Initial Study/Mitigated Negative Declaration

Section 1605 Long-Term Streambed Alteration Agreement For The Debris Basin Maintenance Program

Prepared for

County of Los Angeles
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INTRODUCTION

This Initial Study/Mitigated Negative Declaration (IS/MND) serves as the California Environmental Quality Act (CEQA) documentation required to support the issuance of a Section 1605 Long-term Streambed Alteration Agreement (Section 1605 Agreement) from the California Department of Fish and Game (CDFG) for continued implementation of the Los Angeles County Flood Control District's (LACFCD) Debris Basin Maintenance Program (Maintenance Program).

The proposed Maintenance Program consists of activities and protocols related to sediment removal and debris basin maintenance at the LACFCD's debris basins. The Maintenance Program does not involve new construction, expansion or alteration of the debris basins, but rather includes longstanding and ongoing maintenance activities that protect downstream properties and allow the debris basins to adequately perform their main functions for debris flow reduction and flood control. Therefore, in most cases, the activities set forth under the Maintenance Program have historically been found exempt under CEQA, through a Class 1 (Existing Facilities) Categorical Exemption (CE) pursuant to Section 15301 of the State CEQA Guidelines, which allows for maintenance of existing structures and facilities involving no expansion of its original use.

The County of Los Angeles Department of Public Works (LACDPW), on behalf of the LACFCD, is preparing an IS/MND for CEQA clearance of the Section 1605 Agreement with the CDFG, as requested by the CDFG for this project.

CEQA requires that local government agencies, prior to taking action on projects over which they have discretionary approval authority, consider the environmental consequences of such projects. This IS/MND is the public document designed to provide the public and applicable responsible/trustee agencies, special districts, and local and State governmental agency decision-makers with an analysis of the potential environmental consequences of project implementation to support informed decision-making. The IS/MND indicates that while a project could have environmental impacts, modifications and/or mitigation has been incorporated into the project to reduce its adverse impacts, thereby enabling the project to qualify for an MND (State CEQA Guidelines Section 15070).

Pursuant to Section 15367 of the State CEQA Guidelines, the Lead Agency is the public agency that has the principal responsibility for carrying out or approving a project. The LACFCD is serving as the Lead Agency for the proposed Debris Basin Maintenance Program and is also responsible for implementing this program. As the Lead Agency, the LACFCD has the authority for project approval and adoption of the accompanying environmental documentation.

As part of the issuance of the Section 1605 Agreement, the LACFCD is not proposing any substantive changes to the ongoing activities that are currently being implemented under the Maintenance Program. The Section 1605 Agreement sets forth specific parameters and requirements that must be followed to ensure that the Maintenance Program continues to be implemented in an environmentally responsible manner, consistent with the requirements of the CDFG. These requirements are consistent with the LACFCD operating procedures and protocols that have been historically implemented during debris basin maintenance. Therefore, continued implementation of the Maintenance Program does not represent any change to the environment, and any potential environmental impacts identified within this IS/MND are not a result of changes from historic activities under the Maintenance Program.

This Executive Summary presents a brief overview of the Maintenance Program, a tabular summary of the potential environmental effects of program implementation, and the recommended mitigation program that would reduce potential impacts to less than significant levels. The reader is referred to the full text of this IS/MND, as well as the technical appendices, for a complete description and analysis of the environmental effects of the project.

PROJECT SUMMARY

The operation of the Maintenance Program involves several basic activities carried out at the 162 debris basins throughout the County of Los Angeles. In the course of one year, each of the 162 debris basins receives at least one round of routine maintenance, which may include (1) annual brush clearing, tree trimming, and vegetation mowing; (2) annual entrainment channel and outlet tower clearing; (3) sediment removal; (4) access road maintenance and other appurtenances; (5) State Division of Safety of Dams (DSOD) compliance; (6) storm damage repair and restoration projects; and/or (7) exotic species eradication control.

The Maintenance Program does not involve new construction, expansion or alteration of the debris basins, but rather include longstanding and ongoing maintenance activities that protect the health and safety of downstream properties through debris flow reduction and flood control. Therefore, the Maintenance Program, or "project", does not represent any change to the environment, and any potential environmental impacts identified within this IS/MND are not a result of changes from historic activities under the Maintenance Program.

SUMMARY OF FINDINGS

The analysis in Section 3.0 of this IS/MND shows that continued implementation of the Maintenance Program would not result in impacts to the environment in the following environmental impact areas:

- Agriculture and Forest Resources,
- Land Use and Planning,
- Mineral Resources,
- Population and Housing,
- Public Services, and
- Recreation.

Additionally, less than significant impacts would continue to occur during periodic maintenance activities in the following environmental impact areas:

- Aesthetics,
- Air Quality,
- Cultural Resources,
- Geology and Soils,
- Greenhouse Gas Emissions,
- Hazards and Hazardous Materials,
- Hydrology and Water Quality,

- Noise,
- Transportation, and
- Utilities and Service Systems.

With implementation of all conditions of the Section 1605 Agreement, the project would have less than significant impacts to biological resources. The maintenance activities set forth in the Section 1605 Agreement represent a continuation of the activities performed by the LACFCD at the debris basin sites that have been ongoing for decades. Therefore, the project does not represent any change over the current baseline existing conditions throughout Los Angeles County and would not result in new environmental impacts; therefore, no mitigation would be required. However, to provide a conservative analysis and per the CDFG's request, potential impacts to biological resources due to continued maintenance activities would be considered a significant impact prior to compliance with the conditions of the Section 1605 Agreement, which has been included as a Mitigation Measure (MM).

Table ES-1 below summarizes the MM that is applicable to biological resources, as well as the public entity responsible for implementing and monitoring compliance. With incorporation of the mitigation program for the project, as summarized in Table ES-1, all potential environmental impacts to biological resources would be reduced to a less than significant level. Therefore, no significant impacts would result in any impact area as a result of the project.

TABLE ES-1
ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Impact Summary	Mitigation Measures	Responsible Party
Biological Resources (Section 3.4)		
Although the project would not result in a change from the existing conditions, the LACFCD has determined that there would be potential significant impacts related to sensitive plant and/or wildlife species, sensitive habitat, jurisdictional waters, or wildlife movement with continued implementation of the Maintenance Program without compliance with the provisions of the Section 1605 Permit.	**MM 3.4-1** Activities conducted as part of the Debris Basin Maintenance Program shall be conducted in full compliance with the conditions set forth in the CDFG Section 1605 Long Term Maintenance Agreement, including the requirements related to the following activities: (1) Routine Maintenance Activities, including removal of fallen and dead trees, annual brush maintenance, tree trimming, brush clearing, vegetation mowing, entrainment channel and outlet tower clearing, sediment removal, maintenance of access road and other appurtenances, State Division of Dams compliance, and storm drain repair and restoration projects and (2) Special Conditions related to maintenance at Big Dalton, Englewild, Linda Vista, Mullally, Santa Anita, Sawpit, Sierra Madre Dam, and Wilson debris basins. In accordance with the Section 1605 Agreement, a total of 21.14 acres of vegetation impacted by maintenance activities shall be mitigated through a combination of on-site preservation and/or creation of off-site preservation.	The LACFCD shall implement compliance through protocols set forth in the Maintenance Program and shall monitor compliance.

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SECTION 1.0 INTRODUCTION

1.1 PURPOSE OF THE INITIAL STUDY

In accordance with the California Environmental Quality Act (CEQA) (*California Public Resources Code* §§21000 et seq.) and the CEQA Guidelines (*California Code of Regulations* §§15000 et seq.), the Los Angeles County Department of Public Works (LACDPW), on behalf of the Los Angeles County Flood Control District (LACFCD), has prepared an Initial Study (IS) as supporting documentation for a Mitigated Negative Declaration (MND) to support the issuance of a Section 1605 Long-term Streambed Alteration Agreement (Section 1605 Agreement) from the California Department of Fish and Game (CDFG). The Section 1605 Agreement would allow continued implementation of the existing Debris Basin Maintenance Program (Maintenance Program) for 162 existing debris basins throughout the County of Los Angeles. The draft Section 1605 Agreement, as proposed by the CDFG, is located in Appendix A of this IS/MND.

The proposed Maintenance Program consists of activities and protocols related to sediment removal and debris basin maintenance at the LACFCD's debris basins. The Maintenance Program does not involve new construction, expansion or alteration of the debris basins, but rather includes longstanding and ongoing maintenance activities that protect downstream properties and allow the debris basins to adequately serve their main functions for debris flow reduction and flood control. Therefore, the baseline for the analysis set forth in this IS/MND is the existing operations conditions throughout Los Angeles County, which would remain unchanged by proposed project implementation.

For several decades, the LACFCD has been implementing the Maintenance Program as part of the ongoing operations for the County-wide system of flood-control facilities. With issuance of the Section 1605 Agreement, there would be no change to ongoing Maintenance Program activities, which are described in detail below. Rather, the Section 1605 Agreement would replace successive short-term permits issued periodically by the CDFG and streamline the regulatory processes for both the LACFCD and the CDFG. As part of the issuance of the Section 1605 Agreement, the LACFCD is not proposing any substantive changes to the ongoing activities that are currently being implemented under the Maintenance Program.

The Section 1605 Agreement sets forth specific parameters and requirements that must be followed to ensure that the Maintenance Program continues to be implemented in an environmentally responsible manner, consistent with CDFG requirements. Continued implementation of the Maintenance Program does not represent any change to the environment, and any potential environmental impacts identified within this IS/MND are not a result of changes from historic activities under the Maintenance Program.

Pursuant to Section 15367 of the State CEQA Guidelines, the LACFCD is the Lead Agency for the project. The Lead Agency is the public agency that has the principal responsibility for carrying out a project and also has the authority for project approval and certification of the accompanying environmental documentation. The LACFCD has commissioned the preparation of this IS/MND and has reviewed and revised, as necessary, this IS/MND and accompanying technical analyses for consistency with County of Los Angeles and LACFCD regulations and policies and to reflect its own independent judgment. Supporting data for this IS/MND was obtained from on-site field observations; consultations with LACFCD staff and CDFG staff; and review of available technical studies, reports, and guidelines, including, but not limited to, technical documentation prepared as part of this IS/MND.

This IS/MND includes a summary description of the Maintenance Program; identifies the locations of the 162 debris basins included in the project; evaluates the potential environmental impacts; includes findings from the environmental review; and includes regulatory requirements (RRs) and MMs required to lessen or avoid impacts on the environment. In addition to addressing the potential environmental impacts that would continue to result from long-term implementation of the existing Maintenance Program, this IS/MND further serves as the primary environmental document for any future discretionary approvals that may be needed for implementation of the Maintenance Program as it relates to the Section 1605 Agreement.

In addition to addressing the potential environmental impacts that would continue to result from long-term implementation of the existing Maintenance Program, this IS/MND may further serve as the primary environmental document for any future discretionary approvals that may be needed for implementation of the Maintenance Program as it relates to the Section 1605 Agreement.

1.2 SUMMARY OF INITIAL STUDY FINDINGS

With implementation of all conditions of the Section 1605 Agreement, there would be less than significant impacts to biological resources. Additionally, continued implementation of the Maintenance Program does not represent any change to the environment, as the Maintenance Program is a continuation of activities that have been ongoing for decades. The activities set forth under the Maintenance Program have historically been considered exempt under CEQA through a Class 1 (Existing Facilities) Categorical Exemption (CE) pursuant to State Section 15301 of the CEQA Guidelines, which allows for maintenance of existing structures and facilities involving no expansion of its original use. However, the LACDPW on behalf of the LACFCD, is preparing an IS/MND for CEQA clearance of the Section 1605 Agreement with the CDFG, as requested by the CDFG for this project.

Table ES-1 in the Executive Summary summarizes the potential environmental impacts to biological resources from continued implementation of the Maintenance Program and the recommended mitigation program to reduce the impacts to a less than significant level. According to Section 15370 of the State CEQA Guidelines, “mitigation”:

- Avoids an impact altogether by not taking a certain action or parts of an action.
- Minimizes impacts by limiting the degree or magnitude of the action and its implementation.
- Rectifies an impact by repairing, rehabilitating, or restoring the impacted environment.
- Reduces or eliminates an impact over time by preserving and maintaining operations during the life of the action.
- Compensates for an impact by replacing or providing substitute resources or environments.

Continued implementation of the Maintenance Program would result in no impacts to the environment in the following environmental impact areas:

- Agriculture and Forest Resources,
- Land Use and Planning,

- Mineral Resources,
- Population and Housing,
- Public Services, and
- Recreation.

Additionally, less than significant impacts would continue to occur during during periodic maintenance activities (i.e., impacts would be short-term) in the following environmental impact areas:

- Aesthetics,
- Air Quality,
- Cultural Resources,
- Geology and Soils,
- Greenhouse Gas Emissions,
- Hazards and Hazardous Materials,
- Hydrology and Water Quality,
- Noise,
- Transportation, and
- Utilities and Service Systems.

In accordance with the State CEQA Guidelines, the LACFCD would adopt an MND for the Maintenance Program because, with incorporation of the recommended MM described herein, potential significant environmental impacts would be eliminated or reduced to less than significant levels.

1.3 PROJECT APPROVAL

Pursuant to Section15072 of the State CEQA Guidelines, a Notice of Intent (NOI) to adopt an MND for the project has been sent to the public, responsible agencies, and the Los Angeles County Clerk. The IS/MND has been filed with the State Clearinghouse and mailed to the last known name and address of all organizations and individuals who have previously requested such notice in writing. The NOI and public review period has also been publicized in the *Los Angeles Times* on Friday, December 3, 2010. The IS/MND and associated technical reports are available for review at the Los Angeles County Flood Control District, Annex Building, 2nd Floor, Alhambra, CA 91803-1331. Additionally, the IS/MND is available for public review on http://dpw.lacounty.gov/lacfcd/mnd.cfm and can be viewed at the following 17 public libraries:

La Crescenta Library
2809 Foothill Blvd.
La Crescenta, CA 91214-2910
(818) 248-5313

Montrose-Crescenta Branch Library
2465 Honolulu Avenue
Montrose, CA 91020
(818) 548-2048

La Cañada Flintridge Library
4545 N. Oakwood Ave.
La Cañada Flintridge, CA 91011-335
(818) 790-3330

Valencia Library
23743 W. Valencia Boulevard
Santa Clarita, CA 91355
(661) 259-8942

Rowland Heights Library
1850 Nogales Street
Rowland Heights, CA 91745
(626) 912-5348

City of Monrovia Public Library
321 S. Myrtle Avenue
Monrovia, CA 91016
(626) 256-8274

City of Pasadena Central Library
285 E. Walnut Street
Pasadena, CA 91101
(626) 744-4066

Glendale Central Library
222 E. Harvard St.
Glendale, CA 91205
(818) 548-2020

Platt Branch Library
23600 Victory Boulevard
Woodland Hills, CA 91367
(818) 340-9386

South El Monte Library
1430 N. Central Avenue
South El Monte, CA 91733-3302
(626) 443-4158

View Park Library
3854 W. 54th Street
Los Angeles, CA 90043
(323) 293-5371

Agoura Hills Library
29901 Ladyface Court.
Agoura Hills, CA 91301
(818) 889-2278

Pacific Palisades Library
861 Alma Real Drive
Pacific Palisades, CA 90272
(310) 459-2754

Palmdale City Library
700 E. Palmdale Boulevard
Palmdale, CA 93550
(661) 267-5600

Sunland-Tujunga Branch Library
771 Foothill Boulevard
Tujunga, CA 91042
(818) 352-4481

Glendora Library
140 S. Glendora Avenue
Glendora, CA 91741
(626) 852-4891

Sylmar Branch Library
14561 Polk Street
Sylmar, CA 91342
(818) 367-6102

There will be a 30-day public review period for the IS/MND in accordance with Section15073 of the State CEQA Guidelines. In reviewing the IS/MND, the reviewer should focus on the sufficiency of the document in identifying and analyzing the potential impacts of the Maintenance Program on the environment and ways in which the potentially significant effects of the project would be reduced or avoided through the mitigation program for the project. Written comments on the IS/MND may be sent to:

Ms. Jemellee Cruz, P.E.
Civil Engineer
Los Angeles County Flood Control District
900 South Fremont Avenue
Annex Building, 2nd Floor
Alhambra, CA 91803-1331

Following receipt of comments from agencies, organizations and/or individuals within the public review period, the County of Los Angeles Board of Supervisors (Board of Supervisors) will determine whether any substantial new environmental issues have been raised that necessitate changes to the IS/MND in accordance with CEQA requirements. In accordance with Section 15074 of the State CEQA Guidelines, prior to approving the project, the County of Los Angeles Board of Supervisors will consider the proposed MND together with any comments received during the public review process. The Board of Supervisors will adopt the proposed MND only if it finds that that there is not substantial evidence that the project will have a significant effect on the environment.

1.4 ORGANIZATION OF THE INITIAL STUDY

This IS/MND is organized into the following sections:

Executive Summary. This section provides a summary of the project description, potential impacts that could result from project implementation, and regulatory requirements that would reduce potential environmental impacts.

Section 1.0 – Introduction. This section provides an introduction to the IS/MND process and a brief overview of the conclusions of the IS/MND.

Section 2.0 – Environmental Setting and Project Description. This section provides a description of the project location, the existing environmental setting of the project area, and the Maintenance Program's physical and operational characteristics.

Section 3.0 – Environmental Checklist Form and Assessment. The completed CEQA checklist form provides an overview of the potential impacts that could result from project implementation. A brief discussion of the environmental setting for each environmental issue follows the checklist. This section then contains a response to each checklist question accompanied by an explanation to support each response. The responses serve as an analysis of the environmental impacts of the Maintenance Program. This section also identifies regulatory requirements that would eliminate potential significant effects or reduce them to a level that is less than significant. The environmental checklist form also includes the "Mandatory Findings of Significance" required by CEQA.

Section 4.0 – Report Preparers and Contributors. This section identifies the individuals responsible for preparing and contributing to the IS/MND.

Section 5.0 – References. This section identifies the references used in preparation of the IS/MND.

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SECTION 2.0 ENVIRONMENTAL SETTING AND PROJECT DESCRIPTION

2.1 PROJECT BACKGROUND

For centuries, storm waters have periodically swept out of the San Gabriel Mountains into the Los Angeles River and San Gabriel River basins. Large rain events have historically resulted in extensive property damage and loss of life in Los Angeles County due to extensive flooding. Such a flood occurred after heavy rains in 1914, causing over $10 million in property damage. As a result, the State legislature created the LACFCD in 1915 to reduce flood hazards in the County.

After historic flood events in the 1930s in the Los Angeles Basin, the U.S. Congress approved the Flood Control Act of 1941, which authorized the U.S. Army Corps of Engineers (USACE) to address the hazards associated with Los Angeles County's natural hydrology through the channelization of rivers and drainages and the construction of dams and debris basins.

Debris basins are earthen bowl-shaped excavations located in the headwaters of flood-control channels, which are designed to intercept and retain large amounts of debris (e.g., rock, mud, sand, vegetation) from upslope areas, while allowing the storm waters to pass through to downstream channels. Debris basins protect downstream residences, businesses, and infrastructure from potential damage from floodwaters, mudflows, and debris that could rapidly fill and/or damage downstream drainages and flood-control facilities (i.e., storm drain pipes). In order to maintain debris basin capacity and functionality, periodic maintenance and sediment removal is required.

The debris basins in Los Angeles County have been an integral component of the LACFCD's flood-control infrastructure for over 70 years. The requisite maintenance and sediment removal activities required to maintain the facilities have also been conducted for over 70 years.

The LACFCD, via the LACDPW, Flood Maintenance Division, is responsible for the maintenance of County storm drain facilities, including the ongoing maintenance of debris basins throughout Los Angeles County (LACDPW 2008). Through the Debris Basin Maintenance Program, the LACFCD performs routine maintenance and periodic sediment removal within various LACFCD-owned debris basins in order to maintain basin capacity and functionality; to provide adequate flood-control protection; and to implement vector-control requirements. These maintenance activities require the periodic mowing and/or removal of vegetation that has grown within the debris basins, as well as sediment and debris removal.

Long-term maintenance permits/agreements issued by the USACE, the Los Angeles Regional Water Quality Control Board (LARWQCB), and the CDFG have governed the general mowing and maintenance activities conducted by the LACFCD within the debris basins, with the exception of sediment removal activities. Historically, sediment removal was performed as required to maintain basin capacity needed to protect the health and safety of downstream properties in the event of a major rain event. At the request of the CDFG, sediment removal activities have been categorized as a long-term maintenance activity requiring compliance with the Section 1605 Long-term Streambed Alteration Agreement (Section 1605 Agreement).

Since vegetation removal within the debris basins is considered to be under the jurisdiction of the CDFG due to the presence of "Waters of the State" within the debris basins' 100 % capacity contour (i.e., each debris basin's limit of capacity), the LACFCD will enter into the Section 1605 Agreement with the CDFG to continue maintenance activities on the LACFCD's entire debris basin system. Issuance of this Agreement by the CDFG requires CEQA review of the

Maintenance Program. Although the maintenance activities addressed in this IS/MND have historically been found exempt under CEQA via a Class 1 (Existing Facilities) Categorical Exemption (State CEQA Guidelines §15301), as discussed previously, the CDFG has indicated that it does not accept Categorical Exemptions for the required CEQA documentation for approval of a Section 1605 Agreement. Therefore, the LACDPW, on behalf of the LACFCD, has prepared an IS/MND for the CEQA documentation in support of the issuance of the Section 1605 Agreement.

Therefore, this IS/MND analyzes the environmental impacts of maintenance activities associated with the LACFCD's Debris Basin Maintenance Program in order for the CDFG to process the requested Section 1605 Agreement. It should be noted that this IS/MND only analyzes the LACFCD's ongoing, routine maintenance activities, and is not applicable to emergency debris basin clearing or other emergency maintenance activities that may be necessary for operation of the LACFCD's debris basin system.

2.2 ENVIRONMENTAL SETTING

2.2.1 RELEVANT POLICIES AND REGULATIONS

Federal

Endangered Species Act

The Federal Endangered Species Act (FESA) of 1973 protects plants and animals that the government has listed as "Endangered" or "Threatened". The FESA is implemented by enforcing Sections 7 and 9 of the Act. A federally listed species is protected from unauthorized "take" pursuant to Section 9 of the FESA. "Take", as defined by the FESA, means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or to attempt to engage in any such conduct. All persons are presently prohibited from taking a federally listed species unless and until (1) the appropriate Section 10(a) permit has been issued by the USFWS or (2) an Incidental Take Permit is obtained as a result of formal consultation between a federal agency and the U.S. Fish and Wildlife Service (USFWS) pursuant to Section 7 of the FESA and the implementing regulations that pertain to it (50 *Code of Federal Regulations* [CFR] §402). "Person" is defined in the FESA as an individual, corporation, partnership, trust, association, or any private entity; any officer, employee, agent, department or instrument of the federal government; any State, Municipality, or political subdivision of the State; or any other entity subject to the jurisdiction of the U.S. The Project Applicant is a "person" for purposes of the FESA.

Sections 401 and 404 of the Clean Water Act of 1972 (33 U.S.C. Section 1251 et seq.)

Under Section 401 of the Federal Clean Water Act (CWA), an activity involving discharge to a water body must obtain a federal permit and a State Water Quality Certification in order to ensure that the activity will not violate established water quality standards. Section 404 of the CWA regulates the discharge of dredge and fill material into "Waters of the U.S.", including wetlands. Dredge and fill activities are typically associated with development projects; water-resource related projects; infrastructure development and wetland conversion to farming; forestry; and urban development. The U.S. Environmental Protection Agency (USEPA) is the federal regulatory agency responsible for implementing the CWA. However, it is the State Water Resources Control Board (SWRCB), in conjunction with the nine California Regional Water Quality Control Boards (RWQCBs), who have been delegated the responsibility of administering the water quality certification (Section 401) program. The USACE is the designated regulatory

agency responsible for administering the Section 404 permit program and for making jurisdictional determinations. While these CWA provisions do not pertain to flood hazards per se, areas under the USACE's jurisdiction (through Sections 401 and 404 of the CWA) typically occur within some floodplain areas.

The LACFCD has obtained the required Clean Water Act permits. Details of the current status of the USACE and RWQCB permits are described below:

- ***U.S. Army Corps of Engineers, Regional General Permit No. 45 Maintenance of Sediment Entrapment Basins in Los Angeles County (File No. SPL-2003-00411-KW).*** The Regional General Permit No. 45 (RGP 45) authorizes sediment removal and maintenance of 161 earth-bottom sediment entrapment basins, access roads, and other appurtenances such as, but not limited to, inlet chutes, trash racks, facing slabs, gage boards, slow and down drains, outlet towers, and a small channel and area around the outlet tower. Sediment removal is authorized under two situations: (1) when the quantity of sediment in a sediment entrapment basin has reached 25% capacity or more, as identified in the permit application, or (2) when a sediment entrapment basin has reached 5% or more of the basin's capacity and more than 20% of the watershed of the sediment entrapment basin burned within the previous 5 years. RGP 45 expired on January 26, 2009, and the LACFCD obtained the revised RGP 45 renewal on November 5, 2009. The permit expires on October 15, 2014.

- ***California Regional Water Quality Control Board, Los Angeles Region, Clean Water Act Section 401 Water Quality Certification (File No. 02-144-2008 Renewal).*** The Water Quality Certification was issued by the LARWQCB on October 24, 2008, for the LACFCD's Debris Basin Maintenance Program, certifying that any discharge from the debris basins will have to comply with the applicable provisions of Sections 301 (Effluent Limitations), 302 (Water Quality Related Effluent Limitations), 303 (Water Quality Standards and Implementation Plans), 306 (National Standards of Performance), and 307 (Toxic and Pretreatment Effluent Standards) of the Federal Clean Water Act, and with other applicable requirements of State law. Discharges are regulated under SWRCB Order No. 2003-0017-DWQ, "General Waste Discharge Requirements for Dredge and Fill Discharges That Have Received State Water Quality Certification", which requires compliance with all conditions of the Water Quality Certification issued by the LARWQCB.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) of 1918 may have originally been intended to reduce hunting of migratory birds but has been interpreted more broadly by some resource agencies in recent years. The broader interpretation is that bird nests containing eggs or young are protected under the MBTA from any disturbance that may directly or indirectly affect the success of the nesting attempt regardless of the intent of the activity that caused the disturbance. Although federal agencies have not enforced this interpretation, some State and local agencies have referred to it as a reason to require avoidance measures as part of project approval permits.

State

California Endangered Species Act

Pursuant to the California Endangered Species Act (CESA) and Section 2081 of the *California Fish and Game Code*, an Incidental Take Permit from the CDFG is required for projects that could result in the take of a State-listed Threatened or Endangered species. Under the CESA, "take" is defined as an activity that would directly or indirectly kill an individual of a species, but the definition does not include "harm" or "harass", as the federal act does. As a result, the threshold for a take under the CESA is higher than that under the FESA. A CDFG-authorized Incidental Take Permit under Section 2081(b) is required when a project could result in the take of a State-listed Threatened or Endangered Species. The application for an Incidental Take Permit under Section 2081(b) has a number of requirements, including the preparation of a conservation plan, generally referred to as a Habitat Conservation Plan.

California Fish and Game Code, Section 1802

State law confers upon the CDFG the trustee responsibility and authority for the public trust resource of wildlife in California. The CDFG may play various roles under the CEQA process. By State law, the CDFG has jurisdiction over the conservation, protection, and management of the wildlife, native plants, and habitat necessary to maintain biologically sustainable populations. The CDFG shall consult with lead and responsible agencies and shall provide the requisite biological expertise to review and comment upon environmental documents and impacts arising from project activities. Trustee agencies are generally required to be notified of CEQA documents relevant to their jurisdiction whether or not these agencies have actual permitting authority or approval power over aspects of the underlying project (14 *California Code of Regulations* [CCR] §15386). The CDFG, as a trustee agency, must be notified of CEQA documents regarding projects involving fish and wildlife of the State as well as special status native plants, wildlife areas, and ecological reserves. Although as a trustee agency the CDFG cannot approve or disapprove a project, lead and responsible agencies are required to consult with them. The CDFG shall provide the requisite biological expertise to review and comment upon environmental documents and impacts arising from project activities and shall make recommendations regarding those resources held in trust for the people of California.

The LACFCD has obtained the required Streambed Alteration Agreement (SAA) permit. Details of the current status of the CDFG permit are described below:

- ***California Department of Fish and Game, Streambed Alteration Agreement No. 1600-2004-0080-R5.*** The SAA No. 1600-2004-0080-R5 allowed for mowing activities to occur within the debris basins up to the designated mowing boundary contour. A total of 111 debris basins are covered under this SAA, which expired on March 29, 2009. On October 1, 2008, the CDFG amended the permit to add more debris basins and additional maintenance activities. On April 7, 2010, the CDFG approved and extended the amendment requested by the LACFCD to modify the existing permit to:

    - Add additional debris basins to a total of 161 permitted basins for mowing activities within the basin bottom;

    - Remove 4 debris basins that have been eliminated due to development;

    - Modify the Spinks Debris Basin mowing boundary to allow mowing in areas that were inadvertently left out of the original permit;

- Allow for the removal of debris from around the outlet towers, the cutting of an entrainment channel from the back of the basin to the outlet tower, and the conduct of minor maintenance repair work; and

- Include annual fire brush clearance activities within the debris basin facilities that are near or adjacent to residential homes or other structures, in compliance with California Fire Code requirements.

The SAA No. 1600-2004-0080-R5 will be replaced with a new Section 1605 Long-term Agreement, which will contain the provisions described in Section 2.3 of this IS/MND. The term of the Section 1605 Agreement will be 18 years, with one extension of another 18 years.

Oak Woodland Conservation Act (2001) and California Public Resources Code (Section 21083.4)

The Oak Woodland Conservation Act (*California Fish and Game Code* §§1360 et seq.), passed by the California Legislature in 2001, established an Oak Woodland Conservation Fund administered by the Wildlife Conservation Board (WCB) to help and encourage local governments, park and open space districts, resource conservation districts, nonprofit organizations, and private property owners to protect and enhance oak woodlands. The Oak Woodland Conservation Act "offers landowners, conservation organizations, and cities and counties an opportunity to obtain funding for projects designed to conserve and restore California's oak woodlands. It authorizes the WCB to purchase oak woodland conservation easements and provide grants for land improvements and oak restoration efforts" (McCreary 2004). The Act defines oak woodlands as "an oak stand with a greater than 10 percent canopy cover or that may have historically supported greater than 10 percent canopy cover" (*California Fish and Game Code* §1361[h]).

Section 21083.4 of the *California Public Resources Code* (PRC) (Senate Bill [SB] 1334) which references the Oak Woodland Conservation Act, provides an additional layer of protection for oak woodlands. Section 21083.4 requires counties to determine if a project may result in a conversion of oak woodlands that will have a significant impact on the environment. If it is determined that it would, the county must require one or more of the following to mitigate the significant effect of the conversion of oak woodlands:

1. Conservation of oak woodlands through the use of conservation easements;
2. a. Plant an appropriate number of trees, including maintaining plantings and replacing dead or diseased trees,

   b. The requirement to maintain trees pursuant to this paragraph terminates seven years after trees are planted,

   c. Mitigation pursuant to this paragraph shall not fulfill more than one-half of the mitigation requirement for the project,

   d. The requirements imposed pursuant to this paragraph also may be used to restore former oak woodlands;
3. Contribute funds to the Oak Woodlands Conservation Fund … A project applicant that contributes funds under this paragraph shall not receive a grant from the Oak Woodlands Conservation Fund as part of the mitigation for the project;
4. Other mitigation measures developed by the county.

