

SECTION 2.0

ENVIRONMENTAL CHECKLIST

This section of the Initial Study contains the Environmental Checklist for the Altadena Crest Trail Improvements (proposed project). The checklist used is consistent with Appendix G to the State California Environmental Quality Act Guidelines (State CEQA Guidelines). A summary of the substantial evidence that was used to support the responses in the Environmental Checklist is contained in Section 3. The answers contained in this Environmental Checklist are based on reviews of County of Los Angeles General Plan,¹ Altadena Community Plan,² Altadena Crest Trail Feasibility Analysis,³ a Biological Opportunities and Constraints Analysis,⁴ a Geological Feasibility Report,⁵ a Phase I Environmental Site Assessment,⁶ and a Cultural Resources Evaluation⁷ and field reconnaissance undertaken in the spring, summer, and fall of 2005.

The Altadena Crest Trail Feasibility Analysis provides site-specific technical data that was used in the evaluation of the potential for the project to result in significant impacts, including a visibility analysis (aesthetics), elevation and slope data (geology and soils, and hydrology and water quality), and distance to nearest sensitive receptor (land use and planning). Population data and recreation demand and supply data was derived from the County of Los Angeles Strategic Asset Management Plan/Park Needs Assessment.⁸

¹ County of Los Angeles Department of Regional Planning. 1993. *County of Los Angeles Streamlined General Plan*. Contact: Department of Regional Planning, Hall of Records, 320 West Temple Street, Los Angeles, CA 90012.

² County of Los Angeles Department of Regional Planning. July 1986. *Altadena Community Plan*. Contact: Department of Regional Planning, Hall of Records, 320 West Temple Street, Los Angeles, CA 90012.

³ County of Los Angeles. 4 August 2006. *Altadena Crest Trail Improvements Final Feasibility Analysis*. Prepared by: Sapphos Environmental, Inc., 133 Martin Alley, Pasadena, CA 91105.

⁴ County of Los Angeles. 3 March 2006. *Biological Opportunities and Constraints Analysis for Altadena Crest Trail*. Prepared by: Sapphos Environmental, Inc., 133 Martin Alley, Pasadena, CA 91105.

⁵ Wilson Geosciences. 2006. *Final Altadena Crest Trail Improvements Geological Feasibility Report*. Contact: Wilson Geosciences, 1910 Pincrest Drive, Altadena, CA 91001.

⁶ County of Los Angeles. November 2005. *Phase I Environmental Site Assessment for Altadena Crest Trail*. Prepared by: Sapphos Environmental, Inc., 133 Martin Alley, Pasadena, CA 91105.

⁷ County of Los Angeles. 3 March 2006. *Memorandum for the Record No. 5: Cultural Resources Evaluation for Altadena Crest Trail*. Prepared by: Sapphos Environmental, Inc., 133 Martin Alley, Pasadena, CA 91105.

⁸ County of Los Angeles Department of Parks and Recreation. April 2004. *Strategic Asset Management Plan (SAMP) for 2020*. Prepared by: County of Los Angeles Chief Administrative Office and County of Los Angeles Department of Parks and Recreation, with technical assistance by Sapphos Environmental, Inc.

DETERMINATION

On the basis of this initial evaluation:

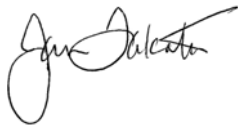
I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

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.

X 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.



Signature

August 21, 2006

Date

Jan Takata, Assistant Division Chief

Printed Name

County of Los Angeles

For

ENVIRONMENTAL CHECKLIST

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
2.1. AESTHETICS – Would the project:				
a) Have a substantial adverse effect on a scenic vista?	_____	_____	_____	_____X_____
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	_____	_____	_____	_____X_____
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	_____	_____	_____	_____X_____
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	_____	_____X_____	_____	_____
2.2. AGRICULTURAL RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. 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?	_____	_____	_____	_____X_____
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	_____	_____	_____	_____X_____

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	_____	_____	_____	<u> X </u>

2.3. AIR QUALITY – Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan?	_____	_____	_____	<u> X </u>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	_____	<u> X </u>	_____	_____
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	_____	_____	_____	<u> X </u>
d) Expose sensitive receptors to substantial pollutant concentrations?	_____	<u> X </u>	_____	_____
e) Create objectionable odors affecting a substantial number of people?	_____	_____	<u> X </u>	_____

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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2.4. BIOLOGICAL RESOURCES --

Would the project:

a)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	_____	<u> X </u>	_____	_____
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 US Fish and Wildlife Service?	_____	<u> X </u>	_____	_____
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?	_____	_____	_____	<u> X </u>
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?	_____	<u> X </u>	_____	_____
e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	_____	_____	_____	<u> X </u>

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	_____	_____	_____	<u> X </u>

2.5. CULTURAL RESOURCES – Would the project:

a) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	_____	<u> X </u>	_____	_____
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	_____	<u> X </u>	_____	_____
c) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	_____	_____	<u> X </u>	_____
d) Disturb any human remains, including those interred outside of formal cemeteries?	_____	_____	_____	<u> X </u>

2.6. GEOLOGY AND SOILS – 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.	_____	<u> X </u>	_____	_____

		Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
ii)	Strong seismic ground shaking?	_____	<u> X </u>	_____	_____
iii)	Seismic-related ground failure, including liquefaction?	_____	<u> X </u>	_____	_____
iv)	Landslides?	_____	<u> X </u>	_____	_____
b)	Result in substantial soil erosion or the loss of topsoil?	_____	<u> X </u>	_____	_____
c)	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	_____	<u> X </u>	_____	_____
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?	_____	<u> X </u>	_____	_____
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?	_____	_____	_____	<u> X </u>

2.7. HAZARDS AND HAZARDOUS MATERIALS –

Would the project:

a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	_____	_____	_____	<u> X </u>
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?	_____	_____	_____	<u> X </u>

		Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	_____	_____	_____	<u> X </u>
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?	_____	_____	_____	<u> X </u>
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?	_____	_____	_____	<u> X </u>
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?	_____	_____	_____	<u> X </u>
g)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	_____	_____	_____	<u> X </u>
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?	_____	<u> X </u>	_____	_____

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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2.8. HYDROLOGY AND WATER QUALITY – Would the project:

a)	Violate any water quality standards or waste discharge requirements?	_____	<u> X </u>	_____	_____
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)?	_____	_____	_____	<u> X </u>
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 which would result in substantial erosion or siltation on- or off-site?	_____	<u> X </u>	_____	_____
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 which would result in flooding on- or off-site?	_____	<u> X </u>	_____	_____
e)	Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	_____	_____	<u> X </u>	_____
f)	Otherwise substantially degrade water quality?	_____	<u> X </u>	_____	_____

		Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	_____	_____	_____	<u> X </u>
h)	Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	_____	<u> X </u>	_____	_____
l)	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?	_____	_____	_____	<u> X </u>
j)	Inundation by seiche, tsunami, or mudflow?	_____	<u> X </u>	_____	_____

2.9. LAND USE AND PLANNING -

Would the project:

a)	Physically divide an established community?	_____	_____	_____	<u> X </u>
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?	_____	_____	_____	<u> X </u>
c)	Conflict with any applicable habitat conservation plan or natural community conservation plan?	_____	_____	_____	<u> X </u>

2.10. MINERAL RESOURCES -- 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?	_____	_____	_____	<u> X </u>
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	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	_____	_____	_____	<u> X </u>

2.11. NOISE --

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?	_____	_____	<u> X </u>	_____
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	_____	<u> X </u>	_____	_____
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	_____	_____	_____	<u> X </u>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	_____	_____	<u> X </u>	_____
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?	_____	_____	_____	<u> X </u>
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?	_____	_____	_____	<u> X </u>

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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2.12. POPULATION AND HOUSING -

- 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 extension of roads or other infrastructure)? | _____ | _____ | _____ | <u> X </u> |
| b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? | _____ | _____ | _____ | <u> X </u> |
| c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere? | _____ | _____ | _____ | <u> X </u> |

2.13. PUBLIC SERVICES -

- | | | | | |
|---|-------|-------|-------|--------------|
| a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: | | | | |
| Fire protection? | _____ | _____ | _____ | <u> X </u> |
| Police protection? | _____ | _____ | _____ | <u> X </u> |
| Schools? | _____ | _____ | _____ | <u> X </u> |
| Parks? | _____ | _____ | _____ | <u> X </u> |
| Other public facilities? | _____ | _____ | _____ | <u> X </u> |

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
2.14. RECREATION --				
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?	_____	_____	<u> X </u>	_____
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?	_____	_____	<u> X </u>	_____
2.15. TRANSPORTATION/TRAFFIC --				
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)?	_____	_____	_____	<u> X </u>
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	_____	_____	_____	<u> X </u>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	_____	_____	_____	<u> X </u>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	_____	<u> X </u>	_____	_____
e) Result in inadequate emergency access?	_____	_____	<u> X </u>	_____

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
f) Result in inadequate parking capacity?	_____	_____	_____	<u> X </u>
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	_____	_____	_____	<u> X </u>

2.16. UTILITIES AND SERVICE

SYSTEMS – Would the project:

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	_____	_____	_____	<u> X </u>
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?	_____	_____	_____	<u> X </u>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	_____	_____	_____	<u> X </u>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	_____	_____	_____	<u> X </u>
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	_____	_____	_____	<u> X </u>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	_____	_____	_____	<u> X </u>

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
g) Comply with federal, state, and local statutes and regulations related to solid waste?	_____	_____	_____	<u> X </u>

2.17. MANDATORY FINDINGS OF SIGNIFICANCE

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 a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	_____	<u> X </u>	_____	_____
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)?	_____	<u> X </u>	_____	_____
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<u> X </u>	_____	_____	_____

SECTION 3.0

ENVIRONMENTAL ANALYSIS

The environmental analysis provided in this section describes the information that was considered in evaluating the questions in Section 2.0, Environmental Checklist. The information used in this evaluation is based on a review of relevant literature and technical reports (see Section 4.0, References, for a list of reference material consulted) and field reconnaissance undertaken in June, September, October, and November 2005.

3.1 AESTHETICS

This analysis is undertaken to determine if the Altadena Crest Trail Improvements (proposed project) may have a significant impact to aesthetics, requiring the consideration of mitigation measures or alternatives, in accordance with Section 15063 of the State of California Environmental Quality Act Guidelines (State CEQA Guidelines).¹ Aesthetics at the proposed project site were evaluated with regard to the County of Los Angeles General Plan,² the County of Los Angeles Streamlined General Plan,³ the California Department of Transportation (Caltrans) "Scenic Highway System" designations,⁴ the Angeles Forest Management Plan,⁵ the City of Pasadena General Plan,⁶ the Arroyo Seco Master Plan,⁷ and previously published information regarding the visual character of the site, including light and glare.

The State CEQA Guidelines recommend the consideration of four questions when addressing the potential for significant impacts to aesthetics:

Would the proposed project have any of the following effects:

- (a) Have a substantial adverse effect on a scenic vista?

The proposed project would not be expected to result in impacts to aesthetics in relation to scenic vistas. The County General Plan Land Use element⁸ includes protection for scenic resources. The element's policies are based on the need to "protect the visual quality of highly scenic areas and views from scenic highways, roads, trails and key vantage points." Special emphasis is placed on protection of hillside character and significant ecological areas (SEAs). The proposed project is located in the unincorporated County of Los Angeles within the San Gabriel Mountains and Angeles National Forest. This region is primarily undeveloped and undisturbed and contains unique aesthetic features. The

¹ State of California. *California Code of Regulations*. Title 14, Chapter 3, Article 5, Sections 15060–15065, Appendix G.

² County of Los Angeles Department of Regional Planning. Adopted 6 December 1990. *County of Los Angeles General Plan: Land Use Element*. Contact: Department of Regional Planning, Hall of Records, 320 West Temple Street, Los Angeles, CA 90012.

³ County of Los Angeles Department of Regional Planning. 1993. *County of Los Angeles Streamlined General Plan: Public Facilities Chapter*. Contact: Department of Regional Planning, Hall of Records, 320 West Temple Street, Los Angeles, CA 90012.

⁴ California Department of Transportation. 28 March 2002. California Scenic Highway Program: California Scenic Routes. "Officially Designated State Scenic Highways." Available at <http://www.dot.ca.gov/hq/LandArch/scenic/schwy1.html>

⁵ U.S. Department of Agriculture, Forest Service Pacific Southwest Region. 1987. *Angeles National Forest, Land and Resources Management Plan*. Arcadia, California.

⁶ City of Pasadena, Planning and Development Department. November 2004. *General Plan, Land Use Element*. Pasadena, CA.

⁷ City of Pasadena, Department of Public Works, Parks and Natural Resources Division. Adopted February 2003. *Arroyo Seco Master Plans, Design Guidelines*. Prepared by Forma Planning and Design. Pasadena, CA.

⁸ County of Los Angeles Department of Regional Planning. Adopted 6 December 1990. *County of Los Angeles General Plan: Land Use Element*. Contact: Department of Regional Planning, Hall of Records, 320 West Temple Street, Los Angeles, CA 90012.

proposed project does not involve construction of structures, urban infrastructure, developments, or landform alterations. The proposed project area would be visible from public areas in the City of Pasadena. However, the County of Los Angeles General Plan, Altadena Community Plan;⁹ the County of Los Angeles Streamlined General Plan;¹⁰ the Angeles Forest Management Plan;¹¹ the City of Pasadena General Plan;¹² and the Arroyo Seco Master Plan¹³ do not designate any scenic vistas looking out from or looking onto the proposed project. The existing viewshed of the San Gabriel Mountains from the community of Altadena and the City of Pasadena would not be affected by the proposed project. Therefore, there would be no expected impacts to aesthetics related to scenic vistas. No further analysis is warranted.

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

The proposed project would not be expected to result in impacts to aesthetics in relation to substantial damage to scenic resources within a state scenic highway. The California Scenic Highways Program¹⁴ preserves and protects scenic highway corridors from changes that would diminish their aesthetic value. The California Department of Transportation (Caltrans) designates scenic highway corridors and lists them on the Caltrans Web site. There are no eligible or officially designated scenic highways under the California Scenic Highways Program located within, adjacent to the proposed project area. The closest officially designated scenic highway is the Angeles Crest Highway (Route 2) from the La Canada/Angeles National Forest boundary to the San Bernardino County Line. Route 2 is located 1.5 miles west of the proposed project site at its nearest location. Steep mountain terrain, covered with vegetation, is located between Route 2 and the proposed project area, thus screening the proposed project from view. Therefore, there would be no expected impacts to aesthetics related to substantial damage to scenic resources within a state scenic highway. No further analysis is warranted.

⁹ County of Los Angeles Department of Regional Planning. 1986. *Altadena Community Plan*. Contact: Department of Regional Planning, Hall of Records, 320 West Temple Street, Los Angeles, CA 90012.

¹⁰ County of Los Angeles Department of Regional Planning. 1993. *County of Los Angeles Streamlined General Plan: Public Facilities Chapter*. Contact: Department of Regional Planning, Hall of Records, 320 West Temple Street, Los Angeles, CA 90012.

¹¹ U.S. Department of Agriculture, Forest Service Pacific Southwest Region. 1987. *Angeles National Forest, Land and Resources Management Plan*. Arcadia, California.

¹² City of Pasadena, Planning and Development Department. November 2004. *General Plan, Land Use Element*. Pasadena, CA.

¹³ City of Pasadena, Department of Public Works, Parks and Natural Resources Division. Adopted February 2003. *Arroyo Seco Master Plans, Design Guidelines*. Prepared by Forma Planning and Design. Pasadena, CA.

¹⁴ California Department of Transportation. 28 March 2002. California Scenic Highway Program: California Scenic Routes. "Officially Designated State Scenic Highways." Available at <http://www.dot.ca.gov/hq/LandArch/scenic/schwy1.html>

(c) Substantially degrade the existing visual character or quality of the site and its surroundings?

The proposed project would not be expected to result in impacts to aesthetics in relation to the substantial degradation of the existing visual character of the site and its surroundings. The proposed project is located in the unincorporated County of Los Angeles within the San Gabriel Mountains and Angeles National Forest. This region is primarily undeveloped and undisturbed and contain unique aesthetic features. The San Gabriel Mountains and the Angeles National Forest offers an area bounded by ridges, canyons, heavy vegetation, and rugged topography. Steep slopes and ravines characterize the interface between mountains and the residential development of the Altadena Community. Prominent ridges extend south from the foothills above Altadena, offering significant views.

The proposed project consists of a series of trail improvements and connections, some weaving between hillside residences that would be visible from surrounding areas. Some segments of the proposed trails are hidden by trees and heavy vegetation. The proposed trails would be compatible with the surrounding riparian habitat within the Hahamongna Watershed Park. The majority of proposed segments cannot be seen from any adjacent homes in the Altadena Community or other adjacent land due to coverage by heavy vegetation.

The Angeles Forest Management Plan¹⁵ designates areas of the Angeles National Forest with the following visual quality objectives: preservation, retention, partial retention, modification, and maximum modification. The proposed project traverses areas of the Angeles National Forest designated Partial Retention, which allows for slight modification to the visual quality and condition of the Angeles Forest.¹⁶ The proposed project's development of hiking trails is fully compatible with the Visual Resources Compatibility Matrix, and requires no further analysis in regard to compliance with the Angeles Forest Management Plan.¹⁷

The proposed trail improvements are compatible with the existing visual character of the San Gabriel Mountains. Several official trails and dozens of unofficial trail segments currently traverse the proposed project area. The proposed trail improvements would not substantially degrade or alter the existing visual character of the San Gabriel Mountains. Therefore, the proposed project would not be expected to result in impacts to aesthetics in relation to the substantial degradation of the existing visual character of the site and its surroundings. No further analysis is warranted.

(d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

The proposed project would be expected to result in impacts to aesthetics related to the creation of a new source of substantial light or glare that would adversely affect day or nighttime views in the area. These impacts would be expected to be reduced to below the level of significance with the incorporation of mitigation measures. The proposed improvement trails are located within the San Gabriel Mountains and the Angeles National Forest, which is bounded by ridges, canyons, heavy

¹⁵ U.S. Department of Agriculture, Forest Service Pacific Southwest Region.1987. *Angeles National Forest, Land and Resources Management Plan*. Arcadia, California.

¹⁶ U.S. Department of Agriculture, Forest Service.1987. *Angeles National Forest, Preferred Plan, Visual Quality Objectives Map*. Arcadia, California.

¹⁷ U.S. Department of Agriculture, Forest Service.1987. *Angeles National Forest, Land and Resources Management Plan, Appendix Volume, Visual Quality*. Arcadia, California.

vegetation, and rugged topography. Steep slopes and ravines characterize the interface between mountains and the residential development of the Altadena Community. The proposed project would not include installation of nighttime lighting along the proposed trails. However, the proposed project would result in new sources of low-level unobtrusive lights such as security and landscape lighting around the new trailhead areas.

The proposed new trailhead areas would include night time safety lights that may affect nighttime views, requiring the consideration of mitigation measures. The contribution of light and glare from the proposed project would not be considered a substantial increase over existing level due to the adjacent urban Altadena Community, which experiences a high level of daytime and nighttime light and glare. Mitigation measures would be considered such as shielding and directing the low-level exterior lighting downward and inward to the extent possible to limit light impacts without compromising safety and security. The low-level lights with the incorporated mitigation measure would reduce night time light pollution impacts to wildlife and surrounding residents below a level of significance. Therefore, impacts to aesthetics related to the creation of a new source of substantial light or glare that would adversely affect day or nighttime views in the area would be reduced to below the level of significance with the incorporation of mitigation measures. Further analysis is warranted.

3.2 AGRICULTURAL RESOURCES

This analysis is undertaken to determine if the Altadena Crest Trail Improvements (proposed project) may have a significant impact to agriculture resources, thus requiring the consideration of mitigation measures or alternatives in accordance with Section 15063 of the State of California Environmental Quality Act Guidelines (State CEQA Guidelines).¹ Agricultural resources at the proposed project site were evaluated with regard to the California Department of Conservation (CDC) Farmland Mapping and Monitoring Program (FMMP)² and the County of Los Angeles General Plan.³

State CEQA Guidelines [§21060.1(a), Public Resources Code 21000-21177] define agricultural land to mean “prime farmland, farmland of statewide importance, or unique farmland, as defined by the United States Department of Agriculture (USDA) land inventory and monitoring criteria, as modified for California,” and is herein collectively referred to as “Farmland.” State CEQA Guidelines recommend the consideration of three effects when addressing the potential for significant impacts to agriculture resources.

Would the proposed project have any of the following effects:

- (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?

The proposed project would not be expected to result in impacts to agricultural resources in relation to the conversion of Farmland. The land uses within the proposed project area include low-density residential, estate/equestrian, residential, and open space within the La Vina Specific Plan Area, non-urban and National Forest/National Forest Management Lands, and flood control and utilities uses.^{4,5} The land in the area of the proposed project is characterized by low-density residential, open space, and undeveloped land. Based on the review of the most recent mapping of the County of Los Angeles for Farmland undertaken by the CDC FMMP, there are no Farmlands located in or immediately adjacent to the proposed project site.⁶ Therefore, there would be no expected impacts to agricultural resources related to the conversion of Farmland. No further analysis is warranted.

¹ State of California. *California Code of Regulations*. Title 14, Chapter 3, Article 5, Sections 15060–15065, Appendix G.

² California Department of Conservation, Division of Land Resource Protection, Farmland Mapping and Monitoring Program. 2004. *Important Farmland in California, 2002*. Sacramento, CA.

³ County of Los Angeles Department of Regional Planning. 25 November 1980 (Revised 1992). *County of Los Angeles General Plan: Open Space Element*. Contact: Department of Regional Planning, Hall of Records, 320 West Temple Street, Los Angeles, CA 90012.

⁴ County of Los Angeles Department of Regional Planning. January 1993. *County of Los Angeles Streamlined General Plan*. Contact: Department of Regional Planning, Hall of Records, 320 West Temple Street, Los Angeles, CA 90012.

⁵ County of Los Angeles Department of Regional Planning. July 1986. *Altadena Community Plan*. Contact: Department of Regional Planning, Hall of Records, 320 West Temple Street, Los Angeles, CA 90012.

⁶ California Department of Conservation, Division of Land Resource Protection, Farmland Mapping and Monitoring Program. 2004. *Important Farmland in California, 2002*. Sacramento, CA.

(b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

The proposed project would not be expected to result in impacts to agricultural resources in relation to a conflict with existing zoning for agricultural use, or a Williamson Act contract. Based on an analysis of the County of Los Angeles General Plan, there is no agricultural land use zoned within the County of Los Angeles jurisdiction.⁷ The County of Los Angeles Office of the Assessor confirmed that no parcels within or adjacent to the proposed project site are subject to Williamson Act contracts, and that no Williamson Act parcels occur within the County of Los Angeles.⁸ Based on the review of the County of Los Angeles zoning and status of Williamson Act contracts, there would be no expected impacts to agricultural resources related to a conflict with existing zoning for agricultural use or a Williamson Act contract. No further analysis is warranted.

(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?

