCANTO PHASE 2
NON-LST EMISSIONS (Continued)**

Tractors/Loaders/Backhoes	0.131	0.001
Construction Vehicle (Mobile Source) Emission Factors		
	VOC lb/mile	SOx lb/mile
Heavy-Duty Truck ^m	0.003516	0.044580

Construction Worker Number of Trips and Trip Length		
Vehicle	No. of One-Way Trips/Day	One Way Trip Length (miles)
Haul Truck ⁿ	2	40
Water Truck ^o	3	22.6

Incremental Increase in Onsite Combustion Emissions from Construction Equipment		
Equation: Emission Factor (lb/hr) x No. of Equipment x Work Day (hr/day) = Onsite Construction Emissions (lb/day)		
	VOC lb/day	SOx lb/day
Equipment Type		
Scrapers	2.57	0.02
Tractors/Loaders/Backhoes	0.91	0.01
Total	3.5	0.0

Incremental Increase in Onsite Combustion Emissions from Onroad Mobile Vehicles		
Equation: Emission Factor (lb/mile) x No. of One-Way Trips/Day x 2 x Trip length (mile) = Mobile Emissions (lb/day)		
	VOC lb/day	SOx lb/day
Vehicle		
Haul Truck	0.56	7.13
Water Truck	0.48	6.05
Total	1.04	13.18

**EL ENCANTO PHASE 2
NON-LST EMISSIONS (Continued)**

Total Incremental Localized Emissions from Construction Activities		
Sources	VOC lb/day	SOx lb/day
On-site Emissions	4.5	13.2
Significance Threshold^u	75	150
Exceed Significance?	NO	NO

GRADING			
Equipment Type^{a,b}	No. of Equipment	hr/day	Crew Size
Graders	1	7.0	
Tractors/Loaders/Backhoes	2	7.0	

Construction Equipment Emission Factors		
Equipment Type^c	VOC lb/hr	SOx lb/hr
Graders	0.206	0.001
Tractors/Loaders/Backhoes	0.131	0.001

Construction Vehicle (Mobile Source) Emission Factors		
	VOC lb/mile	SOx lb/mile
Heavy-Duty Truck ^m	0.003516	0.044580

Construction Worker Number of Trips and Trip Length		
Vehicle	No. of One-Way Trips/Day	One Way Trip Length (miles)
Haul Truck ⁿ	50	0.1

**EL ENCANTO PHASE 2
NON-LST EMISSIONS (Continued)**

Haul Truck (Disposal) ⁿ	17	40
Water Truck ^o	3	3.8

Incremental Increase in Onsite Combustion Emissions from Construction Equipment

Equation: Emission Factor (lb/hr) x No. of Equipment x Work Day (hr/day) = Onsite Construction Emissions (lb/day)

Equipment Type	VOC lb/day	SOx lb/day
Graders	0.02	0.31
Tractors/Loaders/Backhoes	0.05	0.01
Total	0.1	0.3

Incremental Increase in Onsite Combustion Emissions from Onroad Mobile Vehicles

Equation: Emission Factor (lb/mile) x No. of One-Way Trips/Day x 2 x Trip length (mile) = Mobile Emissions (lb/day)

Vehicle	VOC lb/day	SOx lb/day
Haul Truck	0.04	0.45
Haul Truck (Disposal)	4.78	60.63
Water Truck	0.08	1.02
Total	4.90	62.09

Total Incremental Localized Emissions from Construction Activities

Sources	VOC lb/day	SOx lb/day
On-site Emissions	4.9	62.1
Significance Threshold^t	75	150
Exceed Significance?	NO	NO

BUILDING

**EL ENCANTO PHASE 2
NON-LST EMISSIONS (Continued)**

Equipment Type ^{a,b}	No. of Equipment	hr/day	Crew Size
Forklifts	1	7.0	10
Tractors/Loaders/Backhoes	1	7.0	
Generator Sets	1	7.0	
Electric Welders	1	7.0	

Construction Equipment Combustion Emission Factors		
Equipment Type ^c	VOC lb/hr	SOx lb/hr
Forklifts	0.086	0.001
Tractors/Loaders/Backhoes	0.131	0.001
Generator Sets	0.113	0.001
Electric Welders	N/A	N/A

Construction Vehicle (Mobile Source) Emission Factors		
	VOC lb/mile	SOx lb/mile
Heavy-Duty Truck ^d	0.003516	0.044580

Construction Worker Number of Trips and Trip Length		
Vehicle	No. of One-Way Trips/Day	Trip Length (miles)
Flatbed Truck ^e	30	0.1
Water Truck ^f	3	4.5

Incremental Increase in Onsite Combustion Emissions from Construction Equipment

Equation: Emission Factor (lb/hr) x No. of Equipment x Work Day (hr/day) = Onsite Construction Emissions (lb/day)

**EL ENCANTO PHASE 2
NON-LST EMISSIONS (Continued)**

Equipment Type	VOC lb/day	SOx lb/day
Fork Lifts	0.60	0.00
Tractors/Loaders/Backhoes	0.91	0.01
Generator Sets	0.79	0.00
Electric Welders	N/A	N/A
Total	2.3	0.0

Incremental Increase in Onsite Combustion Emissions from Onroad Mobile Vehicles

Equation: Emission Factor (lb/mile) x No. of One-Way Trips/Day x 2 x Trip length (mile) = Mobile Emissions (lb/day)

Vehicle	VOC lb/day	SOx lb/day
Flatbed Truck	0.02	0.27
Water Truck	0.09	1.2
Total	0.11	1.47

Total Incremental Combustion Emissions from Construction Activities

Sources	VOC lb/day	SOx lb/day
On-Site Emissions	2.4	1.5
Significance Threshold^g	75	150
Exceed Significance?	NO	NO

ASPHALT

Equipment Type^{a,b}	No. of Equipment	hr/day	Crew Size
Pavers	1	8.00	8
Paving Equipment	1	8.00	
Rollers	2	8.00	
Cement and Mortar Mixers	1	3.00	
Tractors/Loaders/Backhoes	1	8.00	

**EL ENCANTO PHASE 2
NON-LST EMISSIONS (Continued)**

Construction Equipment Combustion Emission Factors		
Equipment Type^c	VOC lb/hr	SOx lb/hr
Pavers	0.206	0.001
Paving Equipment	0.156	0.001
Rollers	0.141	0.001
Cement and Mortar Mixers	0.012	0.000
Tractors/Loaders/Backhoes	0.131	0.001

Construction Vehicle (Mobile Source) Emission Factors		
	VOC lb/mile	SOx lb/mile
Heavy-Duty Truck ^d	0.003516	0.044580

Construction Worker Number of Trips and Trip Length		
Vehicle	No. of One-Way Trips/Day	Trip Length (miles)
Delivery Truck ^e	9	0.1
Water Truck ^f	3	4.5

Incremental Increase in Onsite Combustion Emissions from Construction Equipment		
Equation: Emission Factor (lb/hr) x No. of Equipment x Work Day (hr/day) = Onsite Construction Emissions (lb/day)		
Equipment Type	VOC lb/day	SOx lb/day
Pavers	1.65	0.01
Paving Equipment	1.24	0.01
Rollers	2.26	0.01

**EL ENCANTO PHASE 2
NON-LST EMISSIONS (Continued)**

Cement and Mortar Mixers	0.04	0.00
Tractors/Loaders/Backhoes	1.05	0.01
Total	6.2	0.0

Incremental Increase in Onsite Combustion Emissions from Onroad Mobile Vehicles

Equation: Emission Factor (lb/mile) x No. of One-Way Trips/Day x 2 x Trip length (mile) = Mobile Emissions (lb/day)

Vehicle	VOC lb/day	SOx lb/day
Delivery Truck	0.01	0.08
Water Truck	0.09	1.2
Total	0.10	1.28

Total Incremental Combustion Emissions from Construction Activities

Sources	VOC lb/day	SOx lb/day
On-Site Emissions	6.3	1.3
Significance Threshold^g	75	150
Exceed Significance?	NO	NO

Appendix B

Biological Constraints Report

November 7, 2008

Ms. Lynne Dwyer
BlueGreen
570 W. Avenue 26, Suite 700
Los Angeles, CA 90065

VIA EMAIL AND U.S. MAIL
lynnedwyer@bluegreen.biz
kammerer@bluegreen.biz

Subject: Results of Biological Reconnaissance Survey and Constraints Analysis for the El Encanto River Wilderness Park Project Site in the City of Glendora, California

Dear Ms. Dwyer:

A biological reconnaissance survey of the El Encanto River Wilderness Park Project Site in the City of Azusa, California (hereafter referred to as the project site), was conducted by BonTerra Consulting on October 19, 2006, and again on October 28, 2008. The purpose of the survey was to document existing biological resources on the site and evaluate potential biological constraints to development of the proposed wilderness park. The purpose of the second visit was to evaluate specific resources (i.e. riparian habitats) as they currently exist on the project site and confirm that conditions had not changed. The results of the field study, as well as a description of the biological resources within the San Gabriel Canyon region in general, are provided. In addition, site specific recommendations for potential enhancement, restoration, and/or creation of biological resources are provided.

LOCATION/DESCRIPTION

Regional

Land uses within the San Gabriel Canyon region are predominantly low intensity recreation and open space within public lands. The overwhelming majority of the open space surrounding the site is within the Angeles National Forest which is oriented toward recreational use. For the most part, unimproved roads, trails, campgrounds, and scattered cabins represent the most intense uses of the forest. Private land-holdings comprise a very small portion of the National Forest lands. South of this mountainous region lies the sprawling urban communities of the San Gabriel Valley. In general, the topography of the San Gabriel Canyon region is severe, consisting of steep-walled canyons and narrow ridgelines.

Project Site

The project site is located near the mouth of San Gabriel Canyon in the northern portion of the City of Azusa. The project site is surrounded by open space with a few scattered developments on adjacent parcels. The Angeles National Forest is situated immediately north of the site. The San Gabriel River flows through the project area and is crossed over by a vehicular bridge as a segment of State Highway 39 (San Gabriel Canyon Road). Land uses on the site include residential properties, the former El Encanto Restaurant and parking lot (now the Rivers & Mountains Conservancy offices), equestrian facilities, and natural open spaces.



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Topography on the site ranges from flat mesas near the river and the parking area to steep hillsides on the southern portion of the site with elevations ranging from approximately 820 to 1,400 feet above mean sea level (msl). The project site is located within the United States Geological Survey (USGS) Azusa, California 7.5-minute quadrangle map.

SURVEY METHODS

Prior to the field survey, BonTerra Consulting conducted a search of available literature to identify special status plants, wildlife, and habitats known to occur in the vicinity of the site. The California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants (CNPS 2005) and the California Department of Fish and Game (CDFG) California Natural Diversity Database (CDFG 2004) were reviewed.

The biological reconnaissance field survey was conducted on October 19, 2006. During the survey, the vegetation types on the site were described and evaluated for their potential to support special status plant and wildlife species. All plant species observed were recorded in field notes. Plant species were identified in the field or collected for subsequent identification. Plants were identified using keys in Hickman (1993) and Munz (1974). Taxonomy follows Hickman (1993) and current scientific data (e.g., scientific journals) for scientific and common names. Nomenclature for vegetation types generally follows that of *The Vegetation Classification and Mapping Program: List of California Terrestrial Natural Communities Recognized by the California Natural Diversity Database* (CDFG 2003). A second survey was conducted on October 28, 2009 to evaluate the current conditions of existing habitats on the project site for their potential to support special status wildlife species.

