



**US Army Corps
of Engineers®**

**SEPULVEDA DAM BASIN
LOS ANGELES COUNTY, CALIFORNIA**

VEGETATION MANAGEMENT

**DRAFT FINDING OF NO SIGNIFICANT IMPACT &
ENVIRONMENTAL ASSESSMENT**

AUGUST 2012

**Los Angeles District
U.S. Army Corps of Engineers
P.O. Box 532711
Los Angeles, California 90053-2325**

DRAFT
FINDING OF NO SIGNIFICANT IMPACT
Vegetation Management Project
(South of Burbank Blvd.)
in Sepulveda Dam Basin
Los Angeles County, California

I have reviewed the Environmental Assessment (EA) that has been prepared for the proposed action of Vegetation Management, south of Burbank Blvd. in the Sepulveda Dam Basin, Los Angeles County, California. The EA has been prepared in compliance with applicable Federal laws, regulations, and Executive Orders and Corps' policies. The EA analyzes the impacts of the proposed alternatives on the environmental and human resources in and adjacent to the area of the proposed action.

Under the No Action Alternative, the vegetation would not be cleared per the guidance of the Engineering Technical Letter 1110-2-571, *Guidelines for Landscape Planting and Vegetation Management at Levees, Floodwalls, Embankment Dams, and Appurtenant Structures*, dated 2008, to maintain flood risk management for the urban area downstream of the Sepulveda Dam, to increase visual surveillance of the area for safety purposes and discourage illegal activity, and to restore native oak woodland-grassland, coastal sage scrub, and riverine habitats in the "Vegetation Management" immediately upstream of Sepulveda Dam, northeast of the Los Angeles River, and south of Burbank Blvd. The No Action Alternative would not meet the purpose and need of the proposed project, although it was carried forward for comparison purposes.

The Preferred Alternative includes a three-phase approach: 1) eradicate invasive and non-native vegetation through mowing and mulching in the first year; 2) apply an herbicide on emergent invasive species in the second year; and 3) seed and plant native species in appropriate areas in the fourth year. The Preferred Alternative would comply with the Engineering Technical Letter 1110-2-571, *Guidelines for Landscape Planting and Vegetation Management at Levees, Floodwalls, Embankment Dams, and Appurtenant Structures*, dated 2009, provide a long-term low maintenance area and a sustainable habitat, and meet the primary and secondary need and purpose of the proposed project.

With the implementation of the environmental commitments identified in Chapter 4.0 during the vegetation management activities in the area of the Proposed Action, all potential impacts to environmental and human resources in and adjacent to the project area would be reduced to less than significant. The recommended alternative, the Optimal Management/Restoration Alternative (Preferred Alternative) would most effectively meet the need and purpose of the proposed action.

By ultimately providing a viable, sustainable habitat, the Preferred Alternative would be the most cost effective, minimize future/long term maintenance, and optimize flood risk management within the Basin. The preferred alternative would also optimize the secondary goals of the proposed project, enhance safety and security within the area, and restore appropriate native species for habitat diversity within the area.

I have determined that implementation of the Preferred Alternative with the incorporation of the Environmental Commitments identified in this EA is in compliance with Section 106 of the National Historic Preservation Act (36 CFR 800), the Endangered Species Act, Migratory Bird Treaty Act, and other Federal laws, regulations, and Executive Orders as described in this EA.

I have considered the available information contained in the EA, and it is my determination that there are no significant adverse impacts on the quality of human environment resulting from the approval of the Recommended Plan. There are no unresolved environmental issues. Preparation of an Environmental Impact Statement (EIS), therefore, is not required.

Date

R. Mark Toy, P. E.
Colonel, US Army
Commander and District Engineer

**Notice of Preparation
Vegetation Management Project
(South of Burbank Blvd.)
in Sepulveda Dam Basin
Los Angeles County, California**

This Draft Environmental Assessment (EA) has been prepared by the US Army Corps of Engineers (Corps) in compliance with the National Environmental Protection Act (NEPA) other Federal laws, regulations, Executive Orders, and Corps' policies. The Corps is the lead Federal agency for the Proposed Action, as no other agency is involved in implementing the Proposed Action.

The Draft EA will be provided for agency and public review to solicit input on the Proposed Action and will be made available for 15 days. Comments received will be considered in determining whether an Environmental Impact Statement (EIS) will be required or whether a Finding of No Significant Impact (FONSI) can be issued.

The Sepulveda Dam Basin (Basin) is located on the upper Los Angeles River in the San Fernando Valley about 17 miles northwest of downtown Los Angeles, Los Angeles County, California. The Basin is bordered on the south by the Ventura Freeway (U.S. Highway 101) and on the east by the San Diego Freeway (Interstate 405) (Figure 1-1). The area of Proposed Action is roughly triangular in shape and approximately 50 acres in size, located in the southeastern corner of the Basin, south of Burbank Blvd., north of the Los Angeles River, and northwest of the upstream face of the Dam (Figure 1-2).

The Corps' principle mission of flood risk management, the protection of life and safety is the primary objective of the Proposed Action. The Corps is obligated by law and regulation to conduct periodic inspections to ensure that Federal projects operate at their authorized level of flood risk management. Corps' guidance, specifically, *Guidelines for Landscape Planting and Vegetation Management at Levees, Floodwalls, Embankment Dams, and Appurtenant Structures*, Engineering Technical Letter (ETL) 1110-2-571, 2009, provide guidance that dictates the requirements of flood control structure inspection and certification. The ETL mandates that the Corps maintain a "vegetation free zone," a three-dimensional zone surrounding all levees, floodwalls, embankment dams, and critical appurtenant structures in all flood risk management systems.

It is a secondary mission of the Corps to embrace stewardship of the lands it manages at water resource projects. Restoration of native habitat of the area is conducive to long-term sustainability and management of the area for its land use classification of vegetation management.

The Proposed Action is the implementation of a vegetation management plan that would eradicate through mowing and mulching non-native vegetation and vegetative debris within the area of the Proposed Action followed by a two year period of spraying the area with an herbicide to control re-emergence of non-native invasive vegetation. Restoration of suitable sustainable habitats such as oak woodland grasslands, coastal sage scrub, and riverine marsh would be actively and passively restored once the existing non-native vegetation is eliminated.

The area of the Proposed Action would continue to be managed long-term by the Corps for flood risk management. Long-term management would continue to include periodic sediment removal from the project area as needed to maintain Basin capacity for flood risk management.

Comments should be received no later than close of business on 7 September 2012 by:

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1.0 INTRODUCTION

This Draft Environmental Assessment (EA) has been prepared by the US Army Corps of Engineers (Corps) to comply with the National Environmental Protection Act (NEPA) (42 USC 4321 et seq.), Council on Environmental Quality (CEQ) regulations published at 42 Code of Federal Regulations (CFR) part 1500, other environmental laws, Executive Orders, and Corps' regulations. The purpose of the EA is to provide sufficient information on the existing environmental conditions within the area of the Proposed Action and the potential environmental effects of the No-Action Alternative and various alternative actions so decision makers can determine the need to prepare an Environmental Impact Statement (EIS) or a Finding of No Significant Impact (FONSI).

For the purposes of this document and pursuant to guidelines for implementing NEPA, the baseline used for the impact analysis reflects conditions at the time of the preparation of this report. No other Federal agency has been designated as a cooperating agency (40 CFR 1501.6).

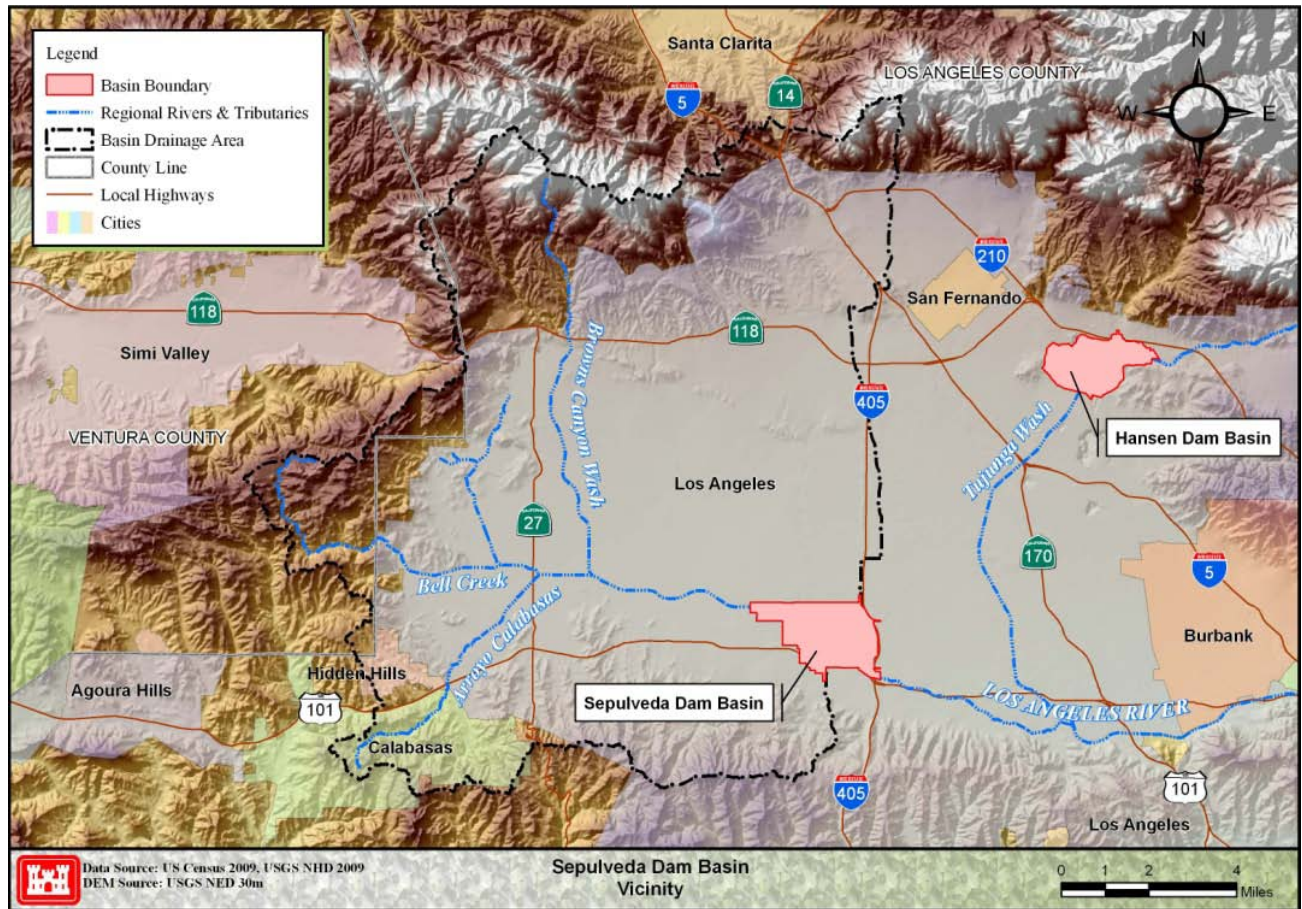
1.1 Proposed Action

The Proposed Action is the management of several distinct areas within the Proposed Action Area, defined in Section 1.2. All non-native, invasive vegetation, vegetative debris, and areas of disturbed and ruderal vegetation that have been burned by accidental fires would be mowed, and mulched in order to eradicate all non-native, invasive vegetation from the area during the first year of the vegetation management plan.

Once the vegetation has been mowed and mulched, the area of the Proposed Action would be sprayed with an herbicide during the following two-years to control re-emergent invasive vegetation. During the fall of the fourth year, a native grass species would be planted by broadcast seed or stolens within the area as an adaptable, resilient, sustainable vegetative cover that meets the height requirement of vegetation in the area per the Corps' Engineering Technical Letter (ETL) 1110-2-571, *Guidelines for Landscape Planting and Vegetation Management at Levees, Floodwalls, Embankment Dams, and Appurtenant Structures*, dated 2009. This native grass would be a variety that is sustainable, and resilient to the extreme climate conditions of the area (inundation during winter storms, typical of southern California's weather pattern, see area climate, Section 3.3 and temperatures that often reach over 100 degrees F in summer months with a long period of drought). A sustainable native grass would also allow for visual inspection of the area for project operation and maintenance facilitating the primary purpose of flood risk management, all of which support the safety of Basin users.