The proposed project would not be expected to result in impacts to agricultural resources in relation to changes in the existing environment that, due to their location or nature, could result in conversion of Farmland to non-agricultural use. Based on the review of the most recent mapping of the County of Los Angeles for Farmland undertaken by the CDC FMMP, there is no Farmland on the proposed project site.⁹ The proposed project would not change the suitability of any designated Farmland for development. There are no designated Farmlands within the proposed project area. Therefore, there would be no expected impacts to agricultural resources related to changes in the existing environment that, due to their location or nature, that could result in conversion of Farmland to non-agricultural use. No further analysis is warranted.

⁷ County of Los Angeles Department of Regional Planning. 25 November 1980 (Revised 1992). *County of Los Angeles General Plan: Open Space Element*. Contact: Department of Regional Planning, Hall of Records, 320 West Temple Street, Los Angeles, CA 90012.

⁸ Jaramillo, Larry, County of Los Angeles Department of Regional Planning. 14 June 2005. Telephone conversation with Mr. Edward Belden, Sapphos Environmental, Inc., Pasadena, CA.

⁹ California Department of Conservation, Division of Land Resource Protection, Farmland Mapping and Monitoring Program. 2004. *Important Farmland in California, 2002*. Sacramento, CA.

3.3 AIR QUALITY

This analysis is undertaken to determine if the Altadena Crest Trail Improvements (proposed project) would have a significant impact to air quality, thus requiring the consideration of mitigation measures or alternatives, in accordance with Section 15063 of the State of California Environmental Quality Act Guidelines (State CEQA Guidelines).¹ Air quality at the proposed project site was evaluated with regard to the County of Los Angeles General Plan,² the South Coast Air Quality Management District's (SCAQMD) Air Quality Management Plan (AQMP),³ and the CEQA Air Quality Handbook.⁴

Data on existing air quality in the South Coast Air Basin, where the proposed project site is located, is monitored by a network of air monitoring stations operated by the California Environmental Protection Agency (CalEPA), California Air Resources Board (CARB), and SCAQMD.

The State CEQA Guidelines recommend the consideration of five questions when addressing the potential for significant impacts to air quality:

Would the proposed project have any of the following effects:

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

Implementation of the proposed project would not be expected to conflict with or obstruct implementation of the regional AQMP, which is based on growth projections by Southern California's Association of Governments (SCAG). The proposed project area is in the County of Los Angeles, within the San Gabriel Valley portion of the South Coast Air Basin. The most recent update to the SCAQMD AQMP was adopted in 2003 by SCAQMD and CARB. The AQMP sets forth strategies for attaining the federal PM₁₀ standard by 2006 and the federal 1-hour ozone standard by 2010, as well as meeting state standards at the earliest practicable date. This plan is updated every three years. The proposed project entails improvements to 6 miles of trails and construction of up to 7 miles of trail that would be consistent with the land use designations for the proposed project area. In addition, as repeated in the County of Los Angeles Strategic Asset Management Plan, the Park Planning Area is currently deficient in facilities and programs to meet the existing and proposed demand for recreation in the Altadena Community. The proposed project would partially address the unmet demand for recreation facilities. Therefore, the proposed project would not be expected to result in any change to the population or employment growth assumptions used in the AQMP for attainment planning. The proposed project would provide services to meet the anticipated needs of the population expected to visit the proposed project site. Therefore, no long-term air quality impacts would be expected to occur that would cause conflicts with or obstruct implementation of the AQMP. No further analysis is warranted.

¹ State of California. *California Code of Regulations*. Title 14, Chapter 3, Article 5, Sections 15060–15065, Appendix G.

² County of Los Angeles Department of Regional Planning. 1988. *County of Los Angeles General Plan*. Contact: Department of Regional Planning, Hall of Records, 320 West Temple Street, Los Angeles, CA 90012.

³ South Coast Air Quality Management District. 15 November 1996. *1997 Air Quality Management Plan*. Contact: 21865 East Copley Drive, Diamond Bar, CA 91765. Available at: <http://www.aqmd.gov/aqmd97aqmd/>

⁴ South Coast Air Quality Management District. January 1993. *CEQA Air Quality Handbook*. Contact: 21865 East Copley Drive, Diamond Bar, CA 91765.

- (b) Violate any air quality standard or contribute substantially to an existing or projected air violations?

Construction of the proposed project would contribute to short-term air quality impacts in a nonattainment area requiring the consideration of mitigation measures. The proposed project site is located within the San Gabriel Valley portion of the South Coast Air Basin. The South Coast Air Basin is in nonattainment for several air pollutants including carbon monoxide (CO), ozone (O₃), and particulate matter smaller than or equal to 10 microns in diameter (PM₁₀). Short-term impacts may be generated from construction equipment, worker vehicle exhaust, and fugitive dust during grading, construction, and other site preparation activities. SCAQMD monitors air quality in the proposed project area from the west San Gabriel monitoring station (Station No. 08). According to the most recent data generated in 2002, ozone levels exceeded state standards on 81 days and federal standards on 32 days. PM10 levels exceeded state standards for 7 days in 11.7 percent of the samples.

The thresholds of significance for emissions would be based on criteria used by SCAQMD air quality guidelines, which are provided in Table 3.3-1, *Emission Thresholds of Significance*. Appropriate mitigation measures would be incorporated into the project design to reduce significant impacts to below the level of significance. Therefore, impacts to air quality in relation to air quality standards would be expected to be reduced to below the level of significance with the incorporation of the mitigation measures specified in the SCAQMD CEQA Air Quality Handbook.

**TABLE 3.3-1
EMISSION THRESHOLDS OF SIGNIFICANCE**

Pollutant	Construction		Operation
	Pounds/Day	Tons/Quarter	Pounds/Day
Carbon monoxide (CO)	550	24.75	550
Sulfur oxides (SO _x)	150	6.75	150
Particulate matter (PM ₁₀)	150	6.75	150
Nitrogen oxides (NO _x)	100	2.5	55
Volatile organic compounds (VOCs)	75	2.5	55

SOURCE: South Coast Air Quality Management District. 1993. *CEQA Air Quality Handbook*. Diamond Bar, CA.

Construction emissions would be generated by demolition activity, construction equipment, dust emissions (PM₁₀) during grading and other construction activities, and vehicles of workers traveling to and from the proposed project site. The majority of grading and site preparation activity would occur in the initial phase of the proposed project, which would involve the construction of utility improvements and the building pad. Since grading and site preparation may be conducted concurrently, the highest emissions scenario was utilized to calculate the potential peak daily construction-related air pollutant emissions.

Including compliance with existing regulations, such as watering exposed soil and unpaved roads twice per day, limiting speed on unpaved roads to 15 miles per hour, using properly tuned construction equipment, and covering trucks carrying contents subject to airborne dispersal, the peak construction emissions would be expected to remain below the level of significance. Further analysis is warranted.

- (c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

Implementation of the proposed project would not be expected to result in a cumulatively considerable net increase of any criteria pollutant. The proposed project is intended to enhance the recreational experience of County residents and visitors in the Altadena Community Plan Area rather than increase the total number of residents or visitors. Therefore, the proposed project would be expected to generate a low number of additional vehicle trips. The proposed project would not be expected to result in increased operational air quality emissions that would contribute to a cumulative net increase of any criteria pollutant as a result of the proposed project. No further analysis is warranted.

- (d) Expose sensitive receptors to substantial pollutant concentrations?

The proposed project would be expected to result in impacts to air quality in relation to exposure of sensitive receptors to substantial pollutant concentrations. These impacts would be expected to be reduced to below the level of significance with the incorporation of mitigation measures. In some locations, adjacent residences are the closest sensitive receptors. However, the proposed project construction impacts are short term and substantial pollutant concentrations would be expected to be below the level of significance with the incorporation of mitigation measures. Therefore, impacts related to exposure of sensitive receptors to substantial pollutant concentrations would be reduced to below the level of significance with the incorporation of mitigation measures. Further analysis is warranted.

- (e) Create objectionable odors affecting a substantial number of people?

The proposed project would be expected to result in a less than significant impact to air quality in relation to objectionable odors. The proposed project would neither increase existing odors nor create new odors. Existing potential sources of odor within the proposed project site are within several hundred feet of adjacent residences. However, only limited fugitive dust would be expected to be exposed during grading, because grading would be expected to be both minimal and short term along the 6.4 miles of new trail, which is planned to be only 4 to 8 feet wide. Therefore, the proposed project would be expected to result in less than significant impacts to air quality related to objectionable odors. No further analysis is warranted.

3.4 BIOLOGICAL RESOURCES

This analysis is undertaken to determine if the Altadena Crest Trail Improvements (proposed project) may have a significant impact on biological resources, thus requiring the consideration of mitigation measures or alternatives, in accordance with Section 15063 of the State of California Environmental Quality Act Guidelines (State CEQA Guidelines).¹ Biological resources at the proposed project site were evaluated based on the County of Los Angeles General Plan;² consultation with the resource agency personnel of the U.S. Forest Service³ and U.S. Fish and Wildlife Service (USFWS);⁴ a query of the California Natural Diversity Database (CNDDDB)⁵ for the U.S. Geological Survey (USGS) 7.5-minute series Pasadena and Mount Wilson topographic quadrangles where the proposed project is located, and all surrounding USGS 7.5-minute series topographic quadrangles (Condor Peak, Chilao Flat, El Monte, Los Angeles, Hollywood, Burbank, Sunland, Baldwin Park, Azusa, and Waterman Mountain); and a review of published and unpublished literature applicable to the proposed project and surveys.

As part of the project planning phase, reconnaissance-level biological surveys as well as directed surveys for plants and wildlife were undertaken by Sapphos Environmental, Inc. in June, September, October, and November 2005 within the proposed project area. The results were documented in an opportunities and constraints analysis.

The State CEQA Guidelines recommend the consideration of six questions when addressing the potential for significant impacts to biological resources:

Would the proposed project have any of the following effects:

- (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 the U.S. Fish and Wildlife Service?

To determine whether the proposed project would have substantial adverse effects on any species identified as a candidate, sensitive, or special status species by local, regional, state, or federal authorities (special status species), existing habitat was characterized from a review of previous environmental documents and on-site visits, and evaluated for the potential for extant habitat to support special status species. Plant communities identified within the proposed project area include Riversidean coastal sage scrub, chamise chaparral, nonnative grassland/developed, southern sycamore-alder riparian woodland, coast live oak woodland, and big cone spruce-canyon oak forest.

¹ State of California. *California Code of Regulations*. Title 14, Chapter 3, Article 5, Sections 15060–15065, Appendix G.

² County of Los Angeles Department of Regional Planning. Adopted 11 November 1980 (revised 1992). *County of Los Angeles General Plan*. Contact: Department of Regional Planning, Hall of Records, 320 West Temple Street, Los Angeles, CA 90012.

³ Welch, Leslie, U.S. Forest Service. 7 July 2005. Personal communication with Ms. Melissa Solares, Sapphos Environmental, Inc., Pasadena, CA.

⁴ Goebel, Karen A., U.S. Fish and Wildlife Service. 12 January 2006. Letter communication with Ms. Kara Donohue, Sapphos Environmental, Inc., Pasadena, CA.

⁵ California Department of Fish and Game. 2006. *Rarefind 3: A Database Application for the Use of the California Department of Fish and Game Natural Diversity Database*. Sacramento, CA.

Listed Species

The proposed project would be expected to result in impacts to biological resources related to species listed as rare, threatened, or endangered pursuant to federal and state Endangered Species Acts (ESAs). These impacts would be expected to be reduced to below the level of significance with the incorporation of mitigation measures. Table 3.4-1, *Federally and State-Listed Floral Species with the Potential to Occur within the Proposed Project Area*, and Table 3.4-2, *Federally and State-Listed Faunal Species with the Potential to Occur within the Proposed Project Area*, include 2 plant species and 11 wildlife species listed as endangered, threatened, or rare pursuant to federal and state ESAs that have the potential to be present within the proposed project area.⁶ Given the limited area required to construct and operate the trail, it is anticipated that all impacts to federally and state-listed rare, threatened or endangered species would be avoided. Avoidance could be achieved by completing pre-construction surveys during the optimum time of year to observe listed species, designing the trail alignments to avoid occupied habitat for special status species, constructing the trail at a time of year when listed wildlife species are not present, training construction personnel to avoid occupied habitat, and identifying occupied habitat as “off-limits” on trail plans and specifications. Therefore, impacts to biological resources in relation to species listed as rare, threatened, or endangered pursuant to federal and state ESAs would be reduced to below the level of significance with the incorporation of mitigation measures. Further analysis is warranted.

**TABLE 3.4-1
FEDERALLY AND STATE-LISTED FLORAL SPECIES WITH THE POTENTIAL TO OCCUR
WITHIN THE PROPOSED PROJECT AREA**

Species Name	Status	Occurrence Factors			
		1	2	3	4
Nevin’s barberry (<i>Berberis nevinii</i>)	FE SE CNPS 1B	—	—	X	X
Braunton’s milk-vetch (<i>Astragalus brauntonii</i>)	FE CNPS 1B	—	—	X	X

KEY:

Occurrence Factors:

1 = Observed on site as a result of direct surveys

2 = Historic record within study area

3 = Suitable habitat located within study area

4 = Study area within historic range of species

FE = Listed as endangered under the federal ESA

SE = Listed as endangered by the State of California

CNPS 1B = Designated by the California Native Plant Society (CNPS) as a rare, threatened, or endangered plant in California and elsewhere.

⁶ County of Los Angeles. 3 March 2006. Altadena Crest Trail Improvements Biological Opportunities and Constraints Analysis. Prepared by Sapphos Environmental, Inc., 133 Martin Alley, Pasadena, CA 91105.

**TABLE 3.4-2
FEDERALLY AND STATE-LISTED FAUNAL SPECIES WITH THE POTENTIAL TO OCCUR
WITHIN THE PROPOSED PROJECT AREA**

Species Name	Status	Occurrence Factors			
		1	2	3	4
Fish					
Santa Ana sucker (<i>Catostomus santaanae</i>)	FT CSC FSS	—	—	X	X
Unarmored threespine stickleback (<i>Gasterosteus aculeatus williamsoni</i>)	FE SE CFP	—	—	—	X
Amphibians					
Arroyo toad (<i>Bufo californicus</i>)	FE CSC	—	—	—	X
California red-legged frog (<i>Rana aurora draytonii</i>)	FT CSC	—	—	X	X
Mountain yellow- legged frog (<i>Rana muscosa</i>)	FE CSC FSS	—	—	X	X
Birds					
Swainson's hawk (<i>Buteo swainsoni</i>)	ST FSS	—	—	—	X
American peregrine falcon (<i>Falco peregrinus anatum</i>)	SE FSS CFP	—	—	X	X
Western yellow- billed cuckoo (<i>Coccyzus americanus occidentalis</i>)	SE	—	—	—	X
Southwestern willow flycatcher (<i>Empidonax traillii extimus</i>)	FE SE	—	—	—	X
Bank swallow (<i>Riparia riparia</i>)	ST CSC	—	—	X	X
Coastal California gnatcatcher (<i>Polioptila californica californica</i>)	FT CSC	—	—	X	X

KEY:

- 1 = Observed on site as a result of direct surveys
- 2 = Historic record within study area
- 3 = Suitable habitat located within study area

4 = Study area within historic range of species
CFP = California fully protected
CSC = CDFG species of special concern
FE = Listed as endangered under the federal ESA
FT = Listed as threatened under the federal ESA
SE = Listed as endangered by the State of California
ST = Listed as threatened by the State of California.
FSS = Listed as a U.S. Forest Service (USFS) Forester's sensitive species
CNPS 1B = Designated by the CNPS as a rare, threatened, or endangered plant in California and elsewhere.

SOURCES:

- California Department of Fish and Game. 1994. *Amphibian and Reptile Species of Special Concern in California*. Sacramento, CA.
- California Department of Fish and Game. 2006. *RareFind 3: A Database Application for the Use of the California Department of Fish and Game Natural Diversity Database*. Sacramento, CA.
- California Department of Fish and Game. 2005. "Habitat Conservation Planning Branch." Web site. Sacramento, CA. Available at: <http://www.dfg.ca.gov/hcpb/index.shtml>
- Jones & Stokes. December 2002. *Biological Evaluation and Biological Assessment for the Rubio Canyon Debris Pile*. (J&S 01-360.) Irvine, CA. Prepared for: U.S. Forest Service, Angeles National Forest, San Fernando, CA.
- Stephenson, J.R., and G.M. Calcalrone. 1999. *Southern California Mountains and Foothills Assessment: Habitat and Species Conservation Issues*. (General Technical Report GTR-PSW-172.) Albany, CA: Pacific Southwest Research Station, Forest Service, U.S. Department of Agriculture.
- Thelander, C.G., D.C. Pearson, and G.E. Olson (eds.). 1994. *Life on the Edge*. Santa Cruz, CA: BioSystems, U.S. Fish and Wildlife Service. 1996. *Endangered and Threatened Wildlife and Plants: Review of Plant and Animal Taxa that Are Candidates for Listing as Endangered or Threatened Species*. *Federal Register*, 61(40): 7595–7613.
- U.S. Fish and Wildlife Service. 1997. *Endangered and Threatened Wildlife and Plants: Final Determination of Critical Habitat for the Southwestern Willow Flycatcher*. *Federal Register*, 62(140):39129–39147. Washington, DC: Office of the Federal Register National Archives and Records Administration.
- U.S. Fish and Wildlife Service. 2005. *Endangered and Threatened Wildlife and Plants; Proposed Designation of Critical Habitat for the Southern California Distinct Vertebrate Population Segment of the Mountain Yellow-Legged Frog (Rana muscosa)*. *Federal Register*, 70(176): 54106-54143. Washington D.C.: Office of the Federal Register National Archives and Records Administration.

Sensitive Species

The proposed project would be expected to result in impacts to biological resources related to sensitive species, recognized by USFWS as federal species of concern or by the California Department of Fish and Game (CDFG) as California species of special concern. These impacts would be expected to be reduced to below the level of significance through the same avoidance strategies outlined for listed species. Table 3.4-3, *Sensitive Faunal Species with the Potential to Occur in the Region of the Proposed Project Site*, includes 36 wildlife species that have the potential to occur in the region of the proposed project area.⁷ Sensitive wildlife species are species not listed pursuant to the state or federal ESA, but listed as either federal species of concern, proposed for listing, or identified by CDFG as California species of special concern. Therefore, impacts to biological resources in relation to sensitive species recognized by USFWS as federal species of concern or by CDFG as California species of special concern would be reduced to below the level of significance with the incorporation of mitigation measures. Further analysis is warranted.

⁷ County of Los Angeles. 3 March 2006. Altadena Crest Trail Improvements Biological Opportunities and Constraints Analysis. Prepared by Sapphos Environmental, Inc., 133 Martin Alley, Pasadena, CA 91105.

**TABLE 3.4-3
SENSITIVE FAUNAL SPECIES WITH THE POTENTIAL TO OCCUR
IN THE REGION OF THE PROPOSED PROJECT SITE**

Species Name	Status	Occurrence Factors			
		1	2	3	4
Fish					
Arroyo chub (<i>Gila orcutti</i>)	CSC FSS	—	—	X	X
Santa Ana speckled dace (<i>Rhinichthys osculus</i> ssp.)	CSC FSC FSS	—	—	—	X
Amphibians					
Coast range newt (<i>Taricha torosa torosa</i>)	CSC	—	—	X	X
Yellow-blotched salamander (<i>Ensatina eschsoltzii croceator</i>)	CSC FSS	—	—	X	X
San Gabriel slender salamander (<i>Batrachoseps gabrieli</i>)	FSS	—	—	—	X
Western spadefoot toad (<i>Spea hammondii</i>)	CSC FSC	—	—	X	X
Foothill yellow- legged frog (<i>Rana boylei</i>)	CSC FSS	—	—	X	X
Reptiles					
Southwestern pond turtle (<i>Emys marmorata pallida</i>)	CSC FSC FSS	—	—	X	X
Coast (San Diego) horned lizard (<i>Phrynosoma coronatum blainvillei</i>)	CSC FSC FSS	—	X	X	X
Orange-throated whiptail (<i>Aspidoscelis hyperythra</i>)	CSC FSC	—	—	X	—

**TABLE 3.4-3
SENSITIVE FAUNAL SPECIES WITH THE POTENTIAL TO OCCUR
IN THE REGION OF THE PROPOSED PROJECT SITE, Continued**

Species Name	Status	Occurrence Factors			
		1	2	3	4
Coastal western whiptail (<i>Aspidoscelis tigris stejnegeri</i>)	FSC	—	—	X	X
Silvery (California) legless lizard (<i>Anniella pulchra pulchra</i>)	CSC FSS	—	—	X	X
Rosy boa (<i>Charina trivirgata</i>)	FSC FSS	—	—	X	X
San Bernardino ringneck snake (<i>Diadophis punctatus modestus</i>)	FSC FSS	—	X	X	X
San Bernardino mountain kingsnake (<i>Lampropeltis zonata parvirubra</i>)	CSC FSC FSS	—	—	X	X
Two-striped garter snake (<i>Thamnophis hammondi</i>)	CSC FSC FSS	—	—	X	X
Birds					
Northern goshawk (<i>Accipiter gentilis</i>)	CSC FSS	—	—	—	X
Cooper's hawk (<i>Accipiter cooperii</i>)	CSC	X	—	X	X
Sharp-shinned hawk (<i>Accipiter striatus</i>)	CSC	X	—	—	X
White-tailed kite (<i>Elanus leucurus</i>)	FP	—	—	—	X
Long-eared owl (<i>Asio otus</i>)	CSC	—	—	X	X

**TABLE 3.4-3
SENSITIVE FAUNAL SPECIES WITH THE POTENTIAL TO OCCUR
IN THE REGION OF THE PROPOSED PROJECT SITE, Continued**

Species Name	Status	Occurrence Factors			
		1	2	3	4
California spotted owl (<i>Strix occidentalis occidentalis</i>)	CSC FSS	—	—	—	X
Black swift (<i>Cypseloides niger</i>)	CSC	—	—	—	X
Loggerhead shrike (<i>Lanius ludovicianus</i>)	CSC FSC	—	—	X	X
Coastal cactus wren (<i>Campylorhynchus brunneicapillus couesi</i>)	CSC FSS	—	—	X	X
Yellow-breasted chat (<i>Icteria virens</i>)	CSC	—	—	X	X
Yellow warbler (<i>Dendroica petechia</i>)	CSC	—	—	X	X
Southern California rufous-crowned sparrow (<i>Aimophila ruficeps canescens</i>)	CSC FSC	—	—	X	X
Mammals					
Western red bat (<i>Lasiurus blossevillii</i>)	FSS	—	—	X	X
Southwestern yellow bat (<i>Lasiurus xanthinus</i>)	CSC	—	—	—	X
Townsend's big-eared bat (<i>Plecotus townsendii townsendii</i>)	CSC FSC FSS	—	—	X	X
Pallid bat (<i>Antrozous pallidus</i>)	CSC FSS	—	—	X	X
American badger (<i>Taxidea taxus</i>)	CSC	—	—	—	X

**TABLE 3.4-3
SENSITIVE FAUNAL SPECIES WITH THE POTENTIAL TO OCCUR
IN THE REGION OF THE PROPOSED PROJECT SITE, Continued**

Species Name	Status	Occurrence Factors			
		1	2	3	4
Los Angeles pocket mouse (<i>Perognathus longimembris brevinasus</i>)	CSC FSC FSS	—	—	X	X
Southern grasshopper mouse (<i>Onychomys torridus ramona</i>)	CSC	—	—	X	X
San Diego black-tailed jackrabbit (<i>Lepus californicus bennettii</i>)	CSC FSC	—	—	X	X

KEY:

1 = Observed on site as a result of direct surveys

2 = Historic record within study area

3 = Suitable habitat located within study area

4 = Study area within historic range of species

CSC = CDFG species of special concern

FSC = Federal species of special concern – species or subspecies considered to be of special concern to the USFWS. This is a term-of-art with no official status.