County

County of Los Angeles Oak Tree Ordinance

This ordinance protects oak trees that are at least 8 inches in diameter and are, as measured, 4.5 feet above natural ground. It requires that all potential impacts to oak trees regulated by this ordinance be preceded by an application to the County that includes a detailed Oak Tree Report.

County of Los Angeles General Plan: Significant Ecological Area (SEA) Program

A planning overlay called a "Significant Ecological Area" (SEA) is a primary mechanism used by the County of Los Angeles Department of Regional Planning (LACDRP) and set forth in the County General Plan to assist in the conservation of special status species and biological diversity. The LACDRP has designated SEAs to identify ecologically important land and/or water systems that contain valuable plant and/or animal communities that are often integral to the preservation of Threatened or Endangered species and the conservation of biological diversity in the County (LACDRP 2008). In 1976, 62 areas of biological significance were identified in the *Los Angeles County Significant Ecological Areas Study*, commonly referred to as the England and Nelson Report, and adopted as background information in the 1976 General Plan (LACDRP 1976). In 1980, 61 of these biologically significant areas were adopted as part of the Conservation/Open Space Element of the General Plan.

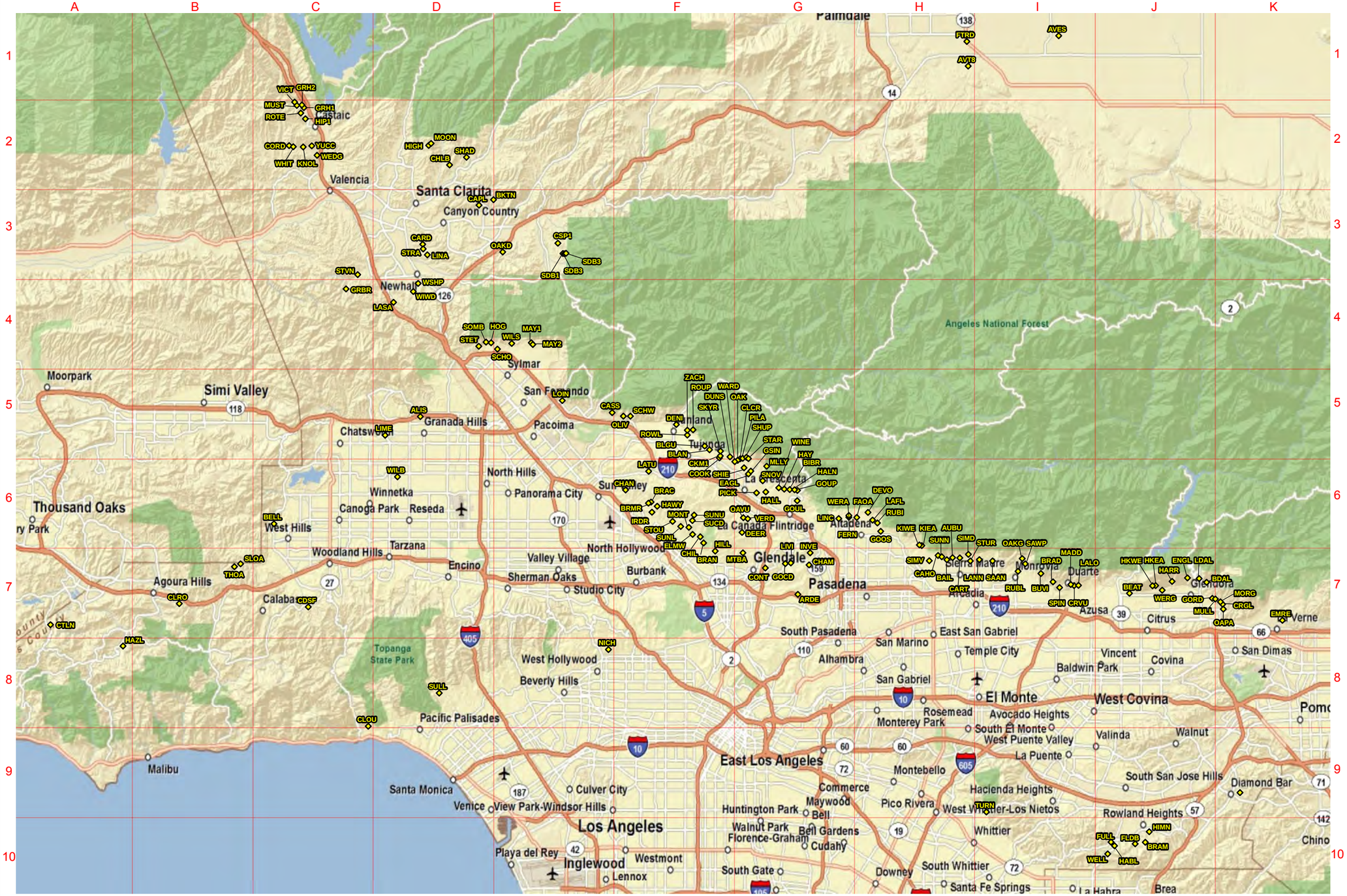
In 2000, the LACDRP completed the Los Angeles County SEA 2000 Update Study with the fundamental goal of (1) evaluating existing SEAs for changes in biotic conditions and considering additional areas for SEA status; (2) delineating SEA boundaries based upon biotic evaluation; and (3) proposing guidelines for managing and conserving biological resources within SEAs (LACDRP 2008). The Los Angeles County SEA 2000 Update Study was incorporated as a part of the Los Angeles County 2008 Draft General Plan Update, which has not yet been adopted.

Cities

Local jurisdictions throughout Los Angeles County have municipal codes and general plans that set forth specific policies and regulatory requirements regarding biological resources, such as tree preservation and maintenance ordinances. The County of Los Angeles is required to comply with the County's oak tree ordinance, as stated above, but is not subject to the municipal code requirements of local jurisdictions.

2.2.2 PROJECT LOCATIONS

There are a total of 162 LACFCD-owned and maintained debris basins in Los Angeles County that would be included in the Section 1605 Agreement. The majority of these debris basins are located in the foothills of the Santa Monica, San Gabriel, Verdugo, and Puente Hills Mountains. However, three of the debris basins are located in the northern foothills of the San Gabriel Mountains near the Palmdale/Lancaster area. The locations and names of each of the 162 debris basins within the Debris Basin Maintenance Program are shown in Exhibit 2-1, Regional Location. Each debris basin is listed with an abbreviated name and a location key that corresponds to the grid on the graphic (similar to the grids presented in a Thomas Guide). Table 2-1 provides a list of the debris basins, with their locations (address, city, longitude and latitude, and upstream canyon/watercourse).



Basin Name	Abbr.	Grid	Basin Name	Abbr.	Grid
Aliso	ALIS	D5	La Salle	LASA	D4
Arbordell	ARDE	G7	La Tuna	LATU	F6
Auburn	AUBU	H7	Lannan	LANN	I7
Ave S	AVES	I1	Las Flores	LAFL	H6
Ave T-8	AVT8	H1	Las Lomas	LALO	I7
Bailey	BAIL	H7	Limekiln	LIME	D5
Bakerton	BKTN	E3	Lincoln	LINC	G6
Beatty	BEAT	J7	Linda Vista	LIVI	G7
Bell Creek	BELL	C6	Line A	LINA	D3
Big Briar	BIBR	G6	Little Dalton	LDAL	J7
Big Dalton	BDAL	J7	Lopez Inlet	LOIN	E5
Blanchard	BLAN	F5	Maddock	MADD	I7
Bluegum	BLGU	F5	May No 1	MAY1	E4
Brace	BRAC	F6	May No 2	MAY2	E4
Bracemar	BRMR	F6	Montana	MONT	F6
Bradbury	BRAD	I7	Monument	MONU	K9
Bramhall	BRAM	J10	Moon Dust	MOON	D2
Brand	BRAN	F6	Morgan	MORG	K7
Buena Vista	BUVI	I7	Mount Batten	MTBA	G7
Caitlyn Circle	CTLN	A7	Mull	MULL	K7
Calle Robleda	CLRO	B7	Mullally	MLLY	G6
Camp Plenty	CAPL	D3	Mustang	MUST	C2
Cardiff	CARD	D3	Nichols	NICH	E8
Carriage House	CAHO	H7	Oak	OAK	G6
Carter	CART	H7	Oak Park	OAPA	K7
Cassara	CASS	E5	Oakdale	OAKD	E3
Chamberlain	CHAM	G7	Oakglade	OAKG	I7
Chandler	CHAN	F6	Oakmont View	OAVU	G6
Childs	CHIL	F6	Oliver	OLIV	F5
Cloud Creek	CLCR	G6	Pickens	PICK	G6
Cloudcroft	CLOU	C8	Pinelawn	PILA	G5
Contento	CONT	G7	Rowley	ROWL	F5
Cooks	COOK	F5	Rowley Upper	ROUP	F5
Cooks M-1A	CKM1	F5	Royal Terminus	ROTE	C2
Copper Hill Line B	CHLB	D2	Rubio	RUBI	H6
Cordoba	CORD	C2	Ruby Lower	RUBL	I7
Crescent Glen	CRGL	K7	Saddleback 1	SDB1	E3
Crestview	CRVU	I7	Saddleback 2	SDB2	E3
Crystal Springs 1	CSP1	E3	Saddleback 3	SDB3	E3
Deer	DEER	G6	Santa Anita	SAAN	I7
Denivelle	DENI	F5	Sawpit	SAWP	I7
Devonwood	DEVO	H6	Schoolhouse	SCHO	E4
Dry Canyon S.F.	CDSF	C7	Schwartz	SCHW	F5
Dunsmuir	DUNS	F5	Shadow	SHAD	D2
Eagle	EAGL	G6	Shields	SHIE	G6
Elmwood	ELMW	F6	Shields Upper	SHUP	G5
Emerald East	EMRE	K7	Sierra Madre Dam	SIMD	H7
Englewild	ENGL	J7	Sierra Madre Villa	SIMV	H7
Fair Oaks	FAOA	H6	Skyridge	SKYR	F5
Fern	FERN	G6	Sloan	SLOA	B7
Fieldbrook	FLDB	J10	Snover	SNOV	G6
Ft Tejon Rd	FTRD	H1	Sombrero	SOMB	D4
Fullerton	FULL	J10	Spinks	SPIN	I7
Golf Club Dr	GOCD	G7	Starfall	STAR	G6
Gooseberry	GOOS	H6	Stetson	STET	D4
Gordon	GORD	J7	Stevenson Ranch	STVN	C3
Goss Inlet	GSIN	G6	Stough	STOU	F6
Gould	GOUL	G6	Stratford	STRA	D3
Gould Upper	GOUP	G6	Sturtevant	STUR	H7
Green Hill 1	GRH1	C2	Sullivan	SULL	D8
Green Hill 2	GRH2	C2	Sunnyside	SUNN	H7
Greensbrier	GRBR	C4	Sunset Canyon	SUCD	F6
Halls	HALL	G6	Sunset Lower	SUNL	F6
Harbor Blvd	HABL	J10	Sunset Upper	SUNU	F6
Harrow	HARR	J7	Thousand Oaks	THOA	B7
Harter Lane	HALN	G6	Turnbull	TURN	I9
Havenway	HAWY	F6	Verdugo	VERD	G6
Hay	HAY	G6	Victoria	VICT	C2
Hazel Nut 2	HAZL	A8	Ward	WARD	G6
High Sierra	HIGH	D2	Wedgewood	WEDG	C2
Hillcrest	HILL	F7	Wellington	WELL	J10
Hillman	HIMN	J10	West Ravine	WERA	G6
Hipshot 1	HIP1	C2	Westridge	WERG	J7
Hog	HOG	D4	Whitney	WHIT	C2
Hook East	HKEA	J7	Wilbur	WILB	D6
Hook West	HKWE	J7	Wildwood	WIWD	D4
Inverness	INVE	G7	William S Hart	WSHP	D4
Irving Drive	IRDR	F6	Wilson	WILS	E4
Kinneloa East	KIEA	H6	Winery	WINE	G6
Kinneloa West	KIWE	H6	Yucca	YUCC	C2
Knoll	KNOL	C2	Zachau	ZACH	F5

Regional Location

Exhibit 2-1

Los Angeles County Debris Basins

N W E S

5 2.5 0 5 Miles

BonTerra CONSULTING

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TABLE 2-1
LISTING OF 162 DEBRIS BASINS

	Facility	Address	USGS	Latitude	Longitude	Upstream Canyon Watercourse
1	Aliso	18100 San Fernando Mission Rd, Granada Hills	Oat Mountain	34°16′33″	118° 31′32″	Aliso Creek
2	Arbor Dell (MTD 207 U02)	5400 Arbor Dell Pl, Eagle Rock	Pasadena	34°08′50″	118° 11′30″	Unnamed
3	Auburn	700 Auburn Avenue, Sierra Madre	Mount Wilson	34°10′26″	118° 03′20″	Unnamed
4	Avenue S (PD 2136)	9300 Ave S, Littlerock	Little Rock	34°33′25″	117° 57′40″	Desert Wash
5	Avenue T-8 (PD 2103)	4880 Ave T-8, Palmdale	Palmdale	34°32′00″	118° 02′25″	Walnut Creek
6	Bailey	700 Oakcrest Dr, Sierra Madre	Mount Wilson	34°10′19″	118° 03′29″	Bailey Canyon
7	Bakerton (MTD 1548)	28268 Bakerton Ave, Santa Clarita	Mint Canyon	34°26′09″	118°27′47″	Unnamed
8	Beatty	500 Sierra Madre Ave, Azusa	Azusa	34°08′52″	117° 33′37″	Beatty Canyon
9	Bell Creek	6950 Valley Circle Blvd, West Hills	Calabasas	31°12′00″	118° 39′20″	Bell Creek
10	Big Briar (PD 638)	5400 Haskell St, La Canada-Flintridge	Pasadena	34°13′26″	118° 11′57″	Unnamed
11	Big Dalton	1000 Glendora Mt. Rd, Glendora	Glendora	34°09′19″	117° 50′00″	Big Dalton Canyon
12	Blanchard	6400 Day St, Tujunga	Sunland	34°15′10″	118° 16′12″	Blanchard Canyon
13	Blue Gum	10320 Haines Canyon Ave, Tujunga	Sunland	34°15′20″	118° 16′30″	Blum Gum Canyon
14	Brace (MTD 266)	3440 Brace Canyon Rd, Burbank	Burbank	34°12′52″	118° 19′19″	Brace Canyon
15	Bracemar (MTD 266)	3361 North Lamer St, Burbank	Burbank	34°12′50″	118° 19′26″	Unnamed
16	Bradbury	72 Bliss Cyn Rd, Bradbury	Azusa	34°09′21″	117° 58′02″	Bradbury Canyon
17	Bramhall	18909 Branhall Ln Rowland Heights	La Habra	33°58′00″	117° 52′30″	Vernon Channel
18	Brand	1700 Brand Park Dr, Glendale	Burbank	34°11′03″	118° 16′31″	Brand Cyn
19	Buena Vista	1165 Norumbega Dr, Monrovia	Azusa	34°09′45″	117° 58′40″	Unnamed
20	Caitlyn Circle (MTD 1589)	1369 Caitlyn Cir, Westlake Village	Point Dume	34°07′21″	118°51′09″	Unnamed
21	Calle Robleda (PD1505)	4900 Calle Robleda, Agoura Hills	Calabasas	34° 08′15″	118° 44′20″	Liberty Canyon
22	Camp Plenty (PD 354)	27950 Camp Plenty Rd, Canyon Country	Mint Canyon	34° 25′50″	118° 28′30″	Unnamed
23	Cardiff (PD 2097)	22350 Cardiff Dr, Saugus	Newhall	34° 24′15″	118° 37′30″	Unnamed
24	Carriage House	1600 Winding Way, Pasadena	Mount Wilson	34° 10′33″	118° 04′07″	Unnamed
25	Carter	600 N. Baldwin Ave, Sierra Madre	Mount Wilson	34° 10′26″	118° 02′58″	Unnamed
26	Cassara	11500 Christy Ave, Sylmar	Sunland	34° 16′44″	118° 21′23″	Cassara Canyon
27	Chamberlain	1400 Chamberlain Rd, Pasadena	Pasadena	34° 10′07″	118° 10′51″	Unnamed
28	Chandler	9900 Roscoe Blvd, Sun Valley	Burbank	34° 13′24″	118° 20′41″	Chandler Canyon
29	Childs	1790 Allen Ave, Glendale	Burbank	34° 11′20″	118° 16′43″	Childs Canyon
30	Cloud Creek (PD 891)	2978 Hawkridge Dr, La Crescenta	Pasadena	34° 14′49″	118° 14′34″	Unnamed

TABLE 2-1 (Continued)
LISTING OF 162 DEBRIS BASINS

	Facility	Address	USGS	Latitude	Longitude	Upstream Canyon Watercourse
31	Cloudcroft	3400 Cloudcroft Dr, Malibu	Topanga	34° 02′57″	118° 34′12″	Parker Canyon
32	Contento (MTD 1221)	1042 Calle Contento, Glendale	Pasadena	34° 10′15″	118° 13′15″	Sycamore Canyon Channel
33	Cooks	5025 Boston Ave, Glendale	Burbank	34° 14′49″	118° 15′42″	Cooks Canyon
34	Cooks (M1-A)	5026 Boston Ave, Glendale	Burbank	34° 14′56″	118° 15′38″	Cooks Canyon
35	Copper Hill Line “B” (PD 1386)	Copper Hill Dr & Buckhorn Ln, Saugus	Mint Canyon	34° 27′40″	118° 29′50″	Unnamed
36	Cordoba (PD 2284)	30530 Gibraltar Pl, Castaic	Val Verde	34° 28′40″	118° 38′40″	Unnamed
37	Crescent Glen	200 N. Crescent Glen Dr, Glendora	Glendora	34° 08′30″	117° 49′15″	Oak Park Drain System
38	Crestview	12 Crestview Ct, Duarte	Azusa	34° 09′12″	117° 56′53″	Unnamed
39	Crystal Springs (PD 2223)	27130 Crystal Springs Rd, Canyon Country	Mint Canyon	34° 24′25″	118° 24′30″	Unnamed
40	Deer	1290 Beaudry Blvd, Glendale	Pasadena	34° 11′35″	118° 14′27″	Deer Creek
41	Denivelle	7710 Denivelle Road, Tujunga	Sunland	34° 16′20″	118° 17′59″	Unnamed
42	Devonwood	505 Devonwood Rd, Altadena	Pasadena	34° 12′25″	118° 07′49″	Unnamed
43	Dry Canyon – South Fork	22820 Mulholland Hwy, Calabasas	Canoga Park	34° 08′10″	118° 37′25″	Unnamed
44	Dunsmuir	5145 Dunsmore Ave, Glendale	Burbank	34° 14′51″	118° 15′07″	Dunsmore Canyon
45	Eagle	2700 Harmony Pl, La Crescenta	Pasadena	34° 14′07″	118° 14′09″	Eagle & Goss Canyon
46	Elmwood	1260 East Elmwood Ave, Burbank	Burbank	34° 11′27″	118° 17′07″	Elmwood Canyon
47	Emerald - East	4854 emerald Ave, La Verne	Glendora	34° 07′38″	117° 45′53″	Unnamed
48	Englewild	4700 Englewild Dr, Glendora	Glendora	34° 09′32″	117° 50′52″	Englewild Canyon
49	Fair Oaks	300 Loma Alta Dr, Altadena	Pasadena	34° 12′12″	118° 08′23″	Unnamed
50	Fern	3500 Chaney Trl, Altadena	Pasadena	34° 12′13″	118° 08′51″	Chiquita Canyon
51	Fieldbrook	18566 Fieldbrook St, Rowland Heights	La Habra	33° 57′51″	117° 53′39″	Unnamed
52	Ft. Tejon (PD 2101)	4800 Essex Dr, Palmdale	Palmdale	34° 33′15″	118° 02′30″	Desert Wash
53	Fullerton (PD 2202-U2)	2300 Fullerton Rd, Rowland Heights	La Habra	33° 58′00″	117° 53′30″	San Jose Creek
54	Golf Club	3065 E. Chevy Chase Dr, Glendale	Pasadena	34° 10′10″	118° 12′11″	Sycamore Canyon
55	Gooseberry	1600 Crest Dr, Altadena	Chico Flat	34° 20′30″	118° 07′15″	Gooseberry Creek
56	Gordon	1900 E. Foothill Blvd, Glendora	Glendora	34° 08′29″	117° 49′42″	Gordon Canyon
57	Goss Inlet (PD 503)	2550 Rockdell St, La Crescenta	Pasadena	34° 14′15″	118° 13′15″	Goss Canyon
58	Gould	800 Green Ln, La Canada-Flintridge	Pasadena	34° 12′54″	118° 11′33″	Gould Canyon

TABLE 2-1 (Continued)
LISTING OF 162 DEBRIS BASINS

	Facility	Address	USGS	Latitude	Longitude	Upstream Canyon Watercourse
59	Gould Upper (PD 655)	Cul De Sac of Lone Grove Wy, La Canada-Flintridge	Pasadena	34° 13′24″	118° 11′33″	Gould Canyon
60	Green Hill #1 (PD 1974)	32200 Green Hill Dr, Castaic	Warm Springs	34° 30′00″	118° 37′45″	Unnamed
61	Green Hill #2 (PD 1974)	28410 Avion Ct, Castaic	Warm Springs	34° 30′10″	118° 37′50″	Unnamed
62	Greensbrier (PD 2495)	24800 Greensbrier Dr, Stevenson Ranch	Oat Mountain	34°22′13″	118°35′35″	Dewitt Canyon
63	Halls	2100 Cross St, La Canada-Flintridge	Pasadena	34° 13′20″	118° 13′15″	Hall Beckley Canyon
64	Harbor Blvd. (PD2202-U2)	3500 Harbor Blvd, Rowland Heights	La Habra	35° 58′00″	117° 54′00″	San Jose Creek
65	Harrow	4800 Easely Canyon Rd, Glendora	Glendora	34° 09′23″	117° 51'40″	Harrow Canyon
66	Harter Lane (PD 222)	5400 Harter Ln, La Canada-Flintridge	Pasadena	34° 13′30″	118° 11′45″	Harter Canyon
67	Haven Way (MTD 1008)	3630 Haven Wy, Burbank	Burbank	34° 12′38″	118° 19′09″	McClure Canyon
68	Hay	1235 El Vago St, La Canada-Flintridge	Pasadena	34° 13′26″	118° 12′16″	Hay Canyon
69	Hazel Nut (PD 2488)	1900 Hazel Nut Ct, Agoura	Point Dume	34° 6′25″	118° 47′17″	Unnamed
70	High Sierra	29090 High Sierra Trl, Saugus	Newhall	34°28′33″	118°31′15″	Unnamed
71	Hillcrest	1800 Hillcrest Ave, Glendale	Burbank	34° 10′43″	118° 15′54″	Hillcrest & Sherer Canyon
72	Hillman	2332 Hillman Ln, Rowland Heights	La Habra	33° 58′30″	117° 53′00″	San Jose Creek
73	Hipshot (PD 1683 U01)	31675 Hipshot Dr, Castaic	Newhall	34° 29′10″	118° 37′30″	Unnamed
74	Hog	15455 Glenoaks Blvd, Sylmar	San Fernando	34° 19′50″	118° 27′50″	Hog Canyon
75	Hook-East	9200 Sierra Madre Ave, Glendora	Azusa	34° 09′12″	117° 52′35″	Unnamed
76	Hook-West	9201 Sierra Madre Ave, Glendora	Azusa	34° 09′13″	117° 52′44″	Unnamed
77	Inverness	1377 Edgehill Pl, Pasadena	Pasadena	34° 10′40	118° 10′51″	Unnamed
78	Irving (MTD 329)	940 Irving Dr, Burbank	Burbank	34° 12′26″	118° 19′15″	Unnamed
79	Kinneloa-East	2300 Kinneloa Canyon Rd, Unincorporated	Mount Wilson	34° 10′59″	118° 04′58″	Unnamed
80	Kinneloa-West	2300 Brambling Lane, Unincorporated	Mount Wilson	34° 11′04″	118° 05′05″	Unnamed
81	Knoll (PD 2279)	28450 Knoll Ct, Castaic	Val Verde	34° 28′00″	118° 38′00″	Unnamed
82	La Salle (PD 1358)	23700 La Salle Canyon Dr, Santa Clarita	Oat Mountain	34° 21′40″	118° 33′00″	Unnamed
83	La Tuna	9050 La Tuna Canyon Rd, Sun Valley	Burbank	34° 14′12″	118° 19′37″	La Tuna Canyon
84	Lannan	2701 Santa Anita Avenue, Sierra Madre	Mount Wilson	34° 10′56″	118° 01′56″	Unnamed
85	Las Flores	3200 Rubio Canyon Rd, Altadena	Pasadena	34° 12′32″	118° 07′32″	Las Flores Canyon
86	Las Lomas	50 Las Lomas Rd, Duarte	Azusa	34° 09′14″	117° 56′40″	Unnamed

TABLE 2-1 (Continued)
LISTING OF 162 DEBRIS BASINS

	Facility	Address	USGS	Latitude	Longitude	Upstream Canyon Watercourse
87	Limekiln	10500 Tunney Ave, Los Angeles	Oat Mountain	34° 15′38″	118°33′25″	Limekiln Canyon
88	Lincoln	600 Loma Alta Dr, Altadena	Pasadena	34° 12′10″	118° 09′22″	Unnamed/W. Ravine Cyn
89	Linda Vista	3200 Linda Vista Rd, Glendale	Pasadena	34° 10′14″	118° 11′54″	Unnamed
90	Line A (PD 2176)	22050 Rolling Ridge Dr, Santa Clarita	Newhall	34° 23′24	118° 31′24″	Unnamed
91	Little Dalton	110 Glendora Mountain Rd, Glendora	Glendora	34° 09′25″	117° 50′14″	Little Dalton Canyon
92	Lopez	12000 Paxton St, Lake View Terrace	San Fernando	34° 17′30″	118° 24′15″	Lopez Canyon
93	Maddock	400 Vineyard Ave, Duarte	Azusa	34° 09′16″	117° 57′03″	Maddock Canyon
94	May #1	13500 Fritz Ln, Sylmar	San Fernando	34° 19′52″	118° 25′42″	May Canyon
95	May #2	13500 Fritz Ln, Sylmar	San Fernando	34° 19′48″	118° 25′38″	Unnamed
96	Montana (MTD 510)	530 South Via Montana, Burbank	Burbank	34° 12′00″	118° 17′25″	Story Canyon
97	Monument	23746 Monument Cyn Dr, Diamond Bar	San Dimas	34° 00′05″	117° 48′10″	Unnamed
98	Moon Dust (PD 2544) - NEW	29250 Moon Dust Ct, Saugus	Newhall	34°28′38″	118°31′07″	Unnamed
99	Morgan	2100 Valiant St, Glendora	Glendora	34° 08′28″	117° 49′10″	Morgan Canyon
100	Mountbatten (MTD 787 U02)	1150 Mountbatten Dr, Glendale	Pasadena	34° 10′39″	118° 14′25″	Unnamed
101	Mull	1800 North Gordon Rd, Glendora	Glendora	34° 08′27″	117° 49′36″	Mull Canyon
102	Mullally (PD 274)	2000 Manistee Dr, La Canada-Flintridge	Pasadena	34° 14′28″	118° 13′14″	Mullally Canyon
103	Mustang (PD 2049)	32350 Mustang Dr, Castaic	Val Verde	34° 30′00″	118° 38′00″	Unnamed
104	Nichols	1920 Nichols Canyon Rd, Los Angeles	Hollywood	34° 06′23″	118° 21′31″	Nichols Canyon
105	Oak (MTD 864)	5324 Quail Canyon Rd, Glendale	Pasadena	34° 14′40″	118° 14′45″	Unnamed
106	Oak Park	2357 Oak Park Rd, Glendora	Glendora	34° 08′30″	117° 49′15″	Oak Park Drain System
107	Oakdale (PD 2389)	26500 Oakdale Canyon Ln, Canyon Country	Mint Canyon	34° 23′52″	118° 27′17″	Unnamed
108	Oakglade	900 Ridgeside Drive, Monrovia	Azusa	34° 10′25″	117° 59′39″	Unnamed
109	Oakmont (MTD 806)	2940 Oakmont View Dr, Glendale	Pasadena	34° 12′14″	118° 14′23′	Unnamed
110	Oliver	11300 Dominica Ave, Lake View Terrace	Sunland	34° 16′34″	118° 20′52″	Oliver Canyon
111	Pickens	4628 Briggs St, La Crescenta	Pasadena	34° 13′16″	118° 13′43″	Pickens Canyon
112	Pinelawn (PD 1053)	2850 Pinelawn Dr, La Crescenta	Pasadena	34° 13′16″	118° 13′43″	Unnamed
113	Rowley	10720 Las Lunitas Ave, Tujunga	Sunland	34° 15′50″	118° 17′26″	Rowley Canyon
114	Rowley Upper	10890 Amidon Pl, Tujunga	Sunland	34° 16′05″	118° 17′08″	Rowley Canyon

TABLE 2-1 (Continued)
LISTING OF 162 DEBRIS BASINS

	Facility	Address	USGS	Latitude	Longitude	Upstream Canyon Watercourse
115	Royal Terminus (PD 1920)	28410 Royal Rd, Castaic	Newhall	34° 29′30″	118° 37′45″	Unnamed
116	Rubio	3200 Rubio Canyon Rd, Altadena	Mount Wilson	34° 11′56″	118° 07′19"	Rubio Canyon
117	Ruby Lower	300 Scenic Dr, Monrovia	Azusa	34° 09′51″	117° 39′54″	Ruby Canyon
118	Saddleback #1 (PD 2247)	15230 Saddleback Rd, Santa Clarita	Mint Canyon	34° 23′30″	118° 24′00″	Unnamed
119	Saddleback #2 (PD 2247)	15200 Saddleback Rd, Santa Clarita	Mint Canyon	34° 24′00″	118° 24′00″	Unnamed
120	Saddleback #3 (PD 2247)	15200 Saddleback Rd, Santa Clarita	Mint Canyon	34° 23′30″	118° 24′00″	Unnamed
121	Santa Anita	2000 Oak Pl, Arcadia	Mount Wilson	34° 10′14″	118° 01′16″	Santa Anita Canyon
122	Sawpit	700 North Canyon Rd, Monrovia	Azusa	34° 10′05″	117° 59′05″	Sawpit/Monrovia/Spanish
123	Schoolhouse	14500 Olive View Dr, Sylmar	San Fernando	34° 19′32″	118° 27′29″	Schoolhouse Canyon
124	Schwartz	9825 Foothill Blvd, Sylmar	Sunland	34° 16′32″	118° 20′32″	Schwartz Canyon
125	Shadow (PD 2099)	29000 Shadow Valley Ln, Saugus	Mint Canyon	34° 28′12″	118° 29′24″	Unnamed
126	Shields	5300 La Crescenta Ave, La Crescenta	Pasadena	34° 14′23″	118° 14′22″	Shields Canyon
127	Shields Upper (PD 769)	5670 Pine Cone Rd, La Crescenta	Pasadena	34° 14′52″	118° 14′15″	Shields Canyon
128	Sierra Madre Dam	900 Brookside Lane, Sierra Madre	Mount Wilson	34° 10′34″	118° 02′31″	Little Santa Anita Canyon
129	Sierra Madre Villa	1150 Sierra Madre Villa Ave, Pasadena	Mount Wilson	34° 10′16″	118° 04′36″	Pasadena Hastings Cyn
130	Skyridge (MTD 1317)	5190 Sky Ridge Dr, Glendale	Burbank	34° 14′50″	118° 15′40″	Unnamed
131	Sloan (PD 1726)	5850 Sloan Pl, Calabasas	Calabasas	34° 10′10″	118° 41′45″	Gates Canyon
132	Snover	5250 Escalante Dr, La Canada-Flintridge	Pasadena	34° 13′48″	118° 13′22″	Snover Canyon
133	Sombrero	Cul De Sac of Sombrero Cyn Rd, Sylmar	San Fernando	34° 19′52″	118° 28′07″	Sombrero Canyon
134	Spinks	17 Woodlyn Land, Bradbury	Azusa	34° 09′06″	117° 37′42″	Spinks Canyon
135	Starfall (PD 1081)	2700 Starfall Dr, La Crescenta	Pasadena	34° 14′47″	118° 14′11″	Eagle Canyon
136	Stetson	13877 Glenoaks Blvd, Sylmar	San Fernando	34° 19′41″	118° 28′27″	Unnamed
137	Stevenson Ranch (PD 2528)	25305 Pico Canyon Rd, Stevenson Ranch	Newhall	34°22′53″	118°34′56″	Pico Canyon
138	Stough	1150 Walnut Ave, Burbank	Burbank	34° 12′00″	118° 18′09″	Stough Canyon
139	Stratford (PD 2097)	25450 Stratford Dr, Saugus	Newhall	34° 24′00″	118° 37′40″	Oakdale Canyon
140	Sturtevant	500 Lotus Ln, Sierra Madre	Mount Wilson	34° 10′18″	118° 02′22″	Unnamed
141	Sullivan	2200 Queensferry Rd, Los Angeles	Topanga	34° 04′24″	118° 30′26″	Sullivan Canyon
142	Sunnyside	4100 Park Vista Dr, Pasadena	Mount Wilson	34° 10′26″	118° 03′52″	Unnamed