1.2 Proposed Action Area

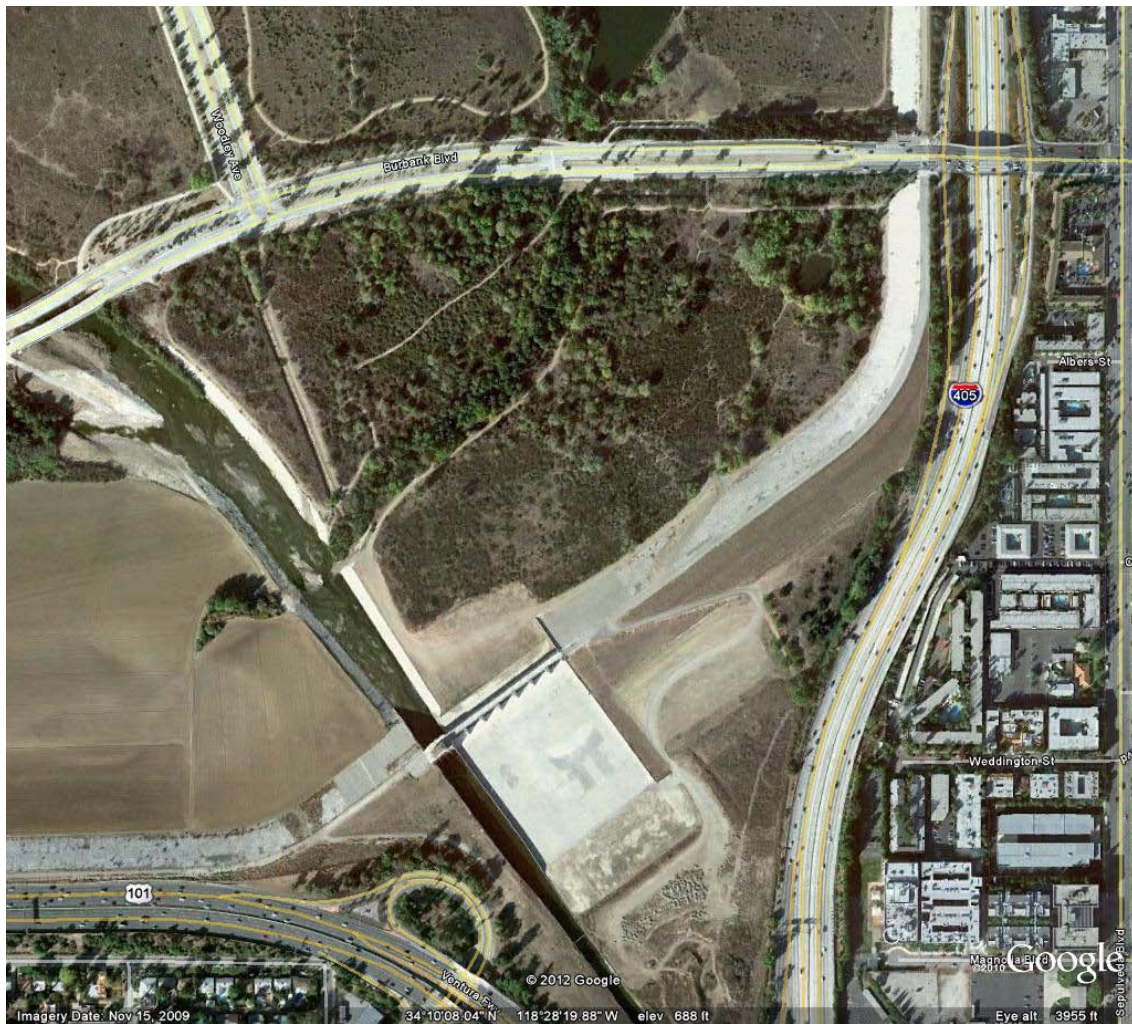
The Proposed Action would occur in the Sepulveda Dam (Dam) Basin (Basin), which is located on the upper Los Angeles River in the San Fernando Valley about 17 miles northwest of downtown Los Angeles, Los Angeles County, California and owned in fee by the United States. The Basin is bordered on the south by the Ventura Freeway (U.S. Highway 101) and on the east by the San Diego Freeway (Interstate 405) (Figure 1.1-1). The Basin is approximately 2,132 acres of which the Corps reserves 363 acres for operation and maintenance of the Dam and roadways and 1,588 acres are outgranted to the City of Los Angeles (City) through its Recreation and Parks Department for recreation purposes per the Flood Control Act of 1944.



Source: Sepulveda Basin Master Plan, 2011

Figure 1.1-1 Location Map

The Proposed Action proposed to work in a roughly triangular shaped parcel that is approximately 50 acres in size, located in the southeastern corner of the Basin, south of Burbank Blvd., north of the Los Angeles River, and west of the upstream face of the Dam (Figure 1.1-2) (Proposed Action Area). The Proposed Action Area is not included in any recreation outgrant.



Source: Google Earth Pro, 2012

Figure 1.1-2 Aerial Photo of Project Area

1.3 Authority

Sepulveda Dam was authorized pursuant to two acts of Congress. The Flood Control Act of 1936 (Public Law [P.L.] 74-738) provided for the construction of the Dam and related flood risk management works. The Flood Control Act of 1938 (P.L. 75-761), amended the 1936 Act by providing for the acquisition of land, easements, and right-of-ways for Dam and Basin projects, channel improvements, and channel rectification for flood risk management. Construction of the existing Dam, spillway, and outlet works were completed in December 1941.

The Corps' Engineering Technical Letter (ETL) 1110-2-571, *Guidelines for Landscape Planting and Vegetation Management at Levees, Floodwalls, Embankment Dams, and Appurtenant Structures*, dated 2009, provides guidance for maintenance of said structures in order to maintain the authorized level of flood risk management. The ETL mandates that the Corps maintain a "vegetation free zone," a three-dimensional zone surrounding all levees, floodwalls, embankment dams, and critical appurtenant structures in all flood damage reduction systems. The purpose of the vegetation-free- zone is to provide a reliable corridor of access to and along Federally

authorized and constructed flood risk management features for surveillance, inspection, maintenance, monitoring and flood-fighting (Figure 1.1-3). The ETL applies to all vegetation greater than 6 inches in height, including grasses.

1.4 Background

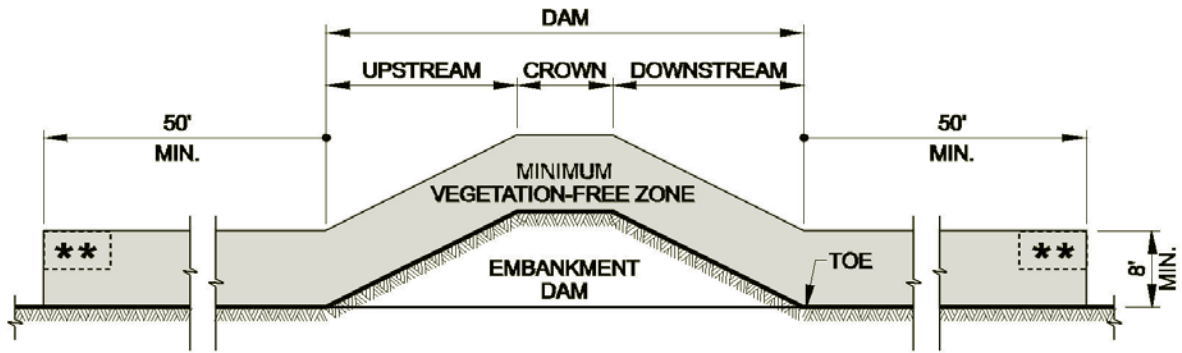
The Proposed Action Area is approximately 50 acres, located south of Burbank Blvd. The Proposed Action Area is just upstream of the Dam and endures inundation on an annual basis, often for weeks at a time during and following typical winter storms. This area is not outgranted to the City for recreation and remains under the direct operation and management by the Corps. The Sepulveda Dam Basin Master Plan, 2011, classifies this area as Multiple Resource Management---Vegetation Management which is defined as “Lands in this in this sub-category shall be managed for the protection and development of forest and vegetative cover”.

The area is generally heavily vegetated with non-native, invasive species such as black mustard, wild fennel, poison oak, and poison hemlock, a variety of non-native grasses, and several species of non-native trees. Scattered through the northern 1/3 of the area are a few native trees such as valley oak (*Quercus lobata*) sycamore (*Platanus racemosa*). A strip of disturbed coastal sage scrub covers the slope from Burbank Blvd. Haskell Creek, which carries treated water from the Donald C. Tillman Water Reclamation Plant (located in the northeastern corner of the Basin) to the Los Angeles River cuts through the area from under Burbank Blvd. in a generally southern direction. The creek is lined with disturbed riverine habitat, interspersed with non-native plants and debris which impedes consistent water flow through the creek.

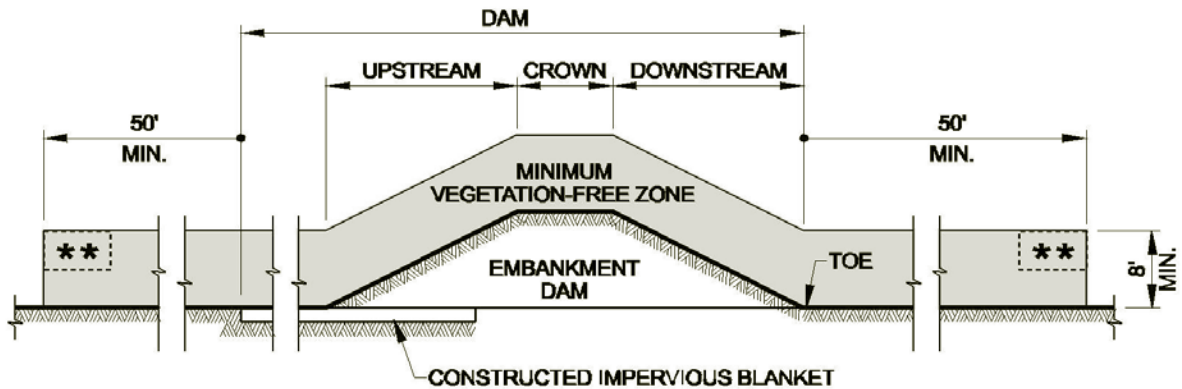
The Corps has not prioritized routine maintenance in this area leaving this highly disturbed area open to infestation by non-native, invasive plants that provide dense cover for a variety of human activities. Maintenance has been limited to occasional clearing of the maintenance road at the upstream toe of the Dam and occasional thinning of vegetation adjacent to the maintenance road parallel to Burbank Blvd.

The Proposed Action Area is reported as being an area used for hidden homeless camps, which has resulted in accidental fires in the area that has usually burned areas of 3 to 5 acres at a time. This has caused a continuous disruption of potential for native species establishment. Continuous disruption minimizes the potential for the establishment of native vegetation as non-native vegetation tends to out-compete native species in the area.

The area of the Proposed Action has also been identified by the City and local community groups as a meeting place for lewd and lascivious conduct and other “illegal activities.” The City of Los Angeles Police Department and Office of Public Safety routinely patrol the area from Burbank Blvd. and from maintenance roads through the area. Due to the thickness of the vegetation on the slope from Burbank Blvd. down to the flat area of the Proposed Action area, visibility of the area is minimal. Since visual access is limited, officers must leave their vehicles to patrol the area, often putting themselves in unsafe situations. Periodic “sweeps” of the area are conducted by these agencies, which reduces the “illegal activities” for a short time.



a. EMBANKMENT DAM WITH DRY RESERVOIR



b. EMBANKMENT DAM WITH DRY RESERVOIR AND CONSTRUCTED IMPERVIOUS BLANKET

** IN THIS 4' X 7' TRANSITION ZONE, TEMPORARY OBSTRUCTION BY LIMBS AND CROWN IS ALLOWED DURING DEVELOPMENT OF NEW PLANTINGS, FOR UP TO 10 YEARS

Source: ETL 1110-2-571, *Guidelines for Landscape Planting and Vegetation Management at Levees, Floodwalls, Embankment Dams, and Appurtenant Structure*, dated 2009

Figure 1.1-3 Typical Earth Fill Embankment Dam Cross Section

1.5 Purpose and Need

Due to the thickness and density of the invasive, non-native vegetation and vegetative debris in the area of the Proposed Action, routine maintenance has been difficult to implement beyond occasional clearing of maintenance road areas. Immediate measures to remove vegetation in the Proposed Action Area are necessary for visual inspection of the Dam features for flood risk management for safety downstream of the Dam possible and as a safety precaution given potential exposure to “illegal activities” are adversely impacted. In order to facilitate long-term maintenance for flood risk management and environmental stewardship, a long-term maintenance

plan is needed for the Proposed Action Area that is efficient and comprehensive, which completes the plan in a timely manner to comply with Corps' policies and guidance, including but not limited to the Engineering Technical Letter (ETL) 1110-2-571, *Guidelines for Landscape Planting and Vegetation Management at Levees, Floodwalls, Embankment Dams, and Appurtenant Structures*, dated 2009, which provides guidance for maintenance of said structures in order to maintain the authorized level of flood risk management and provide flood risk reduction for human life and safety downstream of the Dam and within the Basin.

1.5.1 ETL Compliance

ETL 1110-2-571, *Guidelines for Landscape Planting and Vegetation Management at Levees, Floodwalls, Embankment Dams, and Appurtenant Structures* states in Section 3-4., Embankment Dams and Appurtenant Structures., c., *Vegetation-Free Zone*, (1) Embankment Dams:

“At a minimum, for “dry” reservoirs, the entire dam embankment surface, including upstream impervious blankets and the upstream and downstream areas within 50 feet of the embankment toe, shall be a vegetation-free zone.” (See Figure 1.1-3).

The eradication of non-native, invasive vegetation through a multi-year plan would provide visual access of the area for project operations to facilitate the primary purpose of flood risk management. The planting of native grass species, less than six inches in height for the vegetative cover of the area would serve the dual purpose of compliance with the ETL and providing visual access of the area.

Vegetation management of both banks of Haskell Creek south of Burbank Blvd. to the confluence with the Los Angeles River would be implemented with the removal of vegetative debris, trash, non-native species, and the trimming of trees to remain in place to a height of 20 feet above the ground elevation. This vegetation management and long-term maintenance of suitable habitat on the creek banks would provide visual access of the creek for inspection flood risk management operations and public safety

1.5.2 Safety and Security

Because of the Proposed Action Area's relative isolation, it has become a well known and a well used rendezvous area for lewd and lascivious conduct. Other “illegal” activities that regularly occur in the Proposed Action area include drug dealing and trespassing. Numerous homeless encampments are also present when the area is not inundated by flood risk management operations. Other reported incidents such as walkers and joggers who utilize the maintenance roads through the area being mugged also render the area unsafe despite there being no formal recreation trails in the area.

1.5.3 Habitat Restoration

The restoration of sustainable coastal sage scrub, oak-woodland/grassland, and riverine marsh habitats within the Proposed Action area meets the goals of the Corps' mission of stewardship listed in Engineering Pamphlet (EP) 1130-2-540, *Environmental Stewardship, Operation and Maintenance Guidance and Procedures*, Nov. 1996, as amended, which states:

"The Army Corps of Engineers is the steward of the lands and waters at Corps water resources projects. Its Natural Resources Management Mission is to manage and conserve those natural resources, consistent with eco-system management principles, while providing quality public outdoor recreation experiences to serve the needs of present and future generations. In all aspects of natural and cultural resources management, the Corps promotes awareness of environmental values and adheres to sound environmental stewardship, protection, compliance and restoration practices. The Corps manages for long-term public access to, and use of, the natural resources in cooperation with other Federal, State, and local agencies as well as the private sector. The Corps integrates the management of diverse natural resource components such as fish, wildlife, forests, wetlands, grasslands, soil, air, and water with the provision of public recreation opportunities. The Corps conserves natural resources and provides public recreation opportunities that contribute to the quality of American life."