FSS = Listed as a USFS Forester’s sensitive species

FP = Fully protected (designated by CDFG)

Locally Important Species

The proposed project would be expected to result in impacts to biological resources in relation to locally important plant species.⁸ These impacts would be expected to be reduced to below the level of significance through the same avoidance strategies described for listed species. Locally important plant species are those not listed pursuant to the state or federal ESA, but identified by the California Native Plant Society (CNPS) as sensitive species that should be considered in assessing the potential effects of proposed projects. Table 3.4-4, *Locally Important Floral Species with the Potential to Occur in the Region of the Proposed Project Site*, includes 8 plant species that have the potential to occur in the region of the proposed project area.⁹ Therefore, impacts to biological resources in relation to locally important species recognized by CNPS would be reduced to below the level of significance with the incorporation of the specified mitigation measures. Further analysis is warranted.

⁸ Locally important plant species are those not listed pursuant to the state or federal ESA, but identified by CNPS as sensitive species that should be considered in assessing the potential effects of proposed projects.

⁹ County of Los Angeles. 3 March 2006. Altadena Crest Trail Improvements Biological Opportunities and Constraints Analysis. Prepared by Sapphos Environmental, Inc., 133 Martin Alley, Pasadena, CA 91105.

**TABLE 3.4-4
LOCALLY IMPORTANT FLORAL SPECIES WITH THE POTENTIAL TO OCCUR
IN THE REGION OF THE PROPOSED PROJECT SITE**

Species Name	Current Status	Occurrence Factors			
		1	2	3	4
Robinson's pepper-grass (<i>Lepidium virginicum</i> var. <i>robinsonii</i>)	CNPS 1B	—	—	X	X
Many-stemmed dudleya (<i>Dudleya multicaulis</i>)	CNPS 1B	—	—	X	X
Slender mariposa lily (<i>Calochortus clavatus</i> var. <i>gracilis</i>)	CNPS 1B	—	—	X	X
Plummer's mariposa lily (<i>Calochortus</i> <i>plummerae</i>)	CNPS 1B	—	—	X	X
Spotted Humboldt's lily (<i>Lilium humboldtii</i> var. <i>ocellatum</i>)	CNPS 1B	X	X	X	X
Davidson's bushmallow (<i>Malacothamnus</i> <i>davidsonii</i>)	CNPS 1B	—	—	X	X
Mesa horkelia (<i>Horkelia</i> <i>cuneata</i> ssp. <i>puberula</i>)	CNPS 1B	—	—	X	X
San Gabriel bedstraw (<i>Galium grande</i>)	CNPS 1B	—	—	X	X

KEY:

1 = Observed on site as a result of direct surveys

2 = Historic record within study area

3 = Suitable habitat located within study area

4 = Study area within historic range of species

CNPS 1B = Designated by the CNPS as a rare, threatened, or endangered plant in California and elsewhere.

- (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 the U. S. Fish and Wildlife Service?

The proposed project would be expected to result in impacts to biological resources related to riparian habitat or other sensitive natural communities. Ephemeral and perennial streams afforded protection pursuant to Section 404 of the Clean Water Act were considered as part of this question. These impacts would be expected to be reduced to below the level of significance with the incorporation of mitigation measures. Sections of the proposed project would include riparian habitat, and sections of the trail would traverse riparian habitat and cross over small streams. Mitigation measures to reduce impacts to below the level of significance could include bridge crossings and erosion control measures. Additional mitigation measures, such as biological monitoring during trail construction activities and the enhancement of existing riparian habitat as well as implementation of a regular weed abatement program to minimize the spread on invasive weedy species into adjoining natural areas, would be expected to reduce the proposed project impact to below the level of significance. Therefore, impacts to biological resources in relation to riparian habitat or other sensitive natural

communities would be reduced to below the level of significance with the incorporation of mitigation measures. Further analysis is warranted.

- (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?

No wetlands occur within the proposed project site as indicated by the site surveys and review of the National Wetlands Inventory (NWI) Map.¹⁰ Therefore, there would be no expected impacts to biological resources related to federally protected wetlands as defined by Section 404 of the Clean Water Act. No further analysis is warranted.

- (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?

Wildlife Movement/Corridors

The proposed project would not be expected to result in impacts to biological resources in relation to movement of any migratory fish or wildlife species or with an established wildlife corridor. The footprint of this proposed project consists of the width of the proposed trails and is unlikely to impede the movements of wildlife species. The width of the trail would not impede the movement of any migratory wildlife species that would have the potential to be present in the vicinity of the proposed project area. No streams would be impeded by trails, so aquatic species would not be affected. Therefore, there would be no expected impacts to biological resources related to movement of any migratory fish or wildlife species or with an established wildlife corridor. No further analysis is warranted.

Nursery Site

The proposed project would be expected to result in impacts to biological resources related to impeding the use of native wildlife nursery sites. These impacts would be expected to be reduced to below the level of significance with the incorporation of mitigation measures. Several wildlife and plant species reproduce in the habitats provided in the proposed project area and would potentially be disrupted during proposed project construction. Impacts from the proposed project would be reduced to below the level of significance with the incorporation of mitigation measures. These mitigation measures could include timing trail construction activities outside the breeding bird season, which takes place between March 15 and August 15. Alternatively, preconstruction surveys for the presence of breeding species can be undertaken and construction avoidance measures can be implemented to minimize incidental take of active nests. Therefore, impacts to biological resources in relation to impeding the use of native wildlife nursery sites would be reduced to below the level of significance with the incorporation of the mitigation measures. Further analysis is warranted.

¹⁰ U.S. Fish and Wildlife Service. June 1976. *National Wetland Inventory, Mount Wilson, California*. Washington, DC.

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

The proposed project would not be expected to result in impacts to biological resources related to conflicts with any local policies or ordinances protecting biological resources. Mature oak trees are afforded protection pursuant to the County of Los Angeles Oak Tree Ordinance that pertains to the unincorporated territory of the County of Los Angeles and County-owned property. The County of Los Angeles Code specifies that the director of the Department of Parks and Recreation has the right to make determinations to plant, trim, modify, and/or remove plants and trees on public lands.¹¹ The proposed project would be consistent with the County of Los Angeles Department of Parks and Recreation requirements and procedures. Therefore, no conflict with local policies or ordinances would occur.

The proposed project is not located within a significant ecological area (SEA) as designated by the current County of Los Angeles General Plan.¹² It should be noted that the proposed project area is located within a proposed SEA.¹³ The County General Plan designates several forms of passive recreation, including hiking trails, as compatible and appropriate land use within SEAs.¹⁴ Therefore, there would be no expected impacts to biological resources related to conflicts with any local policies or ordinances protecting biological resources. No further analysis is warranted.

- (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?

The proposed project would not be expected to result in impacts to biological resources in relation to conflicts with the provisions of any adopted Habitat Conservation Plan or Natural Community Conservation Plans. The proposed project site is not located within any proposed or adopted Habitat Conservation Plan or Natural Community Conservation Plans.¹⁵ Therefore, there would be no expected impacts to biological resources related to conflicts with the provisions of any adopted Habitat Conservation Plan or Natural Community Conservation Plans. No further analysis is warranted.

¹¹ County of Los Angeles. County Code, Title 16, 16.76.010, "Trimming, removing or injuring trees and other plants—Permit required." Available at: <http://ordlink.com/codes/lacounty/index.htm>

¹² County of Los Angeles Department of Regional Planning. Adopted 11 November 1980 (revised 1992). *County of Los Angeles General Plan*. Contact: Department of Regional Planning, Hall of Records, 320 West Temple Street, Los Angeles, CA 90012.

¹³ County of Los Angeles Department of Regional Planning. Adopted 11 November 1980 (revised 1992). *County of Los Angeles General Plan*. Contact: Department of Regional Planning, Hall of Records, 320 West Temple Street, Los Angeles, CA 90012.

¹⁴ County of Los Angeles Department of Regional Planning. 1993. *County of Los Angeles Streamlined General Plan: Significant Ecological Areas*. Contact: Department of Regional Planning, Hall of Records, 320 West Temple Street, Los Angeles, CA 90012. Available at: <http://ceres.ca.gov/docs/data/0700/791/HYPEROCR/hyperocr.html>

¹⁵ California Department of Fish and Game. December 2005. "Natural Community Conservation Planning." Sacramento, CA. Available at: <http://www.dfg.ca.gov/nccp/>

3.5 CULTURAL RESOURCES

This analysis is undertaken to determine if the Altadena Crest Trail Improvements (proposed project) would have significant impacts to cultural resources, thus requiring the consideration of mitigation measures or alternatives, in accordance with Section 15063 of the State of California Environmental Quality Act Guidelines (State CEQA Guidelines).¹ Cultural resources at the proposed project area were evaluated with regard to queries at the South Central Coastal Information Center (SCCIC), located at California State University, Fullerton, for the presence of historical and archaeological resources; the Natural History Museum of Los Angeles County for the presence of paleontological resources; and the Native American Heritage Commission (NAHC) located in Sacramento, California, for the presence of sacred sites within the proposed project area. The proposed project area is located in the U.S. Geological Survey (USGS) 7.5-minute series Pasadena and Mount Wilson topographic quadrangles (Townships 1 and 2 North, Range 12 West, Section 3, and partial Sections 2, 4, 11, and 33).² Published and unpublished literature was also reviewed, including the California Historical Resources Inventory, the National Register of Historic Places, the California Historical Landmarks, the California Points of Historical Interest, and the California Register of Historical Resources.

In order to evaluate potential impacts to cultural resources, an area of potential effects (APE) was defined. An APE is “the geographic area or areas within which an undertaking [i.e., a project] may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. The APE is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking.”³ The APE for the proposed project was determined to be the potential trail segments and potential access segments, with a 25-foot buffer zone on each side. The buffer zones would accommodate construction-related activities as well as any minor deviations from the proposed trail alignments that could occur as a result of site constraints encountered during project implementation.

The State CEQA Guidelines recommend the consideration of four questions when addressing the potential for significant impacts to cultural resources:

Would the proposed project have any of the following effects:

- (a) Directly or indirectly destroy a unique paleontological resource or unique geologic feature?

Impacts to cultural resources related directly or indirectly to the destruction of a unique paleontological resource or unique geologic feature from the proposed project would be expected to be reduced to below the level of significance with the incorporation of mitigation measures. A paleontological record search was conducted at the Natural History Museum of Los Angeles County to locate any records of paleontological resources in the vicinity of the proposed project site and to assess the relative level of sensitivity for the proposed project site to contain unique paleontological

¹ State of California. *California Code of Regulations*. Title 14, Chapter 3, Article 5, Sections 15060–15065, Appendix G.

² U.S. Geological Survey. 1977. Pasadena and Mt. Wilson 7.5-Minute Series Topographic Quadrangle. Scale 1:24,000. Reston, VA.

³ U.S. Government Printing Office. *Code of Federal Regulations*. Title 36, Part 800, “Protection of Historic Properties,” §800.16(d): “Definitions.”

resources.⁴ In the portion of the proposed project that occurs within the Pasadena quadrangle, north of the National Forest boundary, the bedrock consists of granitic rocks that do not have a possibility of containing fossils. These type of rocks are also exposed in the far western portion of the proposed project area, northeast of the Jet Propulsion Laboratory, and along both sides of the Arroyo Seco drainage. In the southern portion of the Pasadena quadrangle, east of Lincoln Avenue, the surficial materials consist of Quaternary fan deposits derived from the adjacent hills to the north. North of Loma Alta Drive, these Quaternary fan deposits consist primarily of coarse gravel. These type of deposits are unlikely to contain significant vertebrate fossils, at least in the uppermost layers. However, in the northwest corner of this portion of the proposed project area, between about Lincoln Avenue and Canyon Crest Road and toward the northwest corner of the proposed project area, there are exposures of older Quaternary alluvium such as fluvial deposits associated with the Arroyo Seco drainage and its tributaries.

The portion of the proposed project area occurring in the Mount Wilson quadrangle is characterized by elevated hills where the bedrock is composed of granitic rocks in which fossils do not occur. The less elevated areas around the southern margin of this portion of the proposed project area exhibit surficial deposits consisting of Quaternary fans of gravel and some artificial fill. The area approximately south of Loma Alta Drive has surficial Quaternary fan deposits of sands, but even these are unlikely to contain significant fossils, at least in the uppermost layers.

The closest known vertebrate fossil locality is LACM 1146, located several miles to the west-northwest in Sun Valley, just west of Tuna Canyon. LACM 1146 produced fossil specimens of mastodon (*Mammuth americanum*), horse (*Equus occidentalis*), and camel (*Camelidae*). This fossil locality is found in Quaternary deposits somewhat similar to gravel and sand areas occurring in the proposed project area.

The proposed project includes improvements to existing trail segments of the Altadena Crest Trail and grading for new trail segments, which would typically consist of brush removal and shallow soil disturbances. In addition, the proposed project would include the installation of restrooms that may require ground excavation into deeper soils. Excavations or any earth movement in the granitic rocks in the elevated northern portion of the proposed project area or around Arroyo Seco on the west trail segment would not unearth any fossils. Shallow excavation in the Quaternary alluvium deposits along the southern margin of the proposed project area are unlikely to produce significant fossil vertebrate remains in the uppermost layers. However, excavations in the old terrestrial Quaternary fluvial deposits in the west-northwestern portion of the proposed project area, or deeper excavations in the southern portions that extend down into the older Quaternary fluvial sediments, may encounter significant vertebrate fossils.⁵ Some of the restroom facilities currently proposed are located on areas underlain by the older Quaternary fluvial sediments, which may contain paleontological resources. Impacts to cultural resources related directly or indirectly to the destruction of a unique paleontological resource or unique geologic feature would be reduced to below the level of significance with the incorporation of specific mitigation measurements. These measures include but are not limited to monitoring and full recovery of paleontological resources in the APE in accordance with standards for such recovery established by the Society of Vertebrate Paleontology. Therefore,

⁴ McLeod, Samuel A., Natural History Museum of Los Angeles County. 7 March 2006. Letter to Ms. Natasha Tabares, Sapphos Environmental, Inc. Pasadena, CA.

⁵ McLeod, Samuel A., Natural History Museum of Los Angeles County. 7 March 2006. Letter to Ms. Natasha Tabares, Sapphos Environmental, Inc. Pasadena, CA.

impacts to cultural resources related directly or indirectly to the destruction of a unique paleontological resource or unique geologic feature would be reduced to below the level of significance with the incorporation of specific mitigation measurements. Further analysis is warranted.

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

The proposed project would be expected to result in substantial adverse changes to cultural resources related to a significant archaeological resource. These changes would be expected to be mitigated to below the level of significance with the incorporation of mitigation measures. To ascertain potential impacts to archaeological resources within the APE, literature reviews for previously recorded archaeological/historical resources in the proposed project area were conducted at SCCIC on June 8, 2005; December 6, 2005; and April 12, 2006. The record search encompassed the Pasadena and Mount Wilson USGS quadrangles.⁶ Relevant cultural resource survey and excavation reports were examined. Coordination was also undertaken with NAHC to ascertain the presence for sacred sites or human remains with the potential to be impacted by the proposed project.⁷

These efforts indicated that 31 archaeological surveys have been conducted within the proposed project area and that a total of 25 potential archaeological/historical resources have been recorded within the proposed project area. Three of the 25 resources are located within the APE: (1) site 19-002056 (CA-LAN-2056H);⁸ (2) site 19-003090;⁹ and (3) site 19-186870.¹⁰ The first site, 19-002056, is a hiking trail that begins at the La Vina property and extends north for nearly 300 meters (approximately 88 feet). The trail follows a portion of the 1890s Giddings Toll Road. This trail is currently in use and may be affected by the construction of the La Vina EIR Trail West and/or La Vina West Alternative potential trail segments. The second site, 19-003090, is the Sam Merrill Trail, built in 1934 to 1935 by the Forest Conservation Club of Pasadena. It begins at the corner of Lake Avenue and Alta Loma Drive and extends northeast for 2.6 miles to Echo Mountain. The easternmost portion of this trail may be affected by the construction of Rubio Canyon Gap Option No. 3 potential trail segment. The third site, 19-186870, is the Eagle Rock–Laguna Bell transmission line, consisting of steel lattice towers built between 1922 and 1923 at ridge-top locations and modified in 1961. Two potential trail segment alternatives, La Vina North Alternative and Skylane Gap Option No. 2, cross this transmission line.

These historic era, prescriptive rights trails have not been formally evaluated for historic significance. The proposed improvements would not necessarily be incompatible with prescriptive rights trails. It would be expected that alterations to each site as a result of project implementation would be minimal

⁶ U.S. Geological Survey. 1977. Pasadena and Mt. Wilson 7.5-Minute Series Topographic Quadrangle. Scale 1:24,000. Reston, VA.

⁷ Wood, R., Native American Heritage Commission. 20 March 2006. Letter to Ms. Natasha Tabares, Sapphos Environmental, Inc., Pasadena, CA.

⁸ Weber, C.A. 1992. Archaeological Site Record for CA-LAN-2056H (19-002056). Contact: South Central Coastal Information Center, California State University, Fullerton.

⁹ McIntyre, M.J. 1998. Archaeological Site Record for 19-003090. Updated by Vance, D.W. 2002. USDA Angeles National Forest, Arcadia, CA. Contact: South Central Coastal Information Center, California State University, Fullerton.

¹⁰ Schmidt, J.J., and J.A. Schmidt. 2003. Archaeological Site Record for 19-186870. Compass Rose Archaeological, Inc., Van Nuys, CA. Contact: South Central Coastal Information Center, California State University, Fullerton.

because the trails and transmission line are currently maintained on a regular basis by the U.S. Department of Agriculture Forest Service and Southern California Edison. Therefore, potential impacts to the three recorded historic era sites would be less than significant.

The record search of the sacred land file by NAHC did not indicate the presence of cultural resources, including sacred sites, in the proposed project area.¹¹ Therefore, no significant adverse impacts to Native American cultural resources or sacred sites would be expected to result from the proposed project.

Although no prehistoric cultural resources have been recorded within the APE, previous studies indicate the presence of two prehistoric archaeological sites within the proposed project area (CA-LAN 342/19-000342^{12,13,14,15} and CA-LAN-1599/19-001599¹⁶). The sites are located east and west of the potential trail segments known as La Vina West Alternative and the Millard Canyon Gap Trail. In addition, site records and correspondence¹⁷ filed at SCCIC indicate the presence of cultural resources beyond the recorded sites in the vicinity of the reservoir above what used to be La Vina Hospital and Sanatorium. The archaeological sites contained milling equipment (used for food processing) and lithic (stone) tools. The correspondence emphasizes the archaeological importance of the area, which was used by the Tongva Native Americans as a reliable source of food, and suggests that yucca ovens might also be present. The documented presence of prehistoric cultural resources in the proposed project area and in the APE indicates that additional cultural resources may exist that could be adversely impacted by the proposed project. Implementation of mitigation measures as specified in Section 15126.4 of the State CEQA Guidelines would be expected to reduce these potential adverse impacts to below the level of significance.¹⁸ These mitigation measures may include, but are not limited to, a systematic archaeological survey along the APE and monitoring of all earth-moving activities during the project implementation. Therefore, impacts to cultural resources related to a substantial adverse change in the significance of an archaeological resource would be reduced to below the level of significance with the incorporation of mitigation measures. Further analysis is warranted.

¹¹ Wood, R., Native American Heritage Commission. 20 March 2006. Letter to Ms. Natasha Tabares, Sapphos Environmental, Inc., Pasadena, CA.

¹² King, C. 23 August 1989. Letter to Mr. James Hartl, AIP, Department of Regional Planning, Los Angeles California. Contact: South Central Coastal Information Center, California State University, Fullerton.

¹³ Parker, J. 9 November 1988. Letter to Mr. Ray Town. Subject: Archaeological Record Search of La Vina Sanitarium. Contact: South Central Coastal Information Center, California State University, Fullerton.

¹⁴ Cowper, D. 1965. Archaeological Site Record for CA-LAN-342. Contact: South Central Coastal Information Center, California State University, Fullerton.

¹⁵ Eberhart, H. 19 April 1965. Letter to Mr. Donald Miller, University of California, Los Angeles, California. Contact: South Central Coastal Information Center, California State University, Fullerton.

¹⁶ King, C. 1989. Archaeological Site Record for CA-LAN-1599. Contact: South Central Coastal Information Center, California State University, Fullerton.

¹⁷ King, C. 23 August 1989. Letter to Mr. James Hartl, AIP, Department of Regional Planning, Los Angeles California. Contact: South Central Coastal Information Center, California State University, Fullerton.

¹⁸ State of California. *California Code of Regulations*. Title 14, Division 6, Chapter 3, Section 15126.4(b)(3): "Determining the Significance of Impacts to Archaeological and Historical Resources."

- (c) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

The proposed project would be expected to result in less than significant impacts to cultural resources related to a substantial adverse change in the significance of a historical resource. Historical resources in the proposed project area were identified through record searches conducted at the SCCIC on June 8, 2005; December 6, 2005; and April 12, 2006. Listings in the California Historical Resources Inventory, California Register of Historical Resources, California Historical Landmarks, California Points of Historical Interest, and National Register of Historic Places were examined to identify any historical resources in the proposed project area. The California Historical Resources Inventory indicates that 13 resources in Altadena and 6 in the Angeles National Forest have been listed in the California Register of Historical Resources (through their listing in, or formal determinations of eligibility for listing in, the National Register of Historic Places). None of these resources are located in the APE. In addition, three of the 25 potential archaeological/historical resources are located within the APE: (1) site 19-002056 (CA-LAN-2056H); (2) site 19-003090; and (3) site 19-186870; these sites are discussed in above section 3.5(b).

However, the Angeles National Forest as a whole is designated as a California Historical Landmark #717. Originally known as the San Gabriel Timberland Reserve, the Angeles National Forest was created by proclamation of President Benjamin Harrison in 1892 and was the second wilderness area in the United States to receive the designation as a national forest.