TABLE 2-1 (Continued)
LISTING OF 162 DEBRIS BASINS

	Facility	Address	USGS	Latitude	Longitude	Upstream Canyon Watercourse
143	Sunset Canyon-Deer Canyon	1270 Country Club Dr, Burbank	Burbank	34° 12′05″	118° 17′10″	Deer Canyon
144	Sunset Lower	455 Country Club Dr, Burbank	Burbank	34° 11′09″	118° 17′04″	Sunset Canyon
145	Sunset Upper	1500 Country Club Dr, Burbank	Burbank	34° 12′18″	118° 17′03″	Sunset Canyon
146	Thousand Oaks (PD 1726)	25800 Thousand Oaks Blvd, Calabasas	Calabasas	34° 10′00″	118° 41′50″	Unnamed
147	Turnbull	13600 Turnbull Canyon Road, Whittier	Whittier	33° 59′15″	118° 01′35″	Turnbull Canyon
148	Verdugo	3500 La Crescenta Ave, Glendale	Pasadena	34° 12′06″	118° 14′09″	Verdugo Wash
149	Victoria (PD 2275)	28632 Victoria Rd, Castaic	Whittier Peak	34° 30′20″	118° 38′10″	Unnamed
150	Ward	3145 Markridge Rd, Glendale	Pasadena	34° 14′39″	118° 14′52″	Ward Canyon
151	Wedgewood (PD 2467)	Cul De Sac of W. Wedgewood Ct, Castaic	Newhall	34° 28′00″	118° 37′10″	Villa Canyon
152	Wellington (PD 2202 UIII)	1792 Harbor Blvd, La Habra Heights	La Habra	33° 57′ 26″	117° 55′ 13″	Unnamed
153	West Ravine	3600 Chaney Trl, Altadena	Pasadena	34° 12′18″	118° 08′51″	Unnamed
154	Westridge	1000 Westridge Ave, Glendora	Glendora	34° 09′01″	117° 52′15″	Unnamed
155	Whitney (PD 2444)	30530 Whitney Dr, Castaic	Val Verde	34° 28′30″	118° 38′30″	Villa Canyon
156	Wilbur	19000 Nordhoff Ave, Northridge	Canoga Park	34° 13′45″	118° 32′45″	Aliso & Wilbur Canyon
157	Wildwood (PROJ 1222)	23145 Davey Ave, Newhall	Oat Mountain	34° 22′06″	118° 31′56″	Wildwood Canyon
158	William S. Hart Park (RDD 341)	22900 Market St, Newhall	Oat Mountain	34° 22′27″	118° 31′42″	Unnamed
159	Wilson	14301 Saranac Dr, Sylmar	San Fernando	34° 19′46″	118° 26′41″	Wilson Canyon
160	Winery	1409 El Vago St, La Canada-Flintridge	Pasadena	34° 13′30″	118° 12′33″	Winery Canyon
161	Yucca (PD 2157)	30570 Yucca Pl, Castaic	Newhall	34° 28′12″	118° 37′12″	Unnamed
162	Zachau	10905 Sevenhills Dr, Tujunga	Sunland	34°16′02″	118° 17′25″	Zachau Canyon

2.2.3 TOPOGRAPHY AND GEOLOGY

The County of Los Angeles covers an area of 4,083 square miles and measures approximately 66 miles in the east-west direction and 73 miles in the north-south direction. Terrain within the County can be classified in broad terms as being approximately 25 percent mountainous; 14 percent coastal plain; and 61 percent hills, valleys, and deserts. Elevation ranges from sea level along the coastal areas on the County's southwestern border to a maximum elevation of 10,000 feet above mean sea level on the mountains (LACDPW 2008b). Mountain ranges are aligned in a general east-west direction, with the dominant range being the San Gabriel Mountains. Topography in the mountainous area is generally rugged with deep, V-shaped canyons separated by sharp dividing ridges. Steep walled canyons with side slopes of 70 percent or more are common. The majority of mountain ridges lie below elevation 5,000 feet above mean sea level (LACDPW 2008b).

Igneous, metamorphic, and sedimentary rock groups are all present within the County. The San Gabriel Mountains and Verdugo Hills are composed primarily of highly fractured igneous rock with large areas of exposed granitic rock formations. Faulting and deep weathering have produced porous zones in the rock formations; however, rock masses have produced a comparatively shallow soil mantle due to the steepness of slopes, which accelerates the erosion of the fine material. Other mountains and hilly reaches are composed primarily of folded and faulted sedimentary rocks, including shale, sandstone, and conglomerate. Residual soils in these areas are shallow and generally less pervious than those found in the San Gabriel Mountains (LACDPW 2008b).

Within the County, there are over 50 active and potentially active fault segments, an undetermined number of buried faults, and at least 4 blind thrust faults capable of producing damaging earthquakes. Since 1800, over 90 significant earthquakes have jolted the Los Angeles region (LACDRP 2008).

2.2.4 HYDROLOGY AND DRAINAGE

The seasonal normal rainfall in the County ranges from 27.50 inches in the San Gabriel Mountains to 7.83 inches in the desert. The average annual rainfall for the County is 15.65 inches. Storm water runoff can be affected by snowmelt from mountains in the upper elevations when warm spring rains fall on a snowpack (LACDPW 2008b). Due to the County's climate patterns, streams and rivers receive intermittent heavy winter rainstorms and very little summer or fall precipitation. This results in an inconsistent flow of surface waters throughout the year. Small drainages and tributaries are highly sensitive to pollution, including sediment and silt, and the cumulative impacts of polluted runoff and unnatural levels of silt degrade the water quality of these waterways to a much greater extent than a high volume river with continuous flow (LACDRP 2008).

In mountainous areas, the steep canyon slopes result in rapid concentrations of storm water runoff. The amount of moisture present in the soil during a storm has a pronounced effect on the amount of sediment in storm water runoff. Soil is driest prior to the beginning of a rainy season due to the lack of rainfall and the evapotranspiration process during the dry summer months. Precipitation onto dry soils is nearly entirely absorbed (except for periods of extremely intense rainfall) and significant storm water runoff generally does not occur until soils are wetted to capacity. Due to the high infiltration rates and porosity of mountain soils, runoff occurs primarily as subsurface flow or interflow in addition to direct runoff. Spring or base flow is essentially limited to portions of the San Gabriel Mountain range. Consequently, most streams in the County are intermittent (LACDPW 2008b).

Storm water runoff from a recently burned watershed can result in greatly increased flows and higher quantities of sediment and debris in the flows due to burned and dislodged vegetation and lowered infiltration rates. Within Los Angeles County, debris production from a major storm event has amounted to as much as 223,000 cubic yards (cy) per square mile of watershed. Boulders up to eight feet in diameter have been deposited in valley areas a considerable distance from their source. Debris quantities that are equal in volume to the storm water runoff (i.e., 100 percent bulking) have been recorded in major storms (LACDPW 2008b).

In hilly areas, storm water runoff and debris production rates are normally smaller than those from mountainous areas of the same size. In hilly areas that have been developed for urban use, storm water concentration times become considerably decreased due to drainage improvements (e.g., curbs/gutters, storm drains), which expedite the movement of storm water flows. Additionally, runoff volumes and rates have increased due to increased impervious surfaces (e.g., buildings, parking areas, driveways, and roadway pavement), which do not allow for the infiltration of storm water flows into the soils. However, erosion is controlled and debris is minimized in urban areas due to reduced contact between storm water flows and native soils (LACDPW 2008b).

2.2.5 AIR QUALITY

Los Angeles County lies in two different air districts and two different air basins. All of the project debris basin sites, except three debris basin sites in the Palmdale area, are located in the South Coast Air Basin (SoCAB), which includes the urbanized portions of Los Angeles, Riverside and San Bernardino Counties and all of Orange County. Air quality in the SoCAB is regulated by the South Coast Air Quality Management District (SCAQMD). The SoCAB has an arid climate with virtually no rainfall and abundant sunshine during the summer months. It has light winds and poor vertical mixing compared to the other large urban areas in the U.S. The combination of poor dispersion and abundant sunshine provides conditions especially favorable to the formation of photochemical smog. The SoCAB is bound on the north and east by mountains with elevations exceeding 10,000 feet above msl. The unfavorable combination of meteorology, topography, and emissions from the nation's second largest urban area results in the air basin having the worst air quality in the U.S.

The three debris basin sites near Palmdale are in the Mojave Desert Air Basin (MDAB) and within the jurisdiction of the Antelope Valley Air Quality Management District (AVAQMD), which covers a western portion of the MDAB. The MDAB is classified as a dry-hot desert climate, with portions classified as dry-very hot desert, indicating at least three months with maximum average temperatures over 100.4 degrees Fahrenheit (°F). During the summer, the MDAB is generally influenced by a Pacific Subtropical High cell that sits off the coast, inhibiting cloud formation and encouraging daytime solar heating. The MDAB averages between three and seven inches of precipitation per year. The MDAB is separated from the Southern California coastal and Central California valley regions by the San Gabriel Mountains in the south and the Tehachapi Mountains in the northwest (AVAQMD 2008).

Based on monitored air pollutant concentrations, the USEPA and the California Air Resources Board (CARB) designate an area's status in attaining the National and State ambient air quality standards. The SoCAB is a federal and State nonattainment area for ozone and particulate matter with diameters of 10 microns and 2.5 microns (PM10 and PM2.5, respectively), and a State nonattainment area for nitrogen dioxide. Additionally, the Los Angeles County portion of the SoCAB is a State nonattainment area for lead. The AVAQMD portion of the MDAB is a federal and State nonattainment area for ozone and a State nonattainment area for PM10.

2.2.6 BIOLOGICAL RESOURCES

The County's varied landscape supports a diversity of distinct habitats. Biological resources found within Los Angeles County are some of the most diverse in the U.S., including unusual and relatively undisturbed examples of the original plant and animal species indigenous to the County. In many cases, these species are not found outside of Southern California.

Native trees on mountain slopes generally consist of oak with alder, cottonwood, willow, and sycamore found along streambeds at lower elevations. Pine, cedar, and juniper are found in ravines at higher elevations and along high mountain summits. The principal vegetative cover of upper mountain areas consists of various species of brush and shrubs known as "chaparral". The chaparral is extremely flammable, and extensive burns of the mountain vegetation frequently occur during dry, low-humidity weather accompanied by high winds. Chaparral has the ability to sprout following fire and grows rapidly to re-establish the watershed cover within a period of 5 to 10 years (LACDPW 2008b). Grasses are the principal natural vegetation in hilly areas. Many hillsides and valley areas south of the San Gabriel Mountains have been developed with urban and suburban land uses. Development of the Santa Clarita Valley and the desert areas to the north of the San Gabriel Mountains is less densely urban at present, but is developing rapidly (LACDPW 2008b).

2.3 PROJECT DESCRIPTION

2.3.1 DEBRIS BASIN MAINTENANCE PROGRAM

The Debris Basin Maintenance Program involves a set of continuing activities and protocols related to sediment removal and other debris basin maintenance activities. The program does not include any new activities or construction, but rather reflects continuing and longstanding maintenance activities that have been conducted for decades and which are required to protect downstream residences, businesses, and infrastructure from potential damage caused by floodwaters and debris.

The operation of the existing Maintenance Program involves several basic activities carried out at the 162 debris basins throughout the County of Los Angeles. In the course of one year, each of the 162 debris basin receives at least one round of routine maintenance. Routine maintenance may include (1) annual brush clearing, tree trimming, and vegetation mowing; (2) annual entrainment channel and outlet tower clearing; (3) sediment removal; (4) access road maintenance and other appurtenances; (5) State Division of Safety of Dams (DSOD) compliance; (6) storm damage repair and restoration projects; and/or (7) exotic species eradication control.

The activities involved in the Maintenance Program have been ongoing since the creation of the first debris basin under LACFCD jurisdiction. Although these activities are defined as the "project", they in fact are the established and routine maintenance activities that encapsulate existing LACFCD protocols and requirements. The existing maintenance activities are described as a "project" in order to address the requirement to analyze the environmental impacts of these activities pursuant to CEQA and as part of an approved and certified CEQA document for the issuance of a Section 1605 Agreement.

Debris Basin Contours

The LACFCD defines three subareas within each debris basin to describe the limits of the basin and interior work areas. These 3 areas, in order of increasing size, include the 25% capacity

elevation contour boundary (25 percent of design capacity), the mowing contour boundary, and the 100% capacity elevation contour boundary (100 percent of design capacity). The current LACFCD design capacity for a debris basin is equal to the volume of sediment produced by a capital flood, which depends on the characteristics of the upstream watershed and rainfall data for the area. These contours are depicted on graphics for each of the 162 debris basins included in the Maintenance Program (Appendix B). These debris basins are to be included in the Section 1605 Agreement.

The 25% contour delineates the portion of the debris basin that receives periodic sediment removal as needed to maintain the capacity of the basin at or below this contour elevation. Maintenance of each basin at or below the 25% contour ensures that adequate capacity is available to protect downstream areas from future storm water flows. Additionally, the 5% contour boundary is relevant when the upland watershed has been subject to a recent wildfire event. In the case of a recent wildfire, the debris basins require sediment removal when the sediment reaches the 5% contour boundary.

The mowing contour is similar to and often overlaps the 25% contour and is the portion of the debris basin that receives annual vegetation trimming and/or mowing. The basin limit contour delineates the design capacity of each basin (i.e. the 100% contour). The boundary of the LACFCD-owned property containing the debris basin generally extends outside the basin limit contour, and often includes an access road for LACFCD maintenance vehicles.

Maintenance Program Protocol and Section 1605 Agreement Requirements

Over time, some of the debris basins have developed favorable conditions for the growth of native habitats and vegetation that are considered to be sensitive by jurisdictional agencies (e.g., the CDFG). Because debris basin clearing occurs on varying schedules—such as when debris/sediment reaches the 25% contour or if the basins are expected to receive flows from upstream burned watersheds (which produce a greater volume of debris)—a Section 1605 Streambed Alteration Agreement between the LACFCD and the CDFG is being pursued to allow for ongoing preventative maintenance activities to occur at specified debris basins on an as-needed basis. The Section 1605 Agreement would authorize continued annual vegetation mowing, sediment removal when necessary, and maintenance of debris basins, access roads, and other appurtenances, as specified below.

In addition, the Section 1605 Agreement would include a permit provision that would efficiently and effectively expedite the inclusion of debris basins that are transferred/deeded to the LACFCD into the Section 1605 Agreement, as well as allow for the delisting of existing debris basins from the Section 1605 Agreement, if necessary.[1]

As previously discussed, the ongoing operations of the Maintenance Program do not constitute any change to current standard operating procedures. The authorized maintenance activities, as specified below, do not include any new activities or protocols that would have the potential to significantly impact the environment. In fact, as presented in Table 2-2, Debris Basin Maintenance Program Special Conditions, negotiations with the CDFG have resulted in

[1] As new debris basins are constructed in conjunction with private-sector development projects, the operation and maintenance responsibilities for the debris basins are transferred to the LACFCD. Prior to the transfers, the LACFCD confirms that the debris basins have been constructed according to County standards; have been maintained; and are functioning properly. Debris basins that are decommissioned and no longer operate as flood-control facilities, either through development or other means, would no longer require ongoing maintenance from the LACFCD.

additional conditions that will be required of the LACFCD to ensure that future maintenance activities would have fewer impacts on vegetation within select debris basins.

Annual Brush Clearing, Tree Trimming, and Vegetation Mowing

Routine maintenance activities consist of hand clearing, annual mowing, or other means of minor vegetation management, as necessary, to maintain the functionality of the debris basins and comply with vector- and fire-control requirements. The removal of fallen and dead trees and annual brush maintenance must not exceed 50 cubic yards (cy) annually. Heavy equipment, such as dump trucks and backhoes, are not utilized in areas outside of the 25% contour where vegetation could be crushed or damaged, and only hand tools are allowed for brush clearance. If heavy equipment must be utilized to remove large or cumbersome materials, a Biologist must clearly mark a path to and from the debris to be removed.

Trees other than willow species throughout riparian areas outside of the 25% contour shall only be trimmed under supervision of a qualified Arborist, and the CDFG must approve the removal of any tree with a diameter at breast height (dbh) greater than 4 inches. Brush clearance requires the removal of dead trees and/or thinning of bushes and shrubs and other combustible materials near roads, fences, and combustible fences. No more than 50 cy of this type of material shall be removed annually outside of the 25% contour without permission from the CDFG.

Mowing activities occur within each debris basin one time per year in the fall at the end of the nesting bird season. A variety of equipment, both motorized and non-motorized, may be used for mowing activities, including a slope mower (tractors with a mowing blade attachment on the side), long-reach excavator with mower head, skid steer loader with mower head, excavator with a mower head, and/or weed eaters, along with a dump truck to haul away mowed vegetation. Typically, the debris basin mowing activities will require only one piece of motorized mowing equipment. Larger basins do not require more equipment, but would just take more time to complete mowing activities. Vegetation and other organic matter that are mulched may be left on site or disposed of at nearby landfills.

On a “typical” day during the fall season, normally no more than five debris basins may be subject to mowing activities. The busiest of days may require up to 20 debris basins being mowed at one time. Vegetation mowing protocols and requirements, as conducted by the LACFCD and set forth in the Section 1605 Permit, are described below.

1. Vegetation mowing at all debris basins shall be performed annually between August 16 and March 15 to prevent or minimize impacts on nesting birds that may be present at the facility.

2. If mowing during the nesting season (e.g., mid-February through mid-August) is necessary, a qualified Biologist shall perform a nesting bird survey prior to initiation of mowing if there would be a potential for impacts to nesting birds. Results of the surveys, including negative findings, shall be submitted to the CDFG for concurrence. Additional restrictions and protective measures can be found in the Resource Protection section of the Section 1605 Agreement.

3. Mowing using mechanical mowers shall be performed within the 25% contour of the debris basins. Exotic and invasive/weed removal would be performed by hand between the 25% and 100% contours for fire and invasive vegetation control.

4. The 25% contour location is based on previous surveys performed at the basins. Handheld Global Positioning System (GPS) equipment shall be used in the field to determine several points in the basin that define the 25% contour. These GPS points shall be imported into database spreadsheets. The data shall be used in the field to determine or mark the 25% contour limits prior to the initiation of mowing activities.

5. Invasive vegetation shall be removed first by hand and put onto a tarp or handled according to the methods discussed under "Exotic Species Eradication Control" below.

6. All pre- and post-mowing site visits shall be conducted by a qualified Biologist to ensure that all mowing activities are performed according to the provisions of the Section 1605 Agreement or other applicable regulatory agency permits. Before and after photo-documentation (either by Biologists or LACFCD staff), monthly schedule updates and biological monitoring status reports from the Biologists would be conducted and included as part of the annual debris basin maintenance monitoring report.

Vegetation removal and facility repairs within the LACFCD's debris basin limits would be performed as required or requested by the California Department of Water Resources, Division of Safety of Dams (DSOD), the Agricultural Commission (AC), the Vector Control District (VCD), or local fire departments. Upon receipt of a notice from the DSOD, AC, VCD or local fire department that vegetation removal and/or repairs are required, the LACFCD would inform the CDFG and provide copies of the notice or email request. The LACFCD must remove vegetation that would create a fire hazard, vector, and/or odor nuisance to adjacent properties or that may be detrimental to the public health and safety and the stability of the debris basin. If removal of this vegetation requires using a path through an area that would be outside the boundaries of the debris basin limits, the LACFCD would provide a description of that path when notifying the CDFG.

Entrainment Channel and Outlet Tower Area Clearing

Entrainment channel and outlet tower area clearing generally occurs one time per year and is conducted at the same time as the annual vegetation mowing, although there are a couple of debris basins that require channel clearing more than one time per year. The type of motorized equipment used for entrainment channel and outlet tower area clearing includes a rubber tire excavator, backhoe, bulldozer, rubber tire loader, and/or long-reach excavator. Typically, the entrainment channel and outlet tower area clearing activities will require only one piece of motorized excavating equipment. Larger basins do not require more equipment, but rather take more time to complete channel clearing activities.

Entrainment channel and outlet tower area clearing protocols and requirements, as conducted by the LACFCD and set forth in the Section 1605 Agreement, are described below.

1. Maintenance of a small (i.e., no more than 10-foot-wide) entrainment channel that extends from the basin outlet tower to the upstream end of the LACFCD easement along the flow path and a 15-foot-wide radius area immediately around the outside surface of an outlet tower at the top of the deposited debris shall be maintained annually to prevent clogging of the tower inlet and to direct the low flow discharge from the basin into the outlet tower.

2. In cases where a basin, in a non-burned watershed that has less than 25% capacity, has sufficient accumulated debris to require clearing around the outlet tower (i.e., greater

than 5 feet deep from the bottom of the basin), the following condition shall apply when removing sediment around the outlet tower:

- Sediment clearing around the tower to ensure a clean tower inlet shall require excavating a 15-foot radius from the tower's outer surface to the basin bottom elevation. This bottom basin elevation shall be as shown on the ultimate cut plan for that basin. At the outer circumference of the 15-foot cleared area, a 2:1 slope shall be constructed to meet the existing debris surface. This would ensure that no material would fall against the tower during or after a storm event. Therefore, excavating shall require additional vegetation and sediment removals, as necessary, to create a 2:1 slope from the top of the sediment to the bottom of the excavated area to operate a backhoe and provide access for a truck to remove the excavated debris.

3. These annual maintenance activities shall be performed immediately following the mowing activities to minimize impacts on vegetation or thereafter during the storm season as deemed necessary by LACFCD. If work needs to be performed during the nesting season, a Biological Monitor shall be present and/or available during the mowing and channel clearing activities to ensure compliance with nesting bird requirements. Both mechanical and non-mechanical tools shall be used, as necessary, to perform the maintenance activities.

Sediment Removal

Removal of accumulated sediment is necessary when the basin capacity approaches the 25% contour, or the 5% contour if the debris basin's watershed was subject to recent wildfire. Sediment removal is completed with heavy equipment such as backhoes, excavators bucket loaders, shakers, water truck, sweeper, and/or bulldozers to transfer the sediment into dump trucks. Best Management Practices are also implemented during sediment removal activities by use of metal shakers, water trucks, sweepers, sandbags, etc.

There are multiple variables that contribute to the rate at which the 25% contour would be filled, thereby triggering a cleanout requirement. Many of these factors, such as wildfires, amount of annual rainfall and changes in land use conditions upstream of the basin, cannot be anticipated. These types of variables make it impractical to predict the frequency of basin sediment removal activities. However, the debris basins have been historically cleaned out once every 5 to 20 years. The length of time it takes to clear sediment from a basin depends on its size. Smaller debris basins are typically cleared in one to three days, while medium and larger basins can require between 1 to 6 weeks. The overall cleanout period can be longer (i.e., up to 12 weeks) for larger basins because of weather delays, as sediment clearing is suspended for rain. I

In years that have a substantial amount of sediment flows into the debris basins due to upland wildfires, the requirements for sediment removal can be drastically increased. For example, so far in 2010, approximately 70 debris basin sediment removal actions were taken over the course of the year, either at different basins or at the same basins multiple times. These extraordinarily high number of cleanout events were due to previous year's devastating Ranch Fire (2007), Val Verde Fire (2007), Merek Fire (2008), Sesnon Fire (2008), Santa Anita Fire (2008), Morris Fire (2009) and Station Fire (2009). However, sediment clearing (or other actions) associated with "emergency" activities are exempt from the Section 1605 Agreement requirements. Emergency activities conducted in response to a natural disaster, such as a flood or wildfire, are not a part of the Maintenance Program and therefore not analyzed in this IS/MND.

If maintenance activities are proposed at a time that sensitive biological resources may be affected, such as the nesting bird season, specific preventative measures would be implemented in accordance with all applicable permits, including the Section 1605 Agreement and existing permits with the USACE and the LARWQCB.

Sediment removal protocols and requirements, as conducted by the LACFCD and set forth in the Section 1605 Agreement, are described below.

1. Sediment removal shall be authorized when the quantity of sediment in a debris basin has reached or exceeded 25% of the debris basin's volume.

2. Sediment removal shall be authorized when the quantity of sediment in a debris basin has reached or exceeded 5% or more of the basin's capacity and more than 20% of the watershed upstream of the debris basin has burned within the previous 5 years.

3. Sediment removal in all debris basins shall occur between August 16 and March 15 of any given storm season unless prior approval is received from the CDFG. If work in progress could potentially extend beyond March 15, the LACFCD shall be required to perform the necessary nesting bird surveys in accordance with the provisions of the Section 1605 Agreement before work may continue uninterrupted.

4. Sediment removal below the cleanout thresholds listed above shall only be performed after prior approval from all agencies.

5. Sediment removal usually involves excavation, fill, and land-clearing activities. The work shall be performed using mechanical equipment and non-mechanical methods, such as hand clearing. Work shall be performed within the existing and defined right-of-way easements. All buried vegetation within the sediment deposition zone shall be removed with the sediment as part of the removal activity.

6. A qualified Biological Monitor shall be present or available before and during the sediment removal activities to ensure protection of resources.

7. A Water Diversion Plan shall be prepared and appropriate Best Management Practices (BMPs) installed prior to start of work when a basin has ponded or flowing water. The plan shall include appropriate BMPs and water sampling and testing protocols to comply with applicable LARWQCB requirements. Similar to the LARWQCB permit conditions, copies of the water sampling testing results shall be submitted to the CDFG for its records.

8. Two standard water diversion plans (diversion plans) that have been previously approved by agencies and used by the LACFCD during previous basin cleanouts that involved ponded or flowing water are included as part of the Section 1605 Agreement. Any future debris basin cleanout activity shall use one of the diversion plans and notify the CDFG in writing. No diversion plans shall be submitted prior to start of the cleanout. However, if the LACFCD believes there would be a need to deviate from the pre-approved water diversion plan, a modified diversion plan shall be submitted to CDFG and other agencies for review and approval.

Maintenance of Access Road and Other Appurtenances

Access road and other appurtenance maintenance activities are performed on an as-needed basis. Annual inspections are conducted to determine the need and extent of miscellaneous maintenance activities. Much of the work conducted would not require the use of heavy equipment or machinery. Access road and other appurtenance maintenance protocol and requirements, as conducted by the LACFCD and set forth in the Section 1605 Agreement, are described below.

1. Maintenance, including restoration/reconstruction of existing access roads to and into debris basins, parking and turnaround areas, crest of spillway and spillway structures, would be authorized for maintenance provided the footprint does not change and the minimum width and length of the road necessary to provide access for routine maintenance and sediment removal. Reconstruction and maintenance of fences and other appurtenances would be also authorized. Appropriate BMPs would be installed prior to the start of maintenance activities.

2. Annual inspections of the debris basin structures would be conducted, including minor repairs of outlet towers and access railings/stairs, graffiti removals, spillways, inlet and outlet pipe structures/chutes, riprap, trash racks, facing slabs, gage boards, slow and down drains, fences, unclogging of outlet towers, and other appurtenances to ensure compliance with other agency requirements and for the safety of the basin dam structures. This may require the use of hand and/or mechanical equipment and trucks to enter the basins to perform the repairs.

State Division of Safety of Dams (DSOD) Compliance

Removal of vegetation and/or accumulated trash and debris, including repair of rodent-damaged portions on the upstream and downstream faces of the debris basin dams and abutments would be allowed as necessary to comply with dam safety requirements of the DSOD and/or to ensure the integrity of the embankment. Additional maintenance activities may be required by the DSOD and shall be performed accordingly to comply with applicable regulations, including notification and coordination with the CDFG and other agencies.

Storm Damage Repair and Restoration Projects

Storm damage repair and restoration of existing structures back to pre-storm conditions would be conducted on an as-needed basis and includes repairs to eroded or damaged slopes and embankments, down drains, inlet and outlet pipes and related structures, and other on-site structures. Much of the work conducted would not require the use of heavy equipment or machinery. E-mail notification of the CDFG would be required prior to initiation of any such storm damage repair or restoration projects for existing structures.

Exotic Species Eradication Control

Removal of weeds/invasive vegetation is conducted annually on an as-needed basis. Depending on the vegetation type to be removed, various types of equipment may be required. For giant reed removal, which would be the most intensive invasive removal activity, could require hand tools as well as heavy equipment for excavation of the root ball. Exotic species eradication would be allowed without prior notification of the CDFG consistent with the following measures:

The LACFCD shall remove any invasive vegetation (e.g., giant reed, tamarisk, immature eucalyptus [less than 3 inches], pepper tree, castor bean, African umbrella sedge, mustards, tree tobacco, periwinkle, and pampas grass) from the debris basin under the supervision of a Biologist; disposal would occur in a manner and in a location that prevents invasive species reestablishment. Removal would occur at the optimum time of the year and as often as necessary to attain complete control of target species. Native riparian vegetation would be flagged and avoided. Techniques to be used are described below:

- Giant Reed (Arundo), if present, would be cut to a height of six inches or less, and the stumps painted with an herbicide approved for aquatic use within five minutes of cutting. The initial cutting or excavation of the root ball would be done in the fall. The follow-up spraying would occur in the spring/summer months, when the re-growth would be only approximately knee-high.

    1. At all basins, stands of Arundo, tamarisk, castor bean, or other invasive species that may be identified by a Biologist as having a high probability of spreading/propagating would be cut by hand or other equipment, with the cuttings placed on tarps or other means to minimize the spread within the basin during transport from the site for off-site disposal, in order to prevent reestablishment in any water body. Alternate methods of containing and hauling invasive species off site would also include covering invasive trees with plastic bags before cutting, directly disposing of the species or loading into a nearby truck or mechanical bucket immediately after cutting, or any other available and feasible operation means to respond to each site condition.