VEGETATION

Regional

The variety of topography, soil types, slope aspects and water availability within the San Gabriel Canyon region create a range of physical habitats which support numerous plant species. Sensitive plant species occurring or potentially occurring within the San Gabriel Canyon area are discussed in the Special Status Resources section below. Many of these species, although often different in their growth form, prefer similar habitat characteristics and are often found in recurring assemblages to form plant communities. Ten major plant communities are found within the San Gabriel Canyon area. Plant communities within the region were classified using standard methodology and terminology. Most of the communities discussed below correspond directly with those listed in Holland's Preliminary Descriptions of the Terrestrial Natural Communities of California (1986 and 1992 update). Other communities are named based on dominant species within them and/or commonly used terminology. Brief descriptions and general locations of each major plant community present within the San Gabriel Canyon area are provided below, including bigcone spruce-canyon oak forest, white alder riparian forest, alluvial fan scrub, oak woodland, oak riparian forest, walnut woodland, southern willow scrub, chaparral, coastal sage scrub, and non-native grassland.

Big-cone spruce-canyon oak forest is an open to dense forest dominated by big-cone spruce (*Pseudotsuga macrocarpa*) 50 to 80 feet tall over a dense canopy of canyon oak (*Quercus chrysolepis*). It is found scattered throughout the canyon sides at elevations generally above 2,500 feet where it occupies rocky substrates. It commonly occurs in fairly small enclaves within chaparral.

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White alder riparian forest is found along the upper reaches of many drainages in the San Gabriel Canyon area. This community is dominated by white alder (*Alnus rhombifolia*) which grow 30 to 40 feet high over a shrub understory. It typically grows along streams in bedrock-constrained, steep-sided canyons, resulting in a fairly narrow riparian corridor.

Alluvial fan scrub is a shrub community characterized by harsh substrates subject to episodic flooding and scouring. It is generally restricted to broad canyon outwashes, or alluvial washes. It is found at the San Gabriel Canyon mouth where it forms an open shrub vegetation within areas of bare, scoured ground in between.

Oak woodland is a plant community dominated by species of the genus *Quercus*. Within the San Gabriel Canyon area, this community includes coast live oak (*Quercus agrifolia*) which typically grows to heights of 20 to 40 feet and the somewhat smaller interior live oak and canyon oak, and forms either closed or open tree canopies. Understory vegetation varies from grassland in level areas to shrubs where topography is steeper. It may also intergrade with shrub communities. Within San Gabriel Canyon area, oak woodland is scattered throughout and most prevalent on north-facing slopes and in drainage bottoms.

Oak riparian forest is a highly related community found in the San Gabriel Canyon area as well. This community is also dominated by coast live oak (canyon oak at higher elevations). The primary difference between oak woodland and oak riparian forest is the greater availability of water in riparian situations which is expressed in a denser tree canopy and higher density of trees. There are also a greater number of hydrophytic (moisture favoring) plant species in the understory. Typical riparian trees such as western sycamore (*Platanus racemosa*) and willow (*Salix* spp.) occasionally occur as well. Oak riparian forest is best developed within broader, more level gradient drainages of the area.

Walnut woodland often intergrades with oak dominated woodlands or develops as a distinct community. This community is dominated by the southern California black walnut (*Juglans californica*) which grows 10 to 30 feet high. More often than not, walnut woodland in this area is highly intermixed with oak woodland and chaparral and large monotypic stands are uncommon.

Southern willow scrubs are found along widely scattered reaches of several drainages throughout the area. This community is dominated by species of willow (*Salix* spp.) which form nearly monotypic stands due to their dense growth with an occasional cottonwood. These stands generally reach 10 to 20 feet in height with little understory vegetation.

Chaparral is a shrub community composed of robust species. Within the area, a number of chaparral sub-communities are found according to their dominant plant species. These include chamise (*Adenostoma fasciculatum*), buck brush (*Ceanothus cuneatus* var. *cuneatus*), ceanothus (*Ceanothus* spp.), scrub oak (*Quercus berberidifolia*), interior live oak (*Quercus wislizenii*) and even mosaics of these depending on mixes of species and elevation. These and other shrub species form dense vegetation covers growing five to ten feet in height. The development of chaparral is pronounced over large hillside areas throughout the San Gabriel Canyon area.

Coastal sage scrub is a shrubland community exhibiting less robust structure than chaparral. This plant community is dominated by California sagebrush (*Artemisia californica*), bush sunflower, (*Encelia californica*), white sage (*Salvia apiana*), black sage (*Salvia mellifera*), and California buckwheat (*Eriogonum fasciculatum*). It also forms dense stands which grow three to four feet in height. Within the area it is generally found in scattered patches which are highly

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integrated with mixed chaparral. These are primarily located in the lower elevation hillsides of the San Gabriel Canyon area.

Non-native grassland is dominated by non-native annual grasses and forbs. These opportunistically growing species include brome grasses (*Bromus* spp.), wild oats (*Avena fatua*) and mustards (*Brassica* spp.). Characteristic of other parts of Southern California, this community became established as a result of livestock grazing and agriculture, as native vegetation is removed, sometimes by mechanical means, and replaced by more adventitious species. Non-native grassland is found throughout the area.

Project Site

The following vegetation types were identified specifically on the project site (see Exhibit 1):

- California Sagebrush Scrub
- Scalebroom Scrub
- Southern Mixed Chaparral
- California Annual Grassland
- Southern Willow Scrub
- Mule Fat Scrub
- Coast Live Oak Woodland

On the project site, scrub and chaparral vegetation types dominate the hillsides, and also occur in the alluvial areas west of San Gabriel Canyon Road. One annual grassland patch is located in the north-central portion of the site, and riparian habitats are present along the edges of the San Gabriel River, east of San Gabriel Canyon Road. Oak woodlands are intermixed with chaparral on the hillsides throughout the southern portion of the site.

Other areas identified on the site included:

- Open Water
- Ruderal
- Ornamental
- Disturbed
- Developed

WILDLIFE

Regional

Wildlife populations within the San Gabriel Canyon area are diverse and abundant due to the region's physiographic diversity, its relative isolation, and its location within and adjacent to the Angeles National Forest. The San Gabriel Canyon area is likely to support healthy populations of a diverse assortment of invertebrate species based on the undisturbed nature and variety of habitats. Fair numbers of amphibians are expected to be present primarily due to the aquatic and semi-aquatic habitats provided within the numerous drainages and several reservoirs.

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Reptile abundance and diversity are expected to be characteristic for the habitats present, although areas closer to urban development along the southern boundaries of the area likely to be suppressed due to edge effect.

Bird use, diversity, and abundance within the San Gabriel Canyon area is expected to be high for several reasons. In general, this area provides habitat for a wide range of shrubland, woodland, forest, and riparian species that occur at varying elevations. In particular, the riparian habitats found in drainages throughout this area provide essential habitat for riparian-obligate and riparian-favoring species. In addition, a number of migratory birds no doubt use this area to move across the northern portion of the Los Angeles Basin. These include a wide spectrum of birds including songbird, waterfowl, and raptorial species.

Similarly, the mammalian fauna is expected to be very diverse and abundant. Perhaps, more influential on this taxa than the diversity of habitats is the inclusion of this area within and adjacent to the vast open space of the Angeles National Forest. Virtually all mammalian species found in the forest (with the exception of bighorn sheep) are expected to be found in this area. Frequent observations of black bear and mountain lion in foothill communities attest to the range of species expected.

Wildlife movement within the San Gabriel Canyon area takes on two major forms. First, due to the extreme intervening topography it is logical to expect considerable movement of wildlife up and down the many sizeable drainages which course through this area to connect the forest interior with foothill areas. In large part, the larger the watershed of the drainages, the greater the volume of movement. Consequently, this type of movement occurs on a seasonal and more frequent basis, particularly for large mobile mammals whose full range of habitat needs are typically met over broad areas.

The second major type of movement occurs across the flanks of the foothills and lower mountains, in an east-west direction. Particularly for riparian-favoring migratory birds, a corridor linking lower elevational riparian habitats in the San Gabriel Canyon area is of high use and importance. In addition to providing essential habitat for resident riparian birds, this area contains some of the best developed riparian habitat for birds which are seasonal visitors to cismontane Los Angeles County.

Project Site

Wildlife populations on the site are expected to be representative of the habitat types on site as described above for the larger Canyon area. Due to the diversity of plant communities and valuable river resources, underdeveloped portions of the site are expected to be particularly abundant in wildlife diversity.

SPECIAL STATUS RESOURCES

Sensitive biological resources are habitats or individual species that have been given special recognition by federal, state, or local conservation agencies and organizations as endangered, threatened, rare, or otherwise sensitive; this is principally due to the species' declining or limited population sizes, usually resulting from habitat loss. Watch lists of such resources are maintained by the California Department of Fish and Game (CDFG), the United States Fish and Wildlife Service (USFWS), and special groups such as the California Native Plant Society (CNPS). The following sections indicate the habitats as well as plant and animal species present, or potentially present within the San Gabriel Canyon area or the project site, that have

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been afforded special recognition. Database searches included the Azusa, Glendora, Baldwin Park, and San Dimas U.S. Geological Survey quadrangles.

Regional

The San Gabriel Canyon area supports several habitat types considered sensitive by resource agencies, namely the CDFG [California Natural Diversity Database (CNDDDB), 2006], because of their scarcity and their being habitat for a number of state and federally listed endangered, threatened, and rare vascular plants, as well as several sensitive bird and reptile species. These communities include: oak riparian woodland, walnut woodland, southern willow scrub, coastal sage scrub and alluvial fan scrub. These communities, or closely related designations, are considered highest-inventory priority communities by the CDFG, indicating that they are experiencing a decline throughout their range. The array and composition of these communities has been discussed earlier in this report (see Vegetation, above).

Sensitive species include those listed, or candidates for listing by the USFWS, CDFG, and CNPS (particularly List 1A, 1B, and 2). The Special Status Species Tables below lists those species which have been recorded within the San Gabriel Canyon area as well as those reasonably expected to occur. The tables include locations of special status species observed, recorded in the CNDDDB, or reported in previous documentation as observed within or in the immediate vicinity of the area. Additional species, such as native oak, walnut, or sycamore trees may be protected under local ordinances but are not included in these tables.