The planting of native species at Corps' water resource projects is in keeping with the goals of the Corps' guidance on environmental stewardship and minimizing the effects on climate change by planting a viable, resilient, sustainable plant palette at water resource projects. One of the long-term objectives identified in the Sepulveda Dam Basin Master Plan, 2011, is the restoration of the Basin's native habitat in non-recreation al use areas and throughout the Basin where practicable.

2.0 ALTERNATIVES

This EA analyzes the likely effects of the Proposed Action by comparing a No Action Alternative with the Preferred Alternative and with other alternatives deemed to be reasonable, practicable, and feasible. The alternatives considered are limited to alternatives that would meet the purpose and need for the Proposed Action and the No Action Alternative for comparison purposes.

2.1 Alternatives Eliminated From Further Consideration

Removal/eradication of non-native vegetation, vegetative debris, and trash can be managed in several ways. Not all ways are conducive to expediency, cost effectiveness, or completion within a timely manner. Methods of removing/eradicating non-native vegetation that have been eliminated from consideration include:

Controlled Burning of Vegetation

Controlled Burning (also called Prescribed Burning) is a vegetation management tool generally used to manage rangelands. Controlled burns can be used to remove grasses and control the density of woody plants. Controlled burning prevents uncontrolled and more destructive fires in open range-land areas. The practice is usually accomplished by initiating a burn through the use of fuel and drip torches.

Risks from controlled burning include the fire spreading if wind patterns change, providing adequate personnel trained and available to oversee the burn so that it does not “escape”, the general safety concerns given the proximity to the recreation use areas within the Basin, the areas of dense development surrounding the Basin, and high volume traffic corridors through and outside the Basin. South Coast Air Quality Management District (SCAQMD) regulations prohibit burning as a method of vegetation clearance. The area of the Proposed Action is part of the South Coast Air Basin (SCAB). SCAB is currently in non-attainment for carbon dioxide (CO₂). Burning of vegetative material within the area of the Proposed Action would add to the non-attainment and would require mitigation measures to be in compliance with the Clean Air Act. Current air quality standards would easily be exceeded because of the quantity of carbon dioxide that would be released into the atmosphere. Therefore, this alternative has been eliminated from further consideration.

Animal Grazing

Animal grazing, including sheep and/or goats can be effective in some environments. The Corps would not have the capability to implement this method on its own, but would “contract” to an outside source. The outside contractor would provide grazing animals that would eat the existing vegetation of the project area. Grazing animals would be onsite until the area would be cleared of vegetation. Goats can stand on their hind legs to reach low growing tree and shrub branches, but could not reach higher branches. Sheep would easily consume herbaceous ground vegetation, but would not eat anything above ground level. Woody vegetation such as large trees including branches to be trimmed would still need to be removed by hand, necessitating additional manual labor.

This method would not be in compliance with the Sepulveda Dam Basin Master Plan, 2011 as the land use classification of the Proposed Action area prohibits the grazing of animals. Therefore, this alternative has been eliminated from further consideration.

This method would not meet the Project needs of efficiency and completeness and has not been carried forward for further consideration.

Herbicides

The use of approved herbicides can be used to gradually eradicate vegetation. This method would require several applications of the herbicide over many years for an indefinite length of time. Application of an herbicide as a stand-alone alternative is not a viable option. Use of herbicides is limited to specific times of the year. This alternative would require several applications over the course of a number of years. Consequently, use of an approved herbicide would not meet the need for effectiveness and completeness of the Proposed Action. This alternative has been eliminated from further consideration as a stand-alone alternative.

2.2 Alternatives Considered For Further Analysis

2.2.1 No-Action Alternative

The Corps is required to consider the option of “No Action” as one of the alternatives in order to comply with the requirements of the NEPA (at 42 CFR, part 1502.14). The No-Action Alternative is the basis for comparison with all other alternatives, as it represents a condition, both current and future, under which nothing would be done to address the identified problems. By comparing the No-Action Alternative to each alternative, the advantages and disadvantages of the alternatives may be assessed in relation to current and future “without-project” conditions.

Under the No-Action Alternative, non-native vegetation and debris would not be eradicated from the Proposed Action area whether by trimming and mowing or by clearing and removal. The No-Action alternative would not meet the Proposed Action’s purpose and need as the area would not be in compliance with the Corps’ ETL would not provide visual access for inspection of Dam features for flood risk management or Basin user safety, comply with the Corps’ policy on climate change, nor the Corps’ policy on environmental stewardship at water resource projects. However, for comparison purposes and to meet the requirements of NEPA, the No-Action alternative is carried forward in this EA.

2.2.2 Optimal Management/Restoration Alternative (Preferred Alternative)

Mowing/Mulching (Phase 1)

In the first year or Phase 1 of the Optimal Management Alternative, vegetation from the Dam westward to the point where Burbank Blvd. crosses the Los Angeles River, native trees would remain, but all dead and broken limbs would be removed either by a vertical mower that utilizes specialized equipment fabricated with Fecon, Inc. known as a “mastigater”, a fixed carbide tip tooth mowing implement or by hand tools such as chain saws or pole saws to create a ground clearance of 20 feet.

Slope Area

The south-facing slope from Burbank Blvd. down to the generally flat area of the Basin northeast of the Los Angeles River and west of the upstream face of the Dam would be cleared of all non-native vegetation by a vertical mower that utilizes specialized equipment fabricated with Fecon, Inc. known as a “mastigater”, a fixed carbide tip tooth mowing implement or by hand tools such as chain saws or pole saw. Native trees including valley oak trees (*Quercus lobata*) and other individual native trees would be identified and flagged by the Corps’ Los Angeles District's Senior Ecologist to remain in place. Future restoration actions would include the active restoration of the slope area with the planting of coastal sage scrub species native to the area and compatible with the remaining native trees.

Vegetation-Free Zone

The vegetation free zone is 50-feet in width from the upstream toe of the Dam (Figure 1-3) that would be mowed and mulched in place by a vertical mower that utilizes specialized equipment fabricated with Fecon, Inc. known as a “mastigater”, a fixed carbide tip tooth mowing implement or by hand tools such as chain saws or pole saw. Several native trees including valley oak trees (*Quercus lobata*) and other individual native trees would be identified and flagged by the Corps’ Los Angeles District's Senior Ecologist to remain in place. The roots of non-native trees and large shrubs greater than two inches in diameter would be dug up and shredded/mulched in place by the same mower. Roots of trees to remain in place would not be removed. Following root removal, the area soil would be compacted to a similar compaction of the surrounding area to minimize erosion and fugitive dust.

Invasive, Non-native Area

The remaining area of the Proposed Action would also be mowed and mulched in place by the same method. Several native trees including valley oak trees and other individual native trees would be identified and flagged by the District's Senior Ecologist to remain in place. However, roots greater than 2 inches would not need be removed and mulched.

Haskell Creek Banks

Within ten (10) feet of the creek banks, the Fecon mower would pull down vegetation to be mowed and mulched in place. Manual tree trimming may be employed in areas where the phecon mower cannot easily access, such as channel and slope banks. Near the water’s edge, the phecon mower would bring down trees and work crews would manually haul or rake the vegetation to a flat area where the mower could easily mulch the material without deposition into waters of the creek.

Herbicide Spraying (Phase 2)

During the two years following the completion of vegetation mowing, the spraying of an approved herbicide would occur for several years to ensure eradication of emergent non-native invasive species throughout the Proposed Activity area. The herbicide would be sprayed by truck or individual pack sprayers over all areas of emergent invasive species using the manufacturer’s approved rate of application.

Restoration (Seeding/Planting) (Phase 3)

The flat area of the Proposed Activity area would be planted by broadcast seed or stolens of a grass known as salt grass that has shown its adaption to extreme conditions, which this area endures, such as inundation during medium to large storm events and extreme heat (over 100 degrees F) during summer months. The slope from Burbank Blvd. would be planted and/or seeded by coastal sage scrub plant species to be determined by the Senior Ecologist from ERB. Whether to plant or seed would depend on what passive restoration may occur naturally.

Logistics

The entry point for construction equipment and workers would be the access road from the top of the Dam into the Basin or from Burbank Blvd., directly into the project area, staying on existing maintenance roads where feasible until the area to be mowed is reached. All trucks would stay on existing maintenance roads to avoid soil compaction and minimize fugitive dust and typical leaking oil and other fluids from engines.

Equipment storage would take place outside the Proposed Activity area, but within the footprint of the Basin. Work-crew parking would occur outside the project area, but within the Basin, most likely at a nearby parking lot at a recreation area or along Woodley Ave. to the north. All equipment would be moved onsite daily.

It is anticipated that work would be ongoing for approximately 21 days, but could take as long as 28 days depending on density of vegetation. Work hours would be Monday through Friday from 7:00 am to 4:00 pm daily.

All management activity of vegetation eradication would occur between 15 September and 15 March due to the use of the area by some migratory birds for foraging. As this is also flood season, activity could be suspended or cut short depending on forecast weather conditions or flooding/inundation of the project area. Complete eradication of non-native vegetation is a process that would include Phase 1—mowing/mulching of vegetation and Phase 2—spraying re-emerging non-native vegetation with an appropriate herbicide over several years.

When a storm event is forecast within 48-hours, work would stop and all equipment and vehicles moved to an elevation greater than the 100-year event (approximately 712 ft)

The area south of the maintenance road paralleling the Los Angeles River (to the west of Haskell Creek) has been an area of least Bell vireo habitat for the last several years. This area would be avoided.

2.2.3 Limited Restoration Alternative

This alternative would be the same as the Optimal Management/Restoration Alternative (Preferred Alternative) as presented above, but would not include active vegetation reseeding. This alternative would include complete elimination of non-native vegetation including Phase 1—mowing/mulching of non-native/invasive vegetation and Phase 2—spraying re-emerging non-native vegetation with an appropriate herbicide over several years.

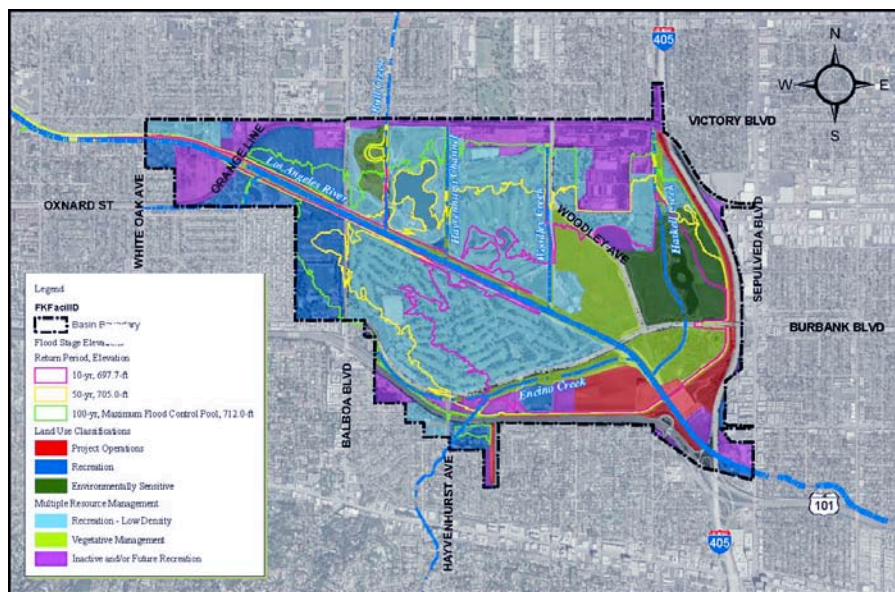
Following the completion of vegetation mowing and/or clearing, this alternative would not include the active restoration on the slope nor would the flat area be planted by broadcast seed or stolens of a grass known as salt grass. Continued herbicide spraying would be required annually to maintain a weed-free area and to ensure non-native “volunteer” plants would not establish within the area. This alternative, although carried forward for comparison purposes, would only partially meet the need and purpose of the Proposed Action as it would not actively establish restoration of a sustainable cover crop of native grass..

3.0 ENVIRONMENTAL CONDITIONS AND ALTERNATIVES ANALYSIS

3.1 LAND USE

3.1.1 Existing Conditions

The area of the Proposed Action is classified in the Sepulveda Basin Master Plan as Vegetation Management. Corps’ guidance defines this land use classification by noting: “Lands in this sub-category shall be managed for the protection and development of forest and vegetative cover.” The Sepulveda Basin Master Plan (Corps 2011) provides use limitations for other Vegetation Management areas that are outgranted under a recreation lease. Since this area is not outgranted for recreation use, access is restricted to authorized personal and no recreation amenities have been developed.



Source: Sepulveda Basin Master Plan (Corps 2011)

Figure 3-1 Land Use Classification Map for the Sepulveda Dam Basin

The Proposed Action area is currently an open field. Southeast of Haskell Creek, the land is covered with native and non-native trees, non-native shrubs, weeds, and grasses. Similar vegetation is to the northwest of Haskell Creek. Haskell Creek banks are covered with a dense canopy of native and non-native trees. There is little understory.

3.1.2 Significance Threshold

A significant impact would occur if the proposed project:

- Were to change land use due to implementation of the project.
- By its implementation was not in compliance with the land use classification identified in the Sepulveda Basin Master Plan.

3.1.3 Alternative Analysis

3.1.3.1 No Action Alternative

There would be no change to the existing land use. The area would continue to be used by the homeless in small camp areas and by others in illegal activities. Non-native vegetation would continue to grow in the area, out-populating native species. Annual inundation would continue. Periodic fires would continue to breakout and burn portions of the area.

3.1.3.2 Optimal Management/Restoration Alternative (Preferred Alternative)

The land use would remain the same, although the management for vegetative cover would follow an on-going program of management practices for flood risk management operations and vegetative sustainability. Removal of areas of thick vegetation and trimming of trees would allow increased visual access of the area for inspection and maintenance for flood risk management, while also discouraging use of the area for illegal use, homeless encampments, and other trespassing uses. There would be no change in the designated land use classification.