    2. Another approved Arundo and other invasives eradication method would be the "spraying re-growth method", whereby either the Arundo would be cut to approximately one foot above the ground surface or the root ball would be removed, and then the new re-growth would be sprayed as necessary until the Arundo has been eradicated. If the spray would be applied to the re-growth when it would be only knee-high, as described earlier in this condition, no nesting surveys are required. For other invasive species, post-emergent herbicide spraying (RoundUp or AquaMaster) would only be used on areas with dense invasive vegetation, if necessary, and left for a week prior to its removal. This allows for the chemical to work and to become absorbed within the plant and roots system for more cost-effective eradication.

    3. On sites where equipment access would be feasible, Arundo, castor bean, or dense invasive vegetation may be removed mechanically, except in areas where invasive vegetation is intermixed with native vegetation. If this treatment option would be preferred, the LACFCD would make every effort to completely remove root masses. Biological monitoring, as necessary, would be provided during the mechanical removal activities for the term of the Section 1605 Agreement to control Arundo (and other invasive vegetation) re-sprouts using an approved control methodology.

The LACFCD shall remove any non-native vegetation (e.g., tree tobacco, castor bean, giant cane, tamarisk) from the work area and shall dispose of it in a manner and a location which prevents its reestablishment. Removal shall be done during the spring/summer season, as needed, until the exotics have been eradicated.

When proposed methods to remove Arundo deviate from these procedures, the LACFCD shall present the alternate method(s) in writing to the CDFG for review and coordination prior to project implementation. Any alternate method(s) shall comply with conditions of the

Section 1605 Agreement, including, but not limited to, where there is a possibility that the herbicide could come into contact with water, the LACFCD shall employ only those herbicides, such as AquaMaster (Glyphosate), which are approved for aquatic use. If surfactants are required, they shall be restricted to non-ionic chemicals, such as AgriDex, which are approved for aquatic use. Additionally, all impacts to nesting birds shall be avoided; and invasive vegetation shall be disposed of in a manner and a location which prevents its reestablishment.

The LACFCD shall apply any herbicides in accordance with State and federal law. No herbicides shall be used where Threatened or Endangered species occur. Herbicides shall be used under the direction of licensed Pesticide Advisor. No herbicides shall be used when wind velocities are above five miles per hour. No herbicides shall be used on native vegetation unless specifically authorized, in writing, by the CDFG.

- A small amount of selective trimming of native bushes and ground cover species may occur to prevent overspray of herbicide from reaching these species, but only as provided within the conditions of the Section 1605 Agreement. Native vegetation may only be trimmed; individual plants shall not be removed. Any trimming to native trees in excess of three inches dbh shall require specific notice to and consultation with the CDFG.

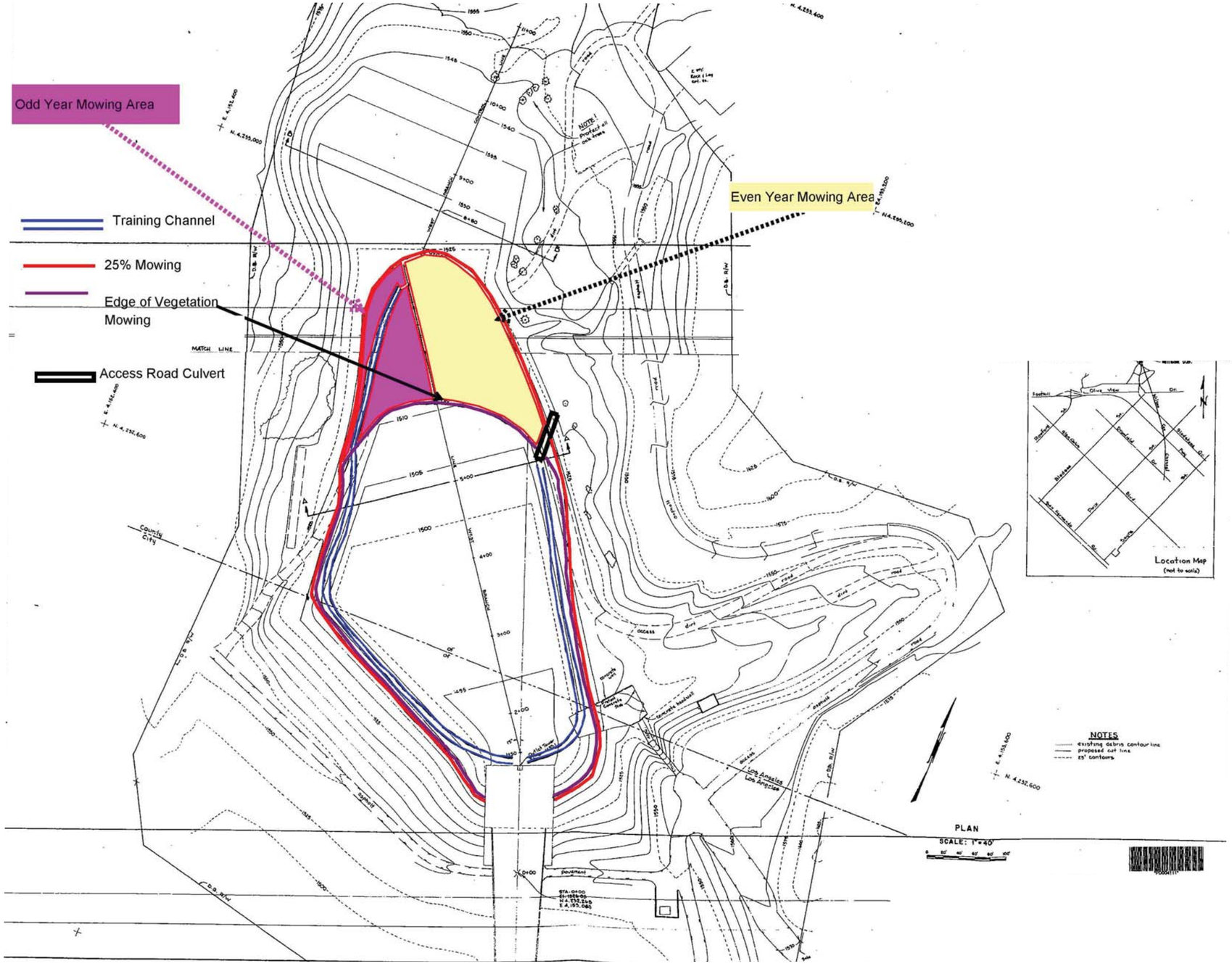
- Herbicide mixing sites shall only be located at an existing road site, or areas devoid of any vegetation. All herbicide preparation shall occur outside of any stream, lake, or adjacent riparian habitat.

Special Conditions

Sediment removal from debris basins under the Section 1605 Agreement would be authorized whenever necessary to protect downstream public health, safety, and welfare. Debris basins with special situations that warrant specific conditions are listed below in Table 2-2 with the appropriate restrictions necessary to protect the environmental resources values present in these basins. The only change to the current operational protocols of the Maintenance Program required by the Section 1605 Agreement relate to the newly required phased clearance of the Wilson Debris Basin. Exhibit 2-2 depicts the phased clearance program for the Wilson Debris Basin, which is intended to reduce the amount of vegetation removed in any one year from vegetation mowing activities. The phased clearance program is described in Table 2-2.

TABLE 2-2
DEBRIS BASIN MAINTENANCE PROGRAM SPECIAL CONDITIONS

Debris Basin	Special Condition
Big Dalton	Sediment removal activities would be conducted between August 15 and November 15 and would avoid major trees located within the slopes of the basin banks where at all possible, even when cleaning within the 25%/100% contour.
Englewild	
Linda Vista	These basins are significantly undersized and require sediment clearing whenever the basin reaches 5% of maximum capacity, regardless of the upstream watershed conditions. Should the facility be redesigned, the LACFCD would consult with the agencies on the proposed capacity in order to allow area for riparian vegetation to develop. This special condition would be void once the basins were built.
Mullally	
Santa Anita	Sediment removal activities would be conducted between August 16 and November 15 and would avoid existing large willows near the dam on both sides of the basin. Willow growth on the upstream dam face may be removed for dam safety purposes. • A 10-foot-wide channel within the path of the inflow, through the willow grove located at the upstream end of the basin reservoir, would be maintained, as needed, to relieve the blockage of debris upstream of the trees and allow debris and sediment to reach the basin. • A 16-foot-wide access area along the toe of the upstream dam embankment face and the western embankment (adjacent to the access road and the residential homes) would be cleared of vegetation and maintained to allow maintenance vehicle trucks or equipment to access the outlet tower from the western invert access ramp for maintenance, to conduct upstream spillway embankment inspection, and to maintain a fire hazard clearing area on the western side of the basin. • A 15-foot-wide radius clearance area around the outside surface of the tower would be cleared of debris, vegetation, and sediment to unclog the outlet tower inlets, ensure proper drainage, and direct storm flows into the outlet tower. • A Vegetation Management Plan would be submitted at a later date in consultation with the CDFG.
Sawpit	The LACFCD would avoid tributaries entering the debris basin unless they are inundated with sediment.
Sierra Madre Dam	The DSOD requires the Sierra Madre Dam to be cleaned out whenever the accumulated debris surface reaches a target elevation of 1,128. 9 feet above mean sea level (msl). This elevation corresponds to the maximum water and silt level at which the debris basin could safely operate in the event of a maximum credible earthquake.
Wilson	Refer to Exhibit 2-2, Wilson Debris Basin Phased Clearance. • The area within the 25% contour that would be downstream of the July 2008 mature vegetation line (as indicated by a purple line on Exhibit 2-2) would be mowed annually in its entirety. Beginning at the edge of the mature vegetation line, the remainder of the 25% contour would be segregated into two areas by the control line. The eastern section would be mowed during even numbered years and the western portion would be mowed during odd numbered years. Training channels would be cut along the toe of both sides of the basin. • The training channel along the western side of the basin would collect waters flowing from the canyon. This western channel would be maintained up to the mature vegetation line annually. During odd numbered years, when the western half of the mature area would be cleared, the training channel would be extended to the furthest upstream point to collect the canyon runoff. • The training channel along the eastern side would collect water coming from a natural spring along that bank of the channel. A culvert would be placed to funnel the water under the basin access road and would be maintained annually. • A 15-foot-wide radius clearance area around the outside surface of the outlet tower would be cleared annually of debris, vegetation, and sediment to unclog the outlet tower inlets, ensure proper drainage, and direct storm flows into the outlet tower.



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Wilson Debris Basin Phased Clearance

Exhibit 2-2

County of Los Angeles Debris Basin Facilities

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Aside from these special conditions, the Section 1605 Agreement also contains conditions for fish and wildlife protection and the use of equipment and access, fill or spoil structures, pollution, sedimentation, and litter. Appendix A contains the draft Section 1605 Agreement that outlines these conditions. The conditions would not result in environmental impacts but would avoid impacts to biological resources and waters within the debris basins.

Addition of New Debris Basins

It is recognized that from time to time the LACFCD may continue to accept debris basins constructed and initially maintained by private development interests or from other jurisdictions for subsequent LACFCD ownership and maintenance. In most cases, these debris basins were constructed under separate Streambed Alteration Agreements issued by the CDFG to the private developers. Prior to LACFCD acceptance, the developer is required to provide the appropriate mitigation documentation to ensure that all appropriate measures to protect biological resources have been completed to the satisfaction of the LACFCD and the CDFG. Upon such acceptance, the LACFCD assumes maintenance responsibility for these debris basins and the future maintenance would need to be subject to the provisions of the 1605 Agreement. Therefore, CDFG would not require any additional mitigation for such Debris Basin when the LACFCD requests to amend the 1605 Agreement to add newly transferred debris basins.

If the proposed debris basin does not have all permits and mitigation completed as discussed above, CDFG would amend the 1605 Agreement to add the debris basin if the LACFCD agrees to apply the same ranking methodology used to determine the replacement acreage for Maintenance Program impacts, as specified in Table 4 of the 1605 Agreement (Appendix A).

Inter-jurisdictional Coordination

The LACFCD has an established protocol to inform and coordinate with the jurisdiction in which a debris basin is located prior to any sediment removal that could involve heavy equipment and/or truck trips. As standard practice, the LACFCD will contact the City Manager and/or LACDPW Director of the applicable jurisdiction to coordinate the schedule of sediment removal and truck route and to discuss any additional constraints or requests. Residences and schools adjacent to truck haul routes (except freeways) are notified of the work schedules prior to the start of work and are provided contact information for complaint resolution. The LACFCD posts flyers in the community and along the haul routes to notify residents, schools, businesses, and City staff of the planned maintenance activities and haul routes; to incorporate any recommendation, condition, and/or alternatives; and to obtain any necessary permits for the activities.

2.3.2 OPERATIONAL ASSUMPTIONS

As previously stated, the activities involved in the Maintenance Program are not new and have been ongoing since the creation of the first debris basins under the jurisdiction of the LACFCD. Although these activities are defined herein as the “project”, they in fact are the established and routine maintenance activities that encapsulate existing LACFCD protocols and requirements. The purpose of describing the existing maintenance activities as a “project” is to address the requirement to analyze the environmental impacts of such continuing activities pursuant to CEQA, since an approved document prepared pursuant to CEQA is required by the CDFG for issuance of the Section 1605 Agreement for the Debris Basin Maintenance Program.

The following information is provided based on the historic operating protocols and requirements of the LACFCD, as presented in historic sediment clearing activities maintained by the LACFCD three main yards that are responsible for implementing the Maintenance Program: Longden Yard (east), Hansen Yard (west), and Imperial Yard (south). The operational activities described below are not intended to describe each individual year of maintenance activities, but rather to describe the average, as well as the reasonably anticipated "typical" year of activity.

The vast majority of activities performed under the Maintenance Program are conducted prior to the start of the nesting bird season (i.e., prior to March 15). However, these activities can occur at other times of the year if needed to adequately maintain the flood-control facilities.

According to an 11 year span of data provided by LACDPW for the years 2000 through 2010, the average number of debris basins undergoing sediment removal activity per year was 15.[2] A total of 9 of these 11 years had between 1 and 15 debris basin clearing events, which could be considered a "typical" expected range for sediment clearing activities per year (LACDPW 2010).

Debris basins vary greatly in capacity. For example, Irving Debris Basin has a sediment capacity of approximately 300 cy within the 25% contour, while Little Dalton has a sediment capacity of approximately 165,125 cy within the 25% contour (LACDPW 2000). Therefore, the amount of sediment removed during each debris basin clearing event also varies considerably. As such, it is not possible to predict for any given year what the clean out events will require in terms of sediment removal amounts because of various factors, including the presence or absence of rainfall, wildfires, etc. According to the data provided by LACDPW for the years 2000 through 2010, the average amount of sediment removed per year over this 11 year span was 286,623 cy. A total of 8 of these 11 years had between 18,000 cy and 240,000 cy of sediment removed per year, which could be considered a "typical" expected range for the amount of sediment removed per year (LACDPW 2010).

Cleared vegetation and sediment is disposed of off-site at designated Sediment Placement Sites (SPS). Several different SPS are used by the LACFCD for the disposal of sediments removed from the debris basins, as listed in Table 2-3 below and shown in Exhibit 2-3. Additionally, if necessary, appropriate landfills may be used to dispose of sediment.

[2] Between 2000 and 2010, a total of 166 sediment clearing events have occurred, either at different debris basins or repeated clearing events at the same debris basin. This results in an average of 15 debris basins per year.

Regional Location of Sediment Placement Sites

Exhibit 2-3

Los Angeles County Debris Basins

N W E S

5 2.5 0 5 Miles

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TABLE 2-3
EXISTING SEDIMENT PLACEMENT SITES

Sediment Placement Site (SPS)	Address	City
Auburn	700 Auburn Ave	Sierra Madre
Bailey	700 Oak Crest Dr	Sierra Madre
Big Dalton	2500 Dalton Canyon Rd	Glendora
Burro	East Fork Rd	Angeles National Forest
Cogswell	West Fork Rd	Angeles National Forest
Dalton	1100 Glendora Mountain Rd	Glendora
Eaton	2986 New York Dr	Pasadena
Hastings	3600 Ranch Top Rd	Pasadena
Las Flores SPS	3200 Rubio Canyon Rd	Altadena
Lincoln	600 Loma Alta Dr	Altadena
Live Oak	4405 Live Oak Cyn Rd	Claremont
Maddock	400 Vineyard Ave	Duarte
Manning Pit	Vincent Ave, south of Arrow Hhwy	Irwindale
Puddingstone Diversion	5580 San Dimas Cyn Rd	La Verne
Rubio	3200 Rubio Canyon Rd	Altadena
San Dimas	1600 N. San Dimas Cyn Rd	San Dimas
Santa Anita	2000 Oak Pl	Arcadia
Sawpit	700 N. Canyon Rd	Monrovia
Sierra Madre Villa	1150 Sierra Madre Villa Ave	Pasadena
Spinks	17 Woodlyn Ln	Bradbury
Webb	Baseline Rd and Web Cyn Rd	Claremont
West Ravine	3600 Chaney Tr	Altadena
May SPS	Between Wilson DB and May DB No. 1	Los Angeles
Dunsmuir SPS	5200 New York Ave	Glendale
Zachau SPS	1100 Cardamine Pl	Tujunga
Browns SPS	13000 Browns Cyn Rd	Chatsworth
Eagle SPS	2700 Harmony Pl	La Crescenta
Lower Sunset SPS	North of Lower Sunset Debris Basin	Burbank
Upper Sunset SPS	West of Upper Sunset Debris Basin	Burbank
Sunshine Canyon Landfill	14747 San Fernando Rd	Sylmar
Scholl Canyon Landfill	7721 N. Figueroa St	Los Angeles

DB – debris basin; SPS – sediment placement site
Source: LACDPW 2010

Use of a specific SPS is dependent on distance, travel time, remaining capacity of the SPS, vehicle capacity at the SPS, available equipment and resources, time constraints, and SPS permit requirements. In general, SPS sites are used that are the closest to the debris basin. Most of the debris basins that require regular sediment clearing activities due to wildfire activity are in the western portion of the County, which is also where the majority of the SPS facilities are located. Since the SPS depends on these factors, there are no haul routes set; however, trucks generally utilize designated truck routes, with preference to wider streets and those that avoid locations of public congregation, such as schools or libraries.

Other Intermittent Maintenance Activities

Invasive Removal and Fuel Modification

Removal of weeds/invasive vegetation and fuel modification activities are conducted on an as-needed basis. These are done after notices are received from the CDFG but are otherwise scheduled as part of and prior to mowing activities. When conducted separate from the mowing activities, depending on the size and amount of vegetation to be removed, fuel modification requires the use of hand shears, a weed eater, and/or an excavator with a bucket thumb.

Maintenance and Repair of Basins, Access Road and Appurtenances

Maintenance and repair of the basins, access roads, and appurtenances are conducted on an as-needed basis, subject to annual inspections and LACFCD priorities. It is assumed that this activity occurs intermittently at any basin; that it would affect highly disturbed areas such as access roads, embankments/dams, spillways, outlet towers, parking and turnaround areas, fences, access railings/stairs, inlet and outlet pipe structures/chutes, riprap, trash racks, facing slabs, gage boards, slow and down drains, and slopes; and that much of the work would not require the use of heavy equipment or machinery.

2.4 AGENCY APPROVALS AND PERMITS

2.4.1 REQUIRED APPROVALS AND PERMITS

This IS/MND is intended to serve as the primary environmental document pursuant to CEQA for actions associated with the Maintenance Program, including discretionary approvals requested or required to implement the Maintenance Program. In addition, this is the primary reference document for the formulation and implementation of a mitigation monitoring program for the Maintenance Program. Prior to approval of the Maintenance Program, the LACFCD will consider the proposed IS/MND together with any comments received during the public review process.

The Los Angeles County Board of Supervisors may adopt the IS/MND if it finds, on the basis of the whole record before it, that there is no substantial evidence the project would have a significant effect on the environment. Table 2-4 lists all agencies with permit or approval authority over the Maintenance Program.

TABLE 2-4
AGENCY APPROVALS AND REQUIREMENTS

Agency	Approval Required	Purpose
Los Angeles County Flood Control District (Lead Agency)	Mitigated Negative Declaration	Approval pursuant to CEQA
California Department of Fish and Game (Trustee Agency)	Section 1605 Long-term Streambed Alteration Agreement	To authorize impacts to biological resources under State jurisdiction

SECTION 3.0 ENVIRONMENTAL CHECKLIST FORM AND ASSESSMENT

This section includes the completed CEQA environmental checklist form, as provided in Appendix G of the State CEQA Guidelines, as well as substantiation and clarification for each checklist response. The checklist form is used to assist in evaluating the potential environmental impacts of the Maintenance Program and identifies whether the project is expected to have potential significant impacts.

1. Project title: Debris Basin Maintenance Program

2. Lead agency name and address: Los Angeles County Flood Control District
900 South Fremont Avenue
Annex Building, 2nd Floor
Alhambra, CA 91803-1331

3. Contact person and phone number: Jemellee Cruz, P.E.
Civil Engineer
900 South Fremont Avenue
Annex Building, 2nd Floor
Alhambra, CA 91803-1331
(626) 458-4170

4. Project location: Various locations throughout County of Los Angeles, California

5. Project sponsor's name and address: Los Angeles County Flood Control District
900 South Fremont Avenue
Annex Building, 2nd Floor
Alhambra, CA 91803-1331

6. Zoning: P (Public Facilities)

7. Description of project: The Maintenance Program includes the routine maintenance of and periodic sediment removal from 162 debris basins throughout the County of Los Angeles. Routine maintenance refers primarily to vegetation mowing and periodic removal of accumulated sediment. These activities are conducted as needed to maintain adequate debris basin capacity and functionality and to meet vector control requirements. The program does not propose any new activity or construction project, but rather reflects ongoing maintenance activities that have been conducted for many years and which are required to allow debris basins to perform their primary functions of protecting downstream residences, businesses, and infrastructure from potential negative impacts caused by floodwaters, erosion, and debris flows. Environmental review pursuant to CEQA is necessary for the issuance of a Section 1605 Long-term Agreement by the CDFG.

8. Surrounding land uses and setting: The majority of the LACFCD's debris basins are located in the southern foothills of the Santa Monica, San Gabriel, Verdugo, and Puente Hills Mountains; however, three basins are also located in the northern foothills of the San Gabriel Mountains near the Palmdale/Lancaster area. Debris basins are generally located upstream of developed areas that would otherwise be inundated with uncontrolled sediment and water flows. Single-family residences and undeveloped open space dominate the surrounding land uses immediately adjacent to the basins, although some basins are located near major urban centers and freeways.

9. Other public agencies whose approval is required: California Department of Fish and Game.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated on the following pages.

- ☐ Aesthetics
- ☐ Air Quality
- ☐ Cultural Resources
- ☐ Greenhouse Gas Emissions
- ☐ Hydrology and Water Quality
- ☐ Mineral Resources
- ☐ Population and Housing
- ☐ Recreation
- ☐ Utilities and Service Systems
- ☐ Agriculture and Forest Resources
- ☐ Biological Resources
- ☐ Geology and Soils
- ☐ Hazards and Hazardous Materials
- ☐ Land Use and Planning
- ☐ Noise
- ☐ Public Services
- ☐ Transportation/Traffic
- ☐ Mandatory Findings of Significance

DETERMINATION:

On the basis of this initial evaluation:

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

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature of Lead Agency Representative

11/29/10
Date

JEMELLE CRUZ
Printed name

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT
Agency

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

3.1.1 EXISTING CONDITIONS

The debris basins are located in foothill areas and are generally surrounded by either open space and/or residential development. Some are fully surrounded by development (e.g., Cooks, Denivelle, Eagle, and Fair Oaks debris basins). The majority of the debris basins are located in the southern foothills of the Santa Monica, San Gabriel, Verdugo, and Puente Hills Mountains; however, three basins are also located in the northern foothills of the San Gabriel Mountains near the Palmdale/Lancaster area. The mountain ranges in the County provide a visual backdrop to the urban environments throughout the County.

The *County of Los Angeles General Plan's* Conservation and Open Space Element describes various scenic resources that "contribute to tourism and the intellectual and emotional development of local inhabitants". These resources include the San Gabriel and Santa Monica Mountains, stands of trees that cover the higher slopes of the mountains, waters and beaches of the Pacific Ocean, historical architecture, and the downtown skyline (LACDRP 1980a).

In Los Angeles County, several freeways are considered in the California Scenic Highway Mapping System to be "Officially Designated Scenic Highways" or "Eligible State Scenic Highways", including portions of State Route (SR) 126, Interstate (I) 5, and I-210 in the Santa Clarita Area; SR-2 and SR-39 in the San Gabriel Mountains; portions of SR-118 and I-101 near Ventura County; SR-27 near the Malibu area; SR-1 and SR-23 along the coastline west of the City of Santa Monica; and a portion of SR-57 south of SR-60 (Caltrans 2007).

The maintenance activities set forth in the Section 1605 Agreement represent a continuation of existing practices and activities performed by the LACFCD at the debris basin sites. These activities do not involve new construction, expansion or alteration of the debris basins, but rather include longstanding and ongoing maintenance activities that protect the health and safety of downstream properties through debris flow reduction and flood control. Therefore, the project does not represent any change over the current baseline existing conditions throughout Los Angeles County and would not result in new environmental impacts; therefore, no mitigation would be required.

3.1.2 IMPACT ANALYSIS

a, b) Less Than Significant Impact

The ongoing operations of the Maintenance Program would not involve changes to ongoing maintenance activities, but rather reflect a continuation of historical maintenance activities that have been conducted for many years and which are required to protect downstream residences, businesses, and infrastructure from potential damage caused by floodwaters and debris storm water runoff. Debris basins are constructed flood-control facilities and are not scenic resources. Each year, maintenance activities are performed on each of the 162 basins that would involve, at a minimum, trimming or mowing vegetation, and possibly sediment removal and/or removal of exotic and invasive plants. These annual changes to the vegetation debris basins would not significantly impact public area views of scenic vistas, such as the San Gabriel and Santa Monica Mountains.

The presence of heavy equipment or other mechanical devices would not substantially impact views from public areas into scenic vistas. There may be debris basins located in proximity to an officially designated or eligible scenic highway; however, the debris basins are not considered scenic resources, and no new structures or facilities would be constructed that could block views of scenic vistas or otherwise permanently impact scenic resources. All maintenance activities would continue to be temporary and short-term and would have a minimal impact on scenic resources. Therefore, impacts to scenic vistas, scenic resources, or the existing visual character of the debris basins and surrounding areas associated with the ongoing implementation of the Maintenance Program under the conditions of the Section 1605 Agreement would continue to result in less than significant impacts, and no mitigation is required.

c) Less than Significant Impact

The ongoing Maintenance Program operations involve the annual removal of vegetation within the 25% mowing contour and periodic removal of accumulated sediment within each debris basin. The timing of sediment removals varies from basin to basin and depends on factors such as the amount of accumulated sediment and whether wildfires had affected upstream watersheds. The annual vegetation and sediment removal could be perceived as a negative impact to the scenic qualities of the debris basin. Also, temporary, short-term views of landscape equipment/hand tools, earth-moving equipment, trucks, and personnel at each debris basin would also periodically affect the aesthetic character of the debris basins. However, debris basins are constructed flood-control facilities and are not considered to be scenic resources. Views of maintenance activities are generally limited to adjacent land uses in the immediate area because of the low profile of the debris basins and the fact that many debris basins are within valley areas and are hidden by topography and mature vegetation. As noted above, the temporary visual changes associated with the ongoing activities of the Maintenance Program would not be altered by the requirements set forth in the Section 1605 Agreement, which does not require changes in current operations.

Therefore, ongoing implementation of the Maintenance Program under the conditions of the Section 1605 Agreement would continue to result in less than significant impacts to the visual character of each debris basin and its surroundings.

d) No Impact

The ongoing operations of the Maintenance Program would not introduce new sources of light or glare compared to previous and ongoing maintenance activities. All construction activities

would continue to be performed during the daytime hours, and would not require supplemental lighting. Operation of any debris basin under current conditions does not include security or other lighting. Therefore, there would continue to be no impacts related to light and glare.

3.1.3 REGULATORY REQUIREMENTS

None.

3.1.4 MITIGATION MEASURES

There would continue to be no significant impacts to aesthetics; therefore no mitigation measures are required.

3.2 AGRICULTURE AND FOREST RESOURCES	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220[g]), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104[g])?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

3.2.1 EXISTING CONDITIONS

There are no agricultural activities or forest lands within any debris basin property, whether LACFCD-owned or accessed via an easement that has been granted to the LACFCD. This includes forest lands as defined under *California Public Resources Code* Section 4526, Timberland, *California Public Resources Code* Section 12220(g), which defines "forest land", and *California Government Code* Section 51104(g), which defines a "timberland production zone". Where a debris basin is located within federal National Forest boundaries, the LACFCD has been issued an access easement and Special Use Permit from the U.S. Forest Service to allow for the presence of the debris basin and performance of the ongoing maintenance activities. Therefore, no additional approvals from the U.S. Forest Service would be necessary.

The maintenance activities set forth in the Section 1605 Agreement represent a continuation of existing practices and activities performed by the LACFCD at the debris basin sites.

These activities do not involve new construction, expansion or alteration of the debris basins, but rather include longstanding and ongoing maintenance activities that protect the health and safety of downstream properties through debris flow reduction and flood control. Therefore, the project does not represent any change over the current baseline existing conditions throughout Los Angeles County and would not result in new environmental impacts; therefore, no mitigation would be required.

3.2.2 IMPACT ANALYSIS

a□e) No Impact

As discussed above, there are no agricultural activities or forest lands within any debris basin. Because the ongoing Maintenance Program does not involve the construction of new debris basins or the expansion of existing debris basins, the ongoing operations of the Maintenance Program would not convert lands to new uses or have any impacts on timberlands. Thus, the Maintenance Program would not convert lands designated as Farmland to non-agricultural uses or forest to non-forest uses. There would continue to be no impact to agriculture and forest lands.

3.2.3 REGULATORY REQUIREMENTS

None.

3.2.4 MITIGATION MEASURES

There would continue to be no impacts to agricultural resources; therefore, no mitigation measures are required.

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

3.3.1 EXISTING CONDITIONS

All but 3 of the 162 debris basins included in the Maintenance Program are located within the SoCAB. The SoCAB is characterized as having a "Mediterranean" climate (i.e., a semi-arid environment with mild winters, warm summers, and moderate rainfall). The SoCAB is a 6,600-square-mile area bound by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The SoCAB includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties, in addition to the San Gorgonio Pass area of Riverside County.

Three debris basins north of the San Gabriel Mountains are located within the western portion of the MDAB. The MDAB is characterized as having a dry-hot desert climate with hot summers and three to seven inches of precipitation per year. The western portion of the MDAB is separated from the SoCAB by the San Gabriel Mountains.

Both the State of California (State) and the federal government have established health-based ambient air quality standards (AAQS) for seven air pollutants. These pollutants include ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), coarse particulate matter with a diameter of 10 microns or less (PM10), fine particulate matter less than 2.5 microns in diameter (PM2.5), and lead. These standards are designed to protect the health and welfare of the populace with a reasonable margin of safety. The criteria air pollutants and their attainment status in the SoCAB are based on USEPA and CARB designations. Tables 3-1 and 3-2 summarize the attainment status of the SoCAB and the AVAQMD portion of the MDAB for each criteria pollutant, respectively.