**SPECIAL STATUS PLANT SPECIES
 OCCURRING OR POTENTIALLY OCCURRING
 WITHIN THE SAN GABRIEL CANYON AREA**

Vascular Plants					
Scientific Name	Common Name	Agency Listing Status	CNPS Listing Status	Preferred Habitat	Location/Records
Ferns and Fern Allies					
Ophioglossaceae (Adder's-tongue Family)					
<i>Botrychium crenulatum</i>	scalloped moonwort		1B	Bogs and fens, lower montane coniferous forest, meadows, freshwater marshes and swamps.	Potential where habitat occurs
Selaginellaceae (Spike-Moss Family)					
<i>Selaginella cinerascens</i>	ashy spike-moss		4	Dry slopes on mesas in coastal sage scrub and chaparral.	Potential where habitat occurs
Thelypteridaceae (Thelypteris Family)					
<i>Thelypteris puberula</i> var. <i>sonorensis</i>	Sonoran maiden fern		2	Meadows and seeps.	Monrovia Canyon (1967); Roberts Cyn. (1931); Santa Anita Cyn.
Angiosperms (Dicotyledons)					
Apiaceae (Carrot Family)					
<i>Perideridia pringlei</i>	adobe yampah		4	Chaparral, cismontane woodland, coastal scrub.	Potential where habitat occurs
Asteraceae (Sunflower Family)					
<i>Baccharis plummerae</i> ssp. <i>plummerae</i>	Plummer's baccharis		4	Chaparral, broad-leaved upland forest, cismontane woodland, sage scrub. Associated with rocky areas.	Potential where habitat occurs

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**SPECIAL STATUS PLANT SPECIES (Continued)
OCCURRING OR POTENTIALLY OCCURRING
WITHIN THE SAN GABRIEL CANYON AREA**

Vascular Plants					
Scientific Name	Common Name	Agency Listing Status	CNPS Listing Status	Preferred Habitat	Location/Records
<i>Erigeron breweri</i> var. <i>bisanctus</i>	pious daisy		1B	Chaparral, lower montane coniferous forest, open dry slopes and washes.	San Antonio Cyn. (1933); near Glendora Wilderness Park, Big Dalton Dam (1989)
<i>Helianthus nuttallii</i> ssp. <i>parishii</i>	Los Angeles sunflower		1A	Marshes and swamps (coastal salt and freshwater)	Oak Knoll (1903)
<i>Hemizonia parryi</i> ssp. <i>australis</i>	southern tarweed		1B	Coastal salt marsh (estuaries), valley and foothill grassland vernally mesic), vernal pools.	Altadena, near Los Angeles (1951)
<i>Senecio aphanactis</i>	rayless ragwort		2	Cismontane woodland, coastal scrub, drying alkaline flats	Potential where habitat occurs
<i>Senecio ganderi</i>	Gander's ragwort	SR	1B	Chaparral (burned areas, gabbroic outcrops).	Potential where habitat occurs
<i>Symphotrichum greatae</i>	Greata's aster		1B	Cismontane and riparian woodlands and chaparral	Potential where habitat occurs
<i>Symphotrichum defoliatum</i>	San Bernardino aster		1B	Cismontane and riparian woodlands and chaparral	Potential where habitat occurs
Berberidaceae (Barberry Family)					
<i>Berberis nevinii</i>	Nevin's barberry	FE, SE	1B	Sage scrub, chaparral, cismontane woodland, riparian scrub; sandy or gravelly substrate.	In vicinity of San Antonio Wash (198X)
Brassicaceae (Mustard Family)					
<i>Caulanthus simulans</i>	Payson's jewelflower		4	Burned areas, streambeds, rocky, steep slopes and other disturbed sites, below 6,500 feet.	Potential where habitat occurs
<i>Caulanthus stenocarpus</i>	slender-pod jewelflower	SR		Generally found after burns on dry, open slopes in chaparral between 1,000 and 3,000 feet.	Potential where habitat occurs
<i>Lepidium virginicum</i> var. <i>robinsonii</i>	Robinson's pepper grass		1B	Chaparral, coastal scrub.	Between Santa Anita Cyn. and Sierra Madre (1928); Tanbark Flats (1936)
<i>Rorippa gambelli</i>	Gambel's water cress	FE, ST	1B	Freshwater/brackish marsh.	Potential where habitat occurs
Crassulaceae (Stonecrop Family)					
<i>Dudleya cymosa</i> ssp. <i>crebrifolia</i>	San Gabriel River dudleya		1B	Chaparral.	Fish Cyn., from Gaging Station upstream to Large Falls (1986); San Gabriel Cyn.
<i>Dudleya densiflora</i>	San Gabriel Mountains dudleya		1B	Cliffs, cyn. walls in association with chaparral, coastal sage scrub. Succulent perennial.	Mouth of Fish Cyn. at the San Gabriel River (1986); Fish

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**SPECIAL STATUS PLANT SPECIES (Continued)
OCCURRING OR POTENTIALLY OCCURRING
WITHIN THE SAN GABRIEL CANYON AREA**

Vascular Plants					
Scientific Name	Common Name	Agency Listing Status	CNPS Listing Status	Preferred Habitat	Location/Records
					Cyn, 1 mi. downstream of Large Falls (1989); Roberts Cyn. (1989); San Gabriel Cyn. (1989); near San Gabriel Dam (1985)
<i>Dudleya multicaulis</i>	many-stemmed dudleya		1B	Sage scrub, valley and foothill grassland; heavy clay soils or rock outcrops; below 2,000 feet.	Many records throughout area (CNDDDB)
Ericaceae (Heath Family)					
<i>Arctostaphylos peninsularis</i> ssp. <i>peninsularis</i>	peninsula manzanita		2	Chaparral; 650 to 3,000 ft.	Potential where habitat occurs
Fabaceae (Legume Family)					
<i>Astragalus brauntonii</i>	Braunton's milk-vetch	FE	1B	Sage scrub, chaparral, valley and foothill grassland, closed cone coniferous forest; limestone endemic, carbonate soils, recent burns and disturbed areas.	Monrovia, 0.5 mi. N of Hillcrest Blvd. at Myrtle Ave (1986); S of Clamshell Cyn., N of Monrovia (1998), E of debris basin (1996)
<i>Astragalus pachypus</i> var. <i>jaegeri</i>	Jaeger's milk-vetch		1B	Chaparral, coastal scrub, valley and foothill grasslands/sandy or rocky, and cismontane woodland.	Potential where habitat occurs
Juglandaceae (Walnut Family)					
<i>Juglans californica</i> var. <i>californica</i>	Southern California black walnut		4	Sage scrub, chaparral, cismontane woodland; often in association with oaks/oak woodland; steep hillsides with northern exposures; deep alluvial soils.	Base of San Gabriel foothills, Los Pinetos Springs (1999)
Hydrophyllaceae (Waterleaf Family)					
<i>Phacelia suaveolens</i> ssp. <i>keckii</i>	Santiago peak phacelia		1B	Chaparral, closed-cone coniferous forests.	Potential where habitat occurs
Lamiaceae (Mint Family)					
<i>Lepechinia fragrans</i>	fragrant pitcher sage		4	Chaparral below 3,000 ft., perennial herb.	Potential where habitat occurs
<i>Monardella hypoleuca</i> ssp. <i>lanata</i>	felt-leaved monardella		1B	Chaparral between 980 and 3,280 feet.	Potential where habitat occurs
<i>Monardella macrantha</i> ssp. <i>hallii</i>	Hall's monardella		1B	Broadleaved upland forest, chaparral, lower montane coniferous forest, cismontane woodland, valley and foothill grassland, dry slopes and ridges with openings.	Sunset Ridge Road, NW of Spruce Cyn. and ~1.5 mi. S of Sunset Peak (1991)
<i>Monardella viridis</i>	rock		4	Dry rock places in chaparral, yellow	San Dimas Canyon;

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**SPECIAL STATUS PLANT SPECIES (Continued)
OCCURRING OR POTENTIALLY OCCURRING
WITHIN THE SAN GABRIEL CANYON AREA**

Vascular Plants					
Scientific Name	Common Name	Agency Listing Status	CNPS Listing Status	Preferred Habitat	Location/Records
<i>ssp. saxicola</i>	monardella			pine forest, 1,700-6,000 ft. perennial herb.	Upper Big Dalton Canyon
<i>Scutellaria bolanderi</i> ssp. <i>austromontana</i>	southern skullcap		1B	Chaparral, cismontane woodland, lower montane coniferous forest; elevation approximately 300 feet.	Potential where habitat occurs
Malvaceae (Mallow Family)					
<i>Malacothamnus davidsonii</i>	Davidson's bush mallow		1B	Sage scrub, chaparral, riparian woodland.	Potential where habitat occurs
<i>Sidalcea neomexicana</i>	Salt spring checkerbloom		2	Alkali playas, brackish marshes, chaparral, coastal scrub, lower montane coniferous forest, desert scrub.	Claremont (1909)
Orobanchaceae (Broomrape Family)					
<i>Orobanche valida</i> ssp. <i>valida</i>	rock creek broomrape		1B	Chaparral, pinyon juniper woodland, on slopes of loose decomposed granite, parasitic on various chaparral shrubs.	W ridge of Lookout Mt., NE of Mt. Baldy station (1979)
Polemoniaceae (Phlox Family)					
<i>Linanthus concinnus</i>	San Gabriel linanthus		1B	Lower and upper montane coniferous forest, dry rock slopes often in Jeffrey pine/cyn. oak forest.	Icehouse Cyn., San Antonio Hills (1917); Mt. Markham (1921); Mt. Lowe summit (191X)
Polygonaceae (Buckwheat Family)					
<i>Chorizanthe parryi</i> var. <i>parryi</i>	Parry's spineflower		3	Openings/clearings in coastal or desert sage scrub, chaparral or interface; dry slopes or flat ground; sandy soils.	Thompson Creek Dam (1932); Mt. Lowe (1902); Arroyo Seco (1920)
<i>Dodecahema leptoceras</i>	slender-horned spineflower	FE, SE	1B	Alluvial sage scrub vegetation on sandy flood-deposited rivers and washes.	Rubio Wash, Altadena (1920); Santa Anita Wash, S base of San Gabriel Mts. (1920); W fork San Gabriel River (1921)
Primulaceae (Primrose Family)					
<i>Adrosace elongata</i> ssp. <i>acuta</i>	California adrosace		4	Chaparral, cismontane woodland, coastal scrub.	Potential where habitat occurs
Rosaceae (Rose Family)					
<i>Horkelia cuneata</i> ssp. <i>puberula</i>	Mesa horkelia		1B	Cismontane and riparian woodlands, chaparral, coastal sage scrub	Potential where habitat occurs
Rubiaceae (Madder Family)					
<i>Gallium grande</i>	San Gabriel bedstraw		1B	Cismontane woodland, chaparral, broadleafed upland forest, lower montane coniferous forest, open chaparral and low open oak forest, on rocky slopes.	Neat Chantry Flat and also near upper Winter Creek trailhead (1979); Sawpit Cyn. (1910);

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**SPECIAL STATUS PLANT SPECIES (Continued)
OCCURRING OR POTENTIALLY OCCURRING
WITHIN THE SAN GABRIEL CANYON AREA**