Impacts to the historic significance of the Angeles National Forest that may result from implementation of the proposed project would not be expected to be significant. The proposed project incorporates construction of new trail segments and access segments, installation of trail amenities consistent with the County of Los Angeles Trails Manual,¹⁹ and construction of parking areas and restrooms at the trailheads, south of the Angeles National Forest boundaries. In some cases, the new trail segments would be a continuation of current uses. Where no trails currently exist, clearance and grading would be limited in scope and area and would represent minor disturbances to native vegetation and topography relative to the overall size of the Angeles National Forest. The proposed project would not result in the demolition or material alteration of the physical characteristics that convey the historic significance of the Angeles National Forest. Therefore, the proposed project would not be expected to result in significant impacts to cultural resources related to a substantial adverse change in the significance of a historical resource. No further analysis is warranted.

- (d) Disturb any human remains, including those interred outside of formal cemeteries?

The proposed project would not be expected to disturb any human remains, including those interred outside of formal cemeteries. Record searches of the Pasadena and Mount Wilson USGS quadrangles²⁰ conducted at the SCCIC on June 8, 2005; December 6, 2005; and April 12, 2006 did not reveal the presence of Native American cemeteries or former historic period cemeteries within the proposed project area. In addition, a letter of inquiry regarding the knowledge of, or the potential for, the

¹⁹ County of Los Angeles. In Preparation. *County of Los Angeles Trails Manual*. Prepared by: Sapphos Environmental, Inc., Pasadena, CA.

²⁰ U.S. Geological Survey. 1977. Pasadena and Mt. Wilson 7.5-Minute Series Topographic Quadrangle. Scale 1:24,000. Reston, VA.

proposed project to impact Native American sacred sites or human remains was sent to NAHC.²¹ The results of these efforts did not indicate the presence of Native American remains within the proposed project area. One historic site (19-002679),^{22,23} consisting of a grave marker dated 1865, was noted over 300 meters (approximately 900 feet) east of the potential trail segment known as La Vina West Alternative. The grave marker is not within the APE. Therefore, the proposed project would not be expected to disturb any human remains, including those interred outside of formal cemeteries. No further analysis is warranted.

²¹ Wood, R., Native American Heritage Commission. 20 March 2006. Letter to Ms. Natasha Tabares, Sapphos Environmental, Inc., Pasadena, CA.

²² Maxon, P. 1998. Archaeological Site Record for 19-002679. RMW Paleo Associates, Mission Viejo, CA. Contact: South Central Coastal Information Center, California State University, Fullerton.

²³ Vance, D.W. 2002. Archaeological Site Record for 19-002679. USDA Angeles National Forest, Arcadia, CA. Contact: South Central Coastal Information Center, California State University, Fullerton.

3.6 GEOLOGY AND SOILS

This analysis is undertaken to determine if the Altadena Crest Trail Improvements (proposed project) may have a significant impact to geology and soils, thus requiring the consideration of mitigation measures or alternatives, in accordance with Section 15063 of the State of California Environmental Quality Act Guidelines (State CEQA Guidelines).¹ Geology and soils at the proposed project site were evaluated with regard to the County of Los Angeles General Plan seismic and safety element zone and maps,^{2,3} U.S. Geological Survey (USGS) maps,⁴ California Division of Mines and Geology (CDMG) maps,⁵ and the most recent Alquist-Priolo Earthquake Fault Zoning (APEFZ) maps.⁶

The State CEQA Guidelines recommend the consideration of seven questions when addressing the potential for significant impact to geology and soils:

Would the proposed project have any of the following effects:

- (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 (APEFZ) map issued by the State Geologist for the area or based on other substantial evidence of a known fault?

The proposed project would be expected to result in an impact from exposing people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault. The impact would be expected to be reduced to below the level of significance with the incorporation of mitigation measures. The proposed project does not fall within an APEFZ, but does lie within the Sierra Madre fault zone, which is considered capable of surface rupture with a low probability of occurrence. These fault zone issues would be mitigated through the appurtenant structures conformance with the Uniform Building Code⁷ and the County of Los Angeles

¹ State of California. California Code of Regulations. Title 14, Chapter 3, Article 5, Sections 15060–15065, Appendix G.

² County of Los Angeles Department of Regional Planning. 1988. *County of Los Angeles General Plan*. Contact: Department of Regional Planning, Hall of Records, 320 West Temple Street, Los Angeles, CA 90012.

³ County of Los Angeles Department of Regional Planning. Adopted 6 December 1990. *Streamlined County of Los Angeles General Plan: Safety Element*. Contact: Department of Regional Planning, Hall of Records, 320 West Temple Street, Los Angeles, CA 90012.

⁴ U.S. Geological Survey. 1977. Pasadena and Mt. Wilson 7.5-Minute Series Topographic Quadrangle. Scale 1:24,000. Reston, VA.

⁵ California Department of Conservation, California Division of Mines and Geology. 1962. *Mines and Mineral Resources of Kern County California, County Report 1*. Contact: California Division of Mines and Geology, Los Angeles Office, 655 South Hope Street, #700, Los Angeles, CA 90017.

⁶ California Geological Survey. 1977. Alquist Priolo Earthquake Fault Zoning (APEFZ) Maps, Mt. Wilson Quadrangle. Contact: DOC/CGS Library and Information Desk, 801 K Street, MS 14 34, Sacramento, CA 95814. Available at: <http://www.consrv.ca.gov/CGS/rghm/ap/index.htm>

⁷ International Code Council. 1997. "Uniform Building Code Volumes I, II, III." Contact: Los Angeles District Office (LA) 5360 Workman Mill Road; Whittier, CA 90601-2298.

Building Code,⁸ including construction guidelines and specifications such as a fault evaluation if an appurtenant structure were planned over or near a segment of the Sierra Madre fault zone. Therefore, expected impacts from exposing people or structures to potential substantial adverse effects involving rupture of a known earthquake fault would be reduced to below the level of significance with the incorporation of mitigation measures. Further analysis is warranted.

ii) Strong seismic ground shaking?

The proposed project would be expected to result in an impact from exposing people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking. The impact would be expected to be reduced to below the level of significance with the incorporation of mitigation measures. The seismic setting of the proposed projects is considered active due to several faults that could generate strong seismic ground shaking in the area.^{9,10} One fault, the Sierra Madre Fault, passes through the proposed project area and is considered to be the most probable and proximate cause of seismic activity to affect the proposed project. The trail element of the proposed project does not include habitable structures, but would include earth retaining structures for cut-and-fill slopes. The restroom facilities and kiosks that may be constructed at trailheads are not considered habitable structures, and would normally be less than 1,000 square feet and limited to single-story construction. Some potential hazards associated with strong seismic shaking, such as ground cracking and falling rocks, may occur in the trail element. Significant impacts to structures related to strong seismic ground shaking would be mitigated.¹¹

A project-specific geotechnical investigation and/or analysis would be required for all structures for human occupancy and for retaining structures for the protection of structures for human occupancy, and neighboring structures or properties immediately adjacent to the proposed project. All design recommendations or comparable measures in the project-specific geotechnical evaluation, to reduce risk to people and property from seismic ground shaking, would be required to be incorporated into the final plans and specifications. Mitigation measures may include rehabilitating existing retaining structures and cut-and-fill areas, adding new retaining structures and cut-and-fill areas where appropriate, and/or posting seismic instability warning signage at trail entrance points and at potential rockfall areas along the trail. These measures would mitigate impacts from strong seismic ground shaking to below the level of significance. Therefore, impacts to geology and soils in relation to strong seismic ground shaking would be reduced to below the level of significance with the incorporation of mitigation measures. Further analysis is warranted.

⁸ International Code Council. 2002. "County of Los Angeles Building Code 2002." Contact: Los Angeles District Office (LA) 5360 Workman Mill Road; Whittier, CA 90601-2298.

⁹ U.S. Geological Survey. 1999. State of California Seismic Hazard Zones Map, Pasadena Quadrangle. Available at: http://gmw.consrv.ca.gov/shmp/download/pdf/ozn_pasa.pdf

¹⁰ U.S. Geological Survey. 1999. State of California Seismic Hazard Zones Map, Mt. Wilson Quadrangle. Available at: http://gmw.consrv.ca.gov/shmp/download/pdf/ozn_mtwil.pdf

¹¹ Wilson Geosciences. In Preparation. *Altadena Crest Trail Improvements Geological Technical Report*. Contact: Wilson Geosciences, 1910 Pinecrest Drive, Altadena, CA 91001.

iii) Seismic-related ground failure, including liquefaction?

The proposed project would be expected to result in impacts from exposing people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction. These impacts would be expected to be reduced to below the level of significance with the incorporation of mitigation measures. The proposed project traverses several areas identified by the State of California as liquefaction zones in the alluvial canyon areas of the project.^{12,13} Typically, seismically induced liquefaction affects heavy structures more than light ones. The trail element of the proposed project does not include any features of significant weight in the canyon areas. Ground cracking is a form of ground failure that may affect the trail element, but is not a direct hazard to people. The restroom facilities and kiosks that may be constructed at trailheads would normally be less than 1,000 square feet and limited to single-story construction. However, some liquefaction-induced settlement may occur. Significant impacts related to seismic-related ground failure, including liquefaction, would be mitigated.¹⁴

A project-specific geotechnical evaluation would be required for all habitable structures and would address liquefaction as appropriate to the final facility location and design. All design recommendations, or comparable measures, in the project-specific geotechnical investigation, to reduce risk to people and property from seismic-related ground failure, including liquefaction would be required to be incorporated in the final plans and specifications. Mitigation measures may include remediation of the foundation subgrade, strengthening of the structure foundations, or relocating a structure to an area less susceptible to ground failure. Therefore, impacts from exposing people or structures to potential substantial adverse effects involving seismic-related ground failure, including liquefaction, would be reduced to below the level of significance with the incorporation of mitigation measures. Further analysis is warranted.

iv) Landslides?

The proposed project would be expected to result in impacts from exposing people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides. The impacts would be expected to be minimized with the incorporation of mitigation measures. However, the means necessary to remediate the potential for significant landslide damage to the trail element, the appurtenant structures, and to neighboring properties that may abut the trail element requires a project-specific geotechnical investigation, evaluation, and analysis. Landslides are of concern for the proposed project because of the steep slopes of the foothills and the proximity of the proposed trail element to existing structures and manufactured slopes. The proposed project is almost entirely within a State of California–designated landslide seismic hazard zone, which mandates further investigation.¹⁵ Large landslides have been mapped in the proposed project area and future

¹² U.S. Geological Survey. 1999. State of California Seismic Hazard Zones Map, Mt. Wilson Quadrangle. Available at: http://gmw.consrv.ca.gov/shmp/download/pdf/ozn_mtwil.pdf

¹³ U.S. Geological Survey. 1999. State of California Seismic Hazard Zones Map, Pasadena Quadrangle. Available at: http://gmw.consrv.ca.gov/shmp/download/pdf/ozn_pasa.pdf

¹⁴ Wilson Geosciences. 2006. *Altadena Crest Trail Improvements Geological Feasibility Report*. Contact: Wilson Geosciences, 1910 Pincrest Drive, Altadena, CA 91001.

¹⁵ U.S. Geological Survey. 1999. State of California Seismic Hazard Zones Map, Mt. Wilson Quadrangle. Available at: http://gmw.consrv.ca.gov/shmp/download/pdf/ozn_mtwil.pdf

smaller-scale, localized landslides (a few tens to several tens of feet in lateral dimensions) would be expected.¹⁶ In addition to seismic shaking, the presence of surface and subsurface water would impact the size and location of seismically induced landslides. Because landslides are primarily caused by steep slopes, weak materials, and the introduction of water, it would be expected that landslides from these factors would occur more frequently than seismically induced landslides, and that unforeseen drainage issues such as seepage and spring flow may cause unpredictable landslides.

A project-specific geotechnical evaluation would be required to characterize the potential for landslides to result in risks to people or property, including the trail element, structures for human occupancy, and neighboring structures or properties immediately adjacent to the proposed project. All design recommendations, or comparable measures, in the project-specific geotechnical investigation, to reduce risk to people or property from landslides would be required to be incorporated into the final plans and specifications. Mitigation measures would include the use of appropriate seismic design factors. Specific actions may include rehabilitating existing slope retaining structures and landslide-prone cut-and-fill areas, adding new retaining structures where appropriate, re-routing local trail segments to avoid large potentially unstable slope areas, and providing adequate surface and subsurface drainage structures to minimize the potential for water-induced slope failures. Therefore, impacts from exposing people or structures to potential substantial adverse effects involving seismically induced landslides would be reduced to below the level of significance with the incorporation of mitigation measures. Further analysis is warranted.

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

The impact to geology and soils related to substantial soil erosion or the loss of topsoil from the proposed project would be expected to be reduced to below the level of significance with the incorporation of mitigation measures. The issue of erosion for the proposed project is a concern due to the presence of (a) steep slopes, (b) large and small canyons conveying surface water (perennially or intermittently), (c) weak/erodible alluvial fan materials in many areas, (d) fractured granitic/metamorphic basement rock formations in many areas, and (e) the lack of adequate drainage control in existing trail areas. It is possible for areas that sheet-flow drainage to quickly establish channelized drainage patterns that are significantly more erosive to alluvial soils.¹⁷ Where the proposed project affects such alluvial areas, project-specific geotechnical investigation would be required. These erosion issues would be mitigated through conformance with normal state-of-the-practice hillside construction methods, and adherence to standards and specifications in the County of Los Angeles Trails Manual,¹⁸ including construction guidelines and specifications, such as non-erosive drainage devices, limiting construction during the rainy season, stabilizing cut-and-fill slopes, and using materials such as geotextile and jute mesh to support plant growth and hold soil in place. Therefore, impacts to geology and soils in relation to substantial soil erosion or the loss of topsoil would be expected to be reduced to below the level of significance with the incorporation of mitigation measures. Further analysis is warranted.

¹⁶ Wilson Geosciences. 2006. *Altadena Crest Trail Improvements Geological Feasibility Report*. Contact: Wilson Geosciences, 1910 Pinecrest Drive, Altadena, CA 91001.

¹⁷ Wilson Geosciences. In Preparation. *Altadena Crest Trail Improvements Geological Technical Report*. Contact: Wilson Geosciences, 1910 Pinecrest Drive, Altadena, CA 91001.

¹⁸ County of Los Angeles. In Preparation. *County of Los Angeles Trails Manual*. Prepared by: Sapphos Environmental, Inc., Pasadena, CA.

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

The proposed project would be expected to result in less than significant impacts to geology and soils in relation to being located on a geologic unit or soil that is unstable, or that would become unstable as a result of the proposed project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse. Impacts from lateral spreading, subsidence, and collapse are not considered based on the geology and soils conditions present. Liquefaction is discussed above. The trail element of the proposed project would be expected to be largely constructed near existing land surface grades (e.g., within several feet or less of existing grade). Appurtenant structures, such as restrooms and kiosks, would normally be expected to be less than 1,000 square feet and single-story construction, thus requiring limited grading. On- or off-site landslide impacts caused by implementation of the proposed project would be expected to be minimized with the incorporation of mitigation measures discussed above for landslides. However, the means necessary to minimize the potential for significant landslide damage to the trail element, the appurtenant structures, and to neighboring properties that may abut the trail element requires a project-specific geotechnical investigation, evaluation, and analysis.

A project-specific geotechnical evaluation would be required to characterize the potential for creating on- or off-site landslides that may result in risks to people or property. All design recommendations or comparable measures in the project-specific geotechnical investigation, to reduce risk to people or property from landslides, would be required to be incorporated into the final plans and specifications. Mitigation measures may include rehabilitating existing slope retaining structures and landslide-prone cut-and-fill areas, adding new retaining structures where appropriate, re-routing local trail segments to avoid large potentially unstable slope areas, and providing adequate surface and subsurface drainage structures to minimize the potential for on- or off-site slope failures. Therefore, impacts from exposing people or structures to potential substantial adverse effects involving on- or off-site landslides would be reduced to below the level of significance with the incorporation of mitigation measures. Further analysis is warranted.

- (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?

The proposed project would be expected to result in minimal impacts to geology and soils in relation to being located on expansive soil creating substantial risks to life or property. The impacts would be expected to be small and would be further minimized with the incorporation of mitigation measures. The trail element of the proposed project does not include any structural features, and thus expansive soils would not be expected to pose a substantial risk to life or property. However, the restroom facilities and kiosks that may be constructed at the trailheads may be exposed to low to moderate expansive soils. These appurtenant structures would normally be less than 1,000 square feet and limited to single-story construction. Expansive soils are largely comprised of silicate clays, which expand in volume when large quantities of water are absorbed and then contract when dried. The proposed project, including all potential appurtenant structures, is located within alluvial and older plutonic and meta igneous rocks. The older alluvial formations are generally covered by a soil that may be several feet thick. This soil and some of the older alluvium contain moderate to high clay content, which suggests a low to moderate expansive soil condition.

These expansive soil issues would be mitigated through conformance with the Uniform Building Code¹⁹ and the County of Los Angeles Building Code,²⁰ including construction guidelines and specifications such as sufficient excavation for building foundations and introduction of non-expansive soils as base material. Therefore, potential substantial impacts from creating substantial risks to life or property involving expansive soils would be reduced to below the level of significance with the incorporation of mitigation measures. Further analysis is warranted.

- (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?

The proposed project would not be expected to have impacts related to soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water. The proposed project includes the construction, operation, and maintenance of two new restroom facilities. The restrooms would be connected to existing sewage lines or utilize alternative options, such as composting toilets or routine waste removal, which do not require septic tanks. Therefore, the proposed project would not be expected to have impacts related to the use of septic tanks or alternative waste water disposal systems. No further analysis is warranted.

¹⁹ International Code Council. 1997. "Uniform Building Code Volumes I, II, III." Contact: Los Angeles District Office (LA) 5360 Workman Mill Road; Whittier, CA 90601-2298.

²⁰ International Code Council. 2002. "County of Los Angeles Building Code 2002." Contact: Los Angeles District Office (LA) 5360 Workman Mill Road; Whittier, CA 90601-2298.

3.7 HAZARDS AND HAZARDOUS MATERIALS

This analysis is undertaken to determine if the Altadena Crest Trail Improvements (proposed project) may create a significant impact to hazards and hazardous materials, thus requiring the consideration of mitigation measures or alternatives in accordance with Section 15063 of the State of California Environmental Quality Act Guidelines (State CEQA Guidelines).¹ Hazards and hazardous materials at the proposed project site were evaluated based on a review of the County of Los Angeles General Plan Safety element² and the Phase I Environmental Site Assessment (ESA) performed for the proposed project.³

Hazardous wastes are by-products of society that can pose a substantial or potential hazard to human health or the environment when improperly managed. Hazardous wastes possess at least one of four characteristics (ignitability, corrosivity, reactivity, or toxicity), or appear on special U.S. Environmental Protection Agency (EPA) lists.⁴

The State CEQA Guidelines recommend the consideration of eight questions when addressing the potential for significant impact to hazards and hazardous materials:

Would the proposed project have any of the following effects:

- (a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

The construction, operation, and maintenance of the proposed project would not involve the routine transport, use, generation, storage, or disposal of hazardous materials. Therefore, there would be no impacts from hazards or hazardous materials resulting from such activities. The proposed project would involve the construction of 6.4 miles of new trails, five potential trailheads, and improvements to 6 miles of existing trail segments, creating a continuous trail from the Hahamongna Watershed Park on the west to Eaton Canyon Natural Area on the east, and appurtenant facilities including two restrooms and a small parking area. Therefore, there would be no expected impacts from hazards and hazardous materials related to creating a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. No further analysis is warranted.

¹ State of California. *California Code of Regulations*. Title 14, Chapter 3, Article 5, Sections 15060–15065, Appendix G.

² County of Los Angeles Department of Regional Planning. Adopted 6 December 1990. *Streamlined County of Los Angeles General Plan: Safety Element*. Contact: Department of Regional Planning, Hall of Records, 320 West Temple Street, Los Angeles, CA 90012.

³ County of Los Angeles. November 2005. *Phase I Environmental Site Assessment for Altadena Crest Trail*. Prepared by: Sapphos Environmental, Inc., 133 Martin Alley, Pasadena, CA 91105.

⁴ U.S. Environmental Protection Agency. *Code of Federal Regulations*. Title 40, Chapter 1, Part 261.

- (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?

The proposed project would not be expected to result in impacts from hazards and hazardous materials related to reasonably foreseeable upset and accident conditions involving the release of hazardous materials from the proposed project. On-site use and storage of hazardous materials would be limited to incidental amounts of cleaners and common chemicals used for landscaping and maintenance. Storage of all regulated materials would be required to comply with all applicable county, state, and federal standards. The application of all herbicides and pesticides on public lands must be completed by or under the supervision of a state-licensed applicator. Such materials would be disposed of in accordance with county, state, and federal regulations. Therefore, there would be no expected impacts to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous material into the environment. No further analysis is warranted.

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

The proposed project would not be expected to result in impacts from hazards and hazardous materials with respect to hazardous emissions or the handling of hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school. The proposed project would not involve the transport, use, or disposal of hazardous materials, or the emission of acutely hazardous materials or substances. There are two existing school sites located within 0.25 mile of the proposed project site. Loma Alta Elementary School is south of Cobb Estate Trail and located at 3544 North Canon Boulevard. The second school is Noyes Elementary School, which is south of Zane Gray Access Trail and located at 1919 East Pinecrest Drive. The proposed project would involve the construction of 6.4 miles of new trails, five potential trailheads, and improvements to 6 miles of existing trail segments. On-site use and storage of hazardous materials would be limited to incidental amounts of cleaners and common chemicals used for landscaping and maintenance. Therefore, there would be no expected impacts from hazards and hazardous materials with respect to hazardous emissions or the handling of hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school. No further analysis is warranted.

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

The proposed project would not be expected to result in impacts from the proposed project in relation to being a known hazardous materials site. The proposed project site is not located on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. The Department of Toxic Substances Control Hazardous Waste and Substance List (Cortese List) database identifies public drinking water wells with detectable levels of contamination, hazardous substance sites, sites with known toxic materials, and all solid waste disposal facilities.⁵ A search of available environmental records conducted by Environmental Data Resources, Inc. (EDR) indicates that the proposed project area appears on the leaking underground storage tank (LUST), historical underground storage tanks

⁵ Department of Toxic Substances Control. Last accessed 11 April 2006. "Hazardous Waste and Substances Site List–Site Cleanup (Cortese List)" Sacramento, CA. Available at: http://www.dtsc.ca.gov/SiteCleanup/Cortese_List.cfm

(HIST USTs), Waste Management Unit Database System (WMUDS/SWAT), Los Angeles County Industrial Waste and Underground Storage (Los Angeles County HMS), and Facility and Manifest Data (HAZNET) databases.

The LUST incident reports came from the State Water Resources Control Board Leaking Underground Storage Tank Information System. A review of the LUST list revealed that one site, known as Conscon Davidson Homes, is within the proposed project area, located approximately 0.5 mile south of the La Vina development.⁶ This LUST site contained contaminated soil. However, the site underwent remediation in 1996 to remove the contaminated soil. The case has been closed since 1996.