3.1.3.3 Limited Restoration Alternative

The land use would remain the same, although the management for vegetative cover would follow an on-going program of management practices for flood risk management operations and vegetative sustainability. Removal of areas of thick vegetation and trimming of trees would allow increased visual access of the area for inspection and maintenance for flood risk management, while also discouraging use of the area for illegal use, homeless encampments, and other trespassing uses. However, since no sustainable vegetative grass cover would be included, continued management practices of weed eradication would continue, minimizing the establishment potential of a sustainable vegetative cover. There would be no change in the designated land use classification.

3.2 GEOLOGY AND SOILS

3.2.1 Existing Conditions

Geology

The greater part of the San Fernando Valley is overlain by recent alluvium, consisting of unconsolidated and un-weathered, poorly graded clay, silt, gravel, and boulders. The Basin site is entirely covered by recent alluvium composed of relatively fine material (Figure 3-2).

Earthquake Faults

The Alquist-Priolo Earthquake Fault Zoning Act (Section 7.5, Division 2 of the California Public Resources Code) was passed in 1972 in order to identify hazard areas along active faults (fault zones) that should be avoided when planning areas of human occupancy. This California state law

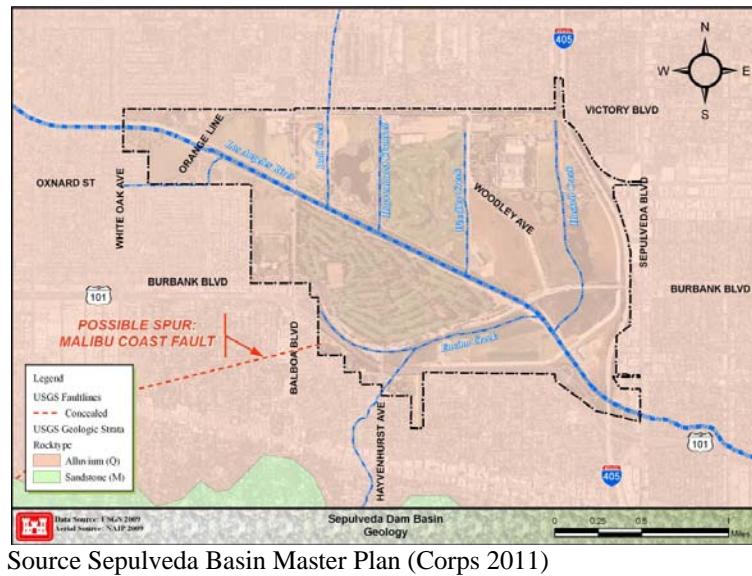


Figure 3-2 Geology Map of the Basin

was influenced by the devastating impacts of the 1971 San Fernando Earthquake. Other faults within the area include:

- Northridge Hills Fault is 15.5 miles long, runs in a northwesterly direction, and is located 3.5 miles north of the Sepulveda Dam Basin.
- Chatsworth Fault is 12.5 miles long, runs in a northeasterly direction and is located 4 miles northwest of the Sepulveda Dam Basin.
- Verdugo Fault is 13 miles long, runs in a northwesterly direction, and is located approximately 6.5 miles east of the Sepulveda Dam Basin.
- One fault that may intersect the Basin is a spur of the Malibu Coast Fault.

Soils

Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database, which is the most detailed level of soil mapping done by the Natural Resources Conservation Service (NRCS). The area of the Proposed Action is divided in two groups: NCRS SSURGO hydrologic group C soil has a slow rate of infiltration rate when thoroughly wet and is located in the northern half of the Proposed Action area; hydrologic group D soil has a high runoff potential and a very slow infiltration rate when thoroughly wet and is located the southern half of the Proposed Action area, adjacent to the Los Angeles River (See Sepulveda Basin Master Plan (Corps 2011)).

3.2.2 Significance Threshold

A significant impact would occur if the proposed project:

- Significantly increases wind or water erosion of soils or loss of topsoil, either on or off site.
- Significantly alters the physical or chemical quality of sediments or soils.
- Triggers or accelerates geologic processes such as erosion or sedimentation brought about

by disturbance of landforms.



Source: Sepulveda Basin Master Plan (Corps 2011)

Figure 3-3 Soil Infiltration Rates in the Basin

3.2.3 Alternative Analysis

3.2.3.1 No Action Alternative:

There would be no change to the current condition of the area. Sediment removal related to normal operations and management activities of the Basin would continue to occur as necessary. No additional foot or vehicular traffic is anticipated. No vegetation management would occur. Current seismic activity, earthquake fault zones, and areas of liquefaction would remain unchanged.

3.2.3.2 Optimal Management/Restoration Alternative (Preferred Alternative)

Under the Preferred Alternative, mowing/mulching of vegetation and establishment of a low growing sustainable grass would have some beneficial impact on the soil stability by providing a continuous vegetative cover with a fibrous root system that would reduce wind erosion of top soil and minimize inundation erosion by flood waters. There would be no impact on the existing topography and landform, as the topography of the area is generally flat. Where tree roots would be removed in a limited area, soil would be re-compacted to existing conditions to minimize future erosion. Sedimentation rates would continue unchanged in the area. Current seismic activity, earthquake fault zones, and areas of liquefaction would remain unchanged.

3.2.3.3 No Active Restoration Alternative

Mowing/mulching of vegetation would have some beneficial impact on the soil stability by providing a mulch to reduce erosion from wind. Since no vegetative grass cover would be planted, no fibrous root system would develop to reduce wind erosion of top soil and minimize inundation erosion by flood waters. There would be no impact on the existing topography and landform, as the topography of the area is generally flat. Where tree roots would be removed in a limited area, soil would be re-compacted to existing conditions to minimize future erosion. Sedimentation rates would continue unchanged in the area. Current seismic activity, earthquake fault zones, and areas of liquefaction would remain unchanged.

3.3 WATER RESOURCES

3.3.1 Existing Conditions

Floodplain Management

The area south of Burbank Blvd. lies within an area of 10% (10-year) annual exceedance probability. During storm and flood events, inflow to the Basin can create hazardous conditions related to flowing water, erosion of soil from stream banks, inundation of Basin lands, and potential for Dam failure.

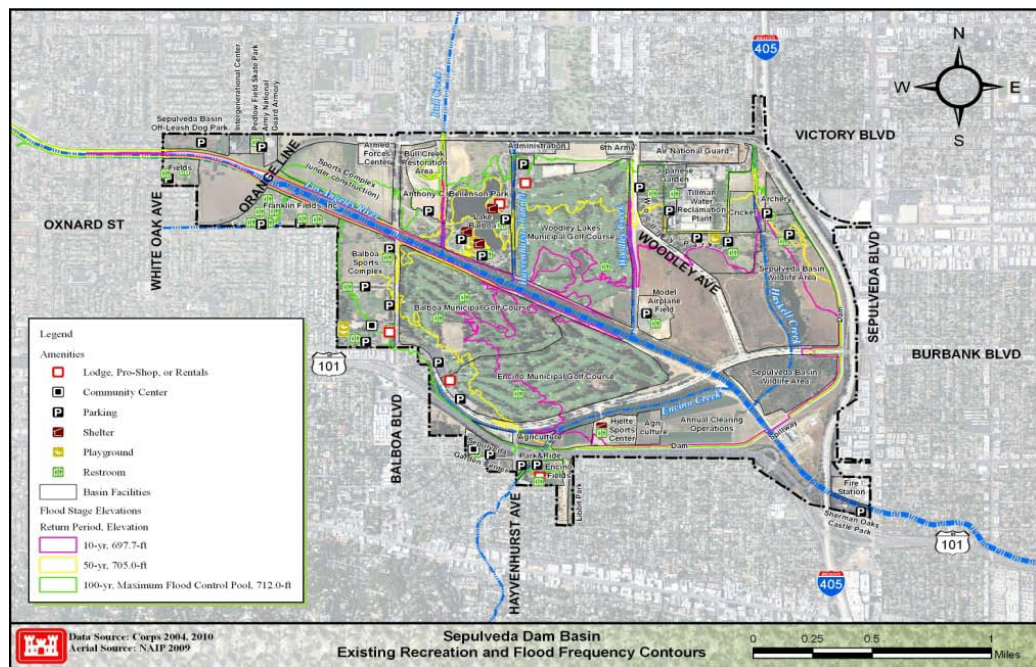
The Corps has prepared a formal plan to address the actions to be taken during emergency situations at the Dam resulting from earthquakes, large floods, or security alerts. This plan, the Emergency Action and Notification Sub-plan for Sepulveda Dam (Corps 2011), prescribes notifications necessary for: 1) prompt evacuation of downstream residents; 2) ensuring safety; 3) vacating project areas where emergency operations may be conducted; and 4) coordination with Federal agencies and non-Federal units of government.

Hydrology

Upper watershed runoff into the Basin is a result of high flood peaks of short duration from high-intensity rainfall. Flood events are typically of less than 12 hours duration and nearly always less than 48 hours. Inflow rates drop rapidly between storms. Based on Corps' operation records, the long-term average inflow to the Basin for the water years 1943 through 2007 is 60,692 acre-feet per year (or 84 cfs).

Surface Water Quality

The urban storm runoff entering the Basin is generally of poor quality. Routine base flow (usually less than 10 cfs) is typically high in salinity, whereas storm runoff is generally low in salinity. As the area is within the 10-year event elevation, the area is often inundated by the overflow from the Los Angeles River, which can deposit sediment and trash from upstream.



Source: Sepulveda Basin Master Plan (Corps 2011)

Figure 3-4 Flood-line Elevations

Groundwater

The Basin sits on top of the San Fernando Valley Groundwater Basin.

3.3.2 Significance Threshold

A significant impact would occur if the proposed project:

- Substantially alters the existing drainage pattern of the site or area, including the alteration of the course of a stream or river, in a manner that would result in substantial increase in erosion or siltation on or off site.
- Substantially alters the existing drainage pattern of the site or area, including the alteration of the course of a stream or river, in a manner that would result in a substantial reduction in the quantity of surface water.
- Substantially alters the existing drainage pattern of the site or area, including the alteration of the course of a stream or river, or substantially increases the rate or amount of surface runoff in a manner that would result in flooding on or off site or provide substantial additional sources of polluted runoff.
- Increases substantial erosion or sedimentation in relation to existing conditions.

3.3.3 Alternative Analysis

3.3.3.1 No Action Alternative

There would be no change to surface or ground water conditions in the area.

3.3.3.2 Optimal Management/Restoration Alternative (Preferred Alternative)

The mowing/mulching of non-native vegetation and removal of trash/debris from the area would have no impact on surface or groundwater. There may be some beneficial benefits from removal of debris and dead vegetation from Haskell Creek, as the debris and vegetation would not flow into the Los Angeles River. Vegetation from the area carried away by receding flood waters would also be significantly reduced. Establishing a ground cover of sustainable grass with a fibrous root system throughout the Proposed Action area would create a network that would minimize wind and water erosion of topsoil in the area.

The eight-step process outlined in *Implementation of Executive Order 11988 on Flood Plain Management*, March 1984, Engineering Regulation (ER) 1165-2-26, para. 8, General Procedures was followed in determining the water resources effects and has been summarized in Environmental Compliance, Chapter 6.11. The required Statement of Findings for Floodplain Management is included below.

STATEMENT OF FINDINGS

1. The proposed action would be located in the floodplain as the Proposed Action is complying with ETL 1110-2-571, as indicated in section 1.4.1.
2. Facts considered in making the determination to locate in the floodplain include the need to restore native vegetation and comply with the Corps' ETL.
3. The proposed action would have no impact on state and local floodplain protection standards.
4. The action does not negatively affect the natural and beneficial values of the floodplain. The proposed action does not induce floodplain development or increase risks to public safety.
5. The proposed action minimizes potential harm within the floodplain as there are no non-floodable structures in any element of the proposed project. Environmental commitments for the project implementation include leaving the project area in the event of a forecast storm and the preparation of a Safety Plan including an Emergency Evacuation Plan.

3.3.3.3. No Active Restoration Alternative

The mowing/mulching of non-native vegetation and removal of trash/debris from the Proposed Action area would have no impact on surface or groundwater. There may be some beneficial benefits from removal of debris and dead vegetation from Haskell Creek, as the debris and vegetation would not flow into the Los Angeles River. Vegetation from the area carried away by receding flood waters would also be significantly reduced.

The eight-step process outlined in *Implementation of Executive Order 11988 on Flood Plain Management*, March 1984, Engineering Regulation (ER) 1165-2-26, para. 8, General Procedures was followed in determining the water resources effects and has been summarized in Environmental Compliance, Chapter 6.11. The required Statement of Findings for Floodplain Management is included below.

STATEMENT OF FINDINGS

1. The proposed action would be located in the floodplain as the Proposed Action is complying with ETL1110-2-571, as indicated in section 1.4.1.
2. Facts considered in making the determination to locate in the floodplain include the need to comply with the Corps' ETL, but a native vegetative cover would not be planted.
3. The proposed action would have no impact on state and local flood plain protection standards.
4. The action does not negatively affect the natural and beneficial values of the floodplain. The proposed action does not induce floodplain development or increase risks to public safety.
5. The proposed action minimizes potential harm within the floodplain as there are no non-floodable structures in any element of the proposed project. Environmental commitments for the project implementation include leaving the project area in the event of a forecast storm and the preparation of a Safety Plan including an Emergency Evacuation Plan.

3.4 AIR QUALITY

3.4.1 Existing Conditions

The climate of the San Fernando Valley has characteristics similar to that of the Mediterranean region: warm dry summers and moderately cool winters. Temperature records range from the low 20° F in the winter, to well in excess of 100° F in the late summer. Precipitation is distributed through the winter and spring months with the maximum rainfall in the months of December through February. Annual rainfall averages between 15 and 18 inches.