Vascular Plants					
Scientific Name	Common Name	Agency Listing Status	CNPS Listing Status	Preferred Habitat	Location/Records
					between Monrovia Cyn. and Fish Cyn. (1919); Chantry Flat (1985)
Saxifragaceae (Saxifrage Family)					
<i>Boykinia rotundifolia</i>	round-leaved boykinia		4	Chaparral, riparian woodland, streambanks.	Potential where habitat occurs
Scrophulariaceae (Figwort Family)					
<i>Castilleja gleasonii</i>	Mount Gleason Indian paintbrush	SR	1B	Lower montane coniferous forest, open flats or slopes with granitic soil, restricted to San Gabriel Mts.	Potential where habitat occurs
<i>Fremontodendron mexicanum</i>	Mexican flannelbrush	FE, SR	1B	Closed-cone coniferous forest, chaparral, cismontane woodland, creeks or dry cyns., gabbro soils.	Potential where habitat occurs
Angiosperms (Monocotyledons)					
Liliaceae (Lily Family)					
<i>Brodiaea filifolia</i>	thread-leaved brodiaea	FT, SE	1B	Sage scrub, valley/foothill grassland, cismontane woodland; vernal pools (clay soils).	Glendora, 1 mi. N of Goddard Jr. High School (1991); San Dimas, between Wildwood and Morgan Cyns. (1990)
<i>Calochortus clavatus</i> var. <i>gracilis</i>	slender mariposa lily		1B	Chaparral, especially in foothill cyns.; generally found in shade.	Evey Cyn., just W of jct w/ San Antonio Cyn. (1959); W fork of San Gabriel River
<i>Calochortus palmeri</i> var. <i>palmeri</i>	Palmer's mariposa lily		1B	Meadows, vernal moist places in chaparral and yellow pine forest at elevation from 3,500 to 6,500 feet.	Potential where habitat occurs
<i>Calochortus plummerae</i>	Plummer's mariposa lily		1B	Variety of Southern California plant communities, including sage scrub, valley and foothill grassland, yellow pine forest; dry, rocky or sandy sites, granitic or alluvial soil; to 4,800 feet.	Near Evey Cyn. (1935); Claremont, Live Oak Cyn. (1928); Johnston Peak (1949); many other records on CNDDB
<i>Calochortus weedii</i> var. <i>intermedius</i>	intermediate flowered mariposa lily		1B	Chaparral, coastal scrub, valley and foothill grasslands.	On summit of hills near Rancho Santa Ana Botanic Garden (1927); Elephant Hill (1991)
<i>Lilium humboldtii</i> ssp. <i>ocellatum</i>	ocellated Humboldt lily		4	Openings in chaparral, cismontane woodland, lower montane coniferous forest; below 5,500 feet.	Potential where habitat occurs
<i>Lilium parryi</i>	lemon lily		1B	Lower and upper montane coniferous forest, meadows and seeps, riparian	USGS 7.5' Mt. Baldy quadrangle,

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**SPECIAL STATUS PLANT SPECIES (Continued)
 OCCURRING OR POTENTIALLY OCCURRING
 WITHIN THE SAN GABRIEL CANYON AREA**

Vascular Plants					
Scientific Name	Common Name	Agency Listing Status	CNPS Listing Status	Preferred Habitat	Location/Records
				forest, shady edges of streams.	location info suppressed by CNDDDB (1993)
Poaceae (Grass Family)					
<i>Calamagrostis densa</i>	dense reedgrass		1B	On dry hills in chaparral and coniferous forests on gabbroic soils and disturbed sites between 1,300 and 4,000 feet.	Potential where habitat occurs
<i>Muhlenbergia californica</i>	California muhly		1B	Coastal sage, chaparral, lower montane coniferous forest, meadows near streams or seeps.	Red Hill, E of Upland (1916); Mt. Lowe (1899)
Legend:					
FE Federally Listed as Endangered FT Federally Listed as Threatened FPE Federally Proposed as Endangered FPT Federally Proposed as Threatened FPD Federally Proposed for Delisting SE State Listed as Endangered ST State Listed as Threatened SCE State Candidate for Endangered SCT State Candidate for Threatened SP State Protected SFP State Fully Protected SR State Rare CSC California Special Concern Species		<u>California Native Plant Society (CNPS) Lists</u> 1A Presumed extinct in California. 1B Rare, threatened, or endangered throughout their range 2 Rare, threatened, or endangered in CA, but more common in other states. 3 Plant species for which additional info is needed before rarity can be determined. 4 Species of limited distribution in California (i.e., naturally rare in the wild), but whose existence does not appear to be susceptible to threat.			

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**SPECIAL STATUS WILDLIFE SPECIES
OCCURRING OR POTENTIALLY OCCURRING
WITHIN THE SAN GABRIEL CANYON AREA**

Wildlife				
Scientific Name	Common Name	Agency Listing Status	Preferred Habitat	Location
Invertebrates				
Order Coleoptera (Beetles)				
<i>Paleoxenus dohrni</i>	Dohrn's elegant eucnemid beetle		Transition zone forests, higher elevations, on incense cedar.	Potential where habitat occurs
Order Lepidoptera (Butterflies and Moths)				
<i>Incisalia mossii hikupa</i>	San Gabriel Mountains elfin butterfly		Rocky outcrops, cliffs where stonecrop grows.	Potential where habitat occurs
<i>Plejebus saepiolus</i>	San Gabriel Mountains blue butterfly		Forest openings, at streamsides, in meadows and alpine fell-fields, from cool coastal areas to upper elevations of the California mt. ranges.	Potential where habitat occurs
Order Trichoptera (Caddisflies)				
<i>Diplectrona californica</i>	California diplectron caddisfly		Streams, lakes, and ponds.	Potential where habitat occurs
Vertebrates – Fish				
Cyprinidae (Minnow Family)				
<i>Gila orcutti</i>	arroyo chub	CSC	Slow water sections of streams with mud or sand substrates.	E fork of San Gabriel River and Cattle Cyn. Creek (1999); N & W forks San Gabriel River, also Big Mermaids Cyn. Creek and Bear Creek (1999)
<i>Rhinichthys oscultus</i> ssp. 3	Santa Ana speckled dace	CSC	Requires permanent flowing streams with summer water temperatures of 17 to 20°C, shallow cobble and gravel.	Potential where habitat occurs
Catostomidae (Sucker Family)				
<i>Catostomus santaanae</i>	Santa Ana sucker	FE	Sand, rubble, boulder bottoms; cool, clear water; feed on algae.	E fork of San Gabriel River and Cattle Cyn. Creek (1999); N & W forks San Gabriel River, also Big Mermaids Cyn. Creek and Bear Creek (1999); Fish Cyn. (1986)
Vertebrates – Amphibians				
Salamandridae (Newt Family)				
<i>Taricha torosa torosa</i>	coast range newt	CSC	Moist woodlands.	Potential where habitat occurs
Plethodontidae (Lungless Salamander Family)				
<i>Ensatina eschscholtzii croceator</i>	yellow-blotched salamander	CSC	Coniferous habitats, montane hardwood habitats, and mixed chaparral.	Potential where habitat occurs

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**SPECIAL STATUS WILDLIFE SPECIES (Continued)
OCCURRING OR POTENTIALLY OCCURRING
WITHIN THE SAN GABRIEL CANYON AREA**

Wildlife				
Scientific Name	Common Name	Agency Listing Status	Preferred Habitat	Location
Pelobatidae (Spadefoot Toad Family)				
<i>Scaphiopus hammondi</i>	western spadefoot	CSC, SP	Prefers relatively open areas in lowland grasslands, chaparral, and pine-oak woodlands, areas of sandy or gravelly soil in alluvial fans, washes, and floodplains.	Potential where habitat occurs
Bufoidea (True Toads)				
<i>Bufo californicus</i>	arroyo toad	FE, CSC, SP	Washes/streams, sandy banks, grown to willows, cottonwoods or sycamores; riparian habitats of semi-arid areas, small cobbly streambeds.	Potential where habitat occurs
Ranidae (True Frog Family)				
<i>Rana aurora draytonii</i>	California red-legged frog	FT, CSC, SP	Humid forests, woodlands, grasslands and streamsides, especially where cattails and other plants provide good cover.	Potential where habitat occurs
<i>Rana boylei</i>	foothill yellow-legged frog	CSC, SP	Stream, river of woodland, chaparral and forest.	Potential where habitat occurs
<i>Rana muscosa</i>	Sierra Madre yellow-legged frog	FE, CSC, SP	Sunny riverbanks, meadows, streams, isolated pools, lake borders.	Potential where habitat occurs
Vertebrates – Reptiles				
Emydidae (Box and Water Turtle Family)				
<i>Clemmys marmorata pallida</i>	southwestern pond turtle	CSC, SFP	Ponds, marshes, rivers, streams, irrigation ditches.	USGS 7.5' Azusa quadrangle (1992), location suppressed; Glendora quad, date and location suppressed
Gekkonidae (Gecko Family)				
<i>Coleonyx variegatus abbotti</i>	San Diego banded gecko		Rocky tracts, cyn. walls, and sand dunes in coastal sage and chaparral	Potential where habitat occurs
Iguanidae (Iguanid Lizard Family)				
<i>Phrynosoma coronatum (blainvillei population)</i>	coast (San Diego) horned lizard	CSC, SP	Valley-foothill hardwood, conifer, and riparian habitats, pine-cypress, juniper and annual grassland habitats below 6,000 feet, open country, especially sandy areas, washes, flood plains, and windblown deposits.	Top of Mt. Wilson (197X); 0.5 mi. W of Santa Anita Cyn. (197X); Thompson Creek (197X); Eaton Cyn. Park (1969); Heaton Flat, E fork of San Gabriel River
Teiidae (Whiptail Lizard Family)				
<i>Cnemidophorus tigris stejnegeri</i>	coastal western whiptail		Arid and semi-arid desert to open woodlands, where vegetation is sparse.	Potential where habitat occurs
Anniellidae (Legless Lizard Family)				
<i>Anniella pulchra</i>	silvery legless	CSC	Several habitats but especially in	Potential where habitat

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**SPECIAL STATUS WILDLIFE SPECIES (Continued)
OCCURRING OR POTENTIALLY OCCURRING
WITHIN THE SAN GABRIEL CANYON AREA**

Wildlife				
Scientific Name	Common Name	Agency Listing Status	Preferred Habitat	Location
<i>pulchra</i>	lizard		coastal dune, valley-foothill, chaparral, and coastal scrub habitats.	occurs
Boidae (Boa Family)				
<i>Charina bottae umbratica</i>	southern rubber boa	ST, SP	Grassland, broken chaparral, woodland and forest, under rock bark of dead trees.	Potential where habitat occurs
Colubridae (Colubrid Snake Family)				
<i>Diadophis punctatus modestus</i>	San Bernardino ring-neck snake		Open, relatively rocky areas within valley-foothill, mixed chaparral, and annual grass habitats.	Big Dalton Cyn. and Glendora Mt. Rd.
<i>Lampropeltis zonata parvirubra</i>	San Bernardino mountain kingsnake	CSC	Moist woods, coniferous forests, woodland and chaparral.	Glendora, San Dimas, Little Dalton Cyn., and Big Dalton Cyn.
<i>Lampropeltis zonata pulchra</i>	San Diego mountain kingsnake	CSC, SP	Moist woods, coniferous forests, woodland and chaparral.	Glendora, San Dimas, Little Dalton Cyn., and Big Dalton Cyn.
<i>Salvador hexalepis virgultea</i>	coast patch-nosed snake	CSC	Coastal chaparral, desert scrub, washes, sandy flats, and rocky areas. Barren creosote bush desert flats. Sagebrush semi-deserts; sea level to 7,000 feet.	Potential where habitat occurs
<i>Thamnophis hammondi</i>	two-striped garter snake	CSC, SP	Riparian and freshwater marshes with perennial water.	San Gabriel River below Morris Dam
Vertebrates – Birds				
Ardeidae (Heron, Egret, and Bittern Family)				
<i>Ixobrychus exilis hesperis</i>	western least bittern	CSC	Emergent wetlands of cattails and tules.	Potential where habitat occurs
Phalacrocoracidae (Cormorant Family)				
<i>Phalacrocorax auritus</i>	double-crested cormorant	WL	Coasts, bays, lakes, and rivers.	Potential where habitat occurs
Accipitridae (Hawks, Kites, Harriers and Eagle Family)				
<i>Accipiter cooperi</i>	Cooper's hawk	WL	Open woodlands especially riparian woodland.	Potential where habitat occurs
<i>Accipiter striatus</i>	sharp-shinned hawk	WL	Woodlands; forages over chaparral and other scrublands; prefers riparian habitats and north-facing slopes, with plucking perch sites.	Potential where habitat occurs
<i>Aquila chrysaetos</i>	golden eagle	WL, SFP	Mountains, deserts, and open country; prefer to forage over grasslands, deserts, savannahs and early successional stages of forest and shrub habitats.	Big Dalton drainage area
<i>Buteo swainsoni</i>	Swainson's hawk	ST	Plains, ranges, open hills, sparse trees.	Potential where habitat occurs