The HIST USTs database contains listings of historically reported UST sites. Only one site, La Vina Hospital and Sanatorium, was within the proposed project area. The La Vina Hospital and Sanatorium contained two 280-gallon and one 240-gallon USTs. The tanks, which were installed in 1976, contained regular fuel.⁷ No spills or leaks were reported. The La Vina Hospital and Sanatorium were replaced in the 1990s with the La Vina Development, consisting of 272 single family homes.⁸

The WMUDS/SWAT is used by the State Water Resources Control Board staff and the Regional Water Quality Control Board for program tracking and inventory of waste management units. A review of WMUDS/SWAT database reveals that there are five sites within the proposed project area:

- Western Ravine Debris Disposal Site at 3600 Chaney Trail, bounded by the La Vina Gap to the north, Loma Alta Drive to the south, Canyon Crest to the west, and the Chaney Trail access road to the east
- The Lincoln Debris Disposal Site at 600 Loma Alta Drive, bounded by the La Vina Gap to the north, Loma Alta Drive to the south, Canyon Crest to the west, and the Chaney Trail access road to the east
- Los Angeles County Road Department at 3900 Canyon Crest Road, bounded by the La Vina Gap to the north, Loma Alta Drive to the south, Canyon Crest to the west, and the Chaney Trail access road to the east
- Las Flores Debris Disposal Site at 3400 Rubio Canyon Road is located south of Rubio Canyon, east of Lake Avenue, and at intersection of Rubio Canyon Road and Loma Alta Drive
- Los Angeles County Flood Control District south of the intersection of the Cobb Estate Trail and Rubio Canyon Gap Trail

⁶ Environmental Data Resources, Inc. 29 June 2005. *Data Map Area Study, Altadena, CA*. (Inquiry Number 01455501.5r.) Milford, CT.

⁷ Environmental Data Resources, Inc. 29 June 2005. *Data Map Area Study, Altadena, CA*. (Inquiry Number 01455501.5r.) Milford, CT.

⁸ County of Los Angeles Department of Regional Planning. July 1992. *Final Supplemental Environmental Impact Report for La Vina* (SCH No. 91031099). Los Angeles, CA.

The records review did not reveal any indications of contamination or hazardous waste stored at these sites.⁹

A review of the Los Angeles County HMS revealed that there was one site within the proposed project area: the Loma Alta County Park, which is located at 3330 North Lincoln Avenue, north of Loma Alta Drive and east of Lincoln Avenue.¹⁰ The contents found at the site are unspecified. However, Loma Alta County Park does have a permit for these uses.

The source of the HAZNET data is the California EPA. There was one site listed on the HAZNET list—the Alta Bridge, located at 1180 ½ Loma Alta Drive, which is situated south of the Rubio Canyon Gap, east of Rubio Canyon Road, and west of the Loma Alta Trail.¹¹ A review of the records revealed that 15 tons of asbestos-containing waste was located at the Alta Bridge, which is owned by County of Los Angeles Department of Public Works. The asbestos-containing waste contained at Alta Bridge underwent remediation and was disposed of at a landfill.

No violations with regard to hazardous materials have been identified. State and federal hazardous waste regulations require cleanup and disposal procedures to ensure public safety. Therefore, there would be no expected impacts from the proposed project in relation to being a known hazardous materials site. No further analysis is warranted.

- (e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the proposed project result in a safety hazard for people residing or working in the proposed project area?

The proposed project would not be expected to result in impacts relating to safety hazards for the people residing or working in the proposed project area or visiting the proposed project site because the proposed project is not located within a 2-mile radius of an existing airport land use plan.¹² The Comprehensive Land Use Plan, prepared by the County of Los Angeles Airport Land Use Commission (ALUC), serves as the master compatibility plan for public-use airports and the areas surrounding them within the County of Los Angeles.¹³ The closest public airports to the proposed project site included in the ALUC Comprehensive Land Use Plan are the El Monte Airport, which is located approximately 11 miles southeast of the proposed project site, and the Bob Hope Airport, which is located approximately 11 miles west of the proposed project site in the City of Burbank.¹⁴ The proposed

⁹ Environmental Data Resources, Inc. 29 June 2005. *Data Map Area Study, Altadena, CA*. (Inquiry Number 01455501.5r.) Milford, CT.

¹⁰ Environmental Data Resources, Inc. 29 June 2005. *Data Map Area Study, Altadena, CA*. (Inquiry Number 01455501.5r.) Milford, CT.

¹¹ Environmental Data Resources, Inc. 29 June 2005. *Data Map Area Study, Altadena, CA*. (Inquiry Number 01455501.5r.) Milford, CT.

¹² Moore, Julie, County of Los Angeles Airport Land Use Commission, Department of Regional Planning, Hall of Records, Los Angeles, CA. 5 December 2005. Telephone communication with Sheryll Del Rosario, Sapphos Environmental, Inc., Pasadena, CA.

¹³ County of Los Angeles Airport Land Use Commission, Department of Regional Planning. 19 December 1991 (Revised 1 December 2004). *Los Angeles County Airport Land Use Plan*. Los Angeles, CA.

¹⁴ Google, Inc. 2005. Accessed on 17 May 2006. Google Earth Beta Version 3.0. Mountain View, CA

project would not result in a safety hazard for the people residing or working in the proposed project area or visiting the proposed project site because it is not located within a 2-mile radius of an existing airport land use plan. Therefore, there would be no expected impacts from hazards and hazardous materials in relation to the proximity from an airport and the safety hazard for people residing or working in the proposed project area. No further analysis is warranted.

- (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?

The proposed project would not be expected to result in impacts from hazards and hazardous materials due to the proposed project being located in the vicinity of a private airstrip, creating the potential for safety hazards for people residing or working in the proposed project area. The proposed project site is not located within the immediate vicinity of any airport or private airstrip.¹⁵ The closest private airstrip is the Bob Hope Airport, which includes a private airstrip, located approximately 11 miles west of the proposed project area in the City of Burbank.¹⁶ The proposed project would not result in a safety hazard for the people working in the proposed project area or visiting the proposed project site. Therefore, there would be no expected impacts from hazards and hazardous materials due to the project being located in the vicinity of a private airstrip, creating the potential for safety hazards for people residing or working in the proposed project area. No further analysis is warranted.

- (g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The proposed project would not be expected to result in impacts from hazards and hazardous materials in relation to impairing the implementation of or physically interfering with an adopted emergency response plan or emergency evacuation plan.¹⁷ The proposed project site would not be designated as an emergency staging area and would not contain elements that are anticipated to interfere with local emergency response or evacuation routes. The proposed project development and the construction scenario would not physically impede the existing emergency response plans, emergency vehicle access, or personnel access to the proposed project site. Therefore, the proposed project would not be expected to result in significant impacts to adopted emergency response plans or emergency evacuation plans. No further analysis is warranted.

- (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?

The proposed project would be expected to result in impacts from hazards and hazardous materials in relation to the exposure of people or structures to a significant risk of loss, injury, or death involving wildland fires. These impacts would be reduced to below the level of significance with the incorporation of mitigation measures. A review of the relevant U.S. Geological Survey (USGS) 7.5-

¹⁵ Child, Mark, County of Los Angeles Airport Land Use Commission, Department of Regional Planning, Hall of Records, Los Angeles, CA. 5 December 2005. Telephone communication with Sheryll Del Rosario, Sapphos Environmental, Inc., Pasadena, CA.

¹⁶ Google, Inc. 2005. Accessed on 17 May 2006. Google Earth Beta Version 3.0. Mountain View, CA

¹⁷ Knowles, Captain John, County of Los Angeles Fire Department. 18 May 2006. Telephone communication with Ms. Lorraine Cope, Sapphos Environmental, Inc., Pasadena, CA.

minute series topographic quadrangle was completed.¹⁸ The proposed project area was visually surveyed, and a variety of plant communities was observed, which included coastal sage scrub, chaparral, nonnative/developed grassland, southern sycamore-alder riparian woodland, coast live oak woodland, and big cone spruce-canyon oak forest. Due to the large number of existing plant communities, implementation of the proposed project would be expected to expose people or structures to a significant risk or loss, injury, or death involving wildland fires. Mitigation would include posting fire danger signs during time of high fire-hazard periods, and/or restricting access during high fire-hazard periods. The incorporation of appropriate mitigation measures would reduce impacts from the exposure of people or property to wildland fires to below the level of significance. Further analysis is warranted.

¹⁸ U.S. Geological Survey. 1977. Pasadena and Mt. Wilson 7.5-Minute Series Topographic Quadrangle. Scale 1:24,000. Reston, VA.

3.8 HYDROLOGY AND WATER QUALITY

This analysis is undertaken to determine if the Altadena Crest Trail Improvements (proposed project) may have a significant impact to hydrology and water quality, thus requiring the consideration of mitigation measures or alternatives, in accordance with Section 15063 of the State of California Environmental Quality Act Guidelines (State CEQA Guidelines).¹ Hydrology and water quality at the proposed project site were evaluated with regard to the County of Los Angeles General Plan, County of Los Angeles Trails Manual,² County of Los Angeles Altadena Community Plan,³ State of California Regional Water Quality Control Board Basin Plan for the Los Angeles Region,⁴ and the U.S. Geological Survey (USGS) 7.5-minute series Pasadena and Mount Wilson topographic quadrangles (Townships 1 and 2 North, Range 12 West, Section 3, and partial Sections 2, 4, 11, and 33).⁵

The State CEQA Guidelines recommend the consideration of 10 questions when addressing the potential for significant impacts to hydrology and water quality:

Would the proposed project have any of the following effects:

- (a) Violate any water quality standards or waste discharge requirements?

The proposed project would be expected to result in impacts to hydrology and water quality related to water quality standards or waste discharge requirements. These impacts would be expected to be reduced to below the level of significance with the incorporation of mitigation measures specified as best management practices (BMPs) to control pollutants from urban runoff and storm water discharges under the National Pollutant Discharge Elimination System (NPDES) storm water regulations. The proposed project would entail the development of the continuous Altadena Crest Trail and require the addition of new trailheads and improvements to certain existing trailheads. The proposed project site is located in the transition zone between the densely populated area of the northwestern San Gabriel Valley and the Angeles National Forest, encompassing an area of approximately 5,728 acres, of which approximately 7.5 acres would be impacted. Grading activities would potentially result in short-term erosion and sedimentation impacts. Trail improvements are unpaved and therefore would not result in an increase in total impervious areas.

The proposed construction of two restroom facilities of less than 1,000 square feet and small parking areas would impact less than an acre at each site. These facilities would be designed to provide on-site control and treatment of any incremental increase in storm water runoff resulting from an increase in impervious surfaces.

¹ State of California. *California Code of Regulations*. Title 14, Chapter 3, Article 5, Sections 15060–15065, Appendix G.

² County of Los Angeles. In Preparation. *County of Los Angeles Trails Manual*. Prepared by: Sapphos Environmental, Inc., Pasadena, CA.

³ County of Los Angeles Department of Regional Planning. July 1986. *Altadena Community Plan*. Contact: Department of Regional Planning, Hall of Records, 320 West Temple Street, Los Angeles, CA 90012.

⁴ California Regional Water Quality Control Board, Los Angeles Region. 13 June 1994. *Water Quality Control Plan Los Angeles Region*. Monterey Park, CA. Available at: http://www.epa.gov/ost/standards/wqslibrary/ca/ca_9_lo_angeles.pdf

⁵ U.S. Geological Survey. 1977. Pasadena and Mt. Wilson 7.5-Minute Series Topographic Quadrangle. Scale 1:24,000. Reston, VA.

Non-point source NPDES permits are required for municipalities and unincorporated communities to control urban stormwater runoff. Any storm water discharges associated with proposed project, if any, would be subject to and covered by a separate NPDES Storm Water Discharge Permit for Construction Activities (Construction General Permit) by the State Water Resources Control Board and the Regional Water Quality Control Board, Los Angeles Region. Construction activities of 1 acre or greater are subject to the statewide general construction storm water NPDES Permit. Coverage under this permit requires submittal of a Notice of Intent (NOI), which serves as the application for coverage under the permit, as well as a site map and an annual fee. Implementation of the NPDES and BMPs would ensure that construction activities do not impact runoff water quality. Compliance with existing County standards and regulations would ensure that impacts would be less than significant.

The proposed project is subject to the NPDES and BMPs, which would ensure that construction activities would not have an impact on runoff water quality. In addition, compliance with design guidelines as specified in the County of Los Angeles Trails Manual⁶ would also reduce impacts to below a level of significance. Therefore, impacts to hydrology and water quality in relation to water quality standards or waste discharge requirements would be reduced to below the level of significance with the incorporation of the mitigation measures. Further analysis is warranted.

- (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 preexisting nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?

The proposed project would not be expected to result in impacts to hydrology and water quality in relation to groundwater supplies or groundwater recharge. Most water for the Los Angeles Basin (Basin) is imported. One-third of the water used in the Basin comes from local groundwater and runoff from the Angeles National Forest watershed.⁷ Public agencies that import water into the County of Los Angeles include the City of Los Angeles Department of Public Works, the Metropolitan Water District of Southern California, and the California State Department of Water Resources (DWR).⁸ The source of water supply for the proposed project area would be primarily from the watershed of the Angeles National Forest. The Altadena Community and the City of Pasadena are communities nearest to the proposed trails. Four water companies serve the Altadena Community (Las Flores Water Company, Lincoln Avenue Water Company, Rubio Canyon Land and Water Association, and the City of Pasadena Water and Power Department).⁹ Similar to the Altadena Community, the proposed project would be served primarily by these water companies. There is sufficient capacity and water supply to

⁶ County of Los Angeles. In Preparation. *County of Los Angeles Trails Manual*. Prepared by: Sapphos Environmental, Inc., Pasadena, CA.

⁷ County of Los Angeles Department of Regional Planning. 1993. *County of Los Angeles Streamlined General Plan: Public Facilities Chapter*. Contact: Department of Regional Planning, Hall of Records, 320 West Temple Street, Los Angeles, CA 90012.

⁸ County of Los Angeles Department of Regional Planning. 1993. *County of Los Angeles Streamlined General Plan: Public Facilities Chapter*. Contact: Department of Regional Planning, Hall of Records, 320 West Temple Street, Los Angeles, CA 90012.

⁹ County of Los Angeles Department of Regional Planning. July 1986. *Altadena Community Plan*. Contact: Department of Regional Planning, Hall of Records, 320 West Temple Street, Los Angeles, CA 90012.

support and accommodate the proposed project without depleting the local groundwater table. No new wells or preexisting wells would be utilized to pump groundwater for the proposed project.

The proposed project would not deplete or interfere with potable water sources. During project construction, bottled water would be used for potable uses. The water companies that services the nearby communities of Altadena and Pasadena has sufficient water supplies to serve the proposed project during trail development. Potable water use during construction would be minimal and would primarily be served via the commercial bottle water company. Therefore, there would be no expected impacts to hydrology and water quality related to groundwater supplies or groundwater recharge. No further analysis is warranted.

- (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 on or off site?

The proposed project would be expected to result in impacts to hydrology and water quality related to the alteration of existing drainage patterns in a manner that would result in substantial erosion or siltation on or off site. These impacts would be expected to be reduced to below the level of significance through conformance with trail design standards specified in the County of Los Angeles Trails Manual,¹⁰ which will be specified as mitigation measures. The Altadena Crest Trail Improvements Final Feasibility Analysis identified various trails that would travel along intermittent streams.¹¹ According to the County of Los Angeles Trails Manual,¹² a trail's width would be reduced to approximately 4 to 8 feet,¹³ and a clear-span pre-fabricated bridge or comparable design component would be used to cross the stream outside areas subject to the jurisdictional authority of the U.S. Army Corps of Engineers (USACOE) and the California Department of Fish and Game (CDFG). The project would avoid alteration of the existing drainage patterns in the area through utilization of established trail construction techniques to minimize erosion and drainage on trails.¹⁴

Erosion protection measures such as geotechnical soil stabilization materials would be implemented in areas of concern.¹⁵ Erosion would be mitigated by complying with standard trail construction guidelines and recommendations from the Altadena Crest Trail Improvements Geologic Feasibility

¹⁰ County of Los Angeles. In Preparation. *County of Los Angeles Trails Manual*. Prepared by: Sapphos Environmental, Inc., Pasadena, CA.

¹¹ County of Los Angeles. 4 August 2006. *Altadena Crest Trail Improvements Final Feasibility Analysis*. Prepared by: Sapphos Environmental, Inc., 133 Martin Alley, Pasadena, CA 91105.

¹² County of Los Angeles. In Preparation. *County of Los Angeles Trails Manual*. Prepared by: Sapphos Environmental, Inc., Pasadena, CA.

¹³ County of Los Angeles. In Preparation. *County of Los Angeles Trails Manual*. Prepared by: Sapphos Environmental, Inc., Pasadena, CA.

¹⁴ County of Los Angeles. In Preparation. *County of Los Angeles Trails Manual*. Prepared by: Sapphos Environmental, Inc., Pasadena, CA.

¹⁵ County of Los Angeles. In Preparation. *County of Los Angeles Trails Manual*. Prepared by: Sapphos Environmental, Inc., Pasadena, CA.

Report.¹⁶ Therefore, impacts to hydrology and water quality in relation to alteration of existing drainage patterns in a manner that would result in substantial erosion or siltation on or off site would be reduced to below the level of significance with the incorporation of specified mitigation measures. Further analysis is warranted.

- (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 on site or off site?

The proposed project would result in impacts to hydrology and water quality related to the alteration of existing drainage patterns in a manner that would result in flooding on site or off site. These impacts would be expected to be reduced to below the level of significance with the incorporation of mitigation measures. The County of Los Angeles Department of Public Works (LADPW) is largely responsible for protection from storm water damage, for protection of groundwater quality, and for flood plain management as part of the Federal Flood Insurance Program for the majority of the counties, including the proposed project area. Flooding has been eliminated primarily by the installation of flow-control channels, storm drains, dams, debris basins, and pumping plants.¹⁷

The County of Los Angeles Trails Manual¹⁸ provides recommendations on the overall design and layout of trails in the unincorporated territory of Los Angeles County. The trail shall be designed to channel and direct water into existing channels. Depending on the soil composition, surface runoff would infiltrate into soil. The actual type of trail to be built would depend on the users, the location, and the site considerations. For trails in sensitive areas such as steep sections or regions adjacent to streams, the trail width would be reduced to 4 feet to prevent surface runoff, and stream crossings would be constructed where necessary. It is anticipated that prefabricated bridges would be used to avoid areas subject to the jurisdiction of USACOE and CDFG. According to the maintenance procedures from the County of Los Angeles Trails Manual,¹⁹ debris would be removed on an as-needed basis to allow for free flow and to reduce the risk of flooding. Low areas that channel water or are subject to inundation during heavy rain events would be repaired immediately before they get significantly worse and begin to impact surrounding sections.

The proposed project would not alter the drainage patterns in the area. The proposed improvement trails shall have an unpaved pervious surface area. With the increase in pervious surface area, runoff volume and velocity would decrease, and the frequency and severity of flooding would also decrease. Therefore, impacts to hydrology and water quality in relation to alteration of existing drainage patterns in a manner that would result in flooding on site or off site would be reduced to below the level of

¹⁶ Wilson Geosciences. 2006. *Altadena Crest Trail Improvements Geologic Feasibility Report*. Contact: Wilson Geosciences, 1910 Pincrest Drive, Altadena, CA 91001.

¹⁷ County of Los Angeles Department of Regional Planning. 1993. *County of Los Angeles Streamlined General Plan: Public Facilities Chapter*. Contact: Department of Regional Planning, Hall of Records, 320 West Temple Street, Los Angeles, CA 90012.

¹⁸ County of Los Angeles. In Preparation. *County of Los Angeles Trails Manual*. Prepared by: Sapphos Environmental, Inc., Pasadena, CA.

¹⁹ County of Los Angeles. In Preparation. *County of Los Angeles Trails Manual*. Prepared by: Sapphos Environmental, Inc., Pasadena, CA.

significance with the incorporation of specified design guidelines and mitigation measures. Further analysis is warranted.

- (e) Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or providing substantial additional sources of polluted runoff?

The proposed project would be expected to result in less than significant impacts to hydrology and water quality in relation to exceeding the capacity of existing or planned storm water drainage systems or providing substantial additional sources of polluted runoff. LADPW operates and maintains the storm drainage systems within the proposed project area.²⁰ LADPW is responsible for storm water damage and for the conservation of storm water for subsequent use.²¹ Plans to provide new underground storm drainage facilities in the nearby Altadena Community, specifically in the West Altadena Drainage System, Altadena Channel, and other areas where capacity is necessary to supplement the storm system, shall be implemented according to the Altadena Community Plan.²²

The proposed project would not impact storm water drainage systems. Grading activities would potentially result in short-term erosion and sedimentation impacts. Erosion and sedimentation from construction activities could be a source of polluted runoff. However, it would be short-term and unsubstantial. The improvement trails would result in pervious surface area, which would not have a substantial impact on the runoff volume. Sections of improvement trail areas are not served by existing storm water drainage facilities, and would not require the construction or expansion of existing public facilities related to storm water drainage. Therefore, the proposed project would not be expected to result in significant impacts to hydrology and water quality related to exceeding the capacity of existing or planned storm water drainage systems or providing substantial additional sources of polluted runoff is warranted. No further analysis is warranted.

- (f) Otherwise substantially degrade water quality?

The proposed project would result in impacts to hydrology and water quality related to substantial degradation of water quality. These impacts would be expected to be reduced to below the level of significance with the incorporation of mitigation measures, including the design and implementation of a Standard Urban Storm Water Management Plan prepared consistent with the requirements of the applicable NPDES Permit. This provision would ensure that no substantial amount of polluted runoff would be generated during construction. Surface runoff including horse waste and sediment from the trails could contribute to pollutants entering the waterways. Standard trail construction procedures to reduce erosion from the trail would be utilized for all trail designs. Appropriate management practices for erosion control and waste management should be taken to minimize the release of pollutants into the waters. Diverting runoff from trails away from waterways to low-gradient vegetated buffer areas would decrease water quality degradation. Vegetation also helps to protect water quality by slowing

²⁰ County of Los Angeles Department of Regional Planning. July 1986. *Altadena Community Plan*. Contact: Department of Regional Planning, Hall of Records, 320 West Temple Street, Los Angeles, CA 90012.

²¹ County of Los Angeles Department of Regional Planning. 1993. *County of Los Angeles Streamlined General Plan: Public Facilities Chapter*. Contact: Department of Regional Planning, Hall of Records, 320 West Temple Street, Los Angeles, CA 90012.

²² County of Los Angeles Department of Regional Planning. July 1986. *Altadena Community Plan*. Contact: Department of Regional Planning, Hall of Records, 320 West Temple Street, Los Angeles, CA 90012.

the rate of water runoff and to lessen the risk that soil and manure will be carried into streams.²³ Implementation of conservation and BMPs by way of improving drainage channels, setting up a manure storage system, or revegetating a creek would protect water quality.²⁴ Therefore, impacts to hydrology and water quality related to substantial degradation of water quality would be expected to be reduced to below the level of significance through the design and implementation of the Standard Urban Storm Water Management Plan. Further analysis is warranted.