The California Air Resources Board (CARB) coordinates and oversees state and Federal air pollution control programs in California, oversees activities of local air quality management agencies, and maintains air quality monitoring stations throughout the state in conjunction with the US Environmental Protection Agency (EPA) and local air districts. The air quality monitoring station closest to the Sepulveda Dam Basin is in the western San Fernando Valley, station number (State ID) #70074. This station monitors most of the criteria pollutants except for suspended particulates (PM₁₀).

The area of the Proposed Action is part of the South Coast Air Basin (SCAB). SCAB is currently in attainment for SO₂, NO₂, and is in non-attainment for PM_{2.5}, PM₁₀, CO₂, 1-hour ozone, and 8-hour ozone per EPA's National Ambient Air Quality Standards (NAAQS).

Greenhouse Gas Emissions

Greenhouse gases are compounds in the atmosphere that absorb infrared radiation and reradiate a portion of that back toward the earth's surface, thus trapping heat and warming the earth's atmosphere. The most important naturally occurring greenhouse gas (GHG) compounds are carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), ozone, and water vapor. CO₂, CH₄, and N₂O are produced naturally by respiration and other physiological processes of plants, animals, and microorganisms; by decomposition of organic matter; by volcanic and geothermal activity; by naturally occurring wildfires; and by natural chemical reactions in soil and water. Ozone is not released directly by natural sources, but forms during complex chemical reactions in the atmosphere among organic compounds and nitrogen oxides in the presence of ultraviolet

radiation. While water vapor is a strong greenhouse gas, its concentration in the atmosphere is primarily a result of changes in surface and lower atmospheric temperature conditions.

Climate Change

Climate change is a shift in the average weather patterns observed on earth, which can be measured by such variables as temperature, wind patterns, storms, and precipitation. Scientific research to date indicates that observed climate change is most likely a result of increased emission of GHGs associated with human activity. If California were a country, it would rank between the 12th and 16th largest emitters of CO₂ in the world.

Climate change is expected to exacerbate air quality problems and adversely affect human health by increasing heat stress and related deaths; increase the incidence of infectious diseases, asthma and respiratory health problems; cause sea level rise threatening urban and natural coastal areas; cause variations in natural plant communities affecting wildlife; and cause variations in crop quality and yields. Climate change is also expected to result in more extreme weather events and heavier precipitation events that can lead to flooding as well as more extended drought periods.

3.4.2 Significance Threshold

Impacts would be considered significant if the alternative:

- Violates state and/or Federal air quality standards.

There could be significant impacts caused by climate change if the proposed project:

- Increases heat stress and related deaths.
- Increases the incidence of infectious diseases, asthma, and respiratory health problems.
- Causes variations in natural plant communities affecting wildlife.

Per Section 176(c) of the Clean Air Act Amendments (CAAA) of 1990, the Corps must make a determination of whether the proposed project (i.e., Proposed Action) “conforms” to the State Implementation Plan (SIP). If the total direct and indirect emissions from the proposed project are below the General Conformity Rule *de minimis* emission thresholds, the proposed project is exempt from performing a comprehensive Air Quality Conformity Analysis, and would be considered to be in conformity with the SIP.

3.4.3 Alternative Analysis

3.4.3.1 No Action Alternative

Air quality would continue to be influenced by climatic conditions and local and regional emissions from mobile and stationary sources. No additional pollutant or particulate materials would be produced. Because the area would not be restored to a sustainable native habitat, its long term viability, resiliency, and durability would be compromised to withstand the future impacts of climate change.

3.4.3.2 Optimal Management/Restoration Alternative (Preferred Alternative)

Fugitive dust emissions were calculated using methods identified in EPA’s AP-42, Compilation of Air Pollutant Emission Factors and SCAQMD’s California Environmental Quality Act (CEQA) Air Quality Handbook (SCAQMD 1993). Ozone precursor emissions from on-site restoration activities were calculated using emission factors and methods from the CARB Emission Factors (EMFAC2007) model and SCAQMD CEQA Air Quality Handbook (SCAQMD 1993).

Project-related emissions would contribute minor quantities of CO, ROG, NO_x, SO_x, and PM₁₀ and other pollutants to the air. Table 3.4.-1 below shows the total pounds per day and tons per year for emissions during the first phase of mowing/mulching. The table also provides a comparison of estimated emissions with the daily and yearly threshold limits identified by SDAPCD and in 40 CFR Part 93.153. As presented in Tables 3.4-2 estimated emissions from the Preferred Alternative are below the daily threshold levels and General Conformity *de minimis* thresholds for the ozone precursors ROG and NO_x, as well as other pollutants.

Table 3.4-1 Estimated Project Emissions for the Proposed Action – Year 1

Total On-Site Emissions - Daily	Pounds Per Day				
Project Emissions	ROG	CO	NO_x	SO_x	PM10
Off Road Vehicles/Equipment (On-Site)	0.75	3.37	4.82	0.01	0.38
Daily Threshold Levels	75	550	250	250	100

Total On-Site Emissions - Yearly	Tons Per Year				
Project Emissions	ROG	CO	NO_x	SO_x	PM10
Off Road Vehicles/Equipment (On-Site)	0.00	0.02	0.02	0.00	0.00
de minimis Thresholds	10	100	100	100	70

Table 3.4-2: Comparison of Federal de minimis Thresholds and Maximum Estimated Emissions – Year 1

	Federal de minimis thresholds (tons/year)	Estimated Emissions for Alternative 2 and 3 (tons/day)
Volatile organic compounds (VOC)	10	0.04
Carbon monoxide (CO)	100	0.08
Nitrogen oxides (NO _x)	10	0.01
Sulfur oxides (SO _x)	100	0.00
PM 2.5	100	0.00
PM 10	100	0.00

3.4.3.3 Limited Restoration Alternative

Project-related emissions would be the same as the Preferred Alternative as the first year of mowing and mulching would be the same. The second and third years of spraying an herbicide would be the same. The spraying would continue annually, indefinitely, by hand. There would be a slight increase in emissions over the Preferred Alternative as the spraying of an herbicide would continue in comparison to a one time seeding of the area with a vegetative cover of grass.

3.5 NOISE

Noise Factors

Noise can be defined as unwanted sound or combination of sounds that may interfere with conversation, work, rest, recreation, and sleep, or in the extreme may produce physiological or psychological damage. Sound travels from a source in the form of wave, which exerts a pressure on a receptor such as a human ear. The amount of pressure a sound wave exerts is referred to as sound level, commonly measured in decibels (dB). As a reference, a sound level of zero dB corresponds roughly to the threshold of human hearing, and a sound level in the range of 120 to 140 dB can produce human pain.

Wildlife may be sensitive receptors to noise and vibrations. Animals rely on meaningful sounds for communication, navigation, avoiding danger, and finding food. Noise may be defined for wildlife as “any human sound that alters the behavior of animals or interferes with their functioning”. The level of disturbance may be qualified as damage, which may harm health, reproduction, survivorship, habitat use, distribution, abundance or genetic distribution, or disturbance which causes a detectable change in behavior. Behavioral and physiological responses of wildlife to noise have the potential to cause injury, energy loss, decrease food intake, habitat avoidance and abandonment, and reproductive losses.

3.5.1 Existing Conditions

As the Proposed Action area is not used for recreation, there is limited human-made noise in the area from walkers, “illegal activities,” and homeless encampments. Noise from Burbank Blvd. changes throughout the day, being greater during early morning “rush hour” and late afternoon/early evening “rush hour” periods. Noise from nearby freeways is limited to a very low background hum, if at all, depending on wind direction.

3.5.2 Significance Threshold

A significant impact would occur if the proposed project:

- Results in Federal, state, or local noise standard levels being exceeded significantly during implementation.
- Results in noise level ranges above the ambient noise level range which characterizes the Basin.
- Produces noise levels that would result in abandonment of bird nests.

3.5.3 Alternative Analysis

3.5.3.1 No Action Alternative

There would be no change in noise levels as no mowing/mulching would occur.

3.5.3.2 Optimal Management/Restoration Alternative (Preferred Alternative)

Because only one machine would be used to mow and mulch the vegetation the increase in noise would be less than significant as the area of the Proposed Action is located below the elevation of the street and above the elevation of the water surface of the Los Angeles River. The area is very remote from populated areas. With a freeway to the south and to the east, traffic noise from these sources as well as from traffic on Burbank Blvd and Woodley Ave. to the north would be greater than that from the project area. The noise created during the implementation period would be short-term (approximately 21 days) and would have no significant impact on migratory birds as all work would be performed after 15 September and prior to 15 March.

3.5.3.3 Limited Restoration Alternative

The noise impacts would be the same as the Preferred Alternative during the first three years of the proposed action. Noise levels of years two and three would continue with annual herbicide spraying.

3.6 BIOLOGICAL RESOURCES

3.6.1 Existing Biological Resources

Vegetative Habitat

The proposed project area is currently covered by several distinct vegetation communities including *Baccharis pilularis* Shrubland Alliance, *Eriogonum fasciculatum* Shrubland Alliance, Ruderal lands, and riverine habitat.

Baccharis pilularis Shrubland Alliance is dominated by a mix of native and introduced annual grasses interspersed with scattered coyote brush (*Baccharis pilularis*). Other plant species include black mustard (*Brassica nigra*), shortpod mustard (*Brassica geniculata*), telegraph weed, and white sage.

Eriogonum fasciculatum Shrubland Alliance is found in the upland areas surrounding Haskell Creek. *Eriogonum fasciculatum* Shrubland Alliance, most likely a common vegetation alliance in the area in the past, is found on rarely flooded low-gradient deposits along streams with shallow and rocky soils. In addition to California buckwheat (*Eriogonum fasciculatum*), other species found in this alliance include white sage (*Artemisia ludoviciana*), coast live oak, and coast prickly-pear (*Opuntia littoralis*) (Sawyer *et al.* 2009).

Ruderal lands are areas that have been substantially altered by maintenance or construction, causing them to be devoid of vegetation. Ruderal land is found near the Dam that receives frequent inundation and various access roads and trails throughout the area that prevents native

plants from becoming established; however, hardy herbaceous invasive species such as prickly Russian thistle (*Salsola tragus*) and cocklebur are present.

Animal resources

A variety of birds have been observed within the area, most flying overhead between the Los Angeles River to the southwest and the Wildlife Area to the north. Small mammals, mostly rodents such as squirrels, field mice, and rabbits, roam the area. Feral cats and coyotes roam the area at will, despite the frequent use by humans, including homeless camps, passive recreation use, and other activities.

Special Status Listed Species

Species status taxa include those protected by the Endangered Species Act (ESA) and the Migratory Bird Treaty Act (MBTA).

The least Bell's vireo has been observed in the Basin in 2012 along the edges of the Los Angeles River upstream and downstream of where Burbank Blvd. crosses the River. None have been observed in the Proposed Action area.

3.6.2 Significance Threshold

A significant impact would occur if the proposed alternatives:

- Had a substantial adverse effect on any riparian habitat.
- Had 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, and coastal wetlands) through direct removal, filling, hydrological interruption, or other means.
- Created substantial loss of species diversity in natural vegetation and wildlife habitat.
- Created significant disruption of wildlife corridors.

3.6.3 Alternative Analysis

3.6.3.1 No Action Alternative

Under the No Action Alternative there would not be any implementation of a proposed plan and none of the objectives of the study would be met.

The open space area of the site would continue to be covered with invasive, weedy species with little habitat value. Without action to maintain or restore sustainable biological habitat in the area, an anticipated continuation of decline over time would be expected throughout most of the area as invasive species continue to out compete native species. The continued potential for accidental and set fires would continue to destroy ruderal vegetation as well as prevent establishment of native vegetation in the area.

3.6.3.2 Optimal Management/Restoration Alternative (Preferred Alternative)

The mowing and mulching of the invasive and other non-native plant species within the area followed by several years of follow-up spraying with an approved herbicide and the active restoration by seeding and planting of native species in the area would ultimately provide a sustainable habitat. The restored habitat would provide a vegetative cover that would meet the need and purpose of the proposed action. The vegetative cover of salt grass in the open, flat section of the area would provide erosion control, provide cover and foraging for small mammals, and foraging for birds. Removal of debris and pruning of trees to remain would open a currently dense canopy adjacent to and over Haskell Creek, allowing development of a diverse riverine habitat within and adjacent to the Creek.

3.6.3.3 Limited Restoration Alternative

The impacts would be similar to those of the Preferred Alternative, but without an active restoration plan of seeding a vegetative cover in the open section, invasive species would continue to emerge each year despite continued annual application of an herbicide, and ultimate management of the area would be less effective and require a continuous maintenance plan.

3.7 CULTURAL RESOURCES:

3.7.1 Existing Conditions

A literature review and records search of the Sepulveda Dam Basin and vicinity was conducted in 1977. This was followed by an intensive field survey of land surfaces that had not been altered to the degree that all cultural materials would have been destroyed. Results of these investigations were negative, meaning that no significant prehistoric or historic archaeological or other cultural resources were recorded (Corps 2011). Survey methods employed are not known. Two prehistoric archaeological sites in the vicinity of the Encino Golf Course were recorded but were subsequently destroyed. Prior studies and field information indicate a low potential for intact cultural resources in the Basin (Corps 2011). The area of the Proposed Action is highly disturbed due to its proximity to the Dam and the previous use of the area for agriculture (Figure 3.7-1) and the installation of a sewer line (see Figure 3.14-3 in Section 3.14 Utilities).



Source: California State University, Northridge Map Library

Figure 3.7-1 Aerial Photo of Basin, 1975

3.7.2 Significance Criteria

A significant impact would occur to cultural resources if the proposed project:

- Alters the characteristics of a property that may qualify for inclusion in the National Historic Register. For the purpose of determining effect, alteration to features of a property's location, setting, or use may be relevant depending on a property's significant characteristics and should be considered.
- Introduces visual, audible, or atmospheric elements that are out of character with the property or alters its setting.

3.7.3 Alternative Analysis

3.7.3.1 No Action Alternative

The No-Action alternative would not affect historic or cultural resources.

3.7.3.2 Optimal Management/Restoration Alternative (Preferred Alternative)

Ground disturbance would be limited to removing tree roots within 50 feet of the Dam which is not likely to affect historic or cultural resources as this area was highly disturbed due to the construction of the Dam, previous agricultural use, and placement a sewer line through the area. Implementation of this alternative is not anticipated to have significant impacts on cultural resources.