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**SPECIAL STATUS WILDLIFE SPECIES (Continued)
OCCURRING OR POTENTIALLY OCCURRING
WITHIN THE SAN GABRIEL CANYON AREA**

Wildlife				
Scientific Name	Common Name	Agency Listing Status	Preferred Habitat	Location
<i>Circus cyaneus</i>	northern harrier	CSC	Coastal salt marshes, freshwater marshes, grasslands, and agricultural fields; occasionally forages over open desert and brushlands.	Potential where habitat occurs
<i>Elanus leucurus</i>	white-tailed kite	SFP	Grasslands with scattered trees, near marshes, along highways.	Potential where habitat occurs
<i>Haliaeetus leucocephalus</i>	bald eagle	FPD, SE	Lakes, reservoirs, rivers, offshore islands, and some rangelands and coastal wetlands in Southern California.	Potential where habitat occurs
<i>Pandion haliaetus</i>	osprey	WL	Rivers, lakes, and coasts, mixed conifer.	Potential where habitat occurs
Falconidae (Falcon Family)				
<i>Falco columbarius</i>	merlin	WL	Coastlines, wetlands, woodlands, agricultural fields, and grasslands.	Potential where habitat occurs
<i>Falco mexicanus</i>	prairie falcon	WL	Grasslands, savannahs, rangeland, agricultural fields, and desert scrub; often uses sheltered cliff ledges for cover.	Potential where habitat occurs
Cuculidae (Cuckoos and Roadrunner Family)				
<i>Coccyzus americanus occidentalis</i>	western yellow-billed cuckoo	FC, SE	Riverine woodlands, thickets, and farms.	Near Cattle Cyn. (1931)
Strigidae (True Owl Family)				
<i>Asio otus</i>	long-eared owl	CSC	Riparian and live oak woodlands.	Potential where habitat occurs
<i>Athene cunicularia hypugea</i>	burrowing owl	CSC	Dry grasslands, desert habitats, and open pinyon-juniper and ponderosa pine woodlands below 5,300 feet elevation. Prefers berms, ditches, and grasslands adjacent to rivers, agricultural, and scrub areas.	Potential where habitat occurs
<i>Strix occidentalis occidentalis</i>	California spotted owl	CSC	Oak and oak-conifer habitats.	Potential where habitat occurs
Apodidae (Swift Family)				
<i>Chaetura vauxi</i>	Vaux's swift	CSC	Redwood and douglas fir habitats.	Migrant only in region
<i>Cypseloides niger</i>	black swift	CSC	Steep, rocky, often moist cliffs and crevice or caves on sea cliffs, deep cysns.	Sturtevant Falls, Santa Anita Cyn. (1986); Wolfskill Falls, near Mt. Baldy (1986).
Tyrannidae (Tyrant Flycatcher Family)				
<i>Empidonax traillii extimus</i>	southwestern willow flycatcher	FE, SE	<u>Low elevational sites:</u> Riparian woodlands that contain water and	Potential where habitat occurs

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**SPECIAL STATUS WILDLIFE SPECIES (Continued)
OCCURRING OR POTENTIALLY OCCURRING
WITHIN THE SAN GABRIEL CANYON AREA**

Wildlife				
Scientific Name	Common Name	Agency Listing Status	Preferred Habitat	Location
			low growing willow thickets. <u>High elevational sites</u> : Large, flat, wet meadows that contain patches of willow trees.	
Alaudidae (Lark Family)				
<i>Eremophila alpestris actia</i>	California horned lark	WL	Open habitats, grasslands along the coast, deserts near sea level to alpine dwarf shrub habitat, uncommonly in coniferous and chaparral habitats.	Potential where habitat occurs
Hirundinidae (Swallow Family)				
<i>Progne subis</i>	purple martin	CSC	Towns, farms, open or semi-open country.	Potential where habitat occurs
<i>Riparia riparia</i>	bank swallow	ST	Riparian and other lowland habitats W of the desert.	Potential where habitat occurs
Troglodytidae (Wren Family)				
<i>Campylorhynchus brunneicapillus</i>	coastal cactus wren	CSC	Coastal sage scrub, vegetation with thickets of prickly pear or cholla cactus.	Potential where habitat occurs
Muscicapidae (Kinglets, Gnatcatchers, Thrushes, and Babbler Family)				
<i>Poliophtila californica californica</i>	Coastal California gnatcatcher	FT, CSC	Coastal sage scrub vegetation below 2,500 feet elevation in Riverside County and generally below 1,000 feet elevation along coastal slopes; generally avoids steep slopes and dense vegetation for nesting.	Arcadia (1928); Indian Hill, Claremont (1918); near Bio Field Station/Rancho Santa Ana Botanic Garden (1994)
Laniidae (Shrike Family)				
<i>Lanius ludovicianus</i>	loggerhead shrike	CSC	Open habitats with scattered shrubs, trees, posts, fences, utility lines, or other perches.	Potential where habitat occurs
Vireonidae (Vireo Family)				
<i>Vireo bellii pusillus</i>	least Bell's vireo	FE, SE	Perennial and intermittent streams with low, dense riparian scrub and riparian woodland habitats below 2,000 ft.; nests primarily in willows and forages in the riparian and occasionally in adjoining upland habitats.	Mouth of Fish Cyn. (1974); mouth of Tassel Cyn. (1975)
Parulidae (Warblers)				
<i>Dendroica petechia brewsteri</i>	Yellow warbler	CSC	Riparian and montane woodlands	Big Dalton Cyn. (1993)
<i>Icteria virens</i>	Yellow-breasted chat	CSC	Riparian woodlands	Potential where habitat occurs
Emberizidae (Sparrows, Tanagers, Buntings, and Blackbird Family)				
<i>Agelaius tricolor</i>	tricolored	CSC	Freshwater marshes and riparian	Potential where habitat

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**SPECIAL STATUS WILDLIFE SPECIES (Continued)
OCCURRING OR POTENTIALLY OCCURRING
WITHIN THE SAN GABRIEL CANYON AREA**

Wildlife				
Scientific Name	Common Name	Agency Listing Status	Preferred Habitat	Location
	blackbird		scrub.	occurs
<i>Aimophila ruficeps canescens</i>	Southern California (ashy) rufous-crowned sparrow	WL	Generally, steep, rocky areas within coastal sage scrub and chaparral, often with scattered bunches of grass; prefers relatively recently burned areas.	Potential where habitat occurs
<i>Amphispiza belli belli</i>	Bell's sage sparrow	WL	Dense, dry chamise chaparral and coastal slopes of coastal sage scrub.	Potential where habitat occurs
<i>Piranga rubra</i>	summer tanager	CSC	Desert riparian areas dominated by cottonwoods and willows.	Potential where habitat occurs
<i>Vermivora virginiae</i>	Virginia's warbler	WL	Arid, shrubby, mixed conifer, pinyon-juniper, montane chaparral	Recent record (no date) of a pair successfully breeding near Blue Ridge
Mammals				
Phyllostomidae (Leaf-Nosed Bat Family)				
<i>Macrotus californicus</i>	California leaf-nosed bat	CSC	Desert riparian, desert wash, desert scrub, desert succulent shrub, alkali desert scrub, and palm oasis. Roosts in tunnels, caves and possible buildings and bridges.	Potential where habitat occurs
Vespertilionidae (Evening Bat Family)				
<i>Antrozous pallidus</i>	pallid bat	CSC	Nests in dry, rocky habitats/caves, crevices in rocks, arid habitats including deserts, chaparral, and scrublands.	Potential where habitat occurs
<i>Corynorhinus (Plecotus) townsendii pallescens</i>	pale big-eared bat	CSC	Caves, tunnels, or other structures for roosting, vegetation and mesic edges for feeding, extremely sensitive to roosting site disturbance, maternity roosts are in warm places.	Potential where habitat occurs
<i>Corynorhinus (Plecotus) townsendii townsendii</i>	Townsend's big-eared bat	CSC	Caves, mine tunnels, and buildings.	Potential where habitat occurs
<i>Myotis ciliolabrum</i>	small-footed bat	CSC	Primarily found in relatively arid wooded and brushy uplands near water from sea level to 8,900 feet.	Potential where habitat occurs
<i>Myotis evotis</i>	long-eared bat	CSC	Occurs along entire coast.	Potential where habitat occurs
<i>Myotis thysanodes</i>	Fringed myotis		Grassland/oak savannah, cottonwood-southern willow scrub, riparian scrub, oak woodland, open riverbed and bank.	Potential where habitat occurs
<i>Myotis volans</i>	long-legged		Most common in woodland and	Potential where habitat

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**SPECIAL STATUS WILDLIFE SPECIES (Continued)
OCCURRING OR POTENTIALLY OCCURRING
WITHIN THE SAN GABRIEL CANYON AREA**