- (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?

The proposed project would not be expected to result in impacts to hydrology and water quality in relation to placement of housing within a 100-year flood hazard area. The proposed project does not include the construction or placement of housing within floodplains. The proposed project would not affect any surface water flows, increase the risk of flooding, or place personnel within hazardous flood areas. Therefore, there would be no expected impacts to hydrology and water quality related to placement of housing within a 100-year flood hazard area. No further analysis is warranted.

- (h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?

The proposed project would result in impacts to hydrology and water quality in relation to placement of structures (other than housing) within a 100-year flood hazard area that would impede or redirect flood flows. These impacts would be expected to be reduced to below the level of significance with the incorporation of mitigation measures. The proposed project would not be located within a flood hazard area. However, stream crossings would be part of the project component. The design of trail alignments, and related stream crossings through the use of culverts and bridges would avoid and minimize impacts to stream and wetlands ecosystems to the maximum extent practicable. The project would undertake all feasible engineering solutions to maintain the baseline hydrologic conditions. In areas where a trail must traverse areas with a 100-year flood hazard, clear-span bridges set above the 100-year flood zone or other feasible options will be utilized to ensure that the hydrological conditions will not be modified to impede or redirect flood flows.²⁵ Development of the proposed project would not significantly increase the exposure of people or structures to flood hazards. Therefore, the proposed project would not result in significant impacts to hydrology and water quality related to placement of structures (other than housing) within a 100-year flood hazard area with the incorporation of mitigation measures. Further analysis is warranted.

²³ Council of Bay Area Resource Conservation Districts. October 2002. *Horse Owners Guide to Water Quality Protection*. Contact: County of Bay Area Resource Conservation Districts, 1301 Redwood Way, Suite 215, Petaluma, CA 94954.

²⁴ Council of Bay Area Resource Conservation Districts. October 2002. *Horse Owners Guide to Water Quality Protection*. Contact: County of Bay Area Resource Conservation Districts, 1301 Redwood Way, Suite 215, Petaluma, CA 94954.

²⁵ County of Los Angeles. In Preparation. *County of Los Angeles Trails Manual*. Prepared by: Sapphos Environmental, Inc., Pasadena, CA.

- (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?

The proposed project would not be expected to result in impacts to hydrology and water quality in relation to the failure of a levee or dam. According to the USGS 7.5-minute series Pasadena and Mount Wilson topographic quadrangles (Townships 1 and 2 North, Range 12 West, Section 3, and partial Sections 2, 4, 11, and 33),²⁶ the proposed project site is not located within the potential flood zone of any levees or dams. The elevation of the proposed project site ranges from 1,200 to 2,800 feet above mean sea level (msl). The proposed project area is not located downstream from a dam or levee, and there is no risk related to the failure of any flood control devices. Exposure of people or structures to flooding would not be a result of implementation of the proposed project. Development and operation of the proposed trails would not subject people or structures to flooding or dam failure. According to the maintenance procedures from the County of Los Angeles Trails Manual²⁷ for the proposed project, debris would be removed on an as-needed basis to allow for free flow and to reduce the risk of flooding and failure of levees, dams, bridges, low water crossings, open box culverts, rock drains, and other drainage structures.²⁸ Therefore, there would be no expected impacts to hydrology and water quality related to the failure of a levee or dam. No further analysis is warranted.

- (j) Inundation by seiche, tsunami, or mudflow?

The proposed project would be expected to result in impacts to hydrology and water quality related to inundation by seiche, tsunami, or mudflow. These impacts would be expected to be reduced to below the level of significance with the incorporation of mitigation measures. Construction and operation of the proposed trails would not subject people or structures to tsunami or seiche wave impacts. The proposed project would not be located near a large body of water, and thus, would not be subject to seiche or tsunami. However, during periods of heavy rainfall, debris or mudflows can accompany storm water drainage.²⁹ Compliance with design guidelines as specified in the County of Los Angeles Trails Manual,³⁰ along with control structures such as debris basins, dams, and concrete-lined flood control channels, would mitigate for potential mudflows during periods of heavy rainfall. There are currently existing control measures within the proposed project area that would mitigate for such occurrences. In addition, according to the County of Los Angeles Trails Manual³¹ maintenance procedure, mud and other sediment would be removed along with fallen leaves, branches, and fallen trees to ensure the safety of the users and to prevent culverts from clogging. This maintenance task

²⁶ U.S. Geological Survey. 1977. Pasadena and Mt. Wilson 7.5-Minute Series Topographic Quadrangle. Scale 1:24,000. Reston, VA.

²⁷ County of Los Angeles. In Preparation. *County of Los Angeles Trails Manual*. Prepared by: Sapphos Environmental, Inc., Pasadena, CA.

²⁸ County of Los Angeles. In Preparation. *County of Los Angeles Trails Manual*. Prepared by: Sapphos Environmental, Inc., Pasadena, CA.

²⁹ County of Los Angeles Department of Regional Planning. July 1986. *Altadena Community Plan*. Contact: Department of Regional Planning, Hall of Records, 320 West Temple Street, Los Angeles, CA 90012.

³⁰ County of Los Angeles. In Preparation. *County of Los Angeles Trails Manual*. Prepared by: Sapphos Environmental, Inc., Pasadena, CA.

³¹ County of Los Angeles. In Preparation. *County of Los Angeles Trails Manual*. Prepared by: Sapphos Environmental, Inc., Pasadena, CA.

would be required for all trail surfaces.³² Therefore, impacts to hydrology and water quality in relation to the inundation by seiche, tsunami, or mudflow would be reduced to below the level of significance with the incorporation of mitigation measures. Further analysis is warranted.

³² County of Los Angeles. In Preparation. *County of Los Angeles Trails Manual*. Prepared by: Sapphos Environmental, Inc., Pasadena, CA.

3.9 LAND USE AND PLANNING

This analysis is undertaken to determine if the Altadena Crest Trail Improvement (proposed project) would have a significant impact to land use and planning, thus requiring the consideration of mitigation measures or alternatives, in accordance with Section 15063 of the State of California Environmental Quality Act Guidelines (State CEQA Guidelines).¹ Land use and planning at the proposed project site was evaluated in light of the published Altadena Community Plan land use map² and Altadena Community Plan zoning map,³ the adopted County of Los Angeles General Plan⁴ and County of Los Angeles Altadena Community Plan,⁵ a query of the California Natural Diversity Database (CNDDDB),⁶ and in consultation with the resource agency personnel of U.S. Forest Service⁷ and U.S. Fish and Wildlife Service (USFWS).⁸

The State CEQA Guidelines recommend the consideration of three questions when addressing the potential for significant impacts to land use and planning:

Would the proposed project have any of the following effects:

- (a) Physically divide an established community?

The proposed project would not be expected to result in impacts to land use and planning through the physical division of an established community. The proposed project was evaluated to determine the compatibility with existing land uses, the County of Los Angeles General Plan,⁹ and the County of Los Angeles Altadena Community Plan.¹⁰ The evaluation determined that none of the existing land uses or assigned land use designations are incompatible with or deny the use of trails or trail easements.

¹ State of California. *California Code of Regulations*. Title 14, Chapter 3, Article 5, Sections 15060–15065, Appendix G.

² County of Los Angeles Department of Regional Planning. July 1986, Amended 1989. *Altadena Community Plan Map*. Contact: Department of Regional Planning, Hall of Records, 320 West Temple Street, Los Angeles, CA 90012.

³ County of Los Angeles Department of Regional Planning. August 2005. *Altadena Zoning Map*. Contact: Department of Regional Planning, Hall of Records, 320 West Temple Street, Los Angeles, CA 90012.

⁴ County of Los Angeles Department of Regional Planning. 1993. *County of Los Angeles Streamlined General Plan*. Contact: Department of Regional Planning, Hall of Records, 320 West Temple Street, Los Angeles, CA 90012.

⁵ County of Los Angeles Department of Regional Planning. July 1986. *Altadena Community Plan*. Contact: Department of Regional Planning, Hall of Records, 320 West Temple Street, Los Angeles, CA 90012.

⁶ California Department of Fish and Game. 2002. *Rarefind 2: A Database Application for the Use of the California Department of Fish and Game Natural Diversity Database*. Sacramento, CA.

⁷ Welch, Leslie, U.S. Forest Service. 7 July 2005. Personal communication with Ms. Melissa Solares, Sapphos Environmental, Inc., Pasadena, CA.

⁸ Goebel, Karen A., U.S. Fish and Wildlife Service. 12 January 2006. Letter communication with Ms. Kara Donohue, Sapphos Environmental, Inc., Pasadena, CA.

⁹ County of Los Angeles Department of Regional Planning. 1993. *County of Los Angeles Streamlined General Plan*. Contact: Department of Regional Planning, Hall of Records, 320 West Temple Street, Los Angeles, CA 90012.

¹⁰ County of Los Angeles Department of Regional Planning. July 1986. *Altadena Community Plan*. Contact: Department of Regional Planning, Hall of Records, 320 West Temple Street, Los Angeles, CA 90012.

The trail primarily traverses along the northern border of the Altadena Community. This area is characterized by the steep slopes of the San Gabriel Foothills and the land use is characterized by existing hiking and equestrian trails. The County of Los Angeles General Plan and the adopted Altadena Community Plan designate the proposed project as within the following land use designations:

- Non-Urban (N): This land use allows up to one housing unit per 1 gross acre and hillside development standards.
- Flood Control Facilities (FC): This land use allows use for Public Works Department, Flood Control District sites, and others.
- National Forest and National Forest Management Lands (NF): This land use designates Angeles National Forest boundaries and retains open space.
- Estate/Equestrian (1): This land use allows for one housing unit per 2.5 gross acres.
- Low Density Residential (2): This land use allows for one to six housing units per 1 gross acre.
- Utilities (U): This land use allows all facilities related to electricity.
- La Vina Specific Plan area: Portions of the proposed project pass through this specific plan for this development area.

Although the proposed trail would weave between a few hillside residences, one of the central purposes of the trail project is to encourage the cohesion of the community through improving walk ability and access for multiple users. Planning documents, maps, and aerial photography were reviewed,¹¹ and extensive geographic information system (GIS) analysis and site visits were conducted to determine the location of the proposed project in relation to the community in which it is located. The surrounding community is characterized by the rugged steep slopes of the foothills, which are traversed by existing trails and frequented by local hikers, bicyclists, and equestrians. The proposed project is located in a manner that is compatible with the existing community and would not cause a physical division within the established community. Therefore, there would be no expected impacts to land use and planning resulting in a physical division of the established community. No further analysis is warranted.

- (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?

The proposed project would not be expected to result in impacts to land use and planning in relation to a conflict with adopted or proposed land use plans, policies, or regulations. However, the proposed project would require an update to the Altadena Community Plan to incorporate the trail alignments. Therefore, further analysis is warranted.

The proposed project is located in the unincorporated area of Altadena, and land use jurisdiction resides with the County of Los Angeles. The proposed project extends through many properties of varying ownership, including the U.S. Department of Agriculture Forest Service, La Vina Homeowners Association, County of Los Angeles, County Los Angeles Department of Public Works, Los Angeles County Flood Control District, Pasadena Water and Power, and various private land owners. The

¹¹ County of Los Angeles Department of Regional Planning. August 2005. *Altadena Zoning Map*. Contact: Department of Regional Planning, Hall of Records, 320 West Temple Street, Los Angeles, CA 90012.

proposed project would comply with the Angeles National Forest Land Management Plan standards, which supports trail development.¹² In 1986, the County of Los Angeles adopted the Altadena Community Plan¹³ to guide land use for the Altadena area. The County of Los Angeles General Plan and Altadena Community Plan designate the proposed project as within the following land use designations:

- Non-Urban (N): This land use allows up to one housing unit per 1 gross acre and hillside development standards.
- Flood Control Facilities (FC): This land use allows use for Public Works Department, Flood Control District sites, and others.
- National Forest and National Forest Management Lands (NF): This land use designates Angeles National Forest boundaries and retains open space.
- Estate/Equestrian (1): This land use allows for one housing unit per 2.5 gross acres.
- Low Density Residential (2): This land use allows for one to six housing units per 1 gross acre.
- Utilities (U): This land use allows all facilities related to electricity.
- La Vina Specific Plan area: Portions of the proposed project pass through this specific plan for this development area.

The proposed project is consistent with the goals and policies of the County of Los Angeles General Plan and the Streamlined General Plan, which articulates a commitment toward the creation of recreational opportunities and spaces as stated by the goals and policies of the Conservation and Open Space element of the Streamlined General Plan. The proposed project fulfills the General Plan goal specified below by providing 12.4 miles of continuous trails:

Goal: Improve opportunities for a variety of outdoor recreational experiences.

Policy 30: Provide low-intensity outdoor recreation in areas of scenic and ecological value compatible with protection of these natural resources.

The 1993 County of Los Angeles Streamlined General Plan¹⁴ and the future General Plan Update, "Shaping the Future 2025"¹⁵ have included Altadena foothills, through which the proposed project traverses, in the proposed Altadena significant ecological area (SEA).¹⁶ The General Plan designates

¹² U.S. Department of Agriculture Forest Service. 1987. *Angeles National Forest Land and Resources Management Plan*. Contact: Forest Service Pacific Southwest Region, 1323 Club Drive, Vallejo, CA 94592.

¹³ County of Los Angeles Department of Regional Planning. July 1986. *Altadena Community Plan*. Contact: Department of Regional Planning, Hall of Records, 320 West Temple Street, Los Angeles, CA 90012.

¹⁴ County of Los Angeles Department of Regional Planning. 1993. *County of Los Angeles Streamlined General Plan: Significant Ecological Areas*. Contact: Department of Regional Planning, Hall of Records, 320 West Temple Street, Los Angeles, CA 90012. Available at: <http://ceres.ca.gov/docs/data/0700/791/HYPEROCR/hyperocr.html>

¹⁵ County of Los Angeles Department of Regional Planning. January 2004. *Shaping the Future 2025*. Contact: Department of Regional Planning, Hall of Records, 320 West Temple Street, Los Angeles, CA 90012. Available at: http://planning.co.la.ca.us/gp_update/images/Shaping2025_XXIX_no_logo_page11.pdf

¹⁶ County of Los Angeles Department of Regional Planning. Last accessed 19 April 2006. General Plan Update Program, General Plan Maps: Proposed SEA Maps. Web site. Los Angeles, CA. Available at: http://planning.co.la.ca.us/gp_update/drp_gp_maps.htm

several forms of passive recreation, including hiking trails, as a compatible and appropriate land use within SEAs.¹⁷

The existing Altadena Community Plan does not identify the routes for the Altadena Crest Trail.¹⁸ Therefore, the Altadena Community Plan would be updated to ensure the Altadena Crest Trail is identified for recreational users, and to ensure the trail alignments are incorporated into any future developments in the area.

While the Altadena Crest Trail is consistent and would not be expected to impact land use and planning related to a conflict with adopted or proposed land use plans, policies, or regulations, it will require an update to the community plan. Therefore, further analysis is warranted.

(c) Conflict with any applicable habitat conservation plan or natural community conservation plan?

The proposed project would not be expected to result in impacts to land use and planning in relation to a conflict with any applicable habitat conservation plan or natural community conservation plan. The proposed project area is not located in an area proposed or adopted as part of a habitat conservation plan.¹⁹ Therefore, there would be no expected impacts to land use and planning related to a conflict with any adopted habitat conservation plan or natural community conservation plan. No further analysis is warranted.

¹⁷ County of Los Angeles Department of Regional Planning. 1993. *County of Los Angeles Streamlined General Plan: Significant Ecological Areas*. Contact: Department of Regional Planning, Hall of Records, 320 West Temple Street, Los Angeles, CA 90012. Available at: <http://ceres.ca.gov/docs/data/0700/791/HYPEROCR/hyperocr.html>

¹⁸ County of Los Angeles Department of Regional Planning. July 1986. *Altadena Community Plan*. Contact: Department of Regional Planning, Hall of Records, 320 West Temple Street, Los Angeles, CA 90012.

¹⁹ California Department of Fish and Game. December 2005. "Natural Community Conservation Planning." Web site. Sacramento, CA. Available at: <http://www.dfg.ca.gov/nccp/>

3.10 MINERAL RESOURCES

This analysis is undertaken to determine if the Altadena Crest Trail Improvements (proposed project) may have a significant impact on mineral resources, thus requiring the consideration of mitigation measures or alternatives in accordance with Section 15063 of the State of California Environmental Quality Act Guidelines (State CEQA Guidelines).¹ Mineral resources at the proposed project site were evaluated based on information from California Division of Mines and Geology publications and the County Los Angeles General Plan.²

The State CEQA Guidelines recommend the consideration of two questions when addressing the potential for significant impacts to mineral resources:

Would the proposed project have either of the following effects:

- (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?

The proposed project would not be expected to result in impacts to mineral resources related to the loss of availability of a known mineral resource. Based on a review of California Division of Mines and Geology publications,³ there are no known mineral resources of statewide or regional importance located within the proposed project site.

The County of Los Angeles contains 25 active mines, including an abundant amount of active sand and gravel, dimension stone, clay, decorative rock, and tungsten producers.⁴ There is one sand and gravel mine located in the vicinity of the proposed project site, but it would not be affected by the proposed project. The mine is located approximately 10 miles southeast of the proposed project site, along Interstate 210 (I-210). Therefore, the proposed project would not be expected to result in impacts to mineral resources related to the loss of availability of a known mineral resource. No further analysis is warranted.

- (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?

The proposed project would not be expected to result in impacts to mineral resources in relation to the loss of availability of a known mineral resource recovery site. Based on a review of the California Division of Mines and Geology publications, the County of Los Angeles is abundant in sand and gravel deposits, including two sand and gravel resource recovery sites of local importance located 10 miles

¹ State of California. *California Code of Regulations*. Title 14, Chapter 3, Article 5, Sections 15060–15065, Appendix G.

² County of Los Angeles Department of Regional Planning. Revised 1991. *County of Los Angeles General Plan: Conservation and Open Space Element*. Contact: Department of Regional Planning, Hall of Records, 320 West Temple Street, Los Angeles, CA 90012.

³ California Geological Survey. 1966. *Minerals of California Volume (1866–1966)*. Bulletin 189. Sacramento, CA.

⁴ California Geological Survey. 1999. *Mines and Mineral Producers Active in California (1997–1998)*. Special Publication 103. Sacramento, CA.

southeast of the proposed project site. According to the County of Los Angeles General Plan,⁵ there are no known mineral resource recovery sites within the proposed project site. Therefore, there would be no expected impacts to mineral resources related to the loss of availability of an important, locally known mineral resource recovery site. No further analysis is warranted.

⁵ County of Los Angeles Department of Regional Planning. Revised 1991. *County of Los Angeles General Plan: Conservation and Open Space Element*. Contact: Department of Regional Planning, Hall of Records, 320 West Temple Street, Los Angeles, CA 90012.

3.11 NOISE

This analysis is undertaken to determine if the Altadena Crest Trail Improvements (proposed project) would have a significant impact from noise, thus requiring the consideration of mitigation measures or alternatives, in accordance with Section 15063 of the State of California Environmental Quality Act Guidelines (State CEQA Guidelines).¹ The assessment of noise considers all phases of project planning, construction, and operation. The conclusions rely on information from the County of Los Angeles Department of Public Works and a review of the County of Los Angeles General Plan Noise element.²

The State CEQA Guidelines recommend the consideration of six questions when addressing the potential for significant impact from noise:

Would the proposed 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?

Implementation of the proposed project would be expected to result in less than significant impacts from noise in relation to exposure or generation of noise levels in excess of established standards, including the County of Los Angeles General Plan, Noise element. The proposed project would be expected to result in intermittent noise impacts during grading of the trails, parking areas, and construction of the proposed restrooms. The proposed project, as currently conceived, would provide 12.4 miles of continuous trails, consisting of 6.4 miles of new trails and 6 miles of existing trails. Subsequently, construction activities would be anticipated to consist of minor grading for 6.4 miles of new trails, 4,000 square feet of one parking lot, and 880 square feet for two restrooms. The duration for construction would be expected to last approximately six months. Noise generated during construction of the proposed project would not be expected to exceed standards.

The U.S. Environmental Protection Agency (EPA) estimates that noise levels on construction sites normally reach 90 decibels at a distance of 50 feet from the construction site. If noise disturbance crosses a residential or commercial property line, the County of Los Angeles limits the use of construction equipment to hours between 7:00 a.m. and 7:00 p.m., Monday through Saturday.³ Therefore, the proposed project would be expected to result in less than significant impacts from noise in relation to exposure or generation of noise levels in excess of established standards by utilizing established County limits regarding construction operation. No further analysis is warranted.

¹ State of California. *California Code of Regulations*. Title 14, Chapter 3, Article 5, Sections 15060–15065, Appendix G.

² County of Los Angeles Department of Regional Planning. January 2004. *Shaping the Future 2025: Noise Element*. Contact: Department of Regional Planning, Hall of Records, 320 West Temple Street, Los Angeles, CA 90012. Available at: http://planning.co.la.ca.us/gp_update/images/Shaping2025_XXIX_no_logo_page11.pdf

³ County of Los Angeles. County Code. Title 12, Chapter 12.08, “Noise Control.” Available at: <http://ordlink.com/codes/lacounty/index.htm>

- (b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

The proposed project would be expected to result in impacts from noise in relation to generation of excessive ground-borne vibration or ground-borne noise. These impacts would be expected to be reduced to below the level of significance with the incorporation of mitigation measures. A small excavator and mechanical wheelbarrow would be utilized to complete the construction of the trail. Any ground-borne vibration or ground-borne noise levels would be expected to be short term and would originate from earth movement in the grading and excavation stage. Operation and maintenance of the proposed project would not require use of heavy equipment or earth-moving activities and, therefore, would not be expected to generate impacts related to ground-borne vibration or ground-borne noise levels. Therefore, impacts from noise related to excessive ground-borne vibration or ground-borne noise levels would be reduced below the level of significance with the incorporation of mitigation measures. Further analysis is warranted.

- (c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

The proposed project would not be expected result in impacts from noise in relation to permanent increases in ambient noise levels. Implementation of the proposed project would not permanently increase the ambient noise levels in the proposed project's vicinity above existing baseline conditions. The potential increase in ambient noise levels as a result of additional automobiles at the parking areas and pedestrians at the trails, would be consistent with existing ambient community noise levels. The nearest sensitive noise receptors are residential land uses throughout the proposed project area. Ambient noise levels up to 60 dBA (decibels, A-weighted sound levels) are normally acceptable for residential land uses.⁴ Vehicular and recreational uses are existing components of the ambient noise environment.

The existing 6 miles of trails are designed for 1,267 users based on an estimate of 50 feet of trail per user.⁵ Therefore, the expected addition of 6.4 miles of trails would accommodate 1,267 additional users for the new trail segments. Therefore, there would be no substantial permanent increases in ambient noise levels as a result of the proposed project. No further analysis is warranted.