3.7.3.3 Limited Restoration Alternative

Ground disturbance would be limited to removing tree roots within 50 feet of the Dam which is not likely to affect cultural resources as this area was highly disturbed due to the construction of the Dam, previous agricultural use, and placement of a sewer line through the area. Implementation of this alternative is not anticipated to have significant impacts on cultural resources.

3.8 HAZARDOUS WASTE and MATERIALS

3.8.1 Existing Conditions

A preliminary Hazardous and Toxic Waste and Materials (HTWM) investigation was conducted in 2010 to determine the presence of current or historical contamination within Sepulveda Dam Basin. The preliminary investigation was based on a database review of relevant environmental information maintained by Environmental Data Resources, Inc. The EDR database search included lists compiled by the EPA and the state of California for sites within or near to the Sepulveda Dam Basin that have had recent or historical unauthorized releases of hazardous materials or hazardous waste, may store and use hazardous materials, or may be generators and/or transporters of hazardous wastes. No sites were found within the Basin.

3.8.2 Significance Threshold

A significant impact would occur if the proposed project:

- Caused soil contamination, including flammable or toxic gases, at levels exceeding Federal, state, and local hazardous waste limits established by 40 CFR Part 261.
- Exposed the general public to hazardous situations through the transport, use, storage, or disposal of hazardous materials.
- Created a significant hazard to the public or environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

3.8.3 Alternative Analysis

3.8.3.1 No Action Alternative

There would be no change as no project would be implemented.

3.8.3.2 Optimal Management/Restoration Alternative (Preferred Alternative)

No sites have been identified through standard assessment sources for additional investigation as HTW sites. No activities are proposed that would increase the levels of hazardous or toxic substances. Corps policy guides the management of and response to spills of oils, grease, and other compounds that may be introduced as a result of vegetation management procedures. Mitigation actions would be enforced.

3.8.3.3 Limited Restoration Alternative

Impacts would be similar or less than stated above as vegetation would be mowed/mulched in the first year and re-emerging weeds would be sprayed with an herbicide the following two years, but there would not be any additional active restoration of seeding the area with grass. Mitigation measures would be the same as those that would be implemented for the Preferred Alternative.

3.9 AESTHETIC QUALITY

3.9.1 Existing Conditions

The topography of the area is relatively flat. The major visual features include the Los Angeles River and Sepulveda Dam.

The Los Angeles River is a highly disturbed, channelized waterway that passes through the center of the Basin to the south of the area of the Proposed Action. The Sepulveda Dam outlet structure and spillway is visible from the area of the Proposed Action as it is directly adjacent to the Proposed Action area.

3.9.2 Significance Threshold

A significant impact would occur to aesthetic resources if the proposed project:

- Created direct, permanent changes to important existing scenic characteristics of a landscape that is viewed by a large number of viewers.
- Impairs or obstructs views of major visual elements

3.9.3 Alternative Analysis

3.9.3.1 No Action Alternative

Aesthetic and visual resources would not significantly change in the project footprint. Continued un-checked growth of existing non-native vegetation may continue to decrease the overall aesthetic qualities of the area over time.

3.9.3.2 Optimal Management/Restoration Alternative (Preferred Alternative)

Mowing and mulching of non-native vegetation and dead vegetation and debris would improve the overall scenic quality of the area, un-obstruct views of the Los Angeles River, the Dam, and Haskell Creek from Burbank Blvd. This alternative would increase visual access of the area for

public safety, including eliminating places for people to hide to conduct illegal activities, and homeless encampments, reducing the potential for fires in the area.

3.9.3.3 Limited Restoration Alternative

Mowing and mulching of non-native vegetation and dead vegetation and debris would improve the overall scenic quality of the area, un-obstruct views of the Los Angeles River, the Dam, and Haskell Creek from Burbank Blvd. This alternative would increase visual access of the area for public safety, including eliminating places for people to hide to conduct illegal activities, and homeless encampments, reducing the potential for fires in the area.

3.10 RECREATION RESOURCES

3.10.1 Existing Conditions

A variety of recreation amenities are available in the Sepulveda Dam Basin. These include golf courses, park land, a sports center, baseball fields, a garden center, model airplane field, cricket fields, tennis courts, trails for hiking/jogging, bicycle trails, a lake, and soccer fields. For more information, refer to the Sepulveda Dam Basin Master Plan (Corps 2011).

There is no formal recreation in the area of the Proposed Action. There is a maintenance road that is used by walkers and joggers from the path utilizing the tunnel under Burbank Blvd. from the Wildlife Area on the north side of Burbank Blvd. There is access from Burbank Blvd. via a maintenance road. As the area is not leased for recreation, there are no recreation amenities within this area.

3.10.2 Significance Criteria

A significant impact would occur if the proposed project:

- Disrupted or limited access to recreation and/or open areas.
- Resulted in construction or operational activities that substantially conflict with recreational uses.

3.10.3 Alternative Analysis

3.10.3.1 No Action alternative:

The No-Action alternative would not affect existing open space or recreation areas. The maintenance road would likely continue to be used by un-authorized personnel for walking and jogging.

3.10.3.2 Optimal Management/Restoration Alternative (Preferred Alternative)

Recreation use of the maintenance road by walkers and joggers would be impacted for a short time during the implementation phase of mowing of vegetation in the area, as the maintenance road would be utilized by work crews during the mowing phase and the area would be considered a construction zone, requiring hard hats, safety vests, and steel-toed boots, as the area of the

Proposed Action does not have any formal recreation amenities, and maintenance roads were not developed for nor maintained for recreation use.

3.10.3.3 Limited Restoration Alternative

Recreation use of the maintenance road by walkers and joggers would be impacted for a short time during the implementation phase of mowing of vegetation in the area, as the maintenance road would be utilized by work crews during the mowing phase and the area would be considered a construction zone, requiring hard hats, safety vests, and steel-toed boots, as the area of the Proposed Action does not have any formal recreation amenities, and maintenance roads were not developed for nor maintained for recreation use.

3.11 SAFETY AND PUBLIC HEALTH

3.11.1 Existing Conditions

Safety

Public health and safety measures are intended to protect the public, to maintain public services, to ensure compliance with applicable Federal and state laws, to prevent waste contamination and to minimize hazards resulting from actions on Corps-managed lands and amenities.

The Basin is usually dry, but heavy rainfall has resulted and may result in flooding throughout the Basin. In the event of flooding, hazards could occur both within and downstream of the Basin. Balboa and Burbank Boulevards and Woodley Avenue are closed when there is a danger of flooding. These are major roads used daily by the public. On occasion vehicles have been stranded due to flooding before roads have been closed. Alternative access is available for all public services except the recreation amenities.

There is no formal evacuation plan for Sepulveda Dam Basin because the primary hazard is flood inflows which can be forecast with sufficient lead-time to clear the Basin of recreation users. However, the Corps has a formal notification process in which the Reservoir Regulation Section contacts any known entity likely to be affected by flood inflow to the Basin, based on forecasted runoff and estimates of how high the surface water will rise; these notifications are updated on a continuous basis as hydrologic and Basin conditions change. The City would ensure that public use of the Basin during a potential flood condition would be curtailed through erecting roadway barriers and signage, and by having authorities in place to redirect traffic. The City maintains close coordination with law enforcement and the Corps as well as fire, medical, and emergency response agencies in the area.

Safety issues include the on-going lewd and lascivious conduct and other illegal activities including drug dealing and trespassing. Members of the Los Angeles Department of General Services, Office of Public Safety patrol the area and have expressed concerns regarding their own safety and especially the safety of others who enter the area for bird watching, walking, or jogging. Several homeless encampments have been observed in the area.

Wildfires

Several small fires in the area in the last ten years have been reportedly caused by homeless encampment fires that have gotten out of control. Areas of un-maintained vegetation with large stands of dry vegetation are susceptible to local un-controlled burning. Even moderate burns can quickly eradicate vegetation and ground cover, leaving the area susceptible to greater erosion by rain storms and wind.

Mosquitoes

Several species of mosquitoes in California are known to transmit agents that cause mosquito-borne diseases including western equine encephalomyelitis, St. Louis encephalitis, malaria, and West Nile virus. Within an urban environment, the lack of many of the natural predators can enable mosquitoes to reach nuisance levels and the potential for the spread of mosquito-borne diseases can increase without monitoring and abatement measures.

Mosquitoes breed in stagnant or standing water. If not managed properly, detention basins and wetlands can become breeding sites. Mosquito control methods generally include use of biological and chemical insecticides and is the responsibility of Los Angeles County Vector Control.

3.11.2 Significance Threshold

A significant impact would occur if the proposed project:

- Increases exposure of people or structures to flooding hazards.
- Creates conditions that would present potential dangers to the public or attract the public to a potentially hazardous area (e.g., attractive nuisances).
- Does not use herbicides per recommended manufacturer's instructions and general standards of use. An example of such standards is restricted application before and after rainstorms.
- Creates mosquito breeding conditions in an amount that would require increased levels of mosquito abatement programs to maintain mosquito populations at pre-project levels.

3.11.3 Alternative Analysis

3.11.3.1 No Action Alternative

There would be no change anticipated with continued encampments hidden in dense vegetation with the constant potential threat of spreading fire through the area destroying existing vegetation and leaving the area susceptible to emergence of more invasive species rather than sustainable habitats for long term management. By not clearing and/or mowing and mulching vegetation in Haskell Creek, the current condition of stagnant and standing water would continue leading to a potential increase in mosquito breeding with viruses that are harmful to public health.

3.11.3.2 Optimal Management/Restoration Alternative (Preferred Alternative)

By implementing a vegetation management plan and mowing/mulching vegetation, the Proposed Action area would be less susceptible to fires, provide increased flood risk management by

optimizing flood storage capacity, and enhance water flow in Haskell Creek. There would be no place to hide homeless camps or lewd and lascivious conduct. This would reduce health and safety risks to Basin users and nearby residents.

3.11.3.3 Limited Restoration Alternative

By implementing a vegetation management plan and mowing/mulching vegetation, the Proposed Action area would be less susceptible to fires, provide increased flood risk management by optimizing flood storage capacity, and enhance water flow in Haskell Creek. There would be no place to hide homeless camps, and for lewd and lascivious conduct. This would reduce health and safety risk to Basin users and nearby residents.

Continued spraying of an approved herbicide annually would minimize vegetative cover for people to hide in and reduce risk of fires set by homeless encampments.

3.12 SOCIOECONOMICS AND ENVIRONMENTAL JUSTICE

Each Federal agency is are required, by Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, to “make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and-low income populations....”

The Council on Environmental Quality (CEQ) defines a minority population as any group of minorities that exceeds 50% of the existing population within the market area or where a minority group comprises a meaningfully greater percentage of the local population than in the general population. Additionally, the CEQ) identifies low income using 2000 Census data for “individuals living below the poverty level.”

Ensuring environmental justice means protecting existing local and market-area minority and low-income populations from disproportionate adverse human health or environmental effects related to Federal government action.

3.12.1 Existing Conditions

The communities surrounding the Sepulveda Dam Basin are largely white (including Sherman Oaks and Encino) with the communities of Van Nuys and Lake Balboa having a large Hispanic population. Household income suggests more affluent communities south of the Los Angeles River compared to Van Nuys and Lake Balboa, north of the Basin.

Table 3.12-1 Demographics of the Area				
	Encino	Lake Balboa	Sherman Oaks	Van Nuys
Race				
African American	689	3068	1275	3148
Asian/Pacific Island	1391	3465	506	8231
Indian	73	446	89	609

Mixed Race	152	2786	1145	3708
Others	1005	12703	1138	26861
White	22922	27573	24217	33684
Household Income				
Less \$30,000	3599	6727	3801	7755
\$30,000-\$74,999	5148	7384	5975	7545
\$75,000-\$149,999	2426	2633	3341	2025
Over \$150,000	1619	422	509	246
Education				
Did not Graduate from High School	2423	10181	1638	17242
High School Graduate	8574	12903	8913	11472
College Graduate	6697	6023	8193	5405
Graduate Degree	3610	1746	3956	1123

3.12.2 Thresholds of Significance

Impact on socioeconomics and environmental justice would be considered significant if the following were to occur:

- Impacts to a sector of the economy, productivity, competition, prices, or jobs; impacts on the welfare of minority or low-income populations.
- The impact of project-induced population changes on the availability of public services.
- A substantial long-term decrease in local employment due to direct loss of jobs or an adverse effect on the local economy that results in an indirect long-term loss of jobs.
- Disproportionately high and adverse impacts on minorities, low-income residents, or children.
- A substantial population growth in an area induced by the project.

3.12.3 Alternative Analysis

3.12.3.1 No Action Alternative

Without the implementation of the Proposed Action, there would be no effect on growth-inducing impacts that would affect local economy, housing, demographics, or service needs.

3.12.3.2 Optimal Management/Restoration Alternative (Preferred Alternative)

The Preferred Alternative would have no direct effect on growth-inducing impacts that would affect local economy, housing, demographics, or service needs, as there is no authorized public use of the area. While the mowing would be by contracted to an outside source by the Corps, this would involve one or two machines/mowers that are each operated by one person. Additional work such as tree trimming, raking, and other manual work would be performed by an existing Corps work crew. There would be minimal additional non-Corps labor involved; therefore there would be no growth inducing impacts to the area, nor any impacts to environmental justice, as there would be no impact to local demographics. By eradicating non-native vegetation in the Proposed Action area, there could be a decrease in potential health risks to area residents, including minority and low-income populations in nearby areas.

3.12.3.3 No Active Restoration Alternative

Impacts would be the same as or similar to those of the Preferred Alternative.

3.13 TRANSPORTATION AND TRAFFIC

3.13.1 Existing Conditions

The Basin is located in the northwest quadrant of the intersection of Interstate 405 and U.S. Highway 101. Both freeways are operated by California’s Department of Transportation (Caltrans). Access into the Basin can be attained via main entrances along Woodley Avenue from the north, Burbank Boulevard (which runs along the southern portion of the Basin) from the east or west, Balboa Boulevard from the west, or from Victory Boulevard from the north.