Wildlife				
Scientific Name	Common Name	Agency Listing Status	Preferred Habitat	Location
	myotis		forest habitats above 4,000 feet; also forages in chaparral, coastal scrub, shrub habitats from sea level to 11,400 feet.	occurs
<i>Myotis yumanensis</i>	Yuma myotis	CSC	Open forests and woodlands with water are optimal but uses a variety of habitats.	Potential where habitat occurs
Molossidae (Free-Tailed Bat Family)				
<i>Eumops perotis californicus</i>	western mastiff bat	CSC	Primarily arid lowlands, especially deserts. Open, semi-arid to arid habitats including conifer and deciduous woodlands, coastal scrub, annual and perennial grasslands, palm oases, chaparral, desert scrub, and urban.	Potential where habitat occurs
Leporidae (Hares and Rabbit Family)				
<i>Lepus californicus bennettii</i>	San Diego black-tailed jackrabbit	CSC	Open brushlands and scrub habitats between sea level and 4,000 feet elevation.	Potential where habitat occurs
Heteromyidae (Pocket Mice and Kangaroo Rat Family)				
<i>Chaetodipus fallax fallax</i>	Northwestern San Diego pocket mouse	CSC	Sandy herbaceous areas, usually in association with rocks or coarse gravel, sagebrush, scrub, annual grassland, chaparral and desert scrubs.	Historic records from alluvial scrub areas near lower San Antonio Creek
<i>Dipodomys merriami parvus</i>	San Bernardino Merriam's kangaroo rat	FE, CSC	Alluvial fan scrub.	Potential where habitat occurs
<i>Perognathus longimembris brevinasus</i>	Los Angeles pocket mouse	CSC	Coastal sage scrub, and grasslands, desert cactus, creosote bush and sagebrush habitats.	Potential where habitat occurs
Muridae (Mice, Rats, and Vole Family)				
<i>Neotoma lepida intermedia</i>	San Diego desert woodrat	CSC	Chaparral, coastal sage scrub, and pinyon-juniper woodland.	Several records from different localities in San Gabriel Cyn. and Azusa
<i>Onychomys torridus ramona</i>	southern grasshopper mouse	CSC	Grasslands, desert areas, especially scrub with friable soils.	Potential where habitat occurs
Procyonidae (Raccoon Family)				
<i>Bassariscus astutus oclarus</i>	ringtail cat	SFP	Mixture of forest and shrublands in close association with rocky areas or riparian habitats.	Historic records from numerous cyns. including San Dimas and San Gabriel

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**SPECIAL STATUS WILDLIFE SPECIES (Continued)
 OCCURRING OR POTENTIALLY OCCURRING
 WITHIN THE SAN GABRIEL CANYON AREA**

Wildlife				
Scientific Name	Common Name	Agency Listing Status	Preferred Habitat	Location
Legend				
<u>Agency Lists</u>				
FE	Federally Listed as Endangered		ST	State Listed as Threatened
FT	Federally Listed as Threatened		SCE	State Candidate for Endangered
FPE	Federally Proposed as Endangered		SCT	State Candidate for Threatened
FPT	Federally Proposed as Threatened		SP	State Protected
FPD	Federally Proposed for Delisting		SFP	State Fully Protected
FC	Federal Candidate for Listing as Threatened or Endangered		CSC	California Special Concern Species
SR	State Rare		WL	Watch List
SE	State Listed as Endangered			

Project Site

Several special status habitats occur on the project site including: California Sagebrush Scrub, Scalebroom Scrub, Southern Willow Scrub, Mule Fat Scrub, and Coast Live Oak Woodland.

Below is a list of special status plant and wildlife species which have been determined to have some potential, albeit low in some cases, to occur specifically on the site based on the range of the species and the habitat available on and surrounding the site:

Plants

- Greata's aster (*Aster greatae*)
- Braunton's milk-vetch (*Astragalus brauntonii*)
- Nevin's barberry (*Berberis nevinii*)
- Thread-leaved brodiaea (*Brodiaea filifolia*)
- Slender mariposa lily (*Calochortus clavatus* var. *gracilis*)
- Plummer's mariposa lily (*Calochortus plummerae*)
- Slender-horned spineflower (*Dodecahema leptoceras*)
- San Gabriel River dudleya (*Dudleya cymosa* ssp. *crebrifolia*)
- San Gabriel Mountains dudleya (*Dudleya densiflora*) - *thought to occur on the site
- Mesa horkelia (*Horkelia cuneata* ssp. *puberula*)
- Robinson's pepper-grass (*Lepidium virginicum* var. *robinsonii*)
- Rayless ragwort (*Senecio aphanactis*)

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- San Bernardino aster (*Symphyotrichum defoliatum*)
- Sonoran maiden fern (*Thelypteris puberula* var. *sonorensis*)

Wildlife

- Cooper's hawk (*Accipiter cooperii*)
- Sharp-shinned hawk (*Accipiter striatus*)
- Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*)
- Coastal western whiptail (*Aspidoscelis tigris stejnegeri*)
- Santa Ana sucker (*Catostomus santaanae*)
- Yellow warbler (*Dendroica petechia brewsteri*)
- Southwestern willow flycatcher (*Empidonax traillii extimus*)
- Southwestern pond turtle (*Emys (=Clemmys) marmorata pallida*)
- Arroyo chub (*Gila orcuttii*)
- Yellow-breasted chat (*Icteria virens*)
- San Diego black-tailed jackrabbit (*Lepus californicus bennettii*)
- Big free -tailed bat (*Nyctinomops macrotis*)
- Los Angeles pocket mouse (*Perognathus longimembris brevinasus*)
- Coast (San Diego) horned lizard (*Phrynosoma coronatum [blainvillii population]*)
- Santa Ana speckled dace (*Rhinichthys osculus* ssp. 3)
- Coast Range newt (*Taricha torosa torosa*)
- American badger (*Taxidea taxus*)
- Two-striped garter snake (*Thamnophis hammondi*)
- Least Bell's vireo (*Vireo bellii pusillus*)

Of these species, eight are either state or federally listed as threatened or endangered: thread-leaved brodiaea, Nevin's barberry, Braunton's milk-vetch, slender-horned spineflower, Santa Ana sucker, southwestern willow flycatcher, least Bell's vireo, and coastal California gnatcatcher. The project site provides potential habitat for all eight species; however, the coastal sage scrub habitat for the coastal California gnatcatcher is limited in amount and confined to topography that is considered not suitable for the species. Therefore, the coastal California gnatcatcher is not expected to occur on the project site. There is potential for the other seven species to occur on the project site, though the potential is considered very low. One species, the San Gabriel River dudleya, although not a listed species, is very rare and is known to occur in the immediate vicinity of the property. Proposed plans should avoid impacts to this species if feasible.

REGIONAL BIOLOGICAL VALUE

The San Gabriel Canyon and surrounding area support a rich diversity of biological resources within close proximity to large urban areas. In summary, the Canyon area contains habitat of

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the rare species (i.e., San Gabriel bedstraw and the San Gabriel Mountains dudleya) as well as several plant communities within this area that are CDFG highest inventory priority communities due to their restricted distribution in the Southern California region. These communities include: walnut woodland, oak riparian woodland, southern willow scrub, coastal sage scrub, and alluvial fan scrub.

The three major canyons within this area support well developed and diverse riparian woodlands, as well as a source of water for most, if not all, of the year. These represent important stopover and overwintering areas for a wide variety of migratory birds, as well as essential habitat for resident species. These canyons also support seasonal and more frequent movement for wide-ranging mammals which must move over large areas to fulfill their habitat requirements.

Virtually all of the native biotic communities within this area are relatively undisturbed over most of their extent. As such, and because urbanization throughout much of the foothill regions has removed large expanses of these communities, those in the San Gabriel Canyon area are particularly important to the region's natural heritage.

RESTORATION RECOMMENDATIONS

The proposed River Wilderness Park project has potential to contribute to the sustainment of the biological diversity that exists in the Canyon area. Through careful planning and consideration of key resources, the project may promote and protect rare habitat types and plant and animals species while encouraging light public use. Although some riparian vegetation is present on the site, plant communities such as cottonwood-willow riparian woodland and alder riparian woodland could be enhanced and restored along the banks of the river. Oak woodlands and coastal sage scrub communities could be restored in other upland portions of the site. Existing populations of rare plants in the vicinity of the site, such as San Gabriel River dudleya, could be protected and their expansion promoted through restoration efforts. In addition, many special status wildlife species prefer riparian zones and would be attracted to restored riparian communities. The establishment of these plant communities at such a desirable location, (i.e., adjacent to the river, contiguous with an expansive wilderness area, and within an important canyon corridor) will promote wildlife usage and enhance the biological resource values of the region.

SUMMARY OF BIOLOGICAL CONSTRAINTS

Special status plant and wildlife species that may occur on the project site, especially the seven species listed as threatened and endangered and discussed above, may be a constraint to development of a wilderness park or other uses. Development of the site would be expected to increase public recreational uses at the location and may impact species directly (loss or habitat) or indirectly (introduction of non-native species, erosion/sedimentation resulting from trail construction, etc.). Focused surveys for special status plant species would determine the presence or absence and extent of any population that may be present on the project site. The focused survey results would enable any proposed project activities to avoid impacts on special status plant species that may be present. The Santa Ana sucker may be present in the San Gabriel River on the project site, at least occasionally; however, it is expected that proposed project activities could avoid impacts on suitable habitat for the Santa Ana sucker (i.e. water) and therefore, focused surveys for this species would not be considered necessary in order to avoid these potential impacts. The southwestern willow flycatcher and least Bell's vireo are two migratory bird species that are not present during the winter season, so any proposed project activities conducted outside the nesting season (March 15 to September 15) would avoid any

Exhibit J - IS, NOI, Final MND, & NOD for El Encanto Azusa River Wilderness Park

Ms. Lynne Dwyer
November 7, 2008
Page 22

potential direct impacts on these species. If the southwestern willow flycatcher and least Bell's vireo are present in the riparian habitats adjacent to the San Gabriel River, project activities that result in loss of riparian habitat would be considered an impact even during the winter season. In addition, project activities that may result in indirect impacts on riparian habitats (e.g. noise during the nesting season) could be considered an impact if either of these two bird species are present. If possible, project development should avoid impacting these resources and instead, use these resources as part of the educational element of the wilderness park.

A second set of constraints is related to water and wetlands. Regulatory permits or agreements from the U.S. Army Corps of Engineers (USACE) and CDFG would be required prior to any alteration of any USACE or CDFG jurisdictional area. Further, any impacts to special status habitats may require appropriate mitigation. Finally, if any oak trees on the site may be impacted, an oak tree survey should be performed and a subsequent application for a tree removal permit from the City of Azusa should be processed prior to any impacts occurring.

Please contact Marc Blain at (626) 351-2000 if you have questions or comments.