TABLE 3-1
ATTAINMENT STATUS OF CRITERIA POLLUTANTS IN THE SOUTH COAST AIR BASIN

Pollutant	State	Federal
O_3 (1 hour)	Nonattainment	No standard
O_3 (8 hour)		Extreme Nonattainment
PM10	Nonattainment	Serious Nonattainment
PM2.5	Nonattainment	Nonattainment
CO	Attainment	Attainment/Maintenance
NO_2	Nonattainment	Attainment/Maintenance
SO_2	Attainment	Attainment
Lead	Attainment/Nonattainment[a]	Attainment
All others	Attainment/Unclassified	No standards

[a] Los Angeles County was reclassified from attainment to nonattainment for lead on March 25, 2010; the remainder of the SoCAB is in attainment of the State standard.
Sources: CARB 2010, USEPA 2010a, USEPA 2010b.

TABLE 3-2
DESIGNATIONS OF CRITERIA POLLUTANTS IN THE ANTELOPE VALLEY PORTION OF THE MOJAVE DESERT AIR BASIN

Pollutant	State	Federal
O_3 (1 hour)	Extreme Non-attainment	Revoked June 2005
O_3 (8 hour)		Severe 17 Nonattainment
PM10	Nonattainment	Unclassified
PM2.5	Unclassified	Unclassified/attainment
CO	Attainment	Attainment
NO_2	Attainment/Unclassified	Attainment/Unclassified
SO_2	Attainment/Unclassified	Attainment/Unclassified
Lead	Attainment	Attainment
All others	Unclassified	Unclassified
Source: AVAQMD 2010.		

The maintenance activities set forth in the Section 1605 Agreement represent a continuation of existing practices and activities performed by the LACFCD at the debris basin sites. These activities do not involve new construction, expansion or alteration of the debris basins, but rather include longstanding and ongoing maintenance activities that protect the health and safety of downstream properties through debris flow reduction and flood control. Therefore, the project does not represent any change over the current baseline existing conditions throughout Los Angeles County and would not result in new environmental impacts; therefore, no mitigation would be required.

3.3.2 IMPACT ANALYSIS

a) No Impact

The South Coast Air Quality Management Plan (AQMP) is the air quality plan applicable to the debris basins in the SoCAB. The SCAQMD adopted the 2007 AQMP on June 1, 2007. The 2007 AQMP is an update to the 2003 AQMP and incorporates new scientific data, primarily in the form of updated emissions inventories, ambient measurements, new meteorological episodes, and new air quality modeling tools. CARB approved the plan when the State Strategy for the State Implementation Plan (SIP) was adopted on September 27, 2007. The Draft SIP has been submitted to the USEPA for review and approval. Until such time that the USEPA approves the SIP, the 2003 AQMP will remain in effect for federal Clean Air Act (CAA) conformity analysis. However, for CEQA analysis, projects must also be considered consistent with the requirements of the 2007 AQMP.

The AVAQMD's current air quality planning documentation, pursuant to SIP and California Clean Air Act (CCAA) requirements applicable to the Antelope Valley portion of the MDAB, includes four separate documents: the *AVAQMD 2004 Ozone Attainment Plan (State and Federal)*, the *AVAQMD List and Implementation Schedule for District Measures to Reduce PM Pursuant to Health & Safety Code Section39614(d)*, the *8-Hour Reasonably Available Control Technology – State Implementation Plan Analysis*, and the *AVAQMD Federal 8-Hour Ozone Attainment Plan (Western Mojave Desert Non-attainment Area)*. The *AVAQMD Federal 8-Hour Ozone Attainment Plan (Western Mojave Desert Non-attainment Area)* is the most recent AQMP for the AVAQMD.

The main purpose of an AQMP is to bring an area into compliance with the requirements of federal and State air quality standards. The ongoing activities of the Maintenance Program have been considered as "existing conditions" for the purposes of the various AQMPs because these activities have been conducted regularly by the LACFCD for the life of each debris basin. AQMPs use existing emissions inventories to project future year emissions. Forecasts incorporate the controls implemented under adopted AQMD rules and projected growth rates for population, industry, and motor vehicle activity.

Mobile sources of emissions are divided into two source categories: (1) on-road and (2) other (off-road) mobile sources. On-road mobile sources include light-duty passenger vehicles; light-, medium-, and heavy-duty trucks; motorcycles; urban buses; school buses; and motor homes. Other mobile sources include aircraft; trains; ships and commercial boats; off-road recreational vehicles; off-road equipment; farm equipment; fuel storage and handling; and truck stops (SCAQMD 2007). Because the Maintenance Program involves the ongoing operation of vegetation mowing/removal and sediment clearing activities, emissions associated with on-road and off-road vehicles and equipment have been included in the baseline emissions in the SCAQMD and AVAQMD AQMPs. As such, continued operations associated with the Maintenance Program would not contribute new emissions that would inhibit the SCAQMD or the AVAQMD from meeting air quality attainment requirements. Therefore, the ongoing operation of the Maintenance Program is consistent with the SCAQMD and the AVAQMD AQMPs and there would continue to be no impact.

b, d) No Impact

As described in Section 2.3, Project Description, the Maintenance Program involves an ongoing set of activities and protocols related to sediment removal and debris basin maintenance. The program does not involve a new activity or construction project, but rather reflects longstanding and ongoing maintenance activities required to protect downstream residences, businesses, and infrastructure from potential damage caused by floodwaters and debris in storm water runoff. As a result, mowing, channel clearing, and sediment clearance activities would not result in new or more significant air quality emissions. Continued compliance with all applicable air quality regulations, including SCAQMD Rule 403 and AVAQMD Rule 403 for fugitive dust suppression (as stated in Regulatory Requirements [RRs] 3.3-1 and 3.3-2, respectively), and CCR, Title 13 for diesel emissions (as stated in RR 3.3-3), would further ensure that ongoing operations would not violate air quality standards or contribute substantially to an existing or projected violation of standards, and would continue to result in no impacts.

c) No Impact

The SoCAB is a federal or State nonattainment area for O_3, NO_2, PM10, and PM2.5. The AVAQMD portion of the MDAB is a federal or State nonattainment area for O_3, and PM10. As demonstrated in b) above, the Maintenance Program would not result in new or more significant emissions of O_3 precursors VOC and NOx, NO_2, PM10, or PM2.5. Therefore, there would continue to be no cumulative increase of these pollutants.

e) No Impact

The Maintenance Program activities do not treat sewage, generate chemical emissions, or involve other processes that produce objectionable odors, nor does the program put a substantial number of persons in an area of objectionable odors. There would continue to be no impact.

3.3.3 REGULATORY REQUIREMENTS

RR 3.3-1 In compliance with SCAQMD Rule 403 related to control of PM10 and PM2.5 emissions, all applicable dust control measures shall be implemented on each debris basin site in the SoCAB during sediment removal activities or other maintenance activities that require earth movement.

RR 3.3-2 In compliance with AVAQMD Rule 403 related to control of PM10 and PM2.5 emissions, all applicable dust control measures shall be implemented on each debris basin site in the MDAB during sediment removal activities or other maintenance activities that require earth movement.

RR 3.3-3 In compliance with Title 13 of the CCR, Section 2449, related to idling restrictions, all diesel and alternative diesel-powered off-road vehicles with maximum power of 25 horsepower (hp) or greater, both on-site and off-site, shall be turned off when not in use for more than 5 minutes. In compliance with Title 13 of the CCR, Section 2485, related to commercial idling restrictions, all diesel-fueled commercial motor vehicles with gross vehicular weight ratings greater than 10,000 pounds that must be licensed for operation on highways shall be turned off when not in use for more than 5 minutes.

3.3.4 MITIGATION MEASURES

There would continue to be no significant impacts to air quality; therefore, no mitigation measures are required.

3.4 BIOLOGICAL RESOURCES	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modification, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
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?	☐	☒	☐	☐
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?	☐	☒	☐	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
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?	☐	☒	☐	☐

3.4.1 EXISTING CONDITIONS

The maintenance activities set forth in the Section 1605 Agreement represent a continuation of existing practices and activities performed by the LACFCD at the debris basin sites. These activities do not involve new construction, expansion or alteration of the debris basins, but rather include longstanding and ongoing maintenance activities that protect the health and safety of downstream properties through debris flow reduction and flood control. Therefore, the project does not represent any change over the current baseline existing conditions throughout Los Angeles County and would not result in new environmental impacts; therefore, no mitigation would be required.

However, to provide a conservative analysis and per the CDFG's request, the LACFCD has determined that potential impacts to biological resources due to continued maintenance activities will be considered a significant impact for purposes of this project prior to compliance with the conditions of the Section 1605 Agreement, which has been included as a Mitigation Measure (MM).

Vegetation

In order to obtain a Section 1605 Agreement from the CDFG for the continuing preventative maintenance and sediment clearing activities under the Debris Basin Maintenance Program, it was necessary to determine the habitat values of the vegetation that would be removed as a part of ongoing activities. A full listing of all 162 debris basins covered under the Section 1605 Agreement was compiled in a document entitled *Debris Basin Biological Assessment and Vegetation Replacement Methodology*. This document is included as Appendix B and is on file with the LACFCD and includes aerial photographs of each of the 162 debris basins with demarcations of the location and extent of vegetation types, the 25% inundation contour, mowing contour, and 100% inundation contour within each debris basin.

The vegetation types were mapped within each of the 162 debris basins (Chambers Group, Inc. 2003; BonTerra Consulting 2004). Vegetation types observed within the debris basin facilities or in immediately adjacent areas at the time of the vegetation mapping activities are described in Table 3-4. Nomenclature for vegetation types generally follows that of *The Vegetation Classification and Mapping Program: List of California Terrestrial Natural Communities Recognized by the California Natural Diversity Database* (CDFG 2003). The *Debris Basin Biological Assessment and Vegetation Replacement Methodology* document (Appendix B) lists the quantities of each vegetation type within the basin (100% contour) as well as the quantities just within the 25% or mow contour. This document was provided to the CDFG as supplemental documentation for the Section 1605 Long-term Agreement.

Table 3-4 summarizes the acreages of each vegetation type within the 162 debris basins and is followed by a description of the vegetation types that are located within the 25% mowing contour of the debris basins.

TABLE 3-3
DEBRIS BASIN VEGETATION TYPES

Vegetation Type	Acres Within 25□ Mowing Contour	Acres Preserved Between 25□ Mowing and 100□ Contours	Total Acres Within 100□ Contour
Alluvial Sage Scrub	1.4	4.2	5.5
Alluvial Sage Scrub/Sycamore Riparian Woodland	0.4	2.8	3.3
California Walnut Woodland	0.2	0.4	0.6
Freshwater Marsh	4.4	0.1	4.6
Hollyleaf Cherry Woodland	0.1	0.1	0.2
Mixed Sage Scrub	7.9	23.7	31.6
Mixed Sage Scrub/Needlegrass Grassland	0.0	0.1	0.1
Needlegrass Grassland	0.0	0.0	0.0
Oak Woodland	3.1	19.6	22.7
Oak Woodland/California Walnut Woodland	0.0	0.0	0.0
Oak Woodland/Sycamore Riparian Woodland	0.0	1.8	1.8
Oak Woodland/Sycamore Riparian Woodland/California Walnut Woodland	0.0	0.0	0.1
Oak Woodland/Sycamore Riparian Woodland/Willow Riparian Woodland	0.1	0.3	0.4
Southern Willow Scrub	1.7	0.9	2.6
Southern Willow Scrub/Freshwater Marsh	0.3	0.0	0.3

TABLE 3-4 (Continued)
DEBRIS BASIN VEGETATION TYPES

Vegetation Type	Acres Within 25□ Mowing Contour	Acres Preserved Between 25□ Mowing and 100□ Contours	Total Acres Within 100□ Contour
Sycamore Riparian Woodland	0.0	0.6	0.6
Willow Riparian Woodland	4.2	5.6	9.8
Willow Riparian Woodland/Sycamore Riparian Woodland	0.0	0.0	0.0
Oak Woodland/Chaparral	0.0	0.4	0.4
Sycamore Riparian Woodland/Unvegetated Wash	0.0	0.7	0.7
Chaparral	1.6	3.9	5.5
Chaparral/Mixed Sage Scrub	2.0	7.6	9.6
Mixed Sage Scrub/California Annual Grassland	0.1	0.3	0.4
Mule Fat Scrub	1.7	1.9	3.6
Oak Woodland/Ornamental	0.0	0.2	0.2
Ornamental/Southern Willow Scrub	0.0	0.5	0.5
Riparian Herb	1.9	0.1	2.0
Saltbush Scrub	0.4	0.2	0.5
Chaparral/California Annual Grassland	0.0	0.1	0.1
Open Water	6.8	0.8	7.6
California Annual Grassland	2.4	2.3	4.6
Unvegetated Wash	1.5	0.9	2.4
Ornamental	2.5	4.8	7.3
Ruderal	71.9	24.2	96.1
Developed	9.0	24.2	33.2
Disturbed	59.0	42.0	101.0
TOTAL	**184.6**	**175.5**	**360.1**

Note: Mature oaks will not be removed during maintenance activities; however, clearing may occur underneath the canopy of oak woodland and other mature woodland vegetation types.

Alluvial Sage Scrub

Alluvial sage scrub is a vegetation type in Southern California that occurs in wash and floodplain areas (Hanes 1989). This vegetation type typically occurs along the coastal side of major mountains of Southern California on outwash fans and riverine deposits. Typical plant species of this vegetation type where it occurs at the flood-control structures surveyed include California buckwheat (*Eriogonum fasiculatum*), scalebroom (*Lepidospartum squamatum*), California sagebrush (*Artemisia californica*), deerweed (*Lotus scoparius*), and mule fat (*Baccharis salicifolia*). This vegetation matches Sawyer and Keeler-Wolf's (1995) description of the scalebroom series; it also resembles Holland's (1986) description of Riversidean alluvial fan sage scrub. This vegetation is also briefly described by Boyd (1999).

Mixed Sage Scrub

Coastal sage scrub is a vegetation type that occurs in the lowlands and coastal ranges from San Francisco south to El Rosario in Baja California (Westman 1986; Westman 1982). Mixed

sage scrub is a type of coastal sage scrub that generally describes the sage scrub that is present in the survey areas; it is highly variable and can be delineated into various subtypes. Some of the mixed sage scrub areas are revegetation sites, disturbed areas, or high quality sage scrub. Typical plant species of this vegetation type where it occurs at the flood-control structures surveyed include California sagebrush, California buckwheat, deerweed, bush monkeyflower, purple sage (*Saliva leucophylla*), white sage (*Salvia apiana*), black sage (*Salvia mellifera*), and nodding needlegrass (*Nassella cernua*). This vegetation type resembles Sawyer and Keeler-Wolf's (1995) description of mixed sage series, Holland's (1986) Riversidian and Venturan sage scrubs, and the CDFG's (2002) mixed sage scrub (typically containing more California sagebrush at some sites).

Saltbush Scrub

Saltbush scrub occurs in many upland environments, and is typically associated with saline or alkaline soils (Sawyer and Keeler-Wolf 1995; Holland 1986). Four-wing saltbush (*Atriplex canescens*) is the dominate plant in this vegetation type. Other native shrub species present include California sagebrush and brittlebush (*Encelia farinosa*). This vegetation type resembles Sawyer and Keeler-Wolf's (1995) description of fourwing saltbush series, Holland's (1986) chenopod scrub, and the CDFG's (2002) fourwing saltbush scrub.

Chaparral

Chaparral is a common vegetation type that occurs throughout Southern California in the foothills. This vegetation type within the survey areas is highly variable and can be delineated into various subtypes. Typical plant species of this vegetation type where it occurs at the flood-control structures surveyed consists of chamise (*Adenostoma fasciculatum*), lemonade berry (*Rhus integrifolia*), sugarbush (*Rhus ovata*), scrub oak (*Quercus berberidifolia*), toyon (*Heteromeles arbutifolia*), Mexican elderberry (*Sambucus mexicana*), Southern California black walnut (*Juglans californica* var. *californica*), black sage (*Salvia mellifera*), holly-leaved redberry (*Rhamnus crocea*), ceanothus (*Ceanothus* spp.), and poison oak (*Toxicodendron diversilobum*). This chaparral matches descriptions by Holland's (1986) of southern mixed chaparral, and several of Sawyer and Keeler-Wolf's (1995) chaparral series, including the chamise series and various ceanothus series.

Needlegrass Grassland

Native grasslands, which include needlegrass grassland, have declined by approximately 99 percent in their historic range in California (Noss and Peters 1995). Native grasslands consist mainly of drought-resistant perennial bunchgrasses in small pockets in mixed sage scrub adjacent to native habitats. Needlegrass grassland is comprised of a minimum of ten percent native grass. Typical plant species of this vegetation type where it occurs at the flood-control structures surveyed consist of nodding needlegrass, foothill needlegrass (*Nassella lepida*), purple needlegrass (*Nassella pulchra*), melic grass, giant wild rye (*Leymus condensatus*), and deer grass (*Mulenbergia rigens*). Other species present may include blue dicks (*Dichlostemma pulchellum*), California goldfields, Los Angeles phlox (*Gilia angelensis*), hirsute lotus (*Lotus strigosus*), and fascicled tarweed (*Hemizonia fasciculata*). This grassland matches descriptions by Holland (1986) of valley needlegrass grassland, and several of Sawyer and Keeler-Wolf's (1995) series including the nodding needlegrass series, foothill needlegrass series, and purple needlegrass series.

California Annual Grassland

California annual grassland occurs throughout Southern California in areas that have been disturbed by human use or grazing. Non-native grass species dominate this vegetation type. Typical plant species of this vegetation type where it occurs at the flood-control structures surveyed consist of red brome, soft chess (*Bromus hordeaceus*), ripgut brome, slender wild oat (*Avena barbata*), wild oat (*Avena fatua*), barley (*Hordeum muriunum*), Italian wild rye (*Lolium perenne*), and smilo grass (*Piptatherum miliaceum*). Many native species forbs and bulbs may also be found in annual grasslands. This grassland matches descriptions by Holland (1986) of non-native grassland, and Sawyer and Keeler-Wolf's (1995) California annual grassland series.

Riparian Herb

Riparian herb vegetation consists of grasses and forbs that are typically associated with mesic (wet) habitats throughout Southern California. Typical plant species of this vegetation type where it occurs at the flood-control structures surveyed consist of Mexican tea, prickly sow thistle (*Sonchus asper*), common celery (*Apium graveolens*), common plantain (*Plantago major*), common horseweed (*Conyza canedensis*), bristly ox tongue (*Sonchus oleaceous*), Bermuda grass (*Cynodon dactylon*), beggar's ticks (*Bidens pilosa*), western ragweed (*Ambrosia psilostachya*), greater water speedwell (*Veronica anagallis-aquatica*), Italian wild rye, and milk thistle (*Silybum marianum*).

Freshwater Marsh

Freshwater marsh is a vegetation type in Southern California that occurs in flooded wetland habitats with herbaceous plant species emerging from the water. The dominant plants of this vegetation type where it occurs at the flood-control structures surveyed were cattails (*Typha* spp.). This vegetation matches Sawyer and Keeler-Wolf's (1995) description of the cattail series, Holland's (1986) freshwater marsh, and the CDFG's (2002) cattail wetland.

Willow Riparian Forest

Willow riparian forest occurs in perennial streams throughout Southern California. Willow riparian forest is dominated by large riparian trees in comparison to southern willow scrub, which is dominated by a mix of young willows and mule fat with a more open canopy. Typical plant species of this vegetation type where it occurs at the flood-control structures surveyed consist of black willow, arroyo willow (*Salix lasiolepis*), Fremont cottonwood (*Populus fremontii*), and red willow (*Salix laevigata*). White alders (*Alnus rhombifolia*) are also present in a few sites. This vegetation matches Holland's (1986) description of southern cottonwood-willow riparian forest, and Sawyer and Keeler-Wolf's (1995) description of the Fremont cottonwood series.

Sycamore Riparian Woodland

Sycamore riparian woodland is a vegetation type that occurs in riparian habitats with soils permanently saturated at depth (Sawyer and Keeler-Wolf 1995). The dominant plant of this vegetation type where it occurs at the flood-control structures surveyed was western sycamore. This vegetation matches Sawyer and Keeler-Wolf's (1995) description of the California sycamore series, Holland's (1986) sycamore alluvial woodland, and the CDFG's (2002) foothill sycamore riparian woodland.

Willow Riparian Woodland

Willow riparian woodland is a vegetation type that occurs in perennial and ephemeral drainages throughout Southern California. This vegetation type can be considered intermediate in willow tree stature and overall canopy density between willow riparian forest and southern willow scrub. The dominant plants of this vegetation type where it occurs at the flood-control structures surveyed were multiple willow species (*Salix* spp.). This vegetation matches Sawyer and Keeler-Wolf's (1995) description of the mixed willow series, Holland's (1986) riparian woodland, and the CDFG's (2002) mixed willow riparian forests and woodlands.

Southern Willow Scrub

Southern willow scrub occurs in perennial and ephemeral drainages throughout Southern California. Southern willow scrub is typically lower in stature than willow riparian forest with trees and shrubs approximately five to eight feet tall, and with a more open canopy structure. Typical plant species of this vegetation type where it occurs at the flood-control structures surveyed include arroyo willow, black willow, red willow, and mule fat. Other species present in this series typically include native species, non-native ornamentals, and non-native weed species. This scrub matches descriptions by Holland (1986) of southern willow scrub, and Sawyer and Keeler-Wolf's (1995) arroyo willow and black willow series.

Mule Fat Scrub

Mule fat scrub occurs throughout Southern California in perennial and ephemeral drainages and in some upland areas. The dominant plant species of this vegetation type where it occurs at the flood-control structures surveyed is mule fat, and the majority of these areas are dominated by dense stands of mule fat. Other species associated with this vegetation type include western ragweed and cocklebur (*Xanthium strumarium*). This scrub matches descriptions by Holland (1986) of mule fat scrub, and Sawyer and Keeler-Wolf's (1995) mule fat series.

Oak Woodland

Oak woodlands occur throughout Southern California in the foothills and in riparian corridors. The predominant oak woodland in coastal Southern California is coast live oak woodland. Coast live oak (*Quercus agrifolia*) is the dominant tree of this vegetation type where it occurs at the flood-control structures surveyed. Valley oak (*Quercus lobata*) also occurs at a few of the basins, and this vegetation type occasionally includes scattered western sycamores (*Platanus racemosa*). Southern California black walnut (*Juglans californica*), scrub oak, poison oak, toyon and other shrubs, including most of those listed for chaparral, also occur in the oak woodlands. These woodlands match descriptions by Holland (1986) of coast live oak woodland and coast live oak forest; by Sawyer and Keeler-Wolf (1995) of coast live oak series; and by Holland (1986) of coastal oak woodland.

California Walnut Woodland

California walnut woodland typically occurs on north-facing slopes and riparian corridors in Southern California. The dominant plant species of this vegetation type where it occurs at the flood-control structures surveyed consist of Southern California black walnut. These woodlands match descriptions by Holland (1986) of California walnut woodland, and Sawyer and Keeler-Wolf's (1995) California walnut series.

Hollyleaf Cherry Woodland

Hollyleaf cherry (*Prunus ilicifolia*) is a common shrub of mesic situations within foothill woodland, chaparral, and sage scrub vegetation types. Hollyleaf cherry also forms woodland stands as a small tree, generally with a continuous canopy and a sparse to absent ground layer (Sawyer Keeler-Wolf 1995), which was typical of this vegetation type where it occurred at the flood-control structures surveyed. The hollyleaf cherry woodland follows the CDFG (2002) classification system. The habitat is described as a unique stand in Sawyer and Keeler-Wolf (1995), but it is not described in Holland (1986) and is not categorized by the California Natural Diversity Database (CNDDB) (CDFG 2004).

Ruderal

Ruderal areas occur within many of the flood-control structures surveyed. Ruderal vegetation is non-native or weedy native vegetation that has grown following mowing, grading, weed removal, or some other type of ground disturbance. Many of the disturbed areas within the basins will become areas supporting ruderal vegetation. Common species at the flood-control structures surveyed include prickly lettuce (*Lactuca serriola*), tree tobacco (*Nicotiana glauca*), common purslane (*Portulaca oleracea*), western ragweed, mustards (*Brassica* spp.), western sunflower (*Helianthus annuus*), smilo grass, Russian thistle (*Salsola australis*), and telegraph weed (*Heterotheca grandiflora*). This habitat is not described in Sawyer and Keeler-Wolf (1995) or Holland (1986), and is not categorized by the CDFG (2002).

Ornamental

Ornamental landscaping (parks and ornamental plantings) consists of introduced trees, shrubs, flowers, and turf grass. Ornamental landscaping occurs in greenbelts, parks, and horticultural plantings throughout the County. This habitat is not described in Sawyer and Keeler-Wolf (1995) or Holland (1986), and is not categorized by the CDFG (2002).

Unvegetated Wash

Unvegetated washes occur in active channels at some of the flood-control structures surveyed. Soils in these areas are generally sand and fine gravel, though there also are patches of silts and some coarser rock. Vegetation along these channels is very minimal, dominated by scattered herbs, annual grasses such as red brome, shrubs, and small scattered mule fat. This habitat is not described in Sawyer and Keeler-Wolf (1995) or Holland (1986), and is not categorized by the CDFG (2002).

Open Water

Open water consists of areas of water expanses within the bottoms of some debris basins and plunge pools. These areas generally have no vegetation. However, at times minor amounts of lesser duckweed or other floating plant material can be present. This habitat is not described in Sawyer and Keeler-Wolf (1995) or Holland (1986), and is not categorized by the CDFG (2002).

Disturbed

Disturbed or barren (cleared or graded) areas generally lack vegetation. These are areas that were either recently cleared, such as debris basins including earthen banks, or are dirt roads and trails. This habitat is not described in Sawyer and Keeler-Wolf (1995) or Holland (1986), and is not categorized by the CDFG (2002).

Developed

Developed areas lack vegetation. These areas consist of concrete structures, pavement, constructed berms, grouted rip-rap, and gunite slopes. These areas are not described in Sawyer and Keeler-Wolf (1995) or Holland (1986), and are not categorized by the CDFG (2002).

Plant and Wildlife Species

Surveys of all 162 debris basins were conducted to document the existing biological resources and assess the potential presence of sensitive or special status plant and wildlife species. The biological assessments identified those debris basins with potential to support Threatened or Endangered species as well as other special status plant and wildlife species of special concern to the CDFG. Subsequently, focused surveys were conducted for potentially occurring plant and wildlife species at particular debris basins identified as having such potential. The survey results are summarized in Table 3-5.

Plants

Focused plant surveys were conducted at one or more of the debris basins for Braunton's milk-vetch, described below. The results of these surveys are listed in Table 3-5.

Braunton's milk-vetch (*Astragalus brauntonii*) is a federally-listed Endangered and California Native Plant Society (CNPS) List 1B.1 species. This perennial typically blooms from February to June, and occurs in brushy places and along firebreaks, typically in chaparral, at elevations below approximately 1,500 feet above mean sea level (msl) (Munz 1974). This species is associated with disturbed areas (Hickman 1993). It also occurs in closed-cone coniferous forest, coastal scrub, and valley and foothill grassland, especially in areas with recent burns or disturbance (CNPS 2009). Its seeds germinate following fire or physical disturbance. Although this species is readily identified, presence or absence cannot be determined during most years due to its fire-following life history. In some cases, botanists have reported negative survey results for Braunton's milk-vetch prior to disturbance, but found it along access roads built a year or two later (i.e., following a disturbance). It is often associated with limestone soil or found in down-wash sites. This species is known from Ventura, Los Angeles, and Orange Counties (CNPS 2009).

Wildlife

Wildlife species for which focused surveys were conducted at one or more of the debris basins are described below. The results of these surveys are listed in Table 3-5.