- (d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Implementation of the proposed project would generate short-term, intermittent noise during construction and maintenance of the proposed project that would constitute a less than significant impact on ambient noise levels. Construction and maintenance activities would be undertaken during

⁴ California Department of Health Services, Office of Noise Control. February 1976. Guidelines for the Preparation and Content of Noise Elements of the General Plan. Contact: California Department of Health Services, Office of Noise Control, P.O. Box 942732, Sacramento, CA 94234-7320.

⁵ County of Los Angeles Department of Parks and Recreation. April 2004. *Strategic Asset Management Plan (SAMP) for 2020*. Prepared by: County of Los Angeles Chief Administrative Office and County of Los Angeles Department of Parks and Recreation, with technical assistance by Sapphos Environmental, Inc.

the times allowed by the County of Los Angeles Noise Ordinance, which limits equipment use to hours between 7:00 a.m. and 7:00 p.m., Monday through Saturday.⁶

The proposed project, as currently conceived, anticipates grading for new trails, one parking lot, and two restrooms. Construction activities would be anticipated to consist of minor grading for the 6.4 miles of new trail segments, 4,000 square feet of one parking lot, and approximately 880 square feet for two restrooms. The majority of the proposed trails would occur in undeveloped lands, but portions would also occur in an urban-wildlife interface. The parking lot and restrooms would be constructed in areas closer to the urban community. The majority of the proposed work would be located more than 1,000 feet from residences. Approximately 1,000 residences would be located within 1,000 feet of the proposed project where construction and related activities may be audible; although not at unacceptable levels. Therefore, impacts from noise in relation to temporary or periodic increases in ambient noise levels would be expected to result in less than significant impacts. No further analysis is warranted.

- (e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 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?

The proposed project would not be expected to result in impacts to noise in relation to public airports. According to the County of Los Angeles Airport Land Use Commission (ALUC), the proposed project would not be located within a 1-mile radius of an existing airport land use plan.⁷ The nearest public airports to the proposed project area are the El Monte Airport located at 4233 Santa Anita Avenue in the City of El Monte, approximately 11 miles southeast of the proposed project area, and the Bob Hope Airport located at 2627 North Hollywood Way in the City of Burbank, approximately 11 miles west of the proposed project area.⁸ Therefore, implementation of the proposed project would not be expected to expose people residing or working in the proposed project area to excessive noise levels from a public airport or public use airport. No further analysis is warranted.

- (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?

The proposed project would not be expected to result in impacts to noise in relation to private airstrips. The closest private airstrip is the closest private airstrip is the Bob Hope Airport, which includes a private airstrip, located approximately 11 miles from the proposed project area in the City of Burbank. Therefore, implementation of the proposed project would not be expected to expose people residing or working in the proposed project area to excessive noise levels from a private airstrip. No further analysis is warranted.

⁶ County of Los Angeles. County Code. Title 12, Chapter 12.08, "Noise Control." Available at: <http://ordlink.com/codes/lacounty/index.htm>

⁷ County of Los Angeles Airport Land Use Commission, Department of Regional Planning. 19 December 1991 (Revised 1 December 2004). *Los Angeles County Airport Land Use Plan*. Los Angeles, CA.

⁸ Google, Inc. 2005. Accessed on 17 May 2006. Google Earth Beta Version 3.0. Mountain View, CA.

3.12 POPULATION AND HOUSING

This analysis is undertaken to determine if the Altadena Crest Trail Improvements (proposed project) would have a significant impact to population and housing, thus requiring the consideration of mitigation measures or alternatives, in accordance with Section 15063 of the State of California Environmental Quality Act Guidelines (State CEQA Guidelines).¹ Population and housing at the proposed project site were evaluated with regard to state, regional, and local data; forecasts for population and housing from the U.S. Census Bureau,² Southern California Association of Governments,³ County of Los Angeles General Plan,⁴ and Strategic Asset Management Plan;⁵ and the proximity of the proposed project to existing and planned utility infrastructure.

The State CEQA Guidelines recommend the consideration of three questions when addressing the potential for significant impacts to population and housing:

Would the proposed project have any of the following effects:

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

The proposed project would not be expected to result in impacts to population and housing in relation to inducing substantial direct or indirect population growth. The Altadena Community, located within the unincorporated territory of the County of Los Angeles is deficient in terms of recreation, facilities, and programs.⁶ The population as recorded in the most recent census is 42,610 and is expected to increase to 48,329 by the year 2020.^{7,8} Specifically, there is an existing deficiency of 152 miles of trails that is expected to increase to 191 miles by the year 2020. The proposed project would reduce the existing deficiency by approximately 6 miles (3 percent).⁹ Pursuant to State CEQA Guidelines, Section 15064.7, typical established local thresholds of significance for housing and population growth

¹ State of California. California Code of Regulations. Title 14, Chapter 3, Article 5, Sections 15060–15065, Appendix G.

² U.S. Census Bureau. American FactFinder. Altadena, CA. Available at: <http://factfinder.census.gov/>

³ Southern California Association of Governments. January 1995. *Regional Comprehensive Plan and Guide*. Los Angeles, CA.

⁴ County of Los Angeles Department of Regional Planning. January 1993. *County of Los Angeles Streamlined General Plan*. Los Angeles, CA.

⁵ County of Los Angeles Department of Parks and Recreation. 30 January 2004. *Strategic Asset Management Plan (SAMP) for 2020*. Los Angeles, CA.

⁶ County of Los Angeles Department of Parks and Recreation. 30 January 2004. *Strategic Asset Management Plan (SAMP) for 2020*. Los Angeles, CA.

⁷ U.S. Census Bureau. American FactFinder. Altadena, CA. Available at: <http://factfinder.census.gov/>

⁸ County of Los Angeles Department of Parks and Recreation. 30 January 2004. *Strategic Asset Management Plan (SAMP) for 2020*. Los Angeles, CA.

⁹ County of Los Angeles Department of Parks and Recreation. 30 January 2004. *Strategic Asset Management Plan (SAMP) for 2020*. Los Angeles, CA.

include effects that would induce substantial growth or concentration of a population beyond County projections; alter the location, distribution, density, or growth rate of the population beyond that projected in the County of Los Angeles General Plan Housing element; result in a substantial increase in demand for additional housing; or create a development that significantly reduces the ability of the County to meet housing objectives set forth in the County of Los Angeles General Plan Housing element.¹⁰ The proposed project is estimated to require construction of up to 15 miles of trails under the supervision of a professional trail consultant with four to five crew members. The required professionals would be available within the existing labor force of Los Angeles County. Therefore, the proposed project would not be expected to result in a demand for additional homes or businesses in the Altadena Community.

The proposed project would not induce substantial population growth in an area requiring expansion of existing roadways or the construction of new homes. Therefore, the proposed project would not be expected to result in impacts to population and housing in relation to inducing substantial direct or indirect population growth. No further analysis is warranted.

(b) Displace substantial amounts of existing housing, necessitating the construction of replacement housing elsewhere?

The proposed project would not impact existing housing, necessitating the construction of replacement housing elsewhere. The proposed project consists of properties owned by the County of Los Angeles, U.S. Forest Service, La Vina Homeowners Association (HOA), and private individuals. The proposed property site is relatively undeveloped with the exception of the existing scattered developed trails and recreation areas.

The proposed project, would involve the construction of 6.4 miles of new trails, five potential trailheads, and improvements to 6 miles of existing trail segments. The goal of the proposed project is to link existing trail segments to create a continuous trail from the Hahamongna Watershed Park on the west to the Eaton Canyon Natural Area on the east. The existing and proposed trail portions intertwine through patches of urban development and patches of natural habitat, which traverses the foothills of the San Gabriel Mountains. Therefore, the proposed project would not be expected to result in the displacement of existing housing, necessitating the construction of replacement housing. No further analysis is warranted.

(c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

The proposed project would not result in impacts to population and housing in relation to the displacement of substantial numbers of people, necessitating the construction of replacement housing elsewhere. The proposed property site is relatively undeveloped with the exception of the existing scattered developed trails and recreation areas. Therefore, there would be no expected impacts to population and housing related to the displacement of substantial numbers of people. No further analysis is warranted.

¹⁰ State of California. *California Code of Regulations*. Title 14, Chapter 3, Article 5, Sections 15060–15065, Appendix G.

3.13 PUBLIC SERVICES

This analysis is undertaken to determine if the Altadena Crest Trail Improvements (proposed project) would have a significant impact to public services, thus requiring the consideration of mitigation measures or alternatives, in accordance with Section 15063 of the State of California Environmental Quality Act Guidelines (State CEQA Guidelines).¹ Public services at the proposed project site were evaluated based on review of the County of Los Angeles General Plan,² Altadena Community Plan,³ and previously completed environmental documentation,⁴ as well as coordination with the County of Los Angeles Fire Department and County of Los Angeles Sheriff's Department.^{5,6}

State CEQA Guidelines recommend the consideration of the following question when addressing the potential for significant impact to public services:

- (a) Would the proposed project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:
 - i) Fire protection?

The proposed project would not be expected to result in impacts to public services in relation to fire protection. The proposed project provides recreational facilities to service existing County residents and visitors. The proposed project would be serviced by existing fire protection services, listed in Table 3.13-1, *Fire Stations in the Project Vicinity*, and can be accessed through the neighborhood street infrastructure or the existing fire road. In addition, search and rescue response in the proposed project area would be provided by the existing Altadena fire protection services. The response time and distances from existing County fire stations is consistent with the County of Los Angeles Fire Department planning criteria of requiring a fire station within 3 miles of the service area.⁷ Therefore,

¹ State of California. *California Code of Regulations*. Title 14, Chapter 3, Article 5, Sections 15060–15065, Appendix G.

² County of Los Angeles Department of Regional Planning. Adopted 6 December 1990. *Streamlined County of Los Angeles General Plan*. Contact: Department of Regional Planning, Hall of Records, 320 West Temple Street, Los Angeles, CA 90012.

³ County of Los Angeles Department of Regional Planning. July 1986. *Altadena Community Plan*. Contact: Department of Regional Planning, Hall of Records, 320 West Temple Street, Los Angeles, CA 90012.

⁴ County of Los Angeles. 4 August 2006. *Altadena Crest Trail Improvements Final Feasibility Analysis*. Prepared by: Sapphos Environmental, Inc., 133 Martin Alley, Pasadena, CA 91105.

⁵ Lieutenant Young, Operations Manager, County of Los Angeles Sheriff's Department, Altadena Station, 780 East Altadena Drive, Altadena, CA 91001. 30 November 2005. Personal communication with Mr. Andrew Hall, Sapphos Environmental, Inc., Pasadena, CA.

⁶ Captain Childs, Captain of County of Los Angeles Fire Station 12, Altadena Station, 2760 North Lincoln Avenue, Altadena, CA 91001. 13 December 2005. Personal communication with Mr. Andrew Hall, Sapphos Environmental, Inc., Pasadena, CA.

⁷ Herrera, Barbara. County of Los Angeles Fire Department, Los Angeles, CA. 22 December 2005. Personal Communication with Mr. Andrew Hall, Sapphos Environmental, Inc., Pasadena, CA.

the proposed project would not require the construction of a new fire station or expansion of an existing fire station. Therefore, there would be no expected impacts to public services related to fire services. No further analysis is warranted.

**TABLE 3.13-1
FIRE STATIONS IN THE PROJECT VICINITY⁸**

Station	Location	Personnel / Equipment	Distance to Site
No. 11	2521 North El Molino Avenue Altadena, CA 91001-2317 (626) 797-2104	Five personnel, one engine company, one paramedic truck	1.1 miles
No. 12	2760 North Lincoln Avenue Altadena, CA 91001-4961 (626) 797-1911	Four personnel, equipment, and one truck	0.9 mile
No. 82	352 North Foothill Boulevard La Canada Flintridge, CA 91011 (818) 790-4686	Light task force including two engine companies, a truck, and a patrol and battalion chief	0.5 mile

ii) Police protection?

The proposed project would not be expected to result in impacts to public services in relation to police protection. The proposed project would improve a series of existing trails within the service for the County of Los Angeles Sheriff's Department, Altadena Station, located at 780 East Altadena Drive, Altadena, California 91001. The Altadena Station would provide police protection for the proposed project both within the Altadena area and the Angeles National Forest. The Forest Service would respond to non-law enforcement actions for the portion of the proposed project area in the Angeles National Forest. The Altadena Station has adequate staff to provide sufficient protection to the proposed project area.⁹ Therefore, there would be no expected impacts to public services related to police protection. No further analysis is warranted.

iii) Schools?

The proposed project would not be expected to result in impacts to public services in relation to schools. The proposed project provides recreational facilities to serve existing County residents and visitors. Therefore, the proposed project would not be expected to induce population growth in the area, and would thus not increase the demand for schools in the area. Therefore, there would be no expected impacts to public services related to schools. No further analysis is warranted.

⁸ Captain Childs, Captain of County of Los Angeles Fire Station 12, Altadena Station, 2760 North Lincoln Avenue, Altadena, CA 91001. 13 December 2005. Personal communication with Mr. Andrew Hall, Sapphos Environmental, Inc., Pasadena, CA.

⁹ Lieutenant Young, Operations Manager, County of Los Angeles Sheriff's Department, Altadena Station, 780 East Altadena Drive, Altadena, CA 91001. 30 November 2005. Personal communication with Mr. Andrew Hall, Sapphos Environmental, Inc., Pasadena, CA.

iv) Parks?

The proposed project would not be expected to result in impacts to public services in relation to parks. The proposed project includes trail improvements and new trail extensions that would partially offset the existing unmet need for trails in the County of Los Angeles. Thus, the proposed project would be expected to relieve pressure on existing recreation facilities in the region. The proposed project also includes new restroom facilities, which would offset any potential impacts. Therefore, there would be no expected impacts to public services related to parks. No further analysis is warranted.

v) Other public facilities?

The proposed project would not be expected to result in impacts to public services in relation to other public facilities. The proposed project would not be expected to increase use of public libraries, hospitals, airports, or cemeteries. Therefore, there would be no expected impacts to public services related to other public facilities. No further analysis is warranted.

3.14 RECREATION

This analysis is undertaken to determine if the Altadena Crest Trail Improvements (proposed project) would have a significant impact to recreation, thus requiring the consideration of mitigation measures or alternatives, in accordance with Section 15063 of the State of California Environmental Quality Act Guidelines (State CEQA Guidelines).¹ This assessment of recreation considers the Angeles National Forest Land and Resources Management Plan;² California's Recreation Policy;³ County of Los Angeles General Plan Open Space, Conservation, and Recreation elements;⁴ County of Los Angeles General Plan Regional Recreation Areas Plan;⁵ Shaping the Future 2025;⁶ Los Angeles County Riding and Hiking Trails Map;⁷ and County of Los Angeles Department of Parks and Recreation Strategic Assessment Management Plan (SAMP).⁸

The requirement and deficiency of trails in the Altadena Community, an unincorporated territory of Los Angeles County, was evaluated using the SAMP for the County of Los Angeles Department of Parks and Recreation, which identified an anticipated unmet demand of 191 miles of additional trails by the year 2020.⁹ The unmet demand is based on 11 percent of the 2020 projected population of 201,807 for the Altadena Recreation Planning Area,¹⁰ participating in hiking, and the need for 50 feet of trail

¹ State of California. *California Code of Regulations*. Title 14, Chapter 3, Article 5, Sections 15060–15065, Appendix G.

² U.S. Forest Service Pacific Southwest Region. November 2005. *Angeles National Forest Land and Resources Management Plan*. Contact: Pacific Southwest Region, 1323 Club Drive, Vallejo, CA 94592.

³ California State Parks. 2005. *California's Recreation Policy*. Sacramento, CA: California State Parks. Available at: <http://www.parks.ca.gov/pages/795/files/recpolicy.pdf>

⁴ County of Los Angeles Department of Regional Planning. 1986. *County of Los Angeles General Plan: Open Space, Conservation, and Recreation Elements*. Contact: Department of Regional Planning, Hall of Records, 320 West Temple Street, Los Angeles, CA 90012.

⁵ County of Los Angeles Department of Regional Planning. 1986. *County of Los Angeles General Plan: Regional Recreation Areas Plan*. Contact: Department of Regional Planning, Hall of Records, 320 West Temple Street, Los Angeles, CA 90012.

⁶ County of Los Angeles Department of Regional Planning. January 2004. *Shaping the Future 2025: Conservation/Open Space Element*. Contact: Department of Regional Planning, Hall of Records, 320 West Temple Street, Los Angeles, CA 90012. Available at: http://planning.co.la.ca.us/gp_update/images/Shaping2025_XXIX_no_logo_page11.pdf

⁷ County of Los Angeles Department of Regional Planning. 1992. *Riding and Hiking Trails Map*. Contact: Department of Regional Planning, Hall of Records, 320 West Temple Street, Los Angeles, CA 90012.

⁸ County of Los Angeles Department of Parks and Recreation. April 2004. *Strategic Asset Management Plan (SAMP) for 2020*. Prepared by: County of Los Angeles Chief Administrative Office and County of Los Angeles Department of Parks and Recreation, with technical assistance by Sapphos Environmental, Inc.

⁹ County of Los Angeles Department of Parks and Recreation. April 2004. *Strategic Asset Management Plan (SAMP) for 2020*. Prepared by: County of Los Angeles Chief Administrative Office and County of Los Angeles Department of Parks and Recreation, with technical assistance by Sapphos Environmental, Inc.

¹⁰ County of Los Angeles Department of Parks and Recreation. April 2004. *Strategic Asset Management Plan (SAMP) for 2020*. Prepared by: County of Los Angeles Chief Administrative Office and County of Los Angeles Department of Parks and Recreation, with technical assistance by Sapphos Environmental, Inc.

per participant.¹¹ The Altadena Crest Trail would provide much needed multiuse recreational trails to meet the needs of the County. The County of Los Angeles Streamlined General Plan includes goals and principles related to recreation resources, including the expansion of low-intensity outdoor recreation in areas of scenic and ecological value, compatible with protection of these natural resources.¹² The Altadena Community is located within District 5, Recreation Planning Area 3, which as of 2004 was deficient in hiking trails by approximately 152 miles and deficient in bicycle trails by approximately 133 miles.¹³

The proposed project is designed to serve the current and anticipated demand for additional recreation assets within the Altadena Community. The proposed project, as currently conceived, may involve the construction of 6.4 miles of new trails, five potential trailheads, and improvements to 6 miles of existing trail segments, creating a continuous trail from the Hahamongna Watershed Park on the west to Eaton Canyon Natural Area on the east. The proposed project would allow the County of Los Angeles to move closer to meeting the goals and objectives of the County of Los Angeles General Plan Open Space, Conservation, and Recreation elements¹⁴ and the Angeles National Forest Land and Resources Management Plan,¹⁵ both of which encourage the development of multiuse trails.

The State CEQA Guidelines recommend the consideration of two questions when addressing the potential for significant impact to recreation:

- (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?

The proposed project would be expected to result in less than significant impacts to recreation in relation to increased use of existing neighborhood and regional parks or other recreational facilities that would contribute to their physical deterioration. The proposed project would provide a recreational asset to County of Los Angeles residents and visitors providing 6.4 miles of new trail to accommodate 1,267 users that would partially offset the existing deficiency of recreational resources, particularly trails in the Altadena Community. Therefore, the proposed project would be expected to relieve pressure on existing recreational resources, including existing neighborhood and regional parks. Two park facilities are within a 1-mile radius of the proposed project. These parks include Loma Alta County Park near Loma Alta Drive and Lake Avenue and Eaton Canyon Natural Area (regional park) to the east of the proposed project and Hahamongna Watershed Park on the western extent. The

¹¹ Mertes, James D., and James R. Hall. 1996. *Park, Recreation, Open Space and Greenway Guidelines*. Ashburn, VA: National Recreation and Park Association.

¹² County of Los Angeles Department of Regional Planning. January 1993. *County of Los Angeles Streamlined General Plan*. Los Angeles, CA.

¹³ County of Los Angeles Department of Parks and Recreation. April 2004. *Strategic Asset Management Plan (SAMP) for 2020*. Prepared by: County of Los Angeles Chief Administrative Office and County of Los Angeles Department of Parks and Recreation, with technical assistance by Sapphos Environmental, Inc.

¹⁴ County of Los Angeles Department of Regional Planning. 1986. *County of Los Angeles General Plan: Open Space, Conservation, and Recreation Elements*. Contact: Department of Regional Planning, Hall of Records, 320 West Temple Street, Los Angeles, CA 90012.

¹⁵ U.S. Forest Service Pacific Southwest Region. November 2005. *Angeles National Forest Land and Resources Management Plan*. Contact: Pacific Southwest Region, 1323 Club Drive, Vallejo, CA 94592.

proposed project has been designed to better serve the existing County residents and visitors that utilize these facilities.

The proposed project includes appurtenant improvements, including two new restroom facilities, parking areas, trailhead access, clearly marked signage, and ongoing maintenance. These additional facilities adequately serve the increase in capacity. These improvements are considered to be benefits to the recreational users of the existing trails and parks and would be expected to improve the recreational users' experience rather than deteriorate it. Furthermore, the proposed trails would be developed to the trail standards outlined in the County of Los Angeles Trails Manual, which provides guidelines for responsible trail planning, design, construction, and maintenance.¹⁶ Therefore, no further analysis is warranted.

(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?

The proposed project would be expected to result in less than significant impacts to recreation in relation to adverse physical effects on the environment as a result of the recreational facilities identified as element of the proposed project.

The conceptual design of the proposed project was undertaken consistent with the trail standards outlined in the County of Los Angeles Trails Manual,¹⁷ which provides guidelines for responsible trail planning, design, construction, and maintenance. A feasibility analysis of the conceptual trail alignment and alternative alignments was completed to assess opportunities and constraints in relation to engineering, environmental, social, and economic factors.¹⁸ The conceptual trail alignment was determined to be feasible in relation to environmental factors. It is anticipated that the adverse physical effects in the proposed project would be reduced below the level of significance with the incorporation of mitigation measures. Therefore, the proposed project would be expected to result in less than significant impacts to recreation related to adverse physical effects on the environment as a result of existing recreational facilities or proposed construction or expansion of recreational facilities. While the feasibility analysis acknowledges the ability to reduce adverse physical effects on the environment to below the level of significance, it is recommended that recreation be carried forward for further analysis due to the need to integrate the recreational elements of the proposed project into the Altadena Community Plan.¹⁹

¹⁶ County of Los Angeles. In Preparation. *County of Los Angeles Trails Manual*. Prepared by: Sapphos Environmental, Inc., Pasadena, CA.

¹⁷ County of Los Angeles. In Preparation. *County of Los Angeles Trails Manual*. Prepared by: Sapphos Environmental, Inc., Pasadena, CA.

¹⁸ County of Los Angeles. 4 August 2006. *Altadena Crest Trail Improvements Final Feasibility Analysis*. Prepared by; Sapphos Environmental, Inc., 133 Martin Alley, Pasadena, CA 91105.

¹⁹ County of Los Angeles. 4 August 2006. *Altadena Crest Trail Improvements Final Feasibility Analysis*. Prepared by; Sapphos Environmental, Inc., 133 Martin Alley, Pasadena, CA 91105.