Sincerely,

BONTERRA CONSULTING



Thomas E. Smith, Jr., AICP
Principal



Marc T. Blain
Biological Resources Manager

Enclosures: Exhibit 1 – Vegetation Map

Exhibit J - IS, NOI, Final MND, & NOD for El Encanto Azusa River Wilderness Park

Ms. Lynne Dwyer
November 7, 2008
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Exhibit J - IS, NOI, Final MND, & NOD for El Encanto Azusa River Wilderness Park

Ms. Lynne Dwyer
November 7, 2008
Page 24

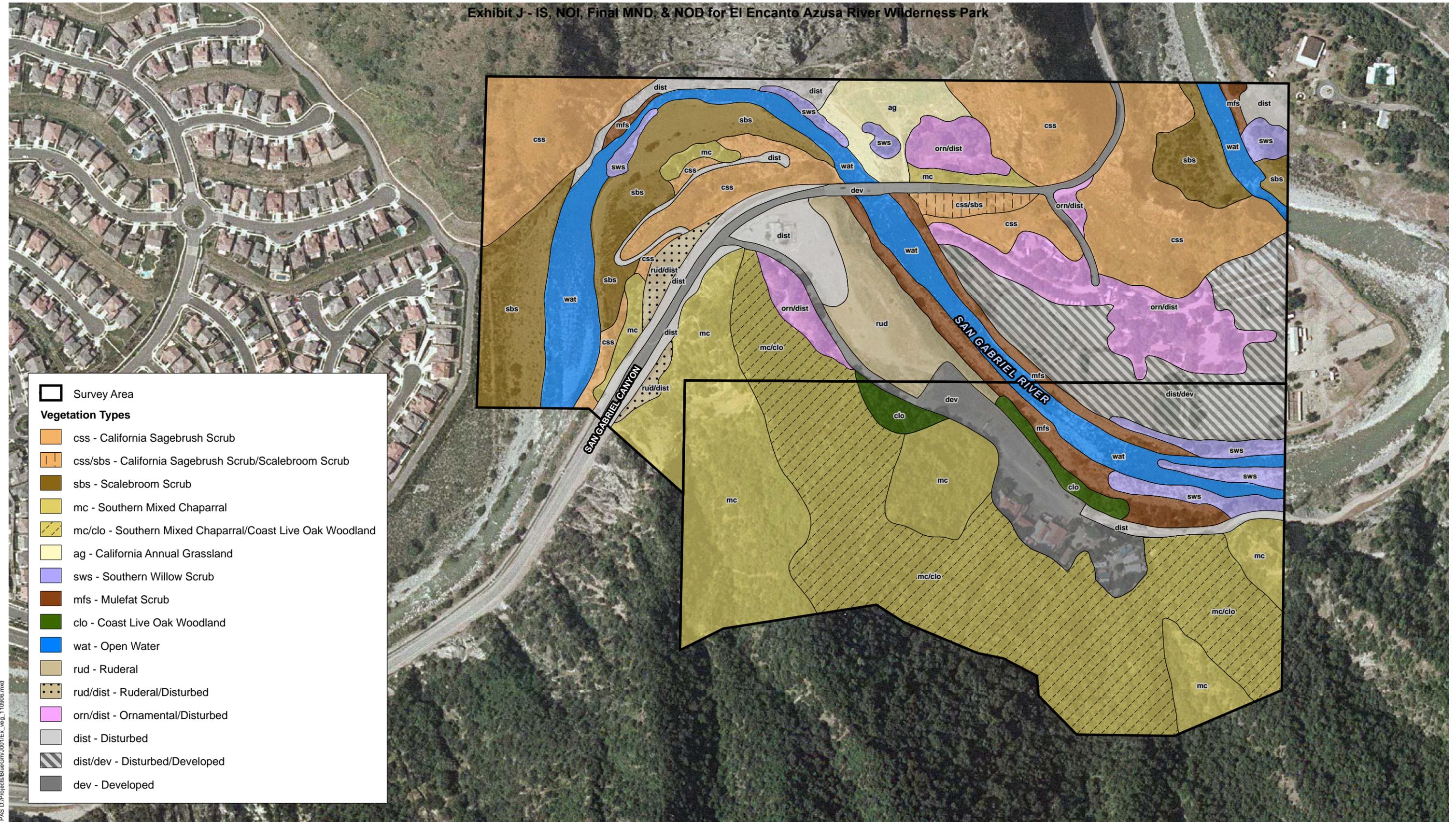
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Survey Area

Vegetation Types

- css - California Sagebrush Scrub
- css/sbs - California Sagebrush Scrub/Scalebroom Scrub
- sbs - Scalebroom Scrub
- mc - Southern Mixed Chaparral
- mc/clo - Southern Mixed Chaparral/Coast Live Oak Woodland
- ag - California Annual Grassland
- sws - Southern Willow Scrub
- mfs - Mulefat Scrub
- clo - Coast Live Oak Woodland
- wat - Open Water
- rud - Ruderal
- rud/dist - Ruderal/Disturbed
- orn/dist - Ornamental/Disturbed
- dist - Disturbed
- dist/dev - Disturbed/Developed
- dev - Developed

Vegetation Types

El Encanto River Wilderness Park



PAS D:/Projects/BlueGrn/J001/EX_veg_110906.mxd

Appendix 7
Letters of Comment Received

Exhibit J - IS, NOI, Final MND, & NOD for El Encanto Azusa River Wilderness Park

LAW OFFICES
WOLF, RIFKIN, SHAPIRO, SCHULMAN & RABKIN, LLPSteven H. Zidell
szidell@wrslawyers.comFile No.
06050-001

February 2, 2009

VIA FACSIMILE (626) 815-1269Ms. Alina Bokde
Watershed Conservation Authority
c/o Rivers and Mountains Conservancy
"El Encanto"
100 N. Old San Gabriel Canyon Road
Azusa, California 91702Re: Mountain Cove Homeowners Association ("Association")
El Encanto Azusa River Wilderness Park (the "Project")

Dear Ms. Bokde:

Thank you for speaking with me earlier last week and again today. As I mentioned, our law firm represents the Association, which only recently became aware of the Project proposed by the Watershed Conservation Authority. According to the Negative Declaration, the Mountain Cove community is located about ½ of a mile west of the Project.

I have reviewed the Master Plan for the Project prepared by BlueGreen Consulting dated October 22, 2007 (the "Master Plan") and the Draft Initial Study and Mitigated Negative Declaration for the Project prepared by BonTerra Consulting dated November 18, 2008 (the "Negative Declaration").

While the overall project sounds interesting, the Association is very concerned about hiking trails going through or adjacent to Mountain Cove. Hikers and other pedestrians going through or adjacent to the Mountain Cove community may result in: (i) increased fire hazard to

UNASSIGNED
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DEC 22 2008

WATERSHED CONSERVATION
AUTHORITY



**SAN GABRIEL VALLEY
MOSQUITO & VECTOR CONTROL DISTRICT**

1145 N. Azusa Canyon Road
West Covina, California 91790
(626) 814-9466 FAX (626) 337-5686
www.sgvmosquito.org

*Steve West
District Manager*

*Kenn K. Fujioka, Ph.D.
Assistant Manager*

Cities of:

Alhambra

December 22, 2008

Arcadia

Azusa

Bradbury

Jane Beesley

Claremont

Watershed Conservation Authority

Covina

San Gabriel & Lower Los Angeles Rivers & Mountains Conservancy

Duarte

100 N. Old San Gabriel Canyon Road

El Monte

Azusa, CA 91702

Glendora

jbeesley@rmc.ca.gov

Industry

RE: DRAFT INITIAL STUDY AND MITIGATED NEGATIVE DECLARATION
for the EL ENCANTO AZUSA RIVER WILDERNESS PARK MASTER PLAN

Irwindale

La Puente

We appreciate the opportunity to provide comments on this project. After review of the Draft Initial Study and Mitigated Negative Declaration (IS/MND) and the El Encanto Azusa River Wilderness Park Master Plan (Plan), we would like to note several points of concern:

La Verne

Monrovia

Monterey Park

1. Page 8 of the Plan notes that vector issues were a "major theme in the discussions" at the first Community Meeting held Nov 2006. Additionally, this District participated throughout the community planning process yet there is no mention of, nor mitigation for potential vector problems in this IS/MND or the Plan.

Pomona

Rosemead

San Dimas

San Gabriel

2. Page 40 of the Plan states "The master list of desired planning elements was checked against existing planning documents including the San Gabriel River Corridor Master Plan..." However, that document contains extensive language relating to vector potential which has not been addressed here. The information begins on page 2-57 and is specifically identified in Plan Elements H2.9, H4.3, and O4.6.

Sierra Madre

Temple City

Walnut

West Covina

*County of
Los Angeles*

While we identified only a few potential issues created by this project, a lack of consultation with this District could result in significant negative impacts and public health liabilities and is not in keeping with planning guidelines established by the San Gabriel River Master Plan.

The following outline our concerns with the various planning elements:

Stormwater Management Strategies

While the elements listed in the Plan are in keeping with acceptable BMPs to increase infiltration and prevent runoff contamination, they can be problematic. The use of bioswales (parking lot) and heavily planted drainages (above Special Use Area and around structures) have the potential to hold water longer than the 96-hour maximum retention time recommended by the California Department of Public Health and this Agency, thereby creating mosquito-breeding habitat.

- *Close monitoring and annual vegetation and BMP maintenance will be required to ensure these features drain/infiltrate as designed and do not lead to the development of mosquitoes.*
- *Funding for annual maintenance must be a budgetary priority.*

Page 68 of the Plan identifies the proposed Plants for Phytoremediation and includes two species of *Typha* for use in the parking lot. Cattail spreads rapidly and makes inspection and treatment for mosquitoes difficult while providing ideal habitat for developing larvae. Additionally, use of these species onsite will lead to a high likelihood of increased establishment along the course of the San Gabriel River. "System disruption is often followed by the growth of dense monocultures of cattails that may reduce habitat heterogeneity and eliminate other plants." (Steven I. Apfelbaum, Applied Ecological Services).

- *We would strongly advise against using *Typha sp.* for phytoremediation on this project.*

We did not identify the use of any underground stormwater treatment devices or catchments in this Plan. If utilized, they will require additional mitigation measures as these are routinely problematic.

Habitat Restoration

Stream channel restoration may potentially impact mosquito production. Areas with high water flows will prohibit mosquito production however *Anopheles spp.* (responsible for malaria transmission) will breed along the edges and *Culex spp.* (responsible for encephalitis transmission) will inhabit more stagnant, algae or vegetation clogged reaches. Any restoration or revegetation must be planned with these considerations in mind.

- *Rapidly growing/spreading emergent vegetation such as *Typha spp.* should be avoided.*
- *Annual vegetation management will be required to ensure adequate water flow to discourage mosquito breeding.*
- *Access along the river's edge must be maintained for inspections by District personnel.*

Additional Issues:

Black Flies

While not addressed in the Plan or IS/MND, visitors/residents in the area routinely experience problems with black fly (*Simulium spp.*). These day-biting flies leave painful welts and can cause severe allergic reactions in some people. Black flies do not transmit any known disease in California however, they will likely be an ongoing nuisance to visitors recreating at the site.

Unfortunately, the remedies are few:

- *The District may be required to increase its use of biorational (Bti) treatments in the River to reduce population levels (aquatic, immature stages prefer fast flowing, highly oxygenated waters)*
- *RMC/WCA should be prepared to provide effective insect repellents to visitors*

Septic Tanks

For the protection of residents, staff, and visitors, on-site functional and abandoned septic tanks need to be identified and inspected for openings that may admit mosquitoes. Mosquitoes can enter openings 1/8" or larger and will reproduce in prodigious numbers in this bacteria-rich environment!

We would be happy to provide additional information as is needed to help ensure this project best serves the residents of the San Gabriel Valley.

Please be aware that the California Health and Safety Codes prohibit property owners from creating or maintaining habitat conducive to the reproduction of vectors which may endanger public health. Section §2060 provides this District with broad abatement powers including the ability to impose fines up to \$1,000 per day plus the cost of abatement as necessary. It is our most fervent desire to *prevent* problems from occurring by ensuring regular monitoring and control and by providing education, guidance, and consultation. We ask that you consider these recommendations and place them into the public record accordingly.

We respectfully request your consideration,

A handwritten signature in black ink that reads "Kelly Middleton". The signature is written in a cursive, flowing style.