TABLE 3-4
SUMMARY OF COMPLETED SPECIAL STATUS PLANT AND WILDLIFE SURVEYS

Debris Basin	Braunton's Milk-Vetch	Special Status Plants (Spring Survey)	Coast Range Newt	Santa Ana Sucker	Western Spadefoot	Arroyo Toad	California Red-legged Frog	Mountain Yellow-legged Frog	Coastal California Gnatcatcher	Least Bell's Vireo	Southwestern Willow Flycatcher
Aliso		●									
Arbor Dell		●									
Auburn	●	●									
Ave S											
Ave T-8											
Bailey	●	●									
Bakerton											
Beatty	●	●									
Bell Creek		●									
Big Briar		●									
Big Dalton	●	●	●		●	●	●	●		●	●
Blanchard		●									
Blue Gum		●					●				
Brace		●									
Bracemar											
Bradbury	●	●								●	●
Bramhall		●							●		
Brand		●			●					●	●
Buena Vista	●	●									
Caitlyn Circle											
Calle Robleda		●					●●				
Camp Plenty		●									
Cardiff		●									
Carriagehouse	●	●									

TABLE 3-5 (Continued)
SUMMARY OF COMPLETED SPECIAL STATUS PLANT AND WILDLIFE SURVEYS

Debris Basin	Braunton's Milk-Vetch	Special Status Plants (Spring Survey)	Coast Range Newt	Santa Ana Sucker	Western Spadefoot	Arroyo Toad	California Red-legged Frog	Mountain Yellow-legged Frog	Coastal California Gnatcatcher	Least Bell's Vireo	Southwestern Willow Flycatcher
Carter	●	●									
Cassara		●			●	●	●				
Chamberlain	●	●									
Chandler		●									
Childs		●									
Cloudcreek		●									
Cloudcroft	●	●									
Contento		●									
Cooks		●				●	●	●		●	●
Cooks M1		●				●	●	●	●	●	●
Copperhill		●					●●				
Cordoba		●									
Crescent Glen		●			●				●●		
Crestview	●	●									
Crystal Springs		●							●		
Deer	●	●									
Denivelle		●									
Devonwood	●	●									
Dry Canyon	●	●					●				
Dunsmuir		●									
Eagle		●									
Elmwood		●									
Emerald East		●									
Englewild	●	●			●					●	●

TABLE 3-5 (Continued)
SUMMARY OF COMPLETED SPECIAL STATUS PLANT AND WILDLIFE SURVEYS

Debris Basin	Braunton's Milk-Vetch	Special Status Plants (Spring Survey)	Coast Range Newt	Santa Ana Sucker	Western Spadefoot	Arroyo Toad	California Red-legged Frog	Mountain Yellow-legged Frog	Coastal California Gnatcatcher	Least Bell's Vireo	Southwestern Willow Flycatcher
Fair Oaks		●									
Fern	●	●									
Fieldbrook									●		
Ft Tejon											
Fullerton		●									
Golf Club		●									
Gooseberry		●									
Gordon		●			●				●		
Goss		●									
Gould		●									
Gould Upper											
Green Hill 1		●									
Green Hill 2		●									
Greensbrier		●							●		
Halls		●								●	●
Harbor		●									
Harrow	●	●									
Harter		●									
Havenway		●									
Hay		●				●					
Hazelnut #2		●			●	●	●				
High Sierra											
Hillcrest		●									
Hillman		●									

TABLE 3-5 (Continued)
SUMMARY OF COMPLETED SPECIAL STATUS PLANT AND WILDLIFE SURVEYS

Debris Basin	Braunton's Milk-Vetch	Special Status Plants (Spring Survey)	Coast Range Newt	Santa Ana Sucker	Western Spadefoot	Arroyo Toad	California Red-legged Frog	Mountain Yellow-legged Frog	Coastal California Gnatcatcher	Least Bell's Vireo	Southwestern Willow Flycatcher
Hipshot		●									
Hog		●			●				●		
Hook-East	●	●			●					●	●
Hook-West	●	●									
Inverness		●									
Irving		●									
Kinneloa-East	●	●									
Kinneloa-West	●	●									
Knoll		●									
La Salle		●									
La Tuna		●								●	●
Lannan	●	●									
Las Flores	●	●									
Las Lomas	●	●			●						
Limekiln	●	●								●	●
Lincoln		●									
Linda Vista		●									
Line A		●									
Little Dalton	●	●	●		●	●		●		●	●
Lopez		●									
Maddock	●	●									
May1		●							●		
May2		●							●		
Montana		●									

TABLE 3-5 (Continued)
SUMMARY OF COMPLETED SPECIAL STATUS PLANT AND WILDLIFE SURVEYS

Debris Basin	Braunton's Milk-Vetch	Special Status Plants (Spring Survey)	Coast Range Newt	Santa Ana Sucker	Western Spadefoot	Arroyo Toad	California Red-legged Frog	Mountain Yellow-legged Frog	Coastal California Gnatcatcher	Least Bell's Vireo	Southwestern Willow Flycatcher
Monument		●									
Morgan		●							●		
Mountbatten		●									
Mull		●							●		
Mullally		●								●	●
Mustang		●									
Nichols	●	●									
Oak		●									
Oak Park		●									
Oakdale		●								●	
Oakglade	●	●			●						
Oakmont		●									
Oliver		●			●	●					
Pickens		●									
Pinelawn		●									
Rowley		●					●				
Rowley Upper		●									
Royal Terminus		●									
Rubio	●	●								●	●
Ruby Lower	●	●	●								
Saddleback #1		●									
Saddleback #2		●									
Saddleback #3		●									
Santa Anita	●	●				●	●	●		●	●

TABLE 3-5 (Continued)
SUMMARY OF COMPLETED SPECIAL STATUS PLANT AND WILDLIFE SURVEYS

Debris Basin	Braunton's Milk-Vetch	Special Status Plants (Spring Survey)	Coast Range Newt	Santa Ana Sucker	Western Spadefoot	Arroyo Toad	California Red-legged Frog	Mountain Yellow-legged Frog	Coastal California Gnatcatcher	Least Bell's Vireo	Southwestern Willow Flycatcher
Sawpit	●	●		●		●	●	●		●	●
Schoolhouse		●							●		
Schwartz		●			●	●					
Shadow		●					●●				
Shields		●									
Shields Upper		●				●					
Sierra Madre Dam	●	●									
Sierra Madre Villa	●	●			●					●	●
Skyridge		●									
Sloan		●					●●				
Snover		●									
Sombrero		●			●				●		
Spinks	●	●			●					●	●
Starfall		●									
Stetson		●			●				●		
Stevenson Ranch											
Stough	●	●								●	●
Stratford		●									
Sturtevant	●	●									
Sullivan	●	●					●				
Sunnyside	●	●									
Sunset Canyon Deer		●									
Sunset Lower		●									
Sunset Upper		●			●						

TABLE 3-5 (Continued)
SUMMARY OF COMPLETED SPECIAL STATUS PLANT AND WILDLIFE SURVEYS

Debris Basin	Braunton's Milk-Vetch	Special Status Plants (Spring Survey)	Coast Range Newt	Santa Ana Sucker	Western Spadefoot	Arroyo Toad	California Red-legged Frog	Mountain Yellow-legged Frog	Coastal California Gnatcatcher	Least Bell's Vireo	Southwestern Willow Flycatcher
Thousand Oaks		●					●●				
Turnbull		●							●		
Verdugo		●								●	●
Victoria		●									
Ward		●									
Wedgewood		●									
Wellington		●								●	
West Ravine	●	●									
Westridge	●										
Whitney											
Wilbur		●									
Wildwood											
William S. Hart Park											
Wilson		●			●				●	●	●
Winery		●									
Yucca		●									
Zachau		●									

● = Focused Surveys Performed
●● = Focused Surveys Repeated
Colored Space= Positive Results

Fish

Santa Ana Sucker

The Santa Ana sucker (*Catostomus santaannae*) is a federally listed Threatened species and a California Species of Special Concern. This fish is found in small, shallow streams with currents that run from swift to sluggish. They are most abundant where waters are cool and unpolluted, although they can withstand turbidity. They are also associated with bottom materials of boulders, rubble, and sand where there is filamentous algae growth. They feed on algae and detritus that they scrape from rock surfaces, and occasionally take aquatic insect larvae. The only populations that are federally protected are those within its historic range, which consists of the Los Angeles, San Gabriel, and Santa Ana River Basins. The population within the Santa Clara River Basin is considered to be introduced and is not covered by the protected status, although those in the Santa Clara River are considered important to the recovery of the species within its native range. On January 4, 2005, the USFWS published a Final Rule designating critical habitat for the Santa Ana sucker (USFWS 2005b). Two areas in Los Angeles County, one along the San Gabriel River (Unit 2) and the other along Big Tujunga Creek (Unit 3), have been identified as critical habitat for the Santa Ana sucker. This encompasses approximately 8,305 acres.

Unarmored Threespine Stickleback

The unarmored threespine stickleback (*Gasterosteus aculeatus williamsoni*) is a federally and State-listed Endangered species and a California Fully Protected species. The stickleback occurs in weedy, permanent pools or backwaters and in slow-moving water along the margins of a stream. It primarily occurs in cool and clear water with mud or sand substrates. The unarmored threespine stickleback was once abundant throughout the Los Angeles Basin and is now known to occur only in the upper Santa Clara River system and in San Antonio Creek in northern Santa Barbara County. Its regional decline is attributable to the channelization of watersheds for flood control and development, and disruption of drainages by urbanization. This species occurs along the Santa Clara River from Piru Creek to I-5, San Francisquito Canyon, Soledad Canyon, and Bouquet Creek (CDFG 2007a). On November 17, 1980, the USFWS published a Proposed Rule to designate critical habitat for the federally Endangered unarmored threespine stickleback (USFWS 1980). These lands include three zones in Los Angeles County (Del Valle, San Francisquito Canyon, and Soledad Canyon) and one zone in Santa Barbara County (San Antonio Creek). However, on September 17, 2002, the critical habitat designation was vacated and the decision was made not to finalize the proposed critical habitat (USFWS 2002).

Amphibians

Coast Range Newt

The coast range newt (*Taricha torosa torosa*) is a California Species of Special Concern. This species occurs along the coast of California from Mendocino County south to San Diego County from sea level to 6,000 feet above msl (Stebbins 2003). It occurs in terrestrial habitats including wet forests, oak forests, chaparral and rolling grasslands, but requires ponds, reservoirs, and sluggish pools in streams for breeding (Stebbins 2003). These terrestrial newts summer in moist habitats under woody debris, in rock crevices and in animal burrows, but it can be observed wandering over land in moist conditions any time of the year. This species has recently been reported in several Los Angeles County locations including in the vicinity of Big Dalton Canyon Dam (Angeles National Forest), Fish Creek (tributary to San Gabriel River), and multiple locations in the foothills of the San Gabriel Mountains and within the Angeles National Forest, especially along the San Gabriel River (CDFG 2009).

Sierra Madre Yellow-legged Frog

The Sierra Madre yellow-legged frog (*Rana muscosa*) is federally Endangered and a California Species of Special Concern endemic to California. In 2008, the Sierra Nevada yellow-legged frog (*Rana sierrae*) was split out from this group into a different species, and it occurs primarily in the Sierra Nevada Mountains from north of the Feather River in Butte county to Tulare County. This diurnal amphibian is absent from 99 percent of its historic range in Southern California (Stebbins 2003). The Sierra Madre yellow-legged frog was historically located in isolated locations in the San Gabriel, San Bernardino, and San Jacinto Mountains, and on Mount Palomar (Stebbins 2003). They have not been observed on Mount Palomar since the 1970s; and they are considered extinct in the San Bernardino mountains since the fires of 2003 (Lannoo 2005). The Sierra Madre yellow-legged frog is known to occur from approximately 1,000 to 12,000 feet above msl. In Southern California, this frog prefers open rocky streams and lake edges with a gentle slope. The decline of this species has been attributed to many factors, including bullfrogs, trout, airborne pollution, cattle grazing, ozone depletion, mining pollution, off-road vehicle disturbance, public dumping, chytrid fungus, fires, and excessive flooding (Lannoo 2005).

Arroyo Toad

The arroyo toad (*Bufo californicus*) is a federally listed Endangered species and a California Species of Special Concern. This species historically occurred from San Luis Obispo County south to San Diego County along most major rivers. Currently, they are restricted to very small remnant populations in these rivers' headwaters. Most of the remaining populations occur in National Forests. The arroyo toad is generally found in semi-arid regions near washes or intermittent streams (Zeiner et al. 1988) from sea level to approximately 3,000 feet above msl. However, this species has highly specialized habitat requirements (such as breeding pools within approximately 300 feet of juvenile and adult habitat), which consist of a shoreline with stable, sandy terraces (Jennings and Hayes 1994). On April 13, 2005, the USFWS published a Final Rule to designate critical habitat for the federally Endangered arroyo toad (USFWS 2005a). This includes approximately 11,695 acres in Santa Barbara, Ventura, Los Angeles, San Bernardino, and Riverside Counties.

California Red-legged Frog

The California red-legged frog (*Rana aurora draytonii*) is a federally listed Threatened species and a California Species of Special Concern. This species historically occurred throughout coastal California, west of the Sierras, from sea level to 8,000 feet above msl. This frog has been extirpated from approximately 70 percent of its historic range and now primarily occurs only in wetlands and streams of Central California (USFWS 2000a). This species prefers areas with deep ponds in areas of streams that have slow water flow with emergent vegetation at the edge of the banks (Jennings and Hayes 1994). Adults feed primarily on aquatic and terrestrial invertebrates. In 2001, the USFWS published a Final Rule designating 31 distinct recovery units as critical habitat for the California red-legged frog; these recovery units range throughout Northern and Southern California. In accordance with a November 6, 2002, consent decree that ordered the USFWS to publish a Proposed Rule, a new proposed critical habitat designation was published on April 13, 2004, which covered 4,138,064 acres. A revised proposed critical habitat designating 737,912 acres was released on November 3, 2005. The Final Rule in effect today was published on April 13, 2006, and designates 450,288 acres as critical habitat (USFWS 2006).

Western Spadefoot

The western spadefoot (*Spea* [*Scaphiopus*] *hammondii*) is a California Species of Special Concern. This species occurs in the Great Valley and bordering foothills and in the Coast Ranges from Monterey Bay south to Baja California, Mexico (Stebbins 2003). From the Santa Clara River Valley in Los Angeles and Ventura Counties southward, an estimated 80 percent of habitat for this species has been lost (Stebbins 2003). This species inhabits grassland, coastal sage scrub, and other habitats with open sandy, gravelly soils. The western spadefoot is primarily a species of the lowlands and frequents washes, floodplains of rivers, alluvial fans, and alkali flats (Stebbins 2003). The western spadefoot breeds in quiet streams, vernal pools, and temporary ponds. This species is rarely seen outside the breeding season.

Birds

Coastal California Gnatcatcher

The coastal California gnatcatcher (*Polioptila californica californica*) is a federally listed Threatened species and a California Species of Special Concern. This species occurs in most of Baja California's arid regions, but is extremely localized in the United States, where it predominantly occurs in coastal regions of highly urbanized Los Angeles, Orange, Riverside, and San Diego Counties (Atwood 1992). In California, this species is an obligate resident of several distinct subassociations of the coastal sage scrub vegetation type. Brood parasitism by brown-headed cowbirds and loss of habitat to urban development have been cited as causes of the coastal California gnatcatcher population decline (Unitt 1984; Atwood 1990). On December 19, 2007, the USFWS published a final rule revising critical habitat for the coastal California gnatcatcher. The revised critical habitat designates 197,303 acres of land in Ventura, Los Angeles, Orange, Riverside, San Bernardino, and San Diego Counties, California.

Least Bell's Vireo

The least Bell's vireo (*Vireo bellii pusillus*) is a federally and State-listed Endangered species. The vireo is now a rare and local summer resident of Southern California's lowland riparian woodlands. While destruction of lowland riparian habitats has played a large role in driving this species to its present precarious situation, brood parasitism by brown-headed cowbirds is the most important factor in its decline (Garrett and Dunn 1981). Local cowbird-control programs have been very effective in maintaining some populations (Small 1994), and the species has begun to recover. The least Bell's vireo breeds primarily in riparian habitats dominated by willows with dense understory vegetation (USFWS 1986). A dense shrub layer two to ten feet above ground is the most important habitat characteristic for this species (Goldwasser 1981; Franzreb 1989). On February 2, 1994, the USFWS published final critical habitat for the least Bell's vireo, designating approximately 37,560 acres of land in Santa Barbara, Ventura, Los Angeles, San Bernardino, Riverside, and San Diego Counties. Designated critical habitat in Los Angeles County is located only along the Santa Clara River from I-5 west to the Ventura County line (USFWS 1994).

Southwestern Willow Flycatcher

The southwestern willow flycatcher (*Empidonax traillii extimus*) is a federally and State-listed Endangered species. This subspecies was once considered a common breeder in coastal Southern California. However, this subspecies has declined drastically due to a loss of breeding habitat and nest parasitism by the brown-headed cowbird. This species occurs in riparian habitats along rivers, streams, or other wetlands where dense growth of willows, Baccharis,

arrowweed, tamarisk, or other plants are present, often with a scattered overstory of cottonwood (USFWS 1995). On July 22, 1997, the USFWS published final critical habitat for this species. Approximately 100 river miles in Kern, Riverside, San Bernardino, and San Diego Counties were designated for the southwestern willow flycatcher (USFWS 1997b). Following the designation of critical habitat, a lawsuit was filed challenging various aspects of the designation. In response to these lawsuits, the critical habitat designation was vacated and the USFWS was instructed by the court to re-evaluate its previous position. A new final critical habitat designation was published on October 19, 2005. The new critical habitat designation encompasses approximately 120,824 acres in Arizona, California, Nevada, New Mexico, and Utah (USFWS 2005c). Approximately 17,212 acres of critical habitat were designated in Kern, Santa Barbara, San Bernardino, and San Diego Counties, California.

3.4.2 IMPACT ANALYSIS

a) Less Than Significant with Mitigation

As previously discussed, initial biological surveys of all 162 debris basins were conducted to document the existing biological resources and assess the potential presence of sensitive or special status plant and wildlife species. Subsequently, focused surveys were conducted for potentially occurring plant and wildlife species at particular debris basins identified as having such potential. The survey results are summarized in Table 3-5. Based on the results of these surveys, methods to avoid or minimize impacts on special status species were incorporated into the ongoing Maintenance Program.

Existing biological conditions at the 162 debris basins are not expected to change substantially from year to year, except in case of emergency events such as wildfires, and repetition of these focused surveys are generally not required. However, the Maintenance Program includes pre-clearing biological surveys that provide a basic assessment of conditions at all 162 debris basins prior to clearing each year. A qualified Biologist documents the biological conditions and re-assesses the potential for the basin to support special status plants or animals. If there is no potential for a special status species to be impacted, sediment and vegetation clearing activities will proceed according to the Maintenance Program. If, based on the results of the pre-clearing survey, there is potential for special status plants or animals to be impacted, maintenance activities will proceed with modified methods to minimize or avoid impacts or will be postponed until focused surveys can determine the presence or absence of special status species. If focused survey results are negative, clearing activities will proceed according to the Maintenance Program. If survey results confirm the presence of special status species within the impact area, maintenance activities will proceed with modified methods to minimize or avoid impacts, or will be postponed until resource agency permits are secured if required (i.e. permits for state- and federally- listed species).

Braunton's milk-vetch was not found during focused surveys at any of the 43 debris basins that had been identified as having potential habitat for this federally and State-listed Endangered plant species (BonTerra Consulting 2003). The survey results concluded that maintained areas (i.e., the 25% mowing contour) of the debris basins do not provide suitable habitat for the species due, in part, to the ongoing maintenance activities, but primarily as a result of periodic inundation of the debris basins. Since the Braunton's milk-vetch surveys were conducted in the fall, spring surveys for other special status plant species were conducted in 2005 at most of the 162 debris basins (11 debris basins were determined to provide no potential for special status plant species) to determine the presence or absence of species that are best detected during the spring season.

These spring surveys found two CNPS List 1B species: Plummer's mariposa lily (*Calochortus plummerae*) and Davidson's bush mallow (*Malacothamnus davidsonii*). One individual Plummer's mariposa lily was within the 100% inundation contour, but outside the 25% mowing contour, at both the Santa Anita Debris Basin and the Stetson Debris Basin. The Davidson's bush mallow was present within the 100% inundation contour, but outside the 25% mowing contour, at three debris basins: Chandler Debris Basin (one individual), Hog Debris Basin (one individual), and Stetson Debris Basin (two individuals). No impacts are expected on these special status plant species from the ongoing Maintenance Program.

The Sawpit Debris Basin was surveyed for the federally listed Threatened Santa Ana sucker on March 28, 2004, by San Marino Environmental Associates and it was not found (BonTerra Consulting 2004). The survey results concluded that the species is absent from the debris basin and that the dam is expected to be a barrier to downstream populations of the fish. No impacts are expected on the Santa Ana sucker from the ongoing Maintenance Program.

Focused surveys have been conducted for five amphibian species: the Coast Range newt, western spadefoot, arroyo toad, California red-legged frog, and the Sierra Madre yellow-legged frog. All five of these species are listed as California Species of Special Concern and three are also listed as either federally Endangered (arroyo toad and Sierra Madre yellow-legged frog) or federally Threatened (California red-legged frog). The survey results have been negative for these species except for the Coast Range newt, which has been found at only one debris basin (Chambers Group, Inc. 2004; BonTerra Consulting 2004; BonTerra Consulting 2005). The ongoing Maintenance Program, with its inclusion of CDFG permit conditions, specifically addresses the presence of the Coast Range newt at the Big Dalton Debris Basin; therefore, impacts on this species are considered to be less than significant.

The biological assessments identified potential habitat at some of the debris basins for the following three bird species: the southwestern willow flycatcher, least Bell's vireo, and coastal California gnatcatcher. Both the southwestern willow flycatcher and least Bell's vireo are federally- and state-listed as Endangered, while the coastal California gnatcatcher is federally-listed as Threatened and is a California Species of Special Concern. The focused survey results for these three species have been negative except for the coastal California gnatcatcher, which was found at the Crescent Glen Debris Basin (BonTerra Consulting 2003; Chambers Group, Inc. 2004; BonTerra Consulting 2005; BonTerra Consulting 2008). One coastal California gnatcatcher considered to be a dispersing juvenile was observed on the last of eight survey visits in the Crescent Glen Debris Basin on August 26, 2004 (Chambers Group, Inc. 2004). The Crescent Glen Debris Basin was again surveyed in 2005 (BonTerra Consulting 2005) on six spring visits, but the coastal California gnatcatcher was not detected. The survey results indicate that the Crescent Glen Debris Basin is not occupied by the coastal California gnatcatcher but may occasionally be used by dispersing individuals. No impacts are expected on these three bird species from the ongoing Debris Basin Maintenance Program.

The Section 1605 Long-Term Agreement contains conditions for fish and wildlife protection, the removal of non-native vegetation, and exotic species removal and control, which would be implemented by the LACFCD to protect and preserve sensitive species found in the debris basins. The Section 1605 Agreement also contains requirements for impacts to sensitive biological resources. With implementation of MM 3.4-1 and RRs 3.4-1 and 3.4-2, impacts from the ongoing implementation of the Debris Basin Maintenance Program associated with vegetation removal would continue not to result in significant direct or cumulatively considerable impacts to candidate, sensitive, or special status species.

b) Less Than Significant with Mitigation

The LACFCD has been removing sediment and vegetation from its debris basins for many decades; only recently (i.e., within the last ten years) have regulatory permits been necessary. Over time, some of the debris basins have developed favorable conditions for the growth of native vegetation of which some types are considered to be sensitive by jurisdictional agencies (i.e., the CDFG). Table 3-4 lists the acreages for each vegetation type that fall within the 25% mowing contour and the total amount that remains (or is preserved) within the 100% contour. Note that this total includes vegetation types (e.g., oak woodland) that will not be impacted by mowing and are included as a result of methods used for vegetation mapping. For example, the canopy of oak woodland may extend over the 25% contour of a debris basin and is mapped as such. However, the actual vegetation cleared would be underneath the canopy and this vegetation would be identified and quantified by biologists during the maintenance activities.

Because debris basin sediment clearings occur on varying schedules, such as when they reach the 25% contour or if they receive flows from burned watersheds, the root systems of vegetation in some debris basins are cleared while they remain intact in other debris basins, allowing quicker regrowth. The maintained areas (within the 25% mowing contour) of the debris basins generally support minimal vegetative growth, depending in large part on available water, and habitat values are mostly considered to be low. Sensitive vegetation types that would be temporarily impacted by maintenance activities within the basin include alluvial sage scrub, freshwater marsh, southern willow scrub, willow riparian woodland, mule fat scrub, riparian herb, open water, and unvegetated wash.

These vegetation types are known to regenerate quickly and would provide valuable habitat within a short time of completion of maintenance activities. Additionally, the debris basins will remain as open space in order to retain their health and safety functions for surrounding land uses. Therefore, the Maintenance Program's activities result in only temporary impacts to vegetation and/or wildlife that exist within the 25% mowing contours. Additionally, the Maintenance Program includes provisions in the Section 1605 Agreement for the one-time replacement of vegetation that would be cleared during sediment removal activities at ratios that are acceptable to the CDFG and the LACFCD.

Appendix B includes the Debris Basin Rankings and Vegetation Replacement Ratios, which were developed based on a habitat quality evaluation for each debris basins. The evaluations considered the following factors: extent of open space, adjacent vegetation types to mowing contours, internal basin vegetation types, potential of adjacent vegetation types and habitat to support special status species combined with presence or absence of designated Critical Habitat, and potential of internal vegetation types and habitat to support special status species combined with presence or absence of designated Critical Habitat. These habitat evaluations generated rankings that were used to determine an appropriate replacement ratio for impacted vegetation communities.

As stated in Appendix A, the draft Section 1605 Agreement states that of the 21.41 acres of vegetation replacement required by the CDFG, 6.42 acres will be credited as preserved on-site between the 25% and 100% contours. Therefore, 14.99 acres of vegetation replacement will be required off site. The replacement vegetation would be created and/or preserved in areas designated as open space in perpetuity. As previously discussed, some debris basins with high-value vegetation will be partially cleared at each maintenance interval, thereby allowing approximately one half of these debris basin to maintain some biological value at all times. Due to this phased clearing at debris basins with high biological value, and with one-time

replacement of impacted vegetation, impacts on riparian habitat or another sensitive natural community would not be directly or cumulatively significant.

With implementation of MM 3.4-1 and RRs 3.4-1 and 3.4-2, impacts from ongoing implementation of the Maintenance Program associated with the vegetation removal would continue not to result in direct or cumulatively significant impacts to riparian habitat or other sensitive natural communities.

c) Less Than Significant with Mitigation

By nature of their function and their position along a natural stream course, up to the 100% inundation contour line of each of the 162 debris basin is generally considered to be protected waters and wetlands and associated riparian habitat under the jurisdiction of the USACE, the CDFG, and the RWQCB. Vegetation types listed in Table 3-4 that would be considered as true wetland vegetation or an indicator of wetlands include freshwater marsh and southern willow scrub. As would be expected with debris basins, the amount of true wetlands is dependent on the frequency and extent of periodic inundations, and may vary from season to season. However, as previously described, maintenance activities would result in only a temporary loss of habitat value. Through implementation of MM 3.4-1 and RRs 3.4-1 and 3.4-2, impacts associated with ongoing implementation of the Maintenance Program would continue not to result in significant direct or cumulatively significant impacts to federally protected wetlands and associated riparian habitat.

d) Less Than Significant with Mitigation

Most of the 162 LACFCD-maintained debris basins are expected to support some level of wildlife activity including nesting by migratory birds. The CDFG and the USACE permits included with the ongoing Maintenance Program provide conditions for compliance with Sections 3503 and 3503.5 of the *California Fish and Game Code* to protect nesting migratory birds and raptors. As a result, maintenance activities are conducted primarily in the fall and early winter after the breeding season for birds and prior to the onset of winter rains. Resident wildlife species and migratory birds, including migrants and wintering visitors, do use the biological resources within the debris basins during the fall and winter seasons and may be temporarily displaced by maintenance activities. However, this impact would be considered only temporary and less than significant. In addition, implementation of MM 3.4-1 and RR 3.4-3 would ensure that the maintenance activities would continue not to interfere with the movement of any native resident or migratory fish or wildlife species or with migratory wildlife corridors, or impede the use of native wildlife nursery sites.

e) No Impact

The ongoing operation of the Maintenance Program ensures the proper functioning of flood-control facilities. As such, these activities are intended to protect the health and safety of downstream residents and properties. The Los Angeles County Oak Tree Ordinance allows for routine tree maintenance activities to occur, as well as activities that are intended to protect life and property without obtaining approval permits. Specifically, Section 22.56.2070(C), Exemptions from Part 16 [Oak Tree Permits] applicability, of the County Code, states that "Emergency or routine maintenance by a public utility necessary to protect or maintain an electric power or communication line or other property of a public utility", in this case, the routine maintenance of the LACFCD flood-control system, is exempt from the County oak tree ordinance. Although oak trees are occasionally trimmed or removed when necessary for debris basin functionality, these impacts do not conflict with the local tree ordinance and would,

therefore, be considered less than significant. Additionally, all oak tree trimming activities are conducted under the guidance of qualified Biologists and/or licensed Arborists to ensure the long-term health of the trimmed oak trees.

Oak woodlands are subject to Senate Bill (SB) 1334 (*California Public Resources Code* [PRC] §21083.4), which "provides funding for the conservation and protection of California's oak woodlands". This bill mandates that oak woodlands be regulated by mitigation measures that are defined in the bill itself. The Maintenance Program would result in extremely minimal impacts to individual oak trees anticipated due to project maintenance activities; no significant impacts to oak woodlands are anticipated. The Section 1605 Agreement states that no impacts can occur to various tree species, including coast live oak, without specific approval from the CDFG prior to impacts. Additionally, mitigation to all sensitive vegetation types, including oak woodlands, will be performed in accordance with the requirements set forth in the Section 1605 Agreement, which are in compliance with SB 1334. Therefore, the continued implementation of the Maintenance Program would continue not to conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

f) Less Than Significant with Mitigation

Some of the 162 LACFCD-maintained debris basins are located within Los Angeles County Significant Ecological Areas (SEAs). Specifically, the Calle Robleda Debris Basin is within SEA No. 6 (Las Virgenes); the Turnbull Debris Basin is within SEA No. 44 (Sycamore-Turnbull Canyons); and the Brace, Bracemar, Brand, Chandler, Childs, Elmwood, Havenway, Hillcrest, Irving Drive, La Tuna, Montana, Sunset Canyon Deer, Sunset Lower, and Sunset Upper Debris Basins are located within SEA No. 40 (Verdugo Mountains). The biological resources contributing to the SEA designation for each of these three SEAs, as defined in the *Los Angeles County Significant Ecological Areas Study* (England and Nelson 1976), are summarized below.

- ***SEA No. 6 (Las Virgenes).*** This area contains a number of plants common to the interior areas of Southern California, but is found nowhere else in the Santa Monica Mountain region. The most conspicuous of these is the California Juniper (*Juniperis californicus*). Also common on the hillside, but found nowhere else in the Santa Monica Mountains is *Happlopappus linearifolius*, a characteristic shrub of the interior hillsides and desert ranges. *Calochortus venustus*, a species of the interior coast ranges of Central California, is only found at two other localities. In addition, this is the only locality in the Santa Monica Mountains where *Dudleya cymosa* grows in full sun. All other populations are found on steep north-facing rocky cliffs. Surrounding vegetation consists of coastal sage scrub and chaparral (England and Nelson 1976).

- ***SEA No. 40 (Verdugo Mountains).*** The Verdugo Mountains are an extensive, relatively undisturbed island of natural vegetation in an urbanized metropolitan area. Their geographic location makes them important for scientific study, genetic interchange between otherwise isolated populations, and recreation to urban residents. Chaparral and coastal sage scrub cover the hillsides of the mountains with riparian vegetation, including California bay, sycamore, ferns and tiger lilies, found in many of the stream drainages. These plant communities provide habitat essential to the diverse and abundant fauna found in the area (LACDRP 1976). The area serves as an island refuge, providing what remains of a link between plant and animal populations found in the Santa Monica and San Gabriel Mountains. Genetic interchange by way of this linkage is important in perpetuating the genetic variability in isolated populations and consequently the maintenance of healthy ecosystems. The proximity of the mountains to urban areas provides an excellent opportunity to study the interaction between wild animal

populations and humans. The area has already been used for studies concerned with public health (England and Nelson 1976).

- ***SEA No. 44 (Sycamore and Turnbull Canyons).*** These canyons and adjacent ridges possess undisturbed examples of natural vegetation remaining in the Puente Hills. In addition, Sycamore Canyon contains a stream that usually flows year-round, and supports one of the best examples of riparian woodland found in the region. A variety of plant communities are found in the area, including riparian woodland, oak woodland, coastal sage scrub, and chaparral. The riparian vegetation provides food, nesting sites, and cover for many animals. The surrounding undisturbed vegetation is extensive enough to enable uncommon species like dear, coyote, bobcat, and badger to frequent the area (England and Nelson 1976).

The ongoing operation of the Maintenance Program would not conflict with the SEA designation because the maintenance activities would avoid and/or minimize potential biological impacts that could conflict with these designations.

Although some of the debris basins located within the SEAs described above may occasionally support biological resources of some value to local plant and animal species, they do not harbor any substantial component of the regional ecology. Prior to the existence of the SEA program, vegetation in constructed basins was removed and the sites were graded. Overtime, many of the basins have been re-colonized by vegetation and associated plant and wildlife species. Although in most cases the majority of the vegetation has been non-native (as is typical for disturbed areas), native vegetation has also returned in some areas. As a result of the ongoing maintenance activities which include annual mowing of the basin vegetation, the biological resources that persist have remained minimal in stature and extent and are not an integral part of the local ecosystem.

As such, preservation of the resources within the basins is non-essential to the overall goals of the SEA designation. The replacement of biological resources removed through the ongoing operation of the Maintenance Program would be conducted in compliance with the applicable permits and ensured via implementation of RR 3.4-1, RR 3.4-2, and RR 3.4-3, and MM 3.4-1. As a result, the continued implementation of the Maintenance Program would continue not to conflict with the provisions of an adopted Habitat Conservation Plan; Natural Community Conservation Plan; or other approved local, regional, or State habitat conservation plan such as the LACDRP's SEA program. There would be a less than significant impact.

3.4.3 REGULATORY REQUIREMENTS

RR 3.4-1 All activities conducted as part of the Debris Basin Maintenance Program shall comply with the conditions set forth in the existing USACE Section 404 Permit.

RR 3.4-2 All activities conducted as part of the Debris Basin Maintenance Program shall comply with the conditions set forth in the existing RWQCB Section 401 Water Quality Certification.

RR 3.4-3 All activities conducted as part of the Debris Basin Maintenance Program shall be conducted in full compliance with the federal Migratory Bird Treaty Act, as well as all other applicable federal, State, and local laws.