Table Error! No text of specified style in document..1 Roadways and Traffic Volumes			
Roadway Name	Average Daily Two-way Traffic (in thousands of cars)	Roadway Designation	Number of Lanes
Interstate 405	223,000	Freeway	12
US Route 101	275,000	Freeway	12
Victory Boulevard	47,000	Arterial	6
Balboa Boulevard	36,000	Arterial	4
Burbank Boulevard	33,000	Arterial	6

Source: Caltrans 2009.

A maintenance road is located at the toe of the Dam on the upstream side. The road turns west and runs parallel to Burbank Blvd. towards Haskell Creek, turning southwest parallel to the creek towards the Los Angeles River, and circles back towards the Dam. The road is often used by walkers and joggers coming from the sidewalk along Burbank Blvd. or through the tunnel under Burbank Blvd. from the Wildlife Area on the north side of Burbank Blvd. There is no through traffic in the area of the Proposed Action.

3.13.2 Significance Threshold

A significant impact would occur to transportation and traffic if the proposed project:

- Caused closure of a major roadway (arterial or collector classification) to through traffic and there would be no suitable alternative route available.
- Caused an increase in vehicle trips associated with additional commuter and truck trips resulting in an unacceptable reduction in level of service of local jurisdictions on roadways resulting in safety problems for vehicular traffic, transit operations, or trains.
- Created an increase in roadway wear in the vicinity of the work zone as a result of heavy truck or equipment movements, resulting in noticeable deterioration of roadway surfaces.

- Resulted in safety problems for vehicular traffic or transit operations.

3.13.3 Alternative Analysis

3.13.3.1 No Action Alternative

There would be no change to any existing street or freeway use adjacent to the area. There would be no change to the existing maintenance roads through the area.

3.13.3.2 Optimal Management/Restoration Alternative (Preferred Alternative)

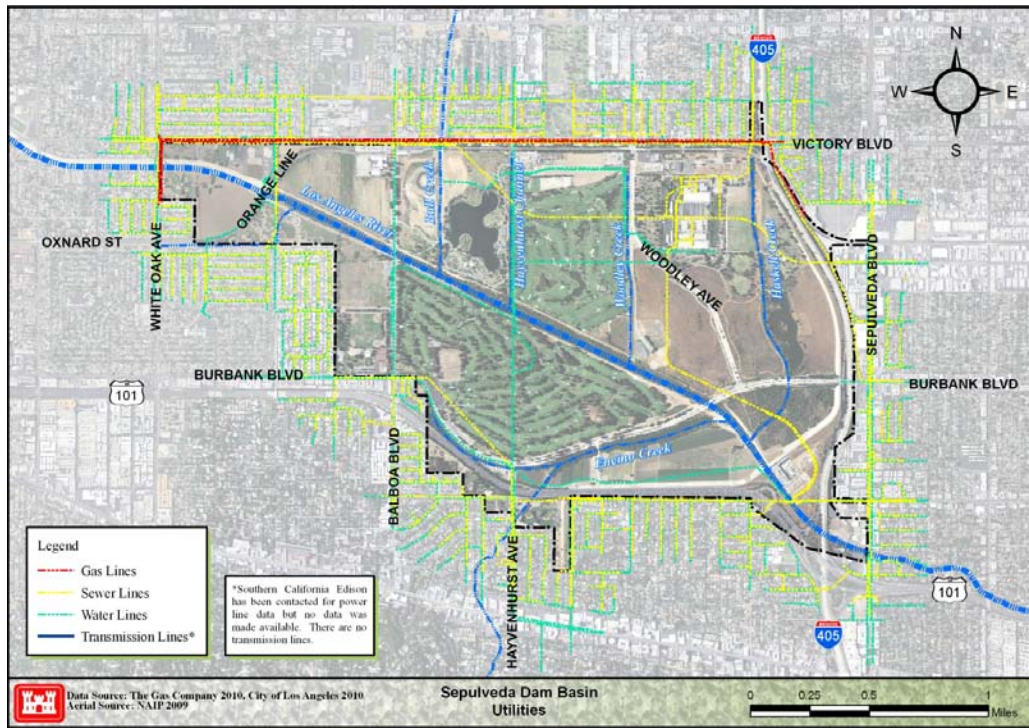
There would be no significant impacts to local traffic as the Proposed Action is off any roadway and would be limited to vegetation mowing and mulching within the area of the Proposed Action. In the first year, there would be approximately an additional ten cars or less of work-crew members arriving in the area daily for approximately 21 to 28 days (Phase 1). These workers would park in nearby parking areas, along Woodley Ave., or within the Proposed Action area on existing maintenance roads. Impacts to existing traffic would be minimal. In the second and third year of spray of re-emerging weeds (Phase 2), spraying would be done by a small crew of about ten people or less, so parking would be similar to the first year. No vegetation would be hauled off-site, so there would be no significant impact to local traffic. The seeding in the fourth year (Phase 3) would be an operation of one truck with spraying equipment and a two to three man crew. Impacts to traffic and parking would be less than significant.

3.13.3.3 Limited Restoration Alternative

The impacts to traffic and parking would be similar to those of the Preferred Alternative, but would not include the fourth year seeding. Instead the re-emerging vegetation would continue to be sprayed annually similar to the second and third year with a work-crew up to 10 people. This would continue indefinitely. Therefore, the impacts, though less than significant annually, would continue indefinitely.

3.14 UTILITIES

The utilities Map Figure 3.14-1 indicates only a sewer line crossing under the area of the Proposed Action from the northwestern corner between the Los Angeles River and Woodley Ave. and continuing southeastwards, under Haskell Creek and under the Dam itself.



Source; Sepulveda Basin Master Plan, Corps 2011

Figure 3.14-1- Utilities Map of Sepulveda Basin

The aerial photo from 1994 (Figure 3.14-3) indicates that the soil surface disturbance was fairly recent and was not visible in an earlier aerial photo from 1989 (Figure 3.14-3).



Figure 3.14-2 Aerial Photo 1989 (no sewer line)



Source: Google Earth Pro

Figure 3.14-3 Aerial Photo 1994 (sewer line, light gray diagonal line from upper left towards lower right)

3.14.3 Alternative Analysis

3.14.3.1 No Action Alternative

There would be no impacts to the existing sewer line through the area.

3.14.3.2 Optimal Management/Restoration Alternative (Preferred Alternative)

The Proposed Action would not cause any ground disturbance except within 50 feet of the upstream face of the Dam for the removal of tree roots greater than two inches in diameter. Within the area of the sewer line, tree roots would be removed by hand, using shovels rather than back hoes and other equipment in order to avoid damaging the sewer line. Therefore, the Preferred Alternative would not significantly impact any utilities.

3.14.3.3 No Active Restoration Alternative

The impacts would be the same as those of the Preferred Alternative.

3.15 CUMULATIVE IMPACTS

Pursuant to 40 CFR Parts 1500-1508, cumulative impacts of a proposed action must be assessed. A cumulative impact is an "impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions" (40 CFR Part 1508.7).

The intent is to identify impacts of other past, present, and future projects that, when considered together with the Proposed Action, may significantly compound or increase environmental

impacts. Cumulative impacts can result from individually minor, but collectively significant, actions taking place over a period of time. Infrastructure, industrial, commercial, residential, and other projects located in close proximity to the proposed mitigation site are considered to have the potential for creating cumulative impacts in association with the proposed project activity.

3.15.1 Past Impacts

Sepulveda Dam and Basin are an integral element of the Los Angeles County Drainage Area (LACDA) flood risk management system operated by the Corps and others within Los Angeles County. With the continued urbanization of lands surrounding the Basin, the Basin has become an important outdoor recreation venue and habitat for wildlife.

The early settlers in the valley utilized a method of “dry” ranching and farming, relying on rainfall with limited irrigation. The construction of Sepulveda Dam in 1941 required grading and clearing of land within the Basin and substantial modifications to the Los Angeles River and local tributaries.

During the housing boom following World War II, the Valley all but eliminated the remaining agriculture and created a need for outdoor recreation areas. In 1951, the Corps and the City of Los Angeles entered into a 50-year recreation lease which has been renewed and extends through 2042. Recreation amenities were first constructed in the Basin in 1959. The Corps and the City cost-shared on a 50-50 basis over \$30 million in recreation amenities over the past 40 years and the City has developed additional recreation amenities.

In 1988, the Wildlife Area was developed north of Burbank Boulevard, converting open and agricultural land into wildlife habitat. In 1995, the Corps added 60 acres of former agriculture land west of Haskell Creek and north of Burbank Blvd. as part of the Wildlife Area through Supplement 1 to the 1981 Sepulveda Basin Master Plan. Additionally, the Corps and the City instigated restoration of approximately 28 acres of native riparian and upland habitat along Bull Creek west of Beilenson Park in 2008.

3.15.2 Present Impacts

The City continues to develop, operate, and maintain recreation amenities within the Basin in conjunction with the Corps. The Basin currently supports both recreation and non-recreation uses. Recreation amenities occupy approximately 1,542 acres of land. The continued use and maintenance of existing recreation amenities includes on-going impacts to air quality, noise, and traffic especially during periods of peak usage. Additional impacts of the Proposed Action would be minor compared to air quality, noise, and traffic impacts associated with the built-out urban environment and major thoroughfares surrounding and through the Basin.

3.15.3 Future Impacts

The Basin functions as a flood risk management facility and will continue to do so for the foreseeable future.

Recreation is the other major use authorized within the Basin and has increasingly become an important recreational destination and a resource for wildlife. The Basin would continue to be

used for recreation activities for the foreseeable future as identified in the recreation outgrant with to the City of Los Angeles. The management of recreation uses and allocation of resources maybe subject to modifications to accommodate changing needs and priorities. Potential changes in recreational uses may entail environmental impacts ranging from *de minimis* to significant impacts depending on the scope and nature of the changes proposed. The cumulative impacts are less than significant.

4.0 ENVIRONMENTAL COMMITMENTS

This section describes the environmental commitments that would be implemented as part of the Proposed Action for the vegetation management activities. Due to the limited nature of disturbance, the activities of the Proposed Action are not expected to cause any long term adverse effects. The environmental commitments discussed below would decrease the severity of any short-term or temporary project related activities on resources. The environmental commitments described in this section are not legally binding and do not constitute a mitigation requirement that would be binding or enforceable against the United States.

GEOLOGY AND SOILS

SG-1 Work would not occur during heavy storms.

SG-2 Work would cease when wind speed exceeds 25 miles per hour.

WATER RESOURCES

WR-1 A Storm Water Pollution Prevention Plan (SWPPP) would be prepared to reduce the potential for accidental release of fuels, pesticides, and other materials. A Notice of Intent (NOI) shall be sent to the California Water Resources Board in Sacramento. The SWPPP would be reviewed and approved by Corps team members, including ERB and Engineering. This plan will include the designation of refueling locations, emergency response procedures, and definitions of reporting requirements for any spill that occurs. Equipment for immediate cleanup will be kept at the staging area for immediate use.

WR-2 When a storm event is forecast within 48 hours, work shall stop and all equipment and vehicles moved to an elevation greater than the 100-year event (approximately 712 ft).

AIR QUALITY

AQ-1 A Fugitive Dust Emission Control Plan would be developed and implemented. Measures to be incorporated into the plan would include, but not be limited to the following:

- Water the unpaved road access and other disturbed areas of the active sites at least two times per day, or apply CARB certified soil binders.
- Install wheel washers/cleaners or wash the wheels of trucks and other heavy equipment where vehicles exit the site or unpaved access roads.
- Increase the frequency of watering, or implement other additional fugitive dust mitigation measures, of all disturbed fugitive dust emission sources when wind speeds (as instantaneous wind gusts) exceed 25 miles per hour.

AQ-2 Diesel engine idle time would be restricted to no more than ten minutes duration.

AQ-3 All on-road construction vehicles working within California would meet all applicable California on-road emission standards and would be licensed in the State of California. This does not apply to construction worker personal vehicles.

AQ-4 Activities and operations on unpaved roads areas would be minimized to the extent feasible during high wind events to minimize fugitive dust.

NOISE

- N-1 Activities would comply with local ordinances. Any nighttime or weekend activities would be coordinated with local ordinances and would require a noise permit.
- N-2 All equipment used would be muffled and maintained in good operating condition. All internal combustion engine driven equipment would be fitted with well maintained mufflers in accordance with manufacturer's recommendations.
- NR-3 All work shall be performed after September 15 and prior to March 15 to avoid migratory bird nesting season.

BIOLOGICAL RESOURCES

- BR-1 The Corps would retain a qualified biologist on site to supervise ground disturbing activities and oversee all aspects of monitoring that pertain to biological resource protection.
- BR-2 Work would occur only during daylight hours, if possible, to minimize disturbances to any urban wildlife species that move primarily at night.
- BR-3 Unpaved areas would be watered as needed (or other measures implemented) to control dust on a continual basis.
- BR-5 All construction work would occur outside the migratory bird nesting/breeding season between March 15 and September 15. A project biologist with authority to stop work would be present on site during breeding-season work to ensure the limits of the operation do not encroach into suitable vireo habitat or within 250 ft (76.2 m) of a nesting vireo.
- BR-6 No harassing, killing, collecting, or intentionally harming any species of wildlife, fish or vertebrate would occur.

CULTURAL RESOURCES

- CR-1 In the event that previously unknown cultural resources are uncovered, work in the immediate area would cease until the requirements in 36 CFR 800.13 are complied with.

AESTHETICS AND RECREATION

- AR-1 Work and staging areas would be kept orderly and free of trash and debris.
- AR-2 A storage area for collection and storage of recyclable and green waste materials would be kept within the work area. All trash and debris would be removed from the work area at the end of each day
- AR-3 All recreation uses would be detoured from the area for safety of workers and the public.
- AR-4 Signs would be posted prohibiting trespassing via the tunnel under Burbank Blvd.