3.15 TRANSPORTATION AND TRAFFIC

This analysis is undertaken to determine if the Altadena Crest Trail Improvements (proposed project) would have a significant impact to transportation and traffic, thus requiring the consideration of mitigation measures or alternatives in accordance with Section 15063 of the State of California Environmental Quality Act Guidelines (State CEQA Guidelines).¹ The assessment of transportation and traffic considers all phases of project planning, construction, and operation. The conclusions presented in this document were based on expert opinion and a review of technical studies and literature. These conclusions comply with the policies, traffic guidelines, and traffic significance criteria set forth in the Circulation element of the County of Los Angeles General Plan,² the County of Los Angeles Altadena Community Plan,³ the County of Los Angeles Metropolitan Transportation Authority (MTA) Congestion Management Plan (CMP),⁴ and the California Department of Transportation (Caltrans) Traffic Guidelines.⁵

The State CEQA Guidelines recommend the consideration of seven questions when addressing the potential for significant impact to transportation and traffic:

Would the proposed project have any of the following effects:

- (a) Cause an increase in traffic that 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)?

The proposed project would not be expected to result in impacts to transportation and traffic from the creation of a substantial increase in traffic in relation to the existing traffic and capacity of the street system. The proposed project is intended to serve existing County residents and visitors. The Altadena Community in the unincorporated territory of the County of Los Angeles has a population of 42,610.⁶ There is a deficiency of recreational facilities and programs in the Altadena Community. The existing demand for trails is 152 miles and is expected to increase to 191 miles by the year 2020.⁷ The proposed project would provide 6.4 miles of additional trails, addressing 3 percent of the existing

¹ State of California. *California Code of Regulations*. Title 14, Chapter 3, Article 5, Sections 15060–15065, Appendix G.

² County of Los Angeles Department of Regional Planning. 1980. *County of Los Angeles General Plan: Circulation Element*. Contact: Department of Regional Planning, Hall of Records, 320 West Temple Street, Los Angeles, CA 90012.

³ County of Los Angeles Department of Regional Planning. July 1986. *Altadena Community Plan. Circulation and Planning*. Contact: Department of Regional Planning, Hall of Records, 320 West Temple Street, Los Angeles, CA 90012.

⁴ County of Los Angeles Metropolitan Transportation Authority. 22 July 2004. *2004 Congestion Management Program for Los Angeles County*. Contact: Metropolitan Transportation Authority, One Gateway Plaza, Los Angeles, CA 90012. Available at: http://www.metro.net/projects_programs/cmp.htm

⁵ California Department of Transportation. December 2002. *Guide for the Preparation of Traffic Impact Studies*. Sacramento, CA. Available at: <http://www.dot.ca.gov/hq/traffops/developserv/operationalsystems/>

⁶ U.S. Census Bureau. American FactFinder. Altadena, CA. Available at: <http://factfinder.census.gov/>

⁷ County of Los Angeles Department of Parks and Recreation. April 2004. *Strategic Asset Management Plan (SAMP) for 2020*. Prepared by: County of Los Angeles Chief Administrative Office and County of Los Angeles Department of Parks and Recreation, with technical assistance by Sapphos Environmental, Inc.

unmet need. The proposed project also provides six new trailheads so that access is within walking distance of the majority of Altadena Community residences.

The proposed improvements would be expected to contribute to a negligible increase in the number of vehicle trips to the area. The impact to transportation and traffic on the existing traffic load and capacity of the street system established by the MTA CMP for designated roads or highways would be expected to be below the level of significance. Implementation of the proposed project would not result in an increase in traffic trips that could alter level of service (LOS) at local intersections. In addition, baseline traffic levels conducted for intersections within the Altadena Community demonstrate that most intersections operate at LOS C or greater.⁸ Therefore, impacts to transportation and traffic in relation to creating a substantial increase in traffic would be expected to be below the level of significance. No further analysis is warranted.

- (b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?

The proposed project would not be expected to result in impacts to transportation and traffic related to exceeding, either individually or cumulatively, an LOS standard established by the county congestion management agency for designated roads or highways. The MTA is the designated Congestion Management Agency for the County of Los Angeles. The MTA is responsible for preparing a CMP. Once prepared, the CMP is submitted to the Southern California Association of Governments (SCAG) for review. SCAG is responsible for determining that the CMP is consistent with the region's adopted transportation plan.⁹

LOS is a measure of traffic operation condition whereby a letter grade, A through F, corresponding to progressively worsening operation conditions, is assigned to an intersection or roadway segment. The intersections The County of Los Angeles Department of Public Works considers LOS D the minimum acceptable level of operation for intersections. The baseline traffic levels conducted for intersections within the Altadena Community demonstrate that most intersections operate at LOS C or greater.¹⁰ The proposed improvements would be expected to contribute to a negligible increase in the number of vehicle trips to the area. The impact to transportation and traffic on the existing traffic load and capacity of the street system established by the MTA CMP for designated roads or highways would be expected to be below the level of significance. The LOS of the surrounding streets shall remain at acceptable levels of operation. Therefore, there would be no expected impacts to transportation and traffic in relation to exceeding an LOS standard established by the MTA for designated roads or highways. No further analysis is warranted.

⁸ City of Pasadena. 16 May 2002. *Draft Master Environmental Impact Report Arroyo Seco Master Plan Project (SCH# 2000091062)*. Prepared by: Sapphos Environmental, Inc. 133 Martin Alley, Pasadena, CA 91105.

⁹ U.S. Environmental Protection Agency. *Congestion Management Program (CMP)*. Available at: <http://yosemite.epa.gov/aa/programs.nsf/d0f6289797dbf83a852564a6005e8c24/0402168949acf0a18525651c00506e18!OpenDocument>

¹⁰ City of Pasadena. 16 May 2002. *Draft Master Environmental Impact Report Arroyo Seco Master Plan Project (SCH# 2000091062)*. Prepared by: Sapphos Environmental, Inc. 133 Martin Alley, Pasadena, CA 91105.

- (c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

The proposed project would not be expected to result in impacts to transportation and traffic in relation to a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks. There are no public or private airports within a 2-mile radius of the proposed project area. The nearest airports to the proposed project area are the El Monte Airport located at 4233 Santa Anita Avenue in the City of El Monte, approximately 11 miles southeast of the proposed project area, and the Bob Hope Airport located at 2627 North Hollywood Way in the City of Burbank, approximately 11 miles west of the proposed project area. The proposed trails would be completely developed within the northern portion of Altadena, an unincorporated portion of the County of Los Angeles along the southern foothills of the San Gabriel Mountains and the Angeles National Forest. There would be no change in land use patterns in relation to existing air traffic patterns. Therefore, there would be no expected impacts to transportation and traffic related to a change in air traffic patterns that results in substantial safety risks. No further analysis is warranted.

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

The proposed project would be expected to result in impacts to transportation and traffic related to substantially increasing hazards due to a design feature. These impacts would be expected to be reduced to below the level of significance with the incorporation of mitigation measures. However, any construction-induced traffic would not be expected to result in increased hazards related to traffic engineering design features or incompatible uses. The trail segment crossing along Canyon Crest Road in Millard Canyon may pose a potential hazard to pedestrians due to a lack of distance in visibility approaching the trail crossing. Mitigation measures may include proper signage and/or stoppings to indicate pedestrian crossing. The proposed project would be reached by a standard street at the proposed trailhead sites, connected by a network of well-defined and preexisting paved roads. Therefore, impacts to transportation and traffic in relation to substantially increasing hazards due to a design feature would be reduced to below the level of significance with the incorporation of mitigation measures. Further analysis is warranted.

- (e) Result in inadequate emergency access?

The proposed project would be expected to result in less than significant impacts to transportation and traffic in relation to inadequate emergency access. The proposed project would not alter any existing emergency access routes or change existing patterns of emergency access. Police protection services for the unincorporated community of Altadena are provided by the County of Los Angeles Sheriff's Department located at 780 East Altadena Drive, approximately 2 miles southeast of the proposed project area. The County Forester and Fire Warden are available to assist in efficient emergency response and fire protection in designated fire hazards within the proposed project area. The County of Los Angeles Fire Department is located approximately 6 miles west from the proposed project site, and would be the primary emergency responder for the area.

Pasadena Fire House 36, located at 1140 North Fair Oaks Avenue in the City of Pasadena is approximately 3 miles south of the proposed project area. The La Canada Fire Department, located at 352 Foothill Boulevard in La Canada Flintridge, is approximately 6.6 miles west of the proposed project area. The proposed project would not be expected to involve a change in LOS levels. Traffic due to construction improvement activities would not be expected to result in inadequate emergency

access. Therefore, there would be no expected significant impacts to transportation and traffic related to inadequate emergency access. No further analysis is warranted.

(f) Result in inadequate parking capacity?

The proposed project would not be expected to result in impacts to transportation and traffic related to inadequate parking capacity. To increase access for the existing segments of the Altadena Crest Trail and to encourage use of the proposed segments of the Altadena Crest Trail, there are three potential trailhead areas proposed with minor parking improvements and one improved parking area to be constructed. These areas would include semi-developed parking sections and the use of pre-existing streets with existing or proposed access to the trail. The proposed project would provide additional parking capacity and be designed to serve the existing County residents and visitors. The additional parking would be expected to reduce current parking loads as existing users would be expected to use the advantage of closer parking areas. Therefore, no impacts to transportation and traffic in relation to inadequate parking capacity would occur. No further analysis is warranted.

(g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

Implementation of the proposed project would not be expected to result in impacts to transportation and traffic related to a conflict with adopted policies, plans, or programs supporting alternative modes of transportation. The proposed project would not conflict with County of Los Angeles Altadena Community policies supporting alternative transportation.¹¹ The proposed project shall comply with the applicable policies, plans and programs affecting alternative transportation. Policy 5.3.1-13 of the Circulation and Parking section of the Altadena Community Plan calls for two major trails, the Sunset Ridge Trail and the Altadena Crest Trail, to be incorporated into Angeles National Forest to provide for hiking and equestrian use. Policy 5.3.1-10 supports the County of Los Angeles financed transportation services in Altadena, which includes the Dial-a-Ride service for the elderly and handicapped, and an east-west fixed route line for all citizens that supplements the north-south bus routes.

The proposed project provides a high-quality multiuse trail to accommodate hikers, equestrians, and mountain bikers. Segments of the trails are intended to accommodate walkers, horseback riders, and bicyclists. The proposed project would act as an added transportation corridor for these users. In addition, facilities such as bicycle racks shall be incorporated into the design of the proposed project. Therefore, there would be no impacts to transportation and traffic related to a conflict with adopted policies, plans, or programs supporting alternative transportation. No further analysis is warranted.

¹¹ County of Los Angeles Department of Regional Planning. July 1986. *Altadena Community Plan. Circulation and Parking Section*. Contact: Department of Regional Planning, Hall of Records, 320 West Temple Street, Los Angeles, CA 90012.

3.16 UTILITIES AND SERVICE SYSTEMS

This analysis is undertaken to determine if the Altadena Crest Trail Improvements (proposed project) would have a significant impact on utilities and service systems, thus requiring the consideration of mitigation measures or alternatives, in accordance with Section 15063 of the State of California Environmental Quality Act Guidelines (State CEQA Guidelines).¹ Utilities and service systems at the proposed project site were evaluated with regard to water, wastewater, solid waste, and sewage systems, their current capacities, and the projected demand for these services in the future. Referenced documents include the Water and Waste Management element of the County of Los Angeles General Plan,² the Public Facilities Chapter of the County of Los Angeles Streamlined General Plan,³ the County of Los Angeles Altadena Community Plan,⁴ and the County of Los Angeles Trails Manual.⁵ Personal communications with the Sanitation Districts of Los Angeles County, Planning Section, was also conducted.⁶

The State CEQA Guidelines recommend the consideration of seven questions when addressing the potential for significant impact to utilities and service systems:

Would the proposed project have any of the following effects:

- (a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

The proposed project would not be expected to result in impacts to utilities and service systems in relation to exceeding wastewater treatment requirements of the Regional Water Quality Control Board (RWQCB), Los Angeles Region. The proposed project runs along the southern boundary of the Angeles National Forest, within the south-facing foothills of the San Gabriel Mountains. The Sanitation Districts of Los Angeles County operates the major sewer system in the San Gabriel River drainage area.⁷ The Altadena Community is the nearest community and adjacent to the proposed trails. In trailhead areas where connection to an existing County sewer is feasible, this would be the selected method of waste

¹ State of California. *California Code of Regulations*. Title 14, Chapter 3, Article 5, Sections 15060–15065, Appendix G.

² County of Los Angeles Department of Regional Planning. 1980. *County of Los Angeles General Plan: Water and Waste Management Element*. Contact: Department of Regional Planning, Hall of Records, 320 West Temple Street, Los Angeles, CA 90012.

³ County of Los Angeles Department of Regional Planning. 1993. *County of Los Angeles Streamlined General Plan: Public Facilities Chapter*. Contact: Department of Regional Planning, Hall of Records, 320 West Temple Street, Los Angeles, CA 90012.

⁴ County of Los Angeles Department of Regional Planning. July 1986. *Altadena Community Plan*. Contact: Department of Regional Planning, Hall of Records, 320 West Temple Street, Los Angeles, CA 90012.

⁵ County of Los Angeles. In Preparation. *County of Los Angeles Trails Manual*. Prepared by: Sapphos Environmental, Inc., Pasadena, CA.

⁶ Frazen, Ruth, Sanitation Districts of Los Angeles County, Planning Section, Whittier, CA. 13 April 2006. Personal communication with Ms. Hoan Tang, Sapphos Environmental, Inc., Pasadena, CA.

⁷ County of Los Angeles Department of Regional Planning. 1980. *County of Los Angeles General Plan: Water and Waste Management Element*. Contact: Department of Regional Planning, Hall of Records, 320 West Temple Street, Los Angeles, CA 90012.

disposal. In the undeveloped areas access to sewer lines may be unavailable. If restrooms are located in areas without sewer lines, either composting toilets or those requiring regular waste removal would be utilized. Therefore, the proposed project would not be expected to result in impacts to utilities and service systems in relation to exceeding wastewater treatment requirements of the RWQCB, Los Angeles Region. No further analysis is warranted.

- (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?

The proposed project would not be expected to result in impacts to utilities and service systems related to the construction of new water or wastewater treatment facilities, and it would not be expected to produce significant environmental effects due to the expansion of facilities. The Sanitation Districts of Los Angeles County operates the major sewer system in the San Gabriel River drainage area.⁸ The Altadena Community is the nearest community and adjacent to the proposed trails. Two wastewater reclamation plants serve the Altadena community and scattered areas within the foothills that are connected to the sewer lines. The San Jose Creek Water Reclamation Plant (WRP) and the Whittier Narrows WRP serve a largely residential population of approximately one million people. The San Jose Creek WRP, located at 1965 Workman Mill Road, in unincorporated County of Los Angeles, next to the City of Whittier is the largest of the WRPs. The San Jose Creek WRP provides primary, secondary, and tertiary treatment for 100 million gallons per day (gpd) of wastewater and 89.1 gpd on average.^{9,10} The Whittier Narrows WRP, located at 301 North Rosemead Boulevard, in the City of El Monte provides primary, secondary, and tertiary treatment for 15 million gpd of wastewater and 7.2 gpd on average. This plant serves a population of approximately 150,000 people.^{11,12} There is sufficient capacity in both of these WRPs to serve the proposed project if needed.

Currently, sewer services are only available to those portions of the proposed project area that are directly adjacent to urban developed areas. The undeveloped areas within the proposed project area that are in the Angeles National Forest do not have sewer services. Implementation of the proposed project would not exceed wastewater treatment requirements or cause the construction of new water or wastewater treatment facilities. Utilities may be disturbed during construction. However, there would be no direct effect to water or wastewater treatment facilities. There would be coordination with all potentially affected utility companies and jurisdictions prior to beginning work on the proposed project. Protection of all existing utility lines and associated structures from damage would also be implemented. Therefore, there would be no expected impacts to utilities and service systems relating

⁸ County of Los Angeles Department of Regional Planning. 1980. *County of Los Angeles General Plan: Water and Waste Management Element*. Contact: Department of Regional Planning, Hall of Records, 320 West Temple Street, Los Angeles, CA 90012.

⁹ Sanitation Districts of Los Angeles County. Last accessed 19 April 2006. "San Jose Creek Water Reclamation Plant (WRP)." Web site. Available at: <http://www.lacsd.org/waswater/wrp/sjc1.htm>

¹⁰ Frazen, Ruth, Sanitation Districts of Los Angeles County, Planning Section, Whittier, CA. 13 April 2006. Personal communication with Ms. Hoan Tang, Sapphos Environmental, Inc., Pasadena, CA.

¹¹ Sanitation Districts of Los Angeles County. Last accessed 19 April 2006. "Whittier Narrows Water Reclamation Plant (WRP)." Web site. Available: <http://www.lacsd.org/waswater/wrp/whittienarrows.htm>

¹² Frazen, Ruth, Sanitation Districts of Los Angeles County, Planning Section, Whittier, CA. 13 April 2006. Personal communication with Ms. Hoan Tang, Sapphos Environmental, Inc., Pasadena, CA.

to the construction of new water or wastewater treatment facilities or expansion of facilities, causing significant environmental effects. No further analysis is warranted.

- (c) Require or result in the construction of new storm water drainage facilities or the expansion of existing facilities, the construction of which could cause significant environmental effects?

The proposed project would not be expected to result in impacts to utilities and service systems in relation to the construction of new storm water drainage facilities or expansion of existing facilities, which could cause significant environmental impacts. The County of Los Angeles Department of Public Works operates and maintains the storm drain system.¹³ The proposed project improvement area consists of approximately 6 miles of preexisting trail segments and 6.4 miles of potential trail segments located in the northern portion of the community of Altadena. The surrounding areas are primarily undeveloped land. The proposed project would not result in new impermeable surfaces. No new storm water drainage facilities would need to be constructed for the proposed project. Therefore, there would be no expected impacts to utilities and service systems relating to the construction of new storm water drainage facilities or expansion of existing facilities. No further analysis is warranted.

- (d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new expanded entitlements needed?

The proposed project would not be expected to result in impacts to utilities and service systems in relation to having sufficient water supplies available to serve the project from existing entitlements and resources, or are new expanded entitlements needed. Most water for the Los Angeles Basin (Basin) is imported. One-third of the water used in the Basin comes from local ground water and from runoff for the Angeles National Forest watershed.¹⁴ Public agencies that import water into the County of Los Angeles include the City of Los Angeles Department of Public Works, the Metropolitan Water District of Southern California, and the California State Department of Water Resources (DWR).¹⁵ The source of water supply for the proposed project area would primarily be from the watershed of the Angeles National Forest. There is sufficient capacity and water supply to support and accommodate the proposed project without depleting the local groundwater table. The proposed trail improvement areas are located in the foothills just north of the Altadena Community, which is served by four water companies: Las Flores Water Company, Lincoln Avenue Water Company, Rubio Canyon Land and Water Association, and the City of Pasadena Water and Power Department.

Implementation of the proposed project would require connecting to the existing water system to provide potable water for the two proposed restroom facilities. The proposed project would be expected to be adequately supplied by existing entitlements and resources. The amount of water anticipated to operate the two proposed restroom facilities amount does not represent a substantial increase in the water use in the proposed project area. Due to the variability of local precipitation,

¹³ County of Los Angeles Department of Regional Planning. July 1986. *Altadena Community Plan*. Contact: Department of Regional Planning, Hall of Records, 320 West Temple Street, Los Angeles, CA 90012.

¹⁴ County of Los Angeles Department of Regional Planning. 1993. *County of Los Angeles Streamlined General Plan: Public Facilities Chapter*. Contact: Department of Regional Planning, Hall of Records, 320 West Temple Street, Los Angeles, CA 90012.

¹⁵ County of Los Angeles Department of Regional Planning. 1993. *County of Los Angeles Streamlined General Plan: Public Facilities Chapter*. Contact: Department of Regional Planning, Hall of Records, 320 West Temple Street, Los Angeles, CA 90012.

local groundwater supplies could possibly supplement the operation of the restroom facilities. However, due to the relatively small amount of water consumption anticipated at the proposed project site, there would be no need for additional imported water. Thus, the proposed project would not result in impacts to utilities and service systems in relation to having sufficient water supplies available to serve the proposed project from existing entitlements and resources, and new expanded entitlements would not be needed. No further analysis is warranted.

- (e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to meet the project's projected demand in addition to the provider's existing commitments?

The proposed project would not be expected to impact utilities and service systems in relation to resulting in a determination by the wastewater treatment provider that serves the proposed project that it has adequate capacity to meet the proposed project's anticipated demands in addition to the provider's existing commitments. The San Jose Creek WRP and the Whittier Narrows WRP are the main wastewater treatment provider. They serve a largely residential population of approximately one million people. There is sufficient capacity in these wastewater treatment plants to serve the proposed project if sewer access is utilized for the restroom facilities. If no sewer system is available, alternative restroom options would be utilized such as composting toilets or those requiring routine waste removal. Therefore, there would be no expected impacts to utilities and service systems in relation to a determination by the wastewater treatment provider that it cannot adequately meet the proposed project's anticipated demand as well as its existing commitments. No further analysis is warranted.

- (f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

The proposed project would not be expected to result in impacts to utilities and service systems in relation to being served by a landfill with sufficient permitted capacity to accommodate the proposed project's solid waste disposal needs. Both the construction and operational phases of the proposed project would be expected to generate waste. However, the amount of solid wastes generated at the proposed project site, once it is completed, would be relatively small. No hauling of dirt would be required during construction. The proposed project would be expected to be served by a landfill with sufficient capacity to accommodate its solid waste disposal needs. Solid waste disposal in the County of Los Angeles and unincorporated areas involves essentially three operations: collection, hauling, and disposal. Solid waste at the proposed project site may either be collected under private contract to a certified waste hauler or through the County of Los Angeles Department of Parks and Recreation, who would transport the waste to permitted landfills in the County of Los Angeles. The Sanitation Districts of Los Angeles County establishes and oversees landfill operations. The nearest landfill to the proposed project site is the Scholl Canyon Landfill, located in the City of Glendale. The proposed project would not significantly increase solid waste production and therefore would not affect regional landfill capacities. Therefore, no impacts to utilities and service systems would be expected with regards to the capacity of the landfill that would serve the proposed project's solid waste disposal needs. No further analysis is warranted.

(g) Comply with federal, state, and local statutes and regulations related to solid waste?

The proposed project would not be expected to result in impacts to utilities and service systems in relation to compliance with federal, state, and local statutes and regulations pertaining to solid waste. Both the construction and operational phases of the proposed project would be expected to generate wastes requiring disposal in accordance with local and state laws, including recycling requirements. The County of Los Angeles would select the best method of solids disposal and reduction of the solid waste stream. The proposed project would result in deposition of all solid waste at permitted facilities for solid waste (including hazardous waste). Therefore, there would be no expected impacts to utilities and service systems in relation to compliance with federal, state, and local statutes and regulations related to solid waste. No further analysis is warranted.

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