Kelly Middleton
Public Information Officer

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DEC 22 2008

WATERSHED CONSERVATION
AUTHORITY



COUNTY OF LOS ANGELES

DEPARTMENT OF PARKS AND RECREATION

"Creating Community Through People, Parks and Programs"

Russ Guiney, Director

December 22, 2008

Ms. Jane Beesley
Watershed Conservation Authority
100 N. Old San Gabriel Canyon Road
Azusa, CA 91702

Dear Ms. Beesley:

**NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION
EL ENCANTO AZUSA RIVER WILDERNESS PARK MASTER PLAN**

The Notice of Intent to adopt a Mitigated Negative Declaration for the El Encanto Azusa River Wilderness Park Master Plan has been reviewed for potential impact on the facilities of this Department. The project as described in the Notice will not affect facilities under the jurisdiction of this Department.

Thank you for including this Department in the review of this notice. If we may be of further assistance, please contact me at (213) 351-5129.

Sincerely,

Jui Ing Chien
Park Planner

c: Norma E. Garcia, Frank Moreno, James Barber, Joan Rupert, DPR

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DEC 22 2008
WATERSHED CONSERVATION
AUTHORITY



San Gabriel & Lower Los Angeles RIVERS AND MOUNTAINS CONSERVANCY

CALIFORNIA RESOURCES AGENCY

Governing Board of the Conservancy

December 22, 2008

Dan Arrighi, Chair
Central Basin Water Association

Frank Colonna, Vice Chair
Environmental Public Member

Linda Adams
California Environmental Protection
Agency

Denis Bertone
San Gabriel Valley Council of
Governments

Mike Chrisman
Resources Agency

David De Jesus
San Gabriel Valley Water Association

Michael C. Genest
Department of Finance

Dean Grose
Orange County Division of the League of
California Cities

Sharon Martinez
San Gabriel Valley Council of
Governments

Gloria Molina
Los Angeles County Board of
Supervisors

Patrick O'Donnell
City of Long Beach

Ed Wilson
Gateway Cities Council of Governments

Gordon Shanks
Orange County Division of the League of
California Cities

Ex Officio Members

Ruth Coleman
Department of Parks and Recreation

John Donnelly
Wildlife Conservation Board

Colonel Thomas H. Magness
US Army Corps of Engineers

Bryan Speegle
Orange County Executive Office

Thomas M. Stetson
San Gabriel River Water Master

Bernie Weingardt
Angeles National Forest
US Forest Service

Gail Farber
Los Angeles County Department of
Public Works

Executive Officer

Belinda Faustinos

Jane Beesley
Watershed Conservation Authority
El Encanto
100 N Old San Gabriel Canyon Road
Azusa, CA 91703

Re: El Encanto Azusa River Wilderness Park Master Plan- Draft
Initial Study and Mitigated Negative Declaration.

Dear Ms. Beesley:

The Rivers and Mountains Conservancy (RMC) is grateful for the opportunity to provide comments on the Watershed Conservation Authority's El Encanto Azusa River Wilderness Park Master Plan- Draft Initial Study and Mitigated Negative Declaration. The San Gabriel and Lower Los Angeles Rivers and Mountains Conservancy (RMC) was established as an independent State agency within the Resources Agency of the State of California to preserve urban open space and habitats in order to provide for low-impact recreation and educational uses, wildlife and habitat restoration and protection, and watershed improvements.

The RMC recommends adoption of the El Encanto Azusa River Wilderness Park Master Plan- Draft Initial Study and Mitigated Negative Declaration by the Watershed Conservation Authority. The RMC has reviewed these documents and has the following comments:

The El Encanto Azusa River Wilderness Park Master Plan- Initial Study and Mitigated Negative Declaration are comprehensive and will be useful tools for the development of the Azusa River Wilderness Park. The goals and objectives are far ranging and allow for appropriate access and use of the park and recreation area by the community. The plan supports restoration as well as appropriate mitigation for any impacts that the plan may have on the various project issues discussed in the plan. The strategies outlined are those that allow for protection of the most sensitive of biological resources while taking into account the safety and education of the community.

Exhibit J - IS, NOI, Final MND, & NOD for El Encanto Azusa River Wilderness Park

Ms. Beesley

December 22, 2008

Page 2

The RMC is pleased to see criteria for public access, as well as, recommended and future trails and trail access. Having clear, informative access to the San Gabriel River Bike Path is important to the RMC's goals for enhancing access and trails within the RMC's territory.

The RMC supports the goals and objectives of the plan and agree with the potential impacts. We look forward to the adoption and implementation of the El Encanto Azusa River Wilderness Park Master Plan exemplifying healthy watershed planning and sustainability. Please feel free to contact the Project Manager Debbie Enos at 626-815-1019 ext 112 or at denos@rmc.ca.gov if you have questions regarding these comments.

Sincerely,



Belinda V. Faustinos
Executive Officer

Exhibit J - IS, NOI, Final MND, & NOD for El Encanto Azusa River Wilderness Park

Ms. Alina Bokde
Watershed Conservation Authority
February 2, 2009
Page 2

the community resulting from either intentional acts (e.g. arson) or unintentional acts (e.g., smoking, discarding of flammable materials, etc.), (ii) increased risk of vandalism or graffiti (there have been incidents of graffiti at Mountain Cove and we are concerned that increased non-resident human activity through or near Mountain Cove may increase the incidence of such activity), and (iii) reduction of privacy to residents.

Based on my review of the Master Plan and the Negative Declaration, I did not see any proposals to create, construct or improve any trails through or adjacent to Mountain Cove. This seemed to be your understanding as well based on our telephone conversation today. *Please confirm that is correct.*

However, Section 4.5 on pages 30-31 of the Master Plan states, "A stated goal for this project is to spatially tie the El Encanto site into the existing open space and develop much needed connectivity....plans include the development of nature trails opposite the current bikeway through the Cities of Duarte and Azusa, effectively allowing regional trail connections to the canyons on the north side of the river, most notably, Fish Canyon and Roberts Canyon. A trail on both sides of the river would essentially extend the Emerald Necklace [a 17 mile loop of greenways and parks] into the mountains."

Page 59 of the Master Plan contains an aerial photograph of the Project and the surrounding area (see Figure 5.20) that depicts regional trail connections. The Mountain Cove project is visible on this photograph, and two trails, the Roberts Canyon Trail and Westside Trail (Emerald Necklace Connection), follow the western boundary of part of the Mountain Cove project. *Please advise whether these are existing trails.*

Figure 5.20 also shows broken yellow lines going through the western portion of Mountain Cove and along the southern boundary of Mountain Cove. *Please advise whether these are proposed trails.* As we discussed, you believe that there are easements for these trails which were granted in connection with the government approval for Mountain Cove.

The recorded tract maps for phases 1 and 2 of the Mountain Cove project do contain certain dedications to the City of Azusa for public trails. The public trails dedicated on the tract maps for phases 1 and 2 of the Mountain Cove project run along the southern and eastern boundary of Mountain Cove (roughly from Lot 34 to Lot 250) and through Lot 158 (a common area parcel south of Wildflower Way). However, as far as I can tell the trail easement along the eastern portion of Mountain Cove ends at Boulder Ridge Court. It does not continue northwesterly in order to be able to connect to the Roberts Canyon Trail.

Exhibit J - IS, NOI, Final MND, & NOD for El Encanto Azusa River Wilderness Park

Ms. Alina Bokde
Watershed Conservation Authority
February 2, 2009
Page 3

Further, the broken line going through Mountain Cove starting just west of Mountain Laurel Way ends at Wildflower Way and does not continue through to the northern half of Mountain Cove. The location of this proposed trail goes along Roberts Creek. Although a trail easement is dedicated on the tract map in this area (but as noted above terminating at Wildflower Way), this would be a very bad location for a trail due to the bird nesting activities and sensitive habitat along the creek bed.

Please let me know if you are aware of any other easements through or adjacent to Mountain Cove.

The Association requests that any trails installed or created by WCA should be located or relocated a sufficient distance from Mountain Cove (100 yards seems like it would be sufficient) and that no trail be constructed along Roberts Creek. The Association would not be interested in granting any easements through the Mountain Cove community.

Finally, please advise what the projected timetable is for completion of the Project as described in the Master Plan.

I understand that the WCA's January 2009 meeting was cancelled. You indicated that the next meeting is tentatively scheduled for February 12, 2009.

I look forward to hearing from you.

Very truly yours,

WOLF, RIFKIN, SHAPIRO, SCHULMAN & RABKIN, LLP


STEVEN H. ZIDELL

SHZ:c11

cc: Ms. Lorena Vasquez
Board of Directors
Daniel C. Shapiro, Esq.

I:\06050\001\Letters\Bokde.020209.wpd.

WCA 35916

FILED

Exhibit J - IS, NOI, Final MND, & NOD for El Encanto Azusa River Wilderness Park

Notice of Determination

OCT 21 2009

RECEIVED
NOV 4 2009
NOV 23 2009

Appendix D

To: **REGISTRAR-RECORDER/COUNTY CLERK**
 From: Belinda Faustinos

Office of Planning and Resources
 For U.S. Mail: Street Address: 100 N. Old San Gabriel Canyon Road
P.O. Box 3044 1400 Tenth St.
Sacramento, CA 95812-3044 Sacramento, CA 95814

DEPUTY Agency: Watershed Conservation Authority
 Address: 100 N. Old San Gabriel Canyon Road
Azusa, CA 91702
 Contact: Belinda Faustinos
 Phone: (626) 815-1019

County Clerk
 County of: LOS ANGELES COUNTY
 Address: COUNTY CLERK
12400 IMPERIAL HIGHWAY NORWALK, CA 90650

Lead Agency (if different from above):
 Address: _____
 Contact: _____
 Phone: _____

SUBJECT: Filing of Notice of Determination in compliance with Section 21108 or 21152 of the Public Resources Code.

State Clearinghouse Number (if submitted to State Clearinghouse): SCH 2008111068

Project Title: El Encanto Azusa River Wilderness Park

Project Location (include county): Near the mouth of San Gabriel Canyon in the northeast corner of the City of Azusa immediately south of the Angeles National Forest.

Project Description:

This is to advise that the Watershed Conservation Authority has approved the above described project on _____ and has made the following determinations regarding the above described project:
 Lead Agency or Responsible Agency
 (Date)

1. The project [will will not] have a significant effect on the environment.
2. An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA.
 A Negative Declaration was prepared for this project pursuant to the provisions of CEQA.
3. Mitigation measures [were were not] made a condition of the approval of the project.
4. A mitigation reporting or monitoring plan [was was not] adopted for this project.
5. A statement of Overriding Considerations [was was not] adopted for this project.
6. Findings [were were not] made pursuant to the provisions of CEQA.

This is to certify that the final EIR with comments and responses and record of project approval, or the negative Declaration, is available to the General Public at: Watershed Conservation Authority, 100 N. Old San Gabriel Canyon Road Azusa, CA 91702

Signature (Public Agency) Belinda V Faustinos Title Executive Officer
 Date 10/21/09 Date Received for filing at OPR _____

Authority cited: Sections 21083, Public Resources Code.
 Reference Section 21000-21174, Public Resources Code.

THIS NOTICE WAS POSTED
 ON OCT 21 2009
 UNTIL NOV 23 2009
 REGISTRAR-RECORDER/COUNTY CLERK

Revised 2005

09 0035786