TRAFFIC

- TT-1 Public streets would be kept operational, particularly during the morning and evening peak hours of traffic. If required, any lane closures would be minimized during peak traffic hours.
- TT-2 There would be coordination with the local transportation department of the applicable jurisdiction to implement standard construction traffic controls, such as the posting of

notices, signage, detours, flag men, and other appropriate measures as needed.

SAFETY

- PS-1 A Safety Plan, in accordance with applicable Corps standards, would be developed and implemented during all mowing/mulching and restoration activities to ensure safety of all personnel.
- PS-2 Construction and maintenance fluids (oils, antifreeze, fuels) would be stored in closed containers (no open buckets or pans) and disposed of promptly and properly away from the channel to prevent contamination of the site.
- PS-3 Refueling of the mower and other equipment could be accomplished on site least 50 feet away from flowing water and with the use of liners. Best Management Practices (BMPs)MP's would be used and include such actions as having hazardous waste clean-up equipment and spill kits staged on-site, using the appropriate size and gauge drip pans and absorbent diapers. Spill kits shall be in close proximity to the fuel truck and mower in case of fuel or other fluid spills. Contractor equipment would be checked for leaks prior to operation and repaired as necessary.
- PS-4 Fluids released because of spills, equipment failure (broken hose, punctured tank) or refueling would be immediately controlled, contained, and cleaned-up per Federal and regulations. All contaminated materials would be disposed of promptly and properly to prevent contamination of the site. Someone would be present to monitor refueling activities to ensure that spillage from overfilling, nozzle removal, or other action does not occur.

5.0 ENVIRONMENTAL COMPLIANCE

5.1 National Environmental Policy Act Compliance

The National Environmental Policy Act (NEPA) is the nation's primary charter for protection of the environment. It establishes national environmental policy which provides a framework for Federal agencies to minimize environmental damage and requires Federal agencies to evaluate the potential environmental impacts of their proposed actions. Under NEPA, a Federal agency must prepare an Environmental Assessment (EA) describing the environmental effects of any proposed action having a significant impact on the environment. The EA must identify measures necessary to avoid or minimize adverse impacts resulting from the proposed action or determine if further analysis is required and prepare an Environmental Impact Statement (EIS).

This EA has been prepared in accordance with the requirements of NEPA of 1969 (42 USC 43221, as amended) and the CEQ Regulations for Implementing the Procedural Provisions of NEPA (40 CFR 1500-1508), dated 1 July 1988.

5.2 U.S. Fish and Wildlife Coordination Act (16 U.S.C. 661)

This Act requires Federal agencies to coordinate with the US Fish and Wildlife Service (USFWS) and local and state agencies when any stream or body of water is proposed to be modified. The intent is to give fish and wildlife conservation equal consideration with other purposes of water resources development projects. The Preferred Alternative would not involve modification of a body of water, therefore, formal coordination and preparation of a Coordination Act Report is not required.

5.3 Endangered Species Act of 1973 (Public Law 93-205), as amended.

The Endangered Species Act protects threatened and endangered species, as listed by the USFWS, from unauthorized take, and directs Federal agencies to ensure that their actions do not jeopardize the continued existence of such species. Section 7 of the Act defines Federal agency responsibilities for consultation with the USFWS. There would be no impacts to endangered species as there are none known to be in the area and all activity would be limited to the period between September 15 and March 15, which is outside of the nesting/breeding time period. The Preferred Alternative is in compliance with the Act.

5.4 Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) prohibits the taking or harming of any migratory bird, its eggs, nests, or young without an appropriate Federal permit. Almost all native birds are covered by this Act and any bird listed in wildlife treaties between the United States and several countries, including Great Britain, Mexican States, Japan, and countries once part of the former Soviet Socialist Republics. A "migratory bird" includes the living bird, any parts of the bird, or its nests

or eggs. The take of all migratory birds is governed by the MBTA's regulation of taking migratory birds for educational, scientific, and recreational purposes and requires harvesting to be limited to levels that prevent over-utilization. Section 704 of the MBTA states that the Secretary of the Interior is authorized and directed to determine if, and by what means, the take of migratory birds should be allowed and to adopt suitable regulations permitting and governing take. Disturbance of the nest of a migratory bird requires a permit issued by the USFWS pursuant to Title 50 of the CFR. The Preferred Alternative would not affect or impact migratory bird breeding or nesting activity.

5.5 Clean Water Act

Section 404 (b) prohibits the discharge of dredged or fill materials into the waters of the United States, including wetlands, except as permitted under separate regulations by the USEPA. The Corps does not require or issue itself permits.

The Preferred Alternative does not involve discharge of dredged or fill material in waters of the US and a 404 (b)(1) permit is not required. The Preferred Alternative is in compliance with the Act.

5.6 Clean Air Act of 1970 (42 U.S.C. 7401 et seq.)

The 1977 Amendments to the Clean Air Act enacted legislation to control seven toxic air pollutants. EPA adopted National Emission Standards for Hazardous Air Pollutants, which have been designed to control Hazardous Air Pollutants emissions to prevent adverse health effects in humans.

The 1990 Amendments to the Clean Air Act determine the attainment and maintenance of National Ambient Air Quality Standards (NAAQS) (Title I), motor vehicles and reformulation (Title II), hazardous air pollutants (Title III), acid deposition (Title IV), operating permits (Titles V), stratospheric ozone protection (Title VI), and enforcement (Title VII).

Under Section 176(c) of the Clean Air Act Amendments (CAAA) of 1990, the Lead Agency is required to make a determination of whether the Proposed Action "conforms" to the State Implementation Plan (SIP). Conformity is defined in Section 176(c) of the CAAA as compliance with the SIP's purpose of eliminating or reducing the severity and number of violations of the NAAQS and achieving expeditious attainment of such standards. However, if the total direct and indirect emissions from the Proposed Action are below the General Conformity Rule "*de minimis*" emission thresholds, the Proposed Action would be exempt from performing a comprehensive Air Quality Conformity Analysis and would be considered to be in conformity with the SIP.

The Preferred Alternative would not have a significant impact on air quality. The total emissions of each criteria pollutant either meets or is below *de minimis* levels as prescribed in 40 CFR 93.153(b). The Alternative would not be considered to be regionally significant. Because the use of heavy equipment would be limited to approximately 21 days, emissions are expected to be minimal and below the *de minimis* thresholds and thus would not violate National or state standards. As a result, the Preferred Alternative would have no long-term impacts on local or regional air quality.

5.7 Noise Control Act of 1972, as amended (42 USC 4901 et seq.)

Noise generated by any activity, which may affect human health or welfare on Federal, state, county, local, or private lands must comply with noise limits specified in the Noise Control Act. The Corps has determined that through environmental commitments to minimize impacts during construction, the Preferred Alternative is in compliance with the Act.

5.8 National Historic Preservation Act (Public Law 89-665; 16 U.S.C. 470-470m, as amended, 16 U.S.C. 460b, 470l-470n)

The Preferred Alternative does not impact cultural resources. However, if any cultural resources are discovered during maintenance activities, they will need to be evaluated for their eligibility for inclusion in the National Register of Historic Places pursuant to 36 CFR 800.13(b) Post-review discoveries.

5.9 Archeological Resources Protection Act, as amended

The Act requires that when cultural resources may be impacted when working on Federal lands or there is another Federal connection. The Act allows for the preservation of historical and archeological data (including relics and specimens) which might otherwise be irreparably lost or destroyed. The Preferred Alternative would not impact cultural resources.

5.10 Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) provided EPA with the authority to identify and clean up contaminated hazardous waste sites. Individual states may implement hazardous waste programs under the Resource Conservation and Recovery Act (RCRA) with EPA approval. California has not yet received this EPA approval; instead, the California Hazardous Waste Control Law (HWCL) is administered by the California Environmental Protection Agency (CALEPA) to regulate hazardous wastes. While the HWCL is generally more stringent than RCRA, until the EPA approves the California program, both the state and Federal laws apply in California. CERCLA also contains enforcement provisions for the identification of liable or responsible parties. It details the legal claims that arise under the statute, and provides guidance on settlements with the EPA. Section 120 of this Act addresses hazardous waste cleanups at Federal facilities, and requires the creation of a Federal Agency Hazardous Waste Compliance Docket, which lists facilities that have the potential for hazardous waste problems. For the Proposed Action, conformance with CERCLA would only be engaged if unforeseen waste was found or was abandoned on site in the future.

5.11 Executive Order 11988 Floodplain Management

Signed May 24, 1977, this order requires that Federal government agencies, in carrying out their responsibilities, provide leadership and take action to restore and preserve the natural and beneficial values served by floodplains. Before proposing, conducting, supporting, or allowing an action in the floodplain, each agency is to determine if planned activities will affect the floodplain and evaluate the potential effects of the intended action on the floodplain's functions.

The eight-step process outlined provided in ER 1165-2-26, para. 8, General Procedures (1984) was followed and has been summarized below. The required Statement of Findings has been added to Chapter 3.3, Water Resources, Floodplain Management.

- 1) The recommended site for the proposed project is located within the base flood plain as defined by the Order.¹ This is evidenced by the location of the proposed project within the 10% exceedance elevation in the Basin.
- 2) As described in ER 1165-2-26, it is the policy of the Corps to formulate projects which, to the extent possible, avoid or minimize adverse impacts associated with use of the base flood plain and avoid inducing development in the base flood plain unless there is no practicable alternative. Practicable alternatives are those capable of being done within existing constraints. The decision on whether a practicable alternative exists is based on weighing the advantages and disadvantages of flood plain sites and non-flood plain sites. The test of practicability applies to both the proposed action and to any induced development likely to be caused by the action. No development is likely to be induced by the Proposed Action within the base flood plain. As described in this EA, locations for the Proposed Action were limited by the need to remove non-native vegetation in this particular area and compliance with ETL1110-2-571 (regarding vegetation free zone within 50 feet of the upstream toe of the Dam).
- 3) Federal, state, and local agencies were informed of the Proposed Action, including its location in the Basin, via an Interested Parties Letter accompanying the Draft Environmental Assessment. The review period was for 15 days, starting 10 August 2012.
- 4) Beneficial and adverse impacts due to the Proposed Action were identified in the EA under Section 3, Environmental Condition and Alternative Analysis, for the Preferred Alternative. No adverse impacts to the flood plain are anticipated from the Preferred Alternative.
- 5) There are no direct or indirect impacts to the flood plain that are likely to induce development in the flood plain or outside it. The area is a vacant field adjacent to the Los Angeles River within the Sepulveda Flood Control Basin and the Proposed Activity does not include construction of any new, permanent housing or commercial activities, and is not expected to induce any new residential or commercial growth. Restoration of an appropriate sustainable habitat would reduce erosion of top soil by wind and inundation due to storm events.
- 6) During the environmental analysis of the proposed project, adverse impacts by the proposed action were minimized to less than significant through environmental commitment mitigation measures. The Proposed Activity does not impact the flood plain as the project elements would not include any above-grade structures that are not floodable. Compared to the No Action Alternative, restoration of the area with native species would aid in addressing some runoff considerations. The Proposed Activity is site specific to implement restoration of native habitats. The Proposed Activity would not aggravate current hazards of the flood plain and would not disrupt floodplain values.

¹ “‘Base Flood’ is that flood which has a one percent chance of occurrence in any given year (also known as a 100-year flood).” ER 1165-2-26 para 4. Definitions. b.

7) Federal, state, and local agencies, as well as the public were provided information about the proposed project in the draft EA with the review period of 15 days starting 10 August 2012..

8) The Corps, Los Angeles District recommends the Preferred Plan as the alternative most responsive to the planning objectives and requirements established by Executive Order 11988.

5.12 Executive Order 11990: Protection of Wetlands

Under Executive Order 1199, Federal agencies shall take action to minimize the destruction, loss, or degradation of wetlands, and to preserve and enhance the natural and beneficial values of wetlands in carrying out the agencies responsibilities. Each agency, to the extent permitted by law, shall avoid undertaking or providing assistance for new construction located in wetlands unless the head of the agency finds (1) that there is no practicable alternative to such construction, and (2) that the proposed action includes all practicable measures to minimize harm to wetlands which may result from such use. In making this finding the head of the agency may take into account economic, environmental, and other pertinent factors. Each agency shall also provide opportunity for early public review of any plans or proposals for new construction in wetlands.

During mowing and mulching activities, vegetation adjacent to Haskell Creek would be pulled away from the creek water before it is mulched on flat ground. The Preferred Alternative would be in compliance with the Executive Order.

5.13 Executive Order 12088, Federal Compliance with Pollution Control Standards

The head of each Executive agency is responsible for ensuring that all necessary actions are taken for the prevention, control, and abatement of environmental pollution with respect to Federal facilities and activities under control of the agency. Enactment of environmental commitments to minimize pollution impacts during implementation of the Proposed Action (see Section 4.0) would meet the standards of this Executive Order.

5.14 Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations.

Executive Order 12898 was signed on February 11, 1994. This order was directed Federal agencies “[to] make achieving environmental justice part of its mission by identifying and addressing... disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations in the [U.S.]...” No minority or low-income communities would be disproportionately affected by implementation of the Preferred Alternative. The Preferred Alternative would be in compliance with the Executive Order. (See Section 5.14)

5.15 Executive Order 13112 Invasive Species

Federal agencies are to expand and coordinate efforts to prevent the introduction and spread of invasive plant species and to minimize the economic, ecological, and human health impacts that invasive species may cause. Eradication of invasive species (non-native) within the Proposed

Action area as an element of the Preferred Alternative would meet the intent of this Executive Order.

6.0 LIST OF PREPARERS

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7.0 RECOMMENDATION

The recommended alternative, the Optimal Management/Restoration Alternative (Preferred Alternative) would most effectively meet the need and purpose of the Proposed Action. The implementation of the measures described in Chapter 4, Environmental Commitments would minimize or avoid potential impacts by the Proposed Action.

By ultimately providing a viable, sustainable habitat, the Preferred Alternative would be the most cost effective alternative, minimize future/long term maintenance, and optimize flood risk management within the Basin. The Preferred Alternative would also optimize the secondary goals of the proposed project, safety and security within the area and restoration of appropriate native species for habitat diversity within the area.