3.4.4 MITIGATION MEASURES

MM 3.4-1 All activities conducted as part of the Debris Basin Maintenance Program shall be conducted in full compliance with the conditions set forth in the CDFG Section 1605 Long Term Maintenance Agreement, including the requirements related to the following activities: (1) Routine Maintenance Activities, including removal of fallen and dead trees, annual brush maintenance, tree trimming, brush clearing, vegetation mowing, entrainment channel and outlet tower clearing, sediment removal, maintenance of access road and other appurtenances, DSOD compliance, and storm drain repair and restoration projects and (2) Special Conditions related to maintenance at Big Dalton, Englewild, Linda Vista, Mullally, Santa Anita, Sawpit, Sierra Madre Dam, and Wilson debris basins. In accordance with the Section 1605 Agreement, a total of 21.14 acres of vegetation impacted by maintenance activities shall be mitigated through a combination of on-site preservation and/or creation of off-site preservation.

3.5 CULTURAL RESOURCES	**Potentially Significant Impact**	**Less than Significant with Mitigation**	**Less than Significant Impact**	**No Impact**
Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	☐	☐	☒	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☐	☒	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐

3.5.1 EXISTING CONDITIONS

The California Office of Historic Preservation and the State Historical Resources Commission have designated the California Register of Historical Resources (CRHR) as a program to identify, evaluate, register, and protect California's historical resources. The CRHR lists 402 significant historic and archaeological resources within Los Angeles County, including 379 sites listed in the National Register of Historic Places (NRHP) and 23 State Historical Landmarks. Among this vast number of resources are various missions, the La Brea tar pits, remnants of vast ranchos, routes of early explorers, stagecoach stations, forts, railroad depots, and the homes of prominent people who shaped local history (LACDRP 2008).

Debris basin facilities are typically constructed as part of a larger development plan. Since the enactment of CEQA in 1970, all development projects subject to a CEQA have included an analysis of cultural resources, which would include all areas within the development footprint of a proposed project. As such, the vast majority of the 162 debris basins within the Maintenance Program constructed subsequent to the enactment of CEQA were subject to a cultural resources evaluation to the satisfaction of the Lead Agency.

The maintenance activities set forth in the Section 1605 Agreement represent a continuation of existing practices and activities performed by the LACFCD at the debris basin sites. These

activities do not involve new construction, expansion or alteration of the debris basins, but rather include longstanding and ongoing maintenance activities that protect the health and safety of downstream properties through debris flow reduction and flood control. Therefore, the project does not represent any change over the current baseline existing conditions throughout Los Angeles County and would not result in new environmental impacts; therefore, no mitigation would be required.

3.5.2 IMPACT ANALYSIS

a□c) Less Than Significant Impact

The ongoing operations of the Maintenance Program would not involve impacts to native soils. There would be no demolition or construction activity that could disturb or impact an existing, aboveground or subterranean historic, archaeological, or paleontological resource. The debris basin facilities are fully constructed, engineered earthen depressions with defined contours and depths. The clearance of sediment from debris basins does not disturb the native soils below; rather, the sediment clearance is limited to the removal of soils/debris/sediment that has been deposited from storm water flows from upstream areas. Additionally, the surficial sediments on the debris basins have been repeatedly disturbed by the seasonal flow of storm water and debris. Even if archaeological or paleontological resources were found to have previously washed down into a debris basin from an upstream source, they would not be in situ (in place), having originated elsewhere. Such archaeological resources are considered to be "isolates" and are by definition not considered significant resources. At least three artifacts located within a similar context are required to constitute an archaeological resource. The Maintenance Program would also involve occasional localized, shallow grading to maintain the access roads into each basin. However, like maintenance of the basins, this activity would result in disturbance of non-native surficial sediments that have been previously disturbed.

Therefore, the Maintenance Program would not impact native sediments that were not previously disturbed by the construction and historic maintenance of the debris basin and related appurtenances (e.g., access road, inlet tower, embankment/spillways, outlet, slopes) or that would have the potential to contain cultural resources. The Maintenance Program would not excavate to a depth that would encounter bedrock, which, depending on the formation, could contain paleontological resources. Furthermore, the debris basins are engineered facilities that do not contain any unique geologic features. As such, the Maintenance Program would not encounter previously undisturbed native sediment or sediments that have the potential to contain cultural resources, nor encounter bedrock. Therefore, there would continue to be less than significant impacts to historic, archaeological or paleontological resources.

d) Less Than Significant Impact

As discussed above, the ongoing operations of the Maintenance Program would not impact native sediments that were not previously disturbed by the construction of the debris basin or that would have the potential to contain cultural resources. Storm water, sediment, and debris flows in the basins are not expected to contain human remains. Thus, vegetation mowing, sediment and invasive species removal, and other maintenance activities that would disturb recently deposited sediment and debris and vegetation that may grow on these areas are not expected to affect any human remains, including those interred outside of formal cemeteries.

In the unlikely event of an unanticipated encounter with human remains in the debris basins, the *California Health and Safety Code* and the *California Public Resources Code* require that any activity in the area of a potential find be halted and the Los Angeles County Coroner be notified,

as described in RR 3.5-1. There would continue to be less than significant adverse impacts to human remains with continued compliance with RR 3.5-1.

3.5.3 REGULATORY REQUIREMENTS

RR 3.5-1 Should human remains be discovered during maintenance activities, the Los Angeles County Coroner must be notified immediately, and all activities in the area of the find must cease until lawful measures have been implemented (*California Health and Safety Code* §7050.5, *Public Resources Code* §5097.98). If the Coroner determines that the remains are Native American (prehistoric), the Native American Heritage Commission (NAHC) must be contacted within 24 hours of the determination. The NAHC will designate a Most Likely Descendent (MLD) who will make procedural determinations concerning disposition of the remains.

3.5.4 MITIGATION MEASURES

There would continue to be no impacts to cultural resources; therefore, no mitigation measures are required.

3.6 GEOLOGY AND SOILS	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☐	☒
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in onsite or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☐	☒
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒

3.6.1 EXISTING CONDITIONS

Geologic conditions within the hillsides and foothill areas of Los Angeles County are known to be a potential source of hazards for developed properties. Mud and debris flows, active deep-seated landslides, hillside erosion, and man-induced slope instability comprise the vast majority of hillside hazards. Debris flows are generally formed when unconsolidated material becomes saturated and unstable and can contain sands, silts, sediments, cobbles, vegetation, and woody debris. Areas vegetated with chaparral are especially susceptible to debris flows after a wildfire, when the vegetation that holds the soils in place is destroyed. Rapidly moving storm water runoff can flow down hillside slopes into canyons, where the flows pick up speed and debris and can act as a small river system. In order to prevent damage to downstream properties, debris basins have been constructed to capture storm water flows and associated silt, vegetation, and debris that flow from hillside areas. The debris basins are designed to let the water flow out at a slower and more constant rate, while the debris and sediment is retained within the basin.

The maintenance activities set forth in the Section 1605 Agreement represent a continuation of existing practices and activities performed by the LACFCD at the debris basin sites. These activities do not involve new construction, expansion or alteration of the debris basins, but rather

include longstanding and ongoing maintenance activities that protect the health and safety of downstream properties through debris flow reduction and flood control. Therefore, the project does not represent any change over the current baseline existing conditions throughout Los Angeles County and would not result in new environmental impacts; therefore, no mitigation would be required.

3.6.2 IMPACT ANALYSIS

a) [i-iv] No Impact

The ongoing operations of the Maintenance Program would not involve a new activity or construction project, but rather reflect longstanding and ongoing maintenance activities required to protect downstream residences, businesses, and infrastructure from potential damage caused by floodwaters and debris. The program includes repair of the upstream and downstream faces of the debris basins, embankments/dams, and abutments as necessary to comply with DSOD requirements and/or ensure the integrity of the embankment. No new habitable structures would be constructed as a part of the Maintenance Program.

Debris basins are designed to capture storm water and sediment that flow through canyon areas and therefore serve to prevent damage to downstream properties that could result from seismically induced liquefaction and landslides. Additionally, ongoing implementation of the Maintenance Program is critical to ensuring that adequate basin capacity and dam integrity are maintained. Therefore, the ongoing operations of the Maintenance Program would continue not to result in impacts related to potential exposure of people or structures to risks associated with earthquakes, surface rupture, seismic ground-shaking, liquefaction, or landslides.

b) Less than Significant Impact

The debris basins retain sediment from storm water from upstream areas and reduce downstream erosion. Prior to urban and suburban development, sediment would have been allowed to freely flow with runoff from hillside areas into lowland drainages, serving to replenish alluvial channels with sediment. The operation of debris basins has historically reduced the amount of sediment that flows into downstream channels in order to protect people and property from mudflows. The reductions in sediment volume by the debris basins have been accounted for in the design of downstream infrastructure (i.e., capacity of downstream channels and drainage facilities) and thus, these basins must continue to be maintained to prevent flooding in downstream areas. The subsequent reduction in sediment that is allowed to flow downstream due to the presence of debris basins, including ongoing operations of the Maintenance Program for these basins, reduces the potential for erosion and would result in a less than significant impact associated with loss of “topsoil” in downstream channels. Loss of vegetation may increase erosion potential but mowing and vegetation removal activities would be confined to the basin slopes and bottom, with eroded materials remaining within the basin. Thus, impacts related to erosion would continue to be less than significant.

c□d) No Impact

The Maintenance Program does not involve a new activity or construction project and no new structures or infrastructure would be constructed. Therefore, there would be no impact related to locating a structure on unstable geologic units or expansive soils. The debris basins have been constructed to account for the existing geological characteristics of each site and maintenance activities would continue not to create or expose more people to geological hazards.

e) No Impact

The Maintenance Program does not include septic tanks, and there are no septic tanks at the debris basins. Thus, there would continue to be no impacts related to the use of septic tanks or alternative waste water disposal systems.

3.6.3 REGULATORY REQUIREMENTS

None.

3.6.4 MITIGATION MEASURES

There are no significant impacts related to geology and soils; therefore, no mitigation measures are required.

3.7 GREENHOUSE GAS EMISSIONS	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	☒

3.7.1 EXISTING CONDITIONS

Global climate change is currently an important and highly debated environmental, economic, and political issue. Increasing greenhouse has (GHG) emissions has led to an anthropogenic[3] warming trend of the earth's average temperature, which is causing changes in the earth's climate. Scientific research indicates very high confidence (i.e., at least 90 percent) that the rate and magnitude of current global temperature changes are anthropogenic and that global warming will lead to adverse climate change effects around the globe (IPCC 2007). GHG emissions are primarily associated with (1) the burning of fossil fuels during motorized transport, electricity generation, natural gas consumption, industrial activity, manufacturing, and other activities; (2) deforestation; (3) agricultural activity; and (4) solid waste decomposition.

On September 27, 2006, AB 32, the California Global Warming Solutions Act of 2006, was enacted by the State of California. The legislature stated that "global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California". AB 32 caps California's GHG emissions at 1990 levels by 2020. This bill represents the first enforceable Statewide program in the United States to cap all GHG emissions from major industries and include penalties for noncompliance. While acknowledging that national and international actions will be necessary to fully address the issue of global warming, AB 32 lays out a program to inventory and reduce GHG emissions in California and from power generation facilities located outside the State that serve California residents and businesses.

[3] Anthropogenic effects, processes, objects, or materials are those that are derived from human activities, as opposed to those occurring in natural environments without human influence.

At the direction of the State Legislature in Senate Bill (SB) 97, the California Natural Resources Agency recently adopted amendments to the CEQA Guidelines that require GHG emissions analysis in CEQA documents.[4]

Neither the County of Los Angeles or the LACFCD, nor any other entity with jurisdiction over the County or the LACFCD, have adopted GHG emissions significance thresholds, and to date, no federal, State, or local agencies have finalized thresholds applicable to an ongoing program, such as the Debris Basin Maintenance Program, to assist lead agencies in determining whether or not impacts are significant with respect to GHG emissions. A discussion of approaches to potential significance thresholds is included in the 2008 California Air Pollution Control Officers Association (CAPCOA) document "CEQA and Climate Change." Included in the discussion are proposed interim GHG thresholds, the most stringent of which is a threshold of 900 metric tons of carbon dioxide equivalents ($MTCO_2e$) annually, which applies to small scale commercial/residential projects. Also, on June 2, 2010, the Bay Area Air Quality Management District (BAAQMD) adopted Air Quality CEQA Thresholds of Significance including the following: Project Level GHGs for projects other than stationary sources: Construction-related – none; Operational-related – Compliance with Qualified Greenhouse Gas Reduction Strategy, or 1,100 metric tons (MT) of carbon dioxide equivalent per year (CO_2e/yr)[5], or 4.6 MTCO2e/Service Population/year (residents + employees) (BAAQMD 2010). The BAAQMD is not directly applicable to the proposed project because they were specifically adopted for projects within that jurisdiction.

Beginning in April 2008, the SCAQMD convened a working group to provide guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents. The Working Group meets approximately once per month. On December 5, 2008, the SCAQMD Governing Board adopted its staff proposal for an interim CEQA GHG significance threshold for industrial projects where the SCAQMD is the lead agency (SCAQMD 2008). The interim screening threshold for industrial projects is 10,000 metric tons of carbon dioxide equivalent units per year ($MTCO_2e/yr$).

In September 2010, the Working Group presented a tiered approach to determining GHG significance. At Tier 1, a GHG emissions impact would be less than significant if the project qualifies under a categorical or statutory CEQA exemption. At Tier 2, a GHG emissions impact would be less than significant if the project is consistent with a previously adopted GHG reduction plan meeting specific requirements.[6] Tier 3 for industrial projects proposes extending the 10,000 $MTCO_2e/yr$ screening threshold applicable to SCAQMD lead agency projects to other lead agency industrial projects. Tier 3 proposes the following screening values for residential and commercial projects: Either a single 3,000 $MTCO_2e/yr$ threshold for all land use

[4] The CEQA Guidelines revisions were adopted December 30, 2009. The Adopted Amendments became effective March 18, 2010.

[5] The USEPA recognizes six different GHGs; California has added a seventh. CO_2 is the most common and most mentioned. The global warming characteristics of each GHG are different and their emissions cannot be arithmetically added. The accepted methodology for adding GHGs is to convert all GHG emissions to CO_2e—the carbon dioxide equivalent. To discuss only CO_2 emissions, rather than CO_2e, would indicate that other GHG emissions were not considered.

[6] The plan must (1) quantify greenhouse gas emissions, both existing and projected over a specified time period, resulting from activities within a defined geographic area; (2) establish a level, based on substantial evidence, below which the contribution to GHG emissions from activities covered by the plan would not be cumulatively considerable; (3) identify and analyze the GHG emissions resulting from specific actions or categories of actions anticipated within the geographic area; (4) specify measures or a group of measures, including performance standards, that substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the specified emissions level; (5) establish a mechanism to monitor the plan's progress toward achieving the level and to require an amendment if the plan is not achieving specified levels; and (6) be adopted in a public process following environmental review (CEQA Guidelines §15183.5).

types or separate thresholds of 3,500 $MTCO_2e$/yr for residential projects; 1,400 $MTCO_2e$/yr for commercial projects; and 3,000 $MTCO_2e$/yr for mixed-use projects. A project with emissions less than the applicable screening value would have less than significant GHG emissions. These proposals could be considered by the SCAQMD Board by December 2010.

No thresholds have been adopted that directly relate to ongoing activities such as the Maintenance Program because it is not a common type of project (i.e., residential, commercial. industrial, transportation, etc.). As such, based on the SCAQMD Tier 3, which proposes either a single 3,000 $MTCO_2e$/yr threshold for all land use types or separate thresholds of 3,500 $MTCO_2e$/yr for residential projects, 1,400 $MTCO_2e$/yr for commercial projects, and 3,000 $MTCO_2e$/yr for mixed use projects, it was determined that the 3,000 $MTCO_2e$/yr would be an appropriate threshold for determining the significance of the project. The more conservative 1,400 $MTCO_2e$/yr for commercial projects is based on the assumption that commercial land uses would generate substantial traffic. Since this project is ongoing maintenance and would not generate any long-term operational traffic, the 3,000 $MTCO_2e$/yr threshold for all land use types was determined to be more applicable.

The maintenance activities set forth in the Section 1605 Agreement represent a continuation of existing practices and activities performed by the LACFCD at the debris basin sites. These activities do not involve new construction, expansion or alteration of the debris basins, but rather include longstanding and ongoing maintenance activities that protect the health and safety of downstream properties through debris flow reduction and flood control. Therefore, the project does not represent any change over the current baseline existing conditions throughout Los Angeles County and would not result in new environmental impacts; therefore, no mitigation would be required.

3.7.2 IMPACT ANALYSIS

a) Less than Significant Impact

There are no stationary sources or ongoing operational sources of emissions associated with the Maintenance Program, with the exception of the periodic maintenance activities as previously discussed in Section 2.3, Project Description. The Maintenance Program involves an ongoing set of activities related to vegetation mowing/removal, sediment removal, and debris basin maintenance. As a result, mowing, channel clearing, and sediment clearing activities would not result in new or more significant GHG emissions that have been generated since the debris basins were constructed. There would continue to be less than significant impacts related to GHG emissions.

b) No Impact

The activities covered by the project do not conflict with the County's adopted Energy and Environmental Policy, approved by the County Board of Supervisors on January 16, 2007. This policy covers the areas of energy and water efficiency, environmental stewardship, public outreach and education, and sustainable design. As part of the policy, the County commits to joining the California Climate Action Registry, which serves as a voluntary GHG Registry to protect, encourage, and promote early actions to reduce GHG emissions.

The Debris Basin Maintenance Program does not conflict with the policies of AB 32, the County's adopted Energy and Environmental Policy, or any applicable plan or policy adopted by the Board of Supervisors for the reduction of GHG emissions because it is an ongoing maintenance program and would not create any new sources of GHG in the County. In fact,

ongoing maintenance of the debris basins is a positive action to avoid or minimize the harmful effects that may occur from global warming, specifically, increased flooding due to changes in weather patterns or increased wildfires. The appropriate maintenance of the debris basin system helps minimize damage to downstream properties from potential increased flooding and increased debris production due to wildfires. Thus, the impact of the Maintenance Program may be considered beneficial. Therefore, there would continue to be no impacts related to conflicts with applicable GHG emissions reduction policies.

3.7.3 REGULATORY REQUIREMENTS

None.

3.7.4 MITIGATION MEASURES

There would continue to be no significant impacts related to GHG emissions; therefore, no mitigation measures are required.

3.8 HAZARDS / HAZARDOUS MATERIALS	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☐	☒
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?	☐	☐	☐	☒
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter-mile of an existing or proposed school?	☐	☐	☐	☒
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
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?	☐	☐	☐	☒

3.8.1 EXISTING CONDITIONS

The Department of Toxic Substance Control (DTSC) maintains the Hazardous Waste and Substances Sites (Cortese) List, which was compiled pursuant to Section 65962.5 of the *California Government Code* for use by State and local agencies and which provides information about hazardous substances release sites. The Cortese List identifies public drinking water wells with detectable levels of contamination, hazardous substance sites selected for remedial action, sites with known toxic materials identified through the abandoned site assessment program, sites with underground storage tanks (USTs) having a reportable release, and all solid waste disposal facilities from which there is known migration. None of the debris basins are located on any of the 109 Cortese sites currently identified within Los Angeles County (DTSC 2010).

The maintenance activities set forth in the Section 1605 Agreement represent a continuation of existing practices and activities performed by the LACFCD at the debris basin sites. These

activities do not involve new construction, expansion or alteration of the debris basins, but rather include longstanding and ongoing maintenance activities that protect the health and safety of downstream properties through debris flow reduction and flood control. Therefore, the project does not represent any change over the current baseline existing conditions throughout Los Angeles County and would not result in new environmental impacts; therefore, no mitigation would be required.

3.8.2 IMPACT ANALYSIS

a□c) No Impact

The ongoing operations of the Maintenance Program would not involve the transport, use, or disposal of hazardous materials, nor does it emit or handle hazardous materials. As such, there would continue to be no hazards associated with the potential for unforeseen upset of hazardous materials. Please refer to the analysis for Threshold d) in Section 3.3, Air Quality, for a discussion of the potential for the Maintenance Program to generate substantial pollutant concentrations in the air, such as from diesel emissions.

d) No Impact

The 162 debris basins included in the Maintenance Program are not on a list of hazardous materials sites identified on the Cortese List, and the ongoing activities conducted under the program have not and would continue not to create a significant hazard to the public or the environment. No impact would occur.

e□f) No Impact

The ongoing operations of the Maintenance Program would not involve new structures or activities that could pose a safety hazard associated with aircraft activity or that would conflict with an airport land use plan. There would continue to be no impacts related to air traffic.

g) Less than Significant Impact

Sediment removal is completed by a backhoe or excavator transferring the sediment into dump trucks. Generally, ten-cy dump trucks are used to transport the sediment from the debris basin to a designated sediment placement site. Trucks trips to and from the debris basins during vegetation and sediment removal would occur for short periods of time at individual debris basins throughout the County. The haul routes utilized by these trucks are designated truck routes, and traffic near the debris basins would be controlled in compliance with Caltrans' *Manual on Uniform Traffic Control Devices* (MUTCD), as discussed in Section 3.16, Transportation (RR 3.16-1). Thus, obstructions to traffic flows would be minimized, and interference with emergency response or evacuation would not be significant. Also, the ongoing operations of the Maintenance Program would not increase the intensity or frequency of maintenance activities and associated truck traffic, and would therefore not result in new or increased impacts to emergency response or evacuation plans compared to historic maintenance activities. Impacts related to emergency response/evacuation plans would continue to be less than significant.

h) No Impact

The locations of many debris basins are within areas designated by the County of Los Angeles Fire Department as a Very High Fire Hazard Severity Zone (VHFHSZ). The ongoing operations

of the Maintenance Program would not involve the construction or operation of habitable structures in wildland areas or promote development in wildland areas. Also, vegetation mowing and fuel modification activities that would be conducted under the Maintenance Program would reduce the potential for brush fires within the debris basins. There would continue to be no impacts related to wildfires.

3.8.3 REGULATORY REQUIREMENTS

Repeated from Section 3.16, Transportation:

RR 3.16-1 *Sediment removal activities at the debris basin sites and at SPS shall include a Traffic Control Plan to be prepared and implemented in compliance with the California Manual for Uniform Traffic Control Devices (MUTCD) to ensure that no traffic safety hazards are created by truck crossings and equipment on public rights-of-way.*

3.8.4 MITIGATION MEASURES

There would continue to be no impacts related to hazards and hazardous materials; therefore, no mitigation measures are required.

3.9 HYDROLOGY AND WATER QUALITY	**Potentially Significant Impact**	**Less than Significant with Mitigation**	**Less than Significant Impact**	**No Impact**
Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
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?	☐	☐	☐	☒
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation onsite or offsite?	☐	☐	☐	☒
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding onsite or offsite?	☐	☐	☐	☒
e) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of pollutant runoff?	☐	☐	☐	☒
f) Otherwise substantially degrade water quality?	☐	☐	☒	☐
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?	☐	☐	☐	☒
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☒
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?	☐	☐	☐	☒
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

3.9.1 EXISTING CONDITIONS

The County is served by five principal drainage systems: the Los Angeles River Basin, the San Gabriel River Basin, the Santa Clara River Basin, the Coastal Basin, and the Antelope Valley portion of the South Lahontan Basin. Runoff characteristics are influenced by soil type, slope, vegetation, and many other conditions. General regions behave differently based on these factors and runoff varies greatly between mountain and valley areas (LACDPW 2008b). In mountainous areas, steep canyon walls and channel slopes rapidly concentrate storm runoff. The moisture content of mountain soils also has a pronounced effect on runoff during a storm. Precipitation during periods of low soil moisture is almost entirely absorbed by the porous soils. Soil moisture is lowest at the beginning of the rainy season due to evapotranspiration during the

preceding summer months. Significant surface runoff does not occur until soil moisture is near capacity, except during extremely intense rainfall. Consequently, in certain areas of the County, significant runoff occurs as subsurface flow, or interflow, rather than direct runoff. Most streams in the County are intermittent. Natural year-round perennial discharge is mostly limited to springs in portions of the San Gabriel Mountains (LACDPW 2008b).

More than a dozen different pollutants including metals, nutrients, bacteria, organics, pesticides, trash, and other contaminants are found in the County's water bodies in amounts significantly above established water quality standards. Thus, the majority of the water bodies in Los Angeles County, including rivers, lakes, coastal estuaries, bays and beaches, are in violation of the federal Clean Water Act (CWA) and are included on the 303(d) list. Water bodies on the 303(d) list are termed "impaired water bodies" (LACDRP 2008). The debris basins in the County are located on the upstream areas of watersheds and generally are not located along impaired water bodies.

The maintenance activities set forth in the Section 1605 Agreement represent a continuation of existing practices and activities performed by the LACFCD at the debris basin sites. These activities do not involve new construction, expansion or alteration of the debris basins, but rather include longstanding and ongoing maintenance activities that protect the health and safety of downstream properties through debris flow reduction and flood control. Therefore, the project does not represent any change over the current baseline existing conditions throughout Los Angeles County and would not result in new environmental impacts; therefore, no mitigation would be required.

3.9.2 IMPACT ANALYSIS

a, f) Less than Significant Impact

The ongoing operations of the Maintenance Program would not involve a new activity or construction project that could result in the generation of water pollutants. Maintenance activities would be temporary and short-term and do not generate wastewater that would require on-site disposal. Water used for dust control would create a surface crust but would not result in runoff or pollutants in the runoff. Equipment used at the debris basins may lead to leaks of oil and grease, vehicle fluids, and other solvents into the ground. However, this impact would not be considered significant since no fueling or equipment maintenance activities would be conducted at the debris basins. Also, the number, type, or frequency of the construction equipment required for mowing, sediment removal and other maintenance activities would not change over existing conditions; therefore, pollutants generated from mechanical equipment would remain consistent with historic operations.

The Section 1605 Long-Term Agreement contains conditions regarding the use of herbicides, equipment and access, fill or spoil, structures, pollution, sedimentation, and litter. Vegetation cuttings must be placed on tarps or plastic bags to minimize the spread of invasive species within the basin during transport from the site for off-site disposal. Only herbicides approved for aquatic use can be used at the debris basins. Post-emergent herbicide spraying (with RoundUp or AquaMaster) would only be used in areas with dense invasive vegetation, if necessary, and left for a week prior to its removal. Implementation of a Water Diversion Plan and other appropriate BMPs required by the CDFG would also prevent chemicals from entering the runoff. Compliance with these conditions would avoid impacts to waters within the debris basins.

Discharges are regulated under SWRCB Order No. 2003-0017-DWQ, "General Waste Discharge Requirements for Dredge and Fill Discharges That Have Received State Water Quality Certification", which requires compliance with all conditions of the Water Quality Certification issued by the RWQCB. Compliance with the Water Quality Certification issued by the RWQCB would ensure that any discharge from the debris basins do not conflict with the applicable provisions of Sections 301 (Effluent Limitations), 302 (Water Quality Related Effluent Limitations), 303 (Water Quality Standards and Implementation Plans), 306 (National Standards of Performance), and 307 (Toxic and Pretreatment Effluent Standards) of the Clean Water Act, and with other applicable requirements of State law.

Impacts on water quality would continue to be less than significant with compliance with the waste discharge requirements of the RWQCB and the conditions of the anticipated Section 1605 Agreement.

b) No Impact

The ongoing operations under the Maintenance Program would not require municipal water supplies and would therefore have no impact on groundwater supplies, as water used for dust control would be limited and would come from off-site sources. This water would also percolate into the ground for minimal recharge of the underlying aquifer. The Maintenance Program would not interfere with groundwater recharge, as no impervious cover would be constructed and groundwater recharge would continue to occur via percolation through the debris basin facilities. Sediment removal would also not be deep enough to affect the underlying groundwater. There would continue to be no impacts to groundwater.

c□e) No Impact

The ongoing operations under the Maintenance Program would maintain the capacity and functionality of the debris basins by allowing them to perform their primary function during heavy rains, substantially reducing the adverse effects from erosion and siltation on downstream properties. By maintaining the functionality of the debris basins and associated dam structures, the Maintenance Program reduces the potential for uncontrolled flooding and downstream erosion, and there would continue to be no impact on drainage patterns or increase in runoff volumes. Ongoing debris basin maintenance would have a beneficial impact on drainage patterns and storm drain infrastructure.

g□h) No Impact

While the debris basins are located within streams, canyons and drainage channels, the ongoing operations under the Maintenance Program would not involve a new activity or construction project (e.g., any permanent housing, structure, site or infrastructure improvement) at the basins. No structures would be placed within a 100-year floodplain nor would temporary maintenance activities impede or redirect flows within a 100-year floodplain. There would continue to be no impacts related to flooding.

i) No Impact

As discussed above, the ongoing operations under the Maintenance Program would ensure the continued integrity and functionality of the debris basins and associated dam structures, thereby reducing the potential for exposure of nearby populations to risks from flooding from failure of an upstream flood-control feature such as a dam or levee. There would continue to be no impact related to flooding; ongoing debris basin maintenance would be a beneficial impact.

j) No Impact

The ongoing operations of the Maintenance Program would not expose people or structures to inundation by seiche or tsunami because no new habitable structures would be constructed. There would be no impact related to inundation; ongoing debris basin maintenance would be a beneficial impact. The debris basins specifically reduce mudflow and the Maintenance Program would allow the debris basins to more effectively capture sediment loads and debris in storm water, preventing mudflow hazards to downstream areas. Adverse impacts would continue not to occur with continued implementation of the Maintenance Program.

3.9.3 REGULATORY REQUIREMENTS

None.

3.9.4 MITIGATION MEASURES

There would continue to be no significant impacts to hydrology and water quality; therefore no mitigation measures are required.

3.10 LAND USE AND PLANNING	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
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?	☐	☐	☐	☒
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

3.10.1 EXISTING CONDITIONS

The debris basin sites are restricted for public facility use and are maintained by the LACFCD. All debris basins are located either on LACFCD-owned property or accessed via an easement that has been granted to the LACFCD.

The maintenance activities set forth in the Section 1605 Agreement represent a continuation of existing practices and activities performed by the LACFCD at the debris basin sites. These activities do not involve new construction, expansion or alteration of the debris basins, but rather include longstanding and ongoing maintenance activities that protect the health and safety of downstream properties through debris flow reduction and flood control. Therefore, the project does not represent any change over the current baseline existing conditions throughout Los Angeles County and would not result in new environmental impacts; therefore, no mitigation would be required.

3.10.2 IMPACT ANALYSIS

a□b) No Impact

The Maintenance Program involves the continuation of historic and ongoing maintenance activities and does not involve the expansion of existing debris basins or the construction of new basins. Therefore, the Maintenance Program would not divide an established community. The ongoing operations under the Maintenance Program would not require changes to existing or planned land uses, and thus, would not conflict with applicable land use plans, policies, or regulations. Implementation of the Maintenance Program would also be made in accordance with pertinent permits (i.e., the CDFG 1605 Long-Term Maintenance Agreement, the USACE Section 404 Permit, and the RWQCB 401 Water Quality Certification). There would continue to be no impacts related to dividing and established community or conflicts with applicable land use plans, policies, or regulations.

c) No Impact

As previously discussed in Section 3.4.1 (f), some of the 162 LACFCD-maintained debris basins are located within designated Significant Ecological Areas (SEAs). Specifically, the Calle Robleda debris basin is within SEA No. 6 (Las Virgenes); the Turnbull debris basin is within SEA No. 44 (Sycamore-Turnbull Canyons); and the Brace, Bracemar, Brand, Chandler, Childs, Elmwood, Havenway, Hillcrest, Irving Drive, La Tuna, Montana, Sunset Canyon Deer, Sunset Lower, and Sunset Upper debris basins are located within SEA No. 40 (Verdugo Mountains). The biological resources contributing to the SEA designation for each of these three SEAs, as defined in the *Los Angeles County Significant Ecological Areas Study* (England and Nelson 1976), are summarized in Section 3.4, Biological Resources.

Although some of the debris basins located within the SEAs may occasionally support biological resources of some value to local plant and animal species, they do not harbor any substantial component of the regional ecology. Prior to the SEA program, when each of the basins was constructed, vegetation was removed and grading of the sites occurred. Overtime, many of the basins have been re-colonized by vegetation and associated plant and wildlife species. Although in most cases the majority of the vegetation has been non-native (as is typical for disturbed areas), native vegetation has also returned in some areas. As a result of the ongoing maintenance activities, which include annual mowing of the basin vegetation, the biological resources that persist have remained minimal in stature and extent and are not an integral part of the local ecosystem.

As such, preservation of the resources within the basins is not essential to the overall goals of the SEA designation. The replacement of biological resources removed through the ongoing operations under the Maintenance Program would be conducted in compliance with the applicable permits, as set forth in Section 3.4, Biological Resources (RR 3.4-1, RR 3.4-2, and RR 3.4-3) and would not conflict with the LACDRP SEA program.

There are no adopted Habitat Conservation Plans or Natural Community Conservation Plans that encompass any debris basin locations. However, the West Mojave Habitat Conservation Plan (HCP) is currently being prepared as a component of the *West Mojave Plan*, which will address the management of the desert tortoise, Mojave ground squirrel, and nearly 100 other special status plants and animals found within the 9.4-million-acre planning area that includes most of California's western Mojave Desert. The planning area includes both private lands and federal and State-owned lands in the Antelope Valley portion of Los Angeles County (BLM 2007). There are three debris basins located in the northern foothills of the San Gabriel

Mountains near the Palmdale/Lancaster area, as shown on Exhibit 2-1. These debris basins are located in the southwestern portion of the Mojave Desert and within the planning area for the *West Mojave Plan*.

The Maintenance Program would not involve expansion of existing debris basins or the construction of new basins. Invasive species removal would be consistent with the goals of the proposed *West Mojave Plan* to protect and preserve native plant species. Maintenance and repair of access roads and appurtenances would affect highly disturbed and small areas within each debris basin site and would have no measurable impact on sensitive species in the Mojave Desert. Vegetation mowing, sediment removal, and fuel modification would change on-site habitats, but these activities have been occurring for years prior to the planning effort for the *West Mojave Plan* and would not change under the Maintenance Program. Since the West Mojave HCP has not been developed and adopted, continued implementation of the Maintenance Program would not conflict with the provisions of any Habitat Conservation Plan; Natural Community Conservation Plan; or other approved local, regional, or State habitat conservation plan such as the LACDRP SEA program, and there would continue to be no impacts.

3.10.3 REGULATORY REQUIREMENTS

Repeated from Section 3.4, Biological Resources:

RR 3.4-1 *All activities conducted as part of the Debris Basin Maintenance Program shall be conducted in full compliance with the conditions set forth in the CDFG 1605 Long Term Maintenance Agreement.*

RR 3.4-2 *All activities conducted as part of the Debris Basin Maintenance Program shall comply with the conditions set forth in the ACOE 404 Permit.*

RR 3.4-3 *All activities conducted as part of the Debris Basin Maintenance Program shall comply with the conditions set forth in the RWQCB 401 Water Quality Certification.*

3.10.4 MITIGATION MEASURES

There would continue to be no impacts to land use and planning; therefore, no mitigation measures are required.

3.11 MINERAL RESOURCES	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
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?	☐	☐	☐	☒

3.11.1 EXISTING CONDITIONS

Mineral resource areas include existing surface mining sites, areas identified as containing significant mineral resources by the State Mining and Geology Board, and areas suitable for the production of energy resources, including crude oil and natural gas. The County depends on the California Geological Survey to identify deposits of regionally significant aggregate resources. These clusters or belts of mineral deposits are designated as Mineral Resources Zone 2 (MRZ-2), which are areas that require special management due to the presence of mineral resources important to the County. Four major MRZ-2s are located in Los Angeles County: the Little Rock Creek Fan, Soledad Production Area, Sun Valley Production Area, and Irwindale Production Area (LACDRP 2008). Based on the Natural Resource Areas Map in the Draft General Plan Update, which depicts the generalized boundaries of the MRZ-2 lands in the County, some debris basins may be within or near areas designated as MRZ-2.

The maintenance activities set forth in the Section 1605 Agreement represent a continuation of existing practices and activities performed by the LACFCD at the debris basin sites. These activities do not involve new construction, expansion or alteration of the debris basins, but rather include longstanding and ongoing maintenance activities that protect the health and safety of downstream properties through debris flow reduction and flood control. Therefore, the project does not represent any change over the current baseline existing conditions throughout Los Angeles County and would not result in new environmental impacts; therefore, no mitigation would be required.

3.11.2 IMPACT ANALYSIS

a□b) No Impact

The 162 debris basins included in the Maintenance Program are existing facilities where no mineral extraction activities are ongoing. While aggregate resources may be present in or near the debris basins, past grading and basin construction activities have disturbed any surface resources, and the essential functions of the debris basins for public safety are not likely to be superseded by the need for mining at the basins. Historic and ongoing sediment removal activities would have also affected the availability of resources, although no impervious areas are present to preclude future mining activity. Continued implementation of the Maintenance Program would not require mineral resources nor change the availability of resources on or near the debris basin sites. Additionally, no new structures or facilities would be constructed that could restrict future mineral resource recovery activities at the basin sites. Thus, there would continue to be no impacts to mineral resources.

3.11.3 REGULATORY REQUIREMENTS

None.

3.11.4 MITIGATION MEASURES

There would continue to be no impacts to mineral resources; therefore, no mitigation measures are required.

3.12 NOISE	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
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?	☐	☐	☒	☐
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?	☐	☐	☒	☐

3.12.1 EXISTING CONDITIONS

The debris basins are generally located in foothill areas and are often surrounded by open space and/or in proximity to residential development, which are usually considered to be noise-sensitive areas. Debris basins do not contain any permanently installed mechanized equipment that generates noise on an ongoing basis. Debris basins are located within various jurisdictions throughout the County, which have adopted noise ordinances and restrictions into their Municipal Codes.

The maintenance activities set forth in the Section 1605 Agreement represent a continuation of existing practices and activities performed by the LACFCD at the debris basin sites. These activities do not involve new construction, expansion or alteration of the debris basins, but rather include longstanding and ongoing maintenance activities that protect the health and safety of downstream properties through debris flow reduction and flood control. Therefore, the project does not represent any change over the current baseline existing conditions throughout Los Angeles County and would not result in new environmental impacts; therefore, no mitigation would be required.

3.12.2 IMPACT ANALYSIS

a, d) Less than Significant Impact

Noise generated from ongoing operations under the Maintenance Program would be of the same frequency and scope historically generated at each debris basin. The annual mowing activities and infrequent sediment removal, fuel modification, maintenance, and repair activities and associated equipment use and truck traffic would continue to generate noise levels high enough to be audible at surrounding land uses. As discussed in Section 2.3, Project Description, sediment removal is completed by a backhoe or small excavator transferring the sediment into a dump truck, which is used to transport the sediment from the debris basin to a designated SPS.

There are multiple variables that contribute to the rate at which the 25% contour would be filled, thereby triggering a cleanout requirement. Many of these factors, such as wildfires, amount of annual rainfall, and changes in land use conditions upstream of the basin, cannot be anticipated. These types of variables make it impractical to predict the frequency of basin sediment removal activities; however, historically the basins have been cleaned out once every 5 to 20 years and generally take year an average of 1 to 3 days for smaller basins and 1 to 6 weeks for larger basins. The use of motorized equipment at the debris basins, the hauling of sediment by dump trucks, and unloading activities at SPS generate noise on adjacent land uses and along haul routes during the course of the activity.

Mowing and vegetation removal, which occurs annually, may use diesel-engine driven tractors that generate noise that is audible within 500 to 1,000 feet in quiet surroundings, or may be done using mechanized tools (e.g., mowers, weed whackers) similar to such activities at a private residence and less audible depending on proximity to the debris basin.

Section 12.08.570 of the *Los Angeles County Code* describes the types of activities that are exempt from the County's noise ordinance. Section 12.08.570(H), Public Health and Safety Activities, describes that "All transportation, flood control, and utility company maintenance and construction operations at any time on public right-of-way, and those situations which may occur on private real property deemed necessary to serve the best interest of the public and to protect the public's health and well being, including but not limited to, street sweeping, debris and limb removal, removal of downed wires, restoring electrical service, repairing traffic signals, unplugging sewers, snow removal, house moving, vacuuming catch basins, removal of damaged poles and vehicles, repair of water hydrants and mains, gal lines, oil lines, sewers, etc.". As the ongoing Maintenance Program includes flood-control maintenance activities, including debris removal, the Maintenance Program would be exempt from the County's noise ordinance. However, the LACFCD implements the construction noise measures of the County's noise ordinance as a standard operating procedure (RR 3.12.1).

Section 12.08.440 of the *Los Angeles County Code* prohibits construction noise between the hours of 7:00 PM and 7:00 AM on weekdays, and at any time on Sunday or a federal holiday if it creates a disturbance across a residential or commercial property line. In addition, Section 12.12.030 of the County Code prohibits construction or repair work of any kind upon any building or structure, or performance of any earth excavation, filling, or moving where any of the foregoing entails the use of any air compressors; jackhammers; power-driven drill; riveting machine; excavator, diesel-powered truck, tractor or other earth-moving equipment; hand hammers on steel or iron; or any other machine, tool, device or equipment which makes loud noises to the disturbance of persons occupying sleeping quarters in a dwelling, apartment, hotel, mobilehome, or other place of residence on a Sunday or at any other time between the

hours of 8:00 PM and 6:30 AM the following day. Maintenance Program activities occur Monday through Friday between the hours of 7:30 AM and 5:00 PM, which is more restrictive than allowed by the County and the noise ordinances of most jurisdictions.

The LACFCD has an established protocol to inform and coordinate with the jurisdiction in which a debris basin is located prior to any sediment removal that could involve heavy equipment and/or truck trips. In accordance with standard practice, the LACFCD will contact the City Manager and/or LACDPW Director of the applicable jurisdiction to coordinate the sediment removal schedule and truck route and to discuss any additional constraints or requests. Residences and schools adjacent to truck haul routes (except freeways) are notified of the work schedules prior to the start of work and are provided contact information for complaint resolution. The LACFCD posts flyers in the community and along the haul routes to notify residents, schools, businesses, and City staff of the planned maintenance activities and haul routes and to incorporate any recommendation, condition, and/or alternatives and to obtain any necessary permits for the activities. Thus, impacts that occur from temporary and intermittent noise from the maintenance activities at each debris basin and SPS would continue to be considered less than significant.

b□c) Less than Significant Impact

The Maintenance Program would not generate groundborne vibration or noise levels that would be considered excessive. The excavation of sediment would not require pile driving, blasting, or other additional means for successful excavation that could contribute to groundborne vibration or groundborne noise levels. The operation of the debris basins, (i.e., passively collecting debris and passing storm water), does not generate noise. Therefore, the noise levels generated by the ongoing operations of the Maintenance Program would continue to involve the same scope, frequency, or type of routine activities as historically performed at each debris basin. As such, the proposed Maintenance Program would continue not to result in a permanent increase or any change to the periodic temporary noise levels already experienced at the existing land uses, and impacts would continue to be less than significant.

e□f) Less than Significant Impact

While most debris basins are located more than two miles from an airport or private airstrip, continued maintenance of debris basins located in proximity to a public or private use airport would not increase the exposure of people to excessive aircraft or airport noise since the basins are not permanently staffed and the maintenance crew would be present at the debris basins only for short periods of time. Thus, exposure to any aircraft or airport noise would be temporary and intermittent. Also, this exposure would not change with the continued implementation of the Maintenance Program. There would continue to be a less than significant impact related to airport noise.

3.12.3 REGULATORY REQUIREMENTS

RR 3.12-1 All maintenance work shall be conducted in compliance with the County's noise regulations, as contained in Chapter 12.08, Noise Control, and Chapter 12.12, Building Construction Noise, of the *Los Angeles County Code*.

3.12.4 MITIGATION MEASURES

There would continue to be no significant impacts related to noise; therefore, no mitigation measures are required.

3.13 POPULATION AND HOUSING	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through the extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

3.13.1 EXISTING CONDITIONS

The debris basin sites do not include habitable structures, nor are there permanent employees stationed at the basin sites. Rather, the LACFCD staff travel to the sites to perform inspection and maintenance activities on select days but leave when the work is completed. Thus, there are no on-site operations staff or associated employment positions. Also, there are no housing units, households, or residents at the debris basin sites.

The maintenance activities set forth in the Section 1605 Agreement represent a continuation of existing practices and activities performed by the LACFCD at the debris basin sites. These activities do not involve new construction, expansion or alteration of the debris basins, but rather include longstanding and ongoing maintenance activities that protect the health and safety of downstream properties through debris flow reduction and flood control. Therefore, the project does not represent any change over the current baseline existing conditions throughout Los Angeles County and would not result in new environmental impacts; therefore, no mitigation would be required.

3.13.2 IMPACT ANALYSIS

a□c) No Impact

As discussed above, the debris basins do not have an on-site resident population or employment opportunities. Their maintenance also would not lead to the creation of housing or employment at the basin sites. Current LACFCD personnel and their contractors would continue to provide maintenance services for the debris basins. The Maintenance Program would not involve expansion of existing debris basins or construction of new basins. Therefore, there would be no change in land uses that could induce growth. The continued maintenance of the basins would not promote development in the surrounding area or induce indirect population growth. Also, the ongoing operations under the Maintenance Program would not eliminate existing housing or necessitate the construction of replacement housing elsewhere. There would continue to be no impacts related to population and housing.

3.13.3 REGULATORY REQUIREMENTS

None.

3.13.4 MITIGATION MEASURES

There would continue to be no impacts to population and housing; therefore, no mitigation measures are necessary.

3.14 PUBLIC SERVICES	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
Would the project:				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:				
Fire protection?	☐	☐	☐	☒
Police protection?	☐	☐	☐	☒
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other public facilities?	☐	☐	☐	☒

3.14.1 EXISTING CONDITIONS

Public services in the County are provided by various law enforcement and fire protection agencies, school districts, and other public agencies. The debris basins are fenced to prevent trespassing and vandalism and to promote public safety. However, there are no specific public services that are required by the debris basins or their maintenance.

The maintenance activities set forth in the Section 1605 Agreement represent a continuation of existing practices and activities performed by the LACFCD at the debris basin sites. These activities do not involve new construction, expansion or alteration of the debris basins, but rather include longstanding and ongoing maintenance activities that protect the health and safety of downstream properties through debris flow reduction and flood control. Therefore, the project does not represent any change over the current baseline existing conditions throughout Los Angeles County and would not result in new environmental impacts; therefore, no mitigation would be required.

3.14.2 IMPACT ANALYSIS

a) No Impact

As discussed above in Section 3.13, Population and Housing, the continued implementation of the Maintenance Program would not induce population growth directly or indirectly. Therefore, there would be no change in demand for police and fire protection services. Also, no demand for schools, parks or other public facilities are generated by the debris basins or their maintenance. There would continue to be no impact to public services.

3.14.3 REGULATORY REQUIREMENTS

None.

3.14.4 MITIGATION MEASURES

There would continue to be no impacts to public services; therefore no mitigation measures are required.

3.15 RECREATION	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
Would/does the project:				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
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?	☐	☐	☐	☒

3.15.1 EXISTING CONDITIONS

The debris basins do not generate a demand for parks and recreation. There are no recreation activities associated with the maintenance of the debris basins. While many of the debris basins are located adjacent to recreational trailheads and trails, public access within the LACFCD-owned property or LACFCD easement areas for the basins is prohibited.

The maintenance activities set forth in the Section 1605 Agreement represent a continuation of existing practices and activities performed by the LACFCD at the debris basin sites. These activities do not involve new construction, expansion or alteration of the debris basins, but rather include longstanding and ongoing maintenance activities that protect the health and safety of downstream properties through debris flow reduction and flood control. Therefore, the project does not represent any change over the current baseline existing conditions throughout Los Angeles County and would not result in new environmental impacts; therefore, no mitigation would be required.

3.15.2 IMPACT ANALYSIS

a) No Impact

As discussed above in Section 3.13, Population and Housing, the continued implementation of the Maintenance Program would not induce population growth directly or indirectly, and there are no residents, households, or housing units at the debris basins sites that may generate a need for or increase use of neighborhood and regional parks, including nearby recreational trails. Maintenance activities would be confined to the debris basin sites and would not affect adjacent trails or trailheads. There would continue to be no impacts to existing recreational facilities.

b) No Impact

The ongoing operations of the Maintenance Program do not involve recreational activities or facilities, nor would it include the construction or reconstruction of recreational facilities. There would continue to be no impacts related to new or expanded recreational facilities.

3.15.3 REGULATORY REQUIREMENTS

None.

3.15.4 MITIGATION MEASURES

There would continue to be no impacts related to recreation; therefore, no mitigation measures are required.

3.16 TRANSPORTATION/TRAFFIC	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system. Including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☒	☐
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand established by the county congestion management agency for designated roads or highways?	☐	☐	☒	☐
c) Result in a change in air traffic patterns, including either an increase in traffic levels or change in location that results in substantial safety risks?	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
e) Result in inadequate emergency access?	☐	☐	☒	☐
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decreased the performance or safety of such facilities?	☐	☐	☐	☒

3.16.1 EXISTING CONDITIONS

As shown in Exhibit 2-1, the LACFCD's 162 debris basins are largely concentrated along the southern foothills of the Santa Monica, San Gabriel, Verdugo, and Puente Hills Mountains. Three of these basins are located in the northern foothills of the San Gabriel Mountains **n**ear the Palmdale/Lancaster area. Vehicle trips come from the LACFCD maintenance yards or their contractor yards to the debris basins and back during mowing, fuel modification, invasive species removal, and other maintenance activities. The truck traffic generated by sediment removal activities, as part of ongoing operations of the Maintenance Program, occurs between the debris basin sites and various designated SPS.

The maintenance activities set forth in the Section 1605 Agreement represent a continuation of existing practices and activities performed by the LACFCD at the debris basin sites. These activities do not involve new construction, expansion or alteration of the debris basins, but rather include longstanding and ongoing maintenance activities that protect the health and safety of downstream properties through debris flow reduction and flood control. Therefore, the project does not represent any change over the current baseline existing conditions throughout Los Angeles County and would not result in new environmental impacts; therefore, no mitigation would be required.

3.16.2 IMPACT ANALYSIS

a) Less than Significant Impact

Traffic generated from the ongoing operations of the Maintenance Program would occur at the same frequency and with the same volumes as historically generated for each debris basin. As discussed in Section 2.3, Project Description, mowing activities using mechanized tools usually occurs annually at each debris basin. This type of small-scale annual maintenance usually requires one diesel-engine tractor and one dump truck for hauling mowed vegetation. Channel clearing also occurs annually using one diesel-engine excavator.

Sediment removal does not occur annually or at regular intervals at each basin. There are multiple variables that contribute to the rate at which the 25% contour would be filled, thereby triggering a cleanout requirement. Many of these factors cannot be anticipated, making it impractical to predict the frequency of basin sediment removal activities. However, historically the basins have been cleaned out once every 5 to 20 years and generally take no more than 1 to 3 days for smaller basins and 1 to 6 weeks for the larger basins. The sediment removal activities require one or more large trucks to transport a backhoe or small excavator to the basin, multiple dump trucks to transfer sediment from the basin to a designated SPS (the total number of dump trucks varies widely dependent on the quantity of sediment to be cleared from each basin and the distance to the SPS), and a limited number of trucks or other vehicles to transport personnel to perform the basin clearing.

Because debris basins are located throughout the County, so too is the volume of periodic truck traffic from ongoing maintenance activities, which involve travel on freeways and surface streets. For illustrative purposes, assuming approximately 70 truck trips per day and 5 days of truck traffic from each basin clearing event, local increases in traffic volumes would not significantly affect roadway and intersection capacities. With the addition of maintenance crew and equipment trips, additional trips may be generated each work day, with a one-time travel to and from the site by equipment to be used and staged on-site. Sediment removal would occur once every 5 to 20 years at each basin site and would not represent a significant impact to overall traffic volumes and circulation patterns across the County.

Haul routes are selected based on the use of designated truck routes, with preference to wider streets and avoidance of areas with public congregation. These haul routes are also presented to affected cities for approval or selection of alternate routes, and information flyers are posted at developments along the route prior to the start of hauling activities. With sediment removal occurring intermittently based on remaining basin capacity, the ongoing operation of the Maintenance Program would continue not to result in a permanent increase in traffic volumes or traffic patterns at any one roadway, freeway, or intersection. Traffic impacts on the circulation system would be less than significant. Also, no impacts would occur on mass transit, non-motorized travel, or pedestrian and bicycle paths with continuation of these maintenance activities.

b) Less Than Significant Impact

The Los Angeles County Congestion Management Program (CMP) calls for monitoring of the highway and roadway system in the County and a multi-modal system performance analysis, promotes alternative modes of transportation, requires monitoring of land use and roadway performance by individual jurisdictions, and provides guidelines for the conducting a Traffic Impact Analysis (TIA). The CMP TIA guidelines require analysis of freeway segments, ramps,

and intersections if the proposed project would add 150 or more trips (in either direction) during either the AM or PM weekday peak periods at any location.

Freeway and major roadways in the County's CMP would be utilized by trucks and vehicles coming to and from the debris basin sites. For illustrative purposes, assuming approximately 70 truck trips per day are expected at any one debris basin clearing event (with only a portion of these trips occurring during peak hours), there would be a less than significant impact to CMP freeway segments, ramps, and intersections. Also, trips to and from the debris basins would be temporary and short term. Since no measurable impact on street system performance would continue to occur (as discussed above), no conflict with the Los Angeles County CMP is expected.

c) No Impact

The Maintenance Program would have no impact on air traffic patterns, as continued maintenance activities at the debris basins would not generate demand for air transportation.

d□e) Less than Significant Impact

The Maintenance Program would not include changes to any road configurations that may create sharp curves or dangerous intersections. Also, the debris basins are located on designated evacuation routes or used for emergency access. However, truck traffic during sediment removal could be as much as approximately 70 trips per day at each debris basin. While the selected haul routes are generally designated truck routes, with preference for wider streets and avoidance of areas with public congregation, these truck trips would be queuing in or out of the debris basins or the SPS and could interfere with emergency response or evacuation in areas adjacent to the debris basins or SPS.

To reduce the potential for interference with emergency access during the hauling of sediments from debris basins and unloading at the SPS, the LACFCD complies with the temporary traffic control requirements outlined in the *California Manual for Uniform Traffic Control Devices* (MUTCD) on the use of traffic control devices at truck crossings and equipment on public rights-of-way (RR 3.16-1). The MUTCD provides guidelines for the design and use of traffic signs, temporary striping, driveway access, barricades, flag persons, and other measures to maintain public convenience and safety for motorists, cyclists, pedestrians, and construction workers. During sediment removal operations, the LACFCD has flag persons at driveways to guide truck traffic and prevent obstruction of existing traffic flows in addition to signs, signals, markings, lights, and barriers for changes to travel lanes, restricted parking areas, traffic control zones, and coordination with law enforcement and other emergency units. Compliance with RR 3.16-1 would minimize obstructions to regular traffic flows; promote traffic safety; and maintain emergency access to all developments.

The movement of large equipment on public roadways (as needed to transport equipment to and from the debris basins sites) is regulated by Title 16, Highway, of the *Los Angeles County Code*, which requires a moving permit and compliance with regulations on the permitted size of vehicles/equipment; night moves; moving in inclement weather; parking on streets; travel outside peak hours and holidays; over-length, over-height and over-width requirements; lighting; signs; and restricted routes (RR 3.16-2). This will prevent traffic hazards when large equipment is transported to and from the debris basins. Impacts related to traffic hazards and emergency access would continue to be less than significant.

f) No Impact

Implementation of the Maintenance Program does not require the use of alternative transportation systems; would not affect public transit, bicycle, or pedestrian facilities; and would not conflict with adopted alternative transportation policies. There would continue to be no impacts on alternative transportation.

3.16.3 REGULATORY REQUIREMENTS

RR 3.16-1 Sediment removal activities at the debris basin sites and at SPS shall include a Traffic Control Plan to be prepared and implemented in compliance with the *California Manual for Uniform Traffic Control Devices* (MUTCD) to ensure that no traffic safety hazards are created by truck crossings and equipment on public rights-of-way.

RR 3.16-2 The movement of large equipment on public roadways shall be made in compliance with Title 16, Highway, of the *Los Angeles County Code*, which requires a moving permit and provisions on the size of vehicles/equipment; night moves; moving in inclement weather; parking on streets; travel outside peak hours and holidays; over-length, over-height and over-width requirements; lighting; signs; and restricted routes.

3.16.4 MITIGATION MEASURES

There would continue to be no significant impacts related to transportation/traffic; therefore, no mitigation measures are required.

3.17 UTILITIES AND SERVICE SYSTEMS	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☒
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☒	☐

3.17.1 EXISTING CONDITIONS

Water, sewage, electricity, telecommunications, and other utilities and service systems are not required for operation and maintenance of the debris basins. The maintenance activities set forth in the Section 1605 Agreement represent a continuation of existing practices and activities performed by the LACFCD at the debris basin sites. These activities do not involve new construction, expansion or alteration of the debris basins, but rather include longstanding and ongoing maintenance activities that protect the health and safety of downstream properties through debris flow reduction and flood control. Therefore, the project does not represent any change over the current baseline existing conditions throughout Los Angeles County and would not result in new environmental impacts; therefore, no mitigation would be required.

3.17.2 IMPACT ANALYSIS

a□e) No Impact

The ongoing operations of the Maintenance Program would not produce wastewater, require potable water supplies, require the construction of storm drain facilities, induce population growth, or otherwise contribute to a need for new or increased water or wastewater facilities. There would continue to be no impact related to water, wastewater, or storm drain facilities.

f□g) Less Than Significant Impact

Sediments removed from the debris basins are disposed off site and deposited in LACDPW-maintained SPS, as listed in Table 2-3. Different SPS are used to dispose of sediment loads, which often change due to various factors such as distance from the debris basin, travel time to the SPS, remaining capacity of the SPS, vehicle capacity at the SPS, available equipment and resources of the LACFCD, time constraints, and SPS permit requirements. Vegetation and organic matter removed during mowing and fuel modification activities are brought to landfills, which are also used for disposal of sediments with high organic matter content.

Two landfills are currently used by the Maintenance Program as SPS: Sunshine Canyon Landfill and Scholl Canyon Landfill. Sunshine Canyon Landfill has a permitted daily capacity of 12,100 tons and had a remaining permitted capacity of approximately 83.0 million tons as of December 2008. Sunshine Canyon Landfill is expected to close in approximately 2030 (estimated remaining life of 22 years) based on the 2008 permitting remaining capacity. Scholl Landfill has a permitted daily capacity of 3,400 tons and had a permitted remaining capacity of approximately 5.7 million tons as of December 2008. Scholl Canyon Landfill is expected to close in 2025 (estimated remaining life of 17 years) (LACDPW 2009) based on the 2008 permitting remaining capacity.

The ongoing operations of the Maintenance Program do not generate a constant stream of solid wastes that are disposed of at a specific landfill. Vegetation and organic matter disposal from annual mowing, invasive species removal, and fuel modification generate limited waste volume that can be readily accepted by the landfills. Also, the majority of sediment is disposed of at SPS rather than at landfills. Thus, limited demand for landfill space at Sunshine Canyon Landfill and Scholl Canyon Landfill are needed to serve the Maintenance Program. No hazardous materials would be generated at the debris basins, which may require special handling and disposal. Also, the Maintenance Program would not conflict with waste reduction regulations since the sediments and organic matter from the debris basins can be used as landfill cover, compost, or recycled as fill. Thus, impacts related to solid waste disposal would continue to be less than significant.

3.17.3 REGULATORY REQUIREMENTS

None.

3.17.4 MITIGATION MEASURES

There would continue to be no impacts to utilities and service systems; therefore, no mitigation measures are required.

3.18 MANDATORY FINDINGS OF SIGNIFICANCE	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
Does the project:				
a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☒	☐
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)?	☐	☐	☒	☐
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

3.18.1 MANDATORY FINDINGS OF SIGNIFICANCE ANALYSIS

a) Less than Significant with Mitigation

Continued compliance with regulatory requirements ensures that the ongoing operations under the Maintenance Program do not have the potential to result in significant impacts to the quality of the environment; to substantially reduce the habitat of a fish or wildlife species; to cause a fish or wildlife population to drop below self-sustaining levels; to threaten to eliminate a plant or animal community; to reduce the number or restrict the range of a Rare or Endangered plant or animal; or to eliminate important examples of the major periods of California history or prehistory. As part of the issuance of the Section 1605 Agreement, the LACFCD is not proposing any change to ongoing activities that are currently being implemented under the Maintenance Program. Therefore, continued implementation of the Maintenance Program does not represent a change to the environment, and any potential environmental impacts identified within this IS/MND do not represent a change from historic activities under the Maintenance Program. There would continue to be a less than significant impact with implementation of the mitigation measures for biological resources, as identified in the analysis presented above.

b) Less than Significant Impact

Because these activities are already in existence and a part of the baseline activities throughout the County, they would not contribute to any cumulative impact when viewed in combination with any other development projects.

Activities under the Maintenance Program would continue to be short-term, temporary, and intermittent at scattered debris basin sites. There is no set schedule for maintenance at the debris basins and maintenance activities often occur on an as-needed basis in order of priority rather than at predictable intervals; therefore, it cannot be determined when/if maintenance activities would occur concurrent with other nearby public and/or private development projects,

and it would be speculative to try and determine a schedule of maintenance. However, because implementation of the Maintenance Program is a continuation of ongoing activities and because the environmental impacts of these activities are considered relatively minimal, in the event that a private or public development project were to occur in proximity to a debris basin undergoing maintenance, cumulative impacts would remain less than significant. Compliance with regulatory requirements and mitigation measures would ensure that the ongoing operations under the Maintenance Program would not have considerable cumulative impacts. Therefore, the ongoing operations of the Maintenance Program do not incrementally contribute to cumulative impacts. There would be no impact, and no mitigation would be required.

c) Less than Significant Impact

The ongoing operations under the Maintenance Program do not have any environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly, as previously discussed within the text of each environmental analysis. As part of the issuance of the Section 1605 Agreement, the LACFCD is not proposing any change to ongoing activities that are currently being implemented under the Maintenance Program. Therefore, continued implementation of the Maintenance Program does not represent a change to the environment, and any potential environmental impacts identified within this IS/MND do not represent a change from historic activities under the Maintenance Program. The ongoing operations under the Maintenance Program benefit the County population by ensuring the continued integrity and functionality of the debris basins and associated dam structures, thereby reducing the potential for adverse effects on human beings and exposure of downstream residences, businesses, and infrastructure from potential damage from floodwaters, mudflows, and debris. Therefore, there would be no impact and no mitigation would be required.

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