Initial Study

for

Tujunga Spreading Grounds Enhancement Project

Los Angeles Department of Water and Power
Environmental Affairs
111 North Hope Street, Room 1044
Los Angeles, CA 90012

February 2012

CITY OF LOS ANGELES
OFFICE OF THE CITY CLERK ROOM 395
CITY HALL LOS ANGELES, CALIFORNIA 90012

CALIFORNIA ENVIRONMENTAL QUALITY ACT
INITIAL STUDY AND CHECKLIST
(ARTICLE IV – CITY CEQA GUIDELINES)

<table>
<tr><td>LEAD CITY AGENCY:
City of Los Angeles
Department of Water and Power
111 North Hope Street
Los Angeles, CA 90012</td><td>COUNCIL DISTRICT(S): 6</td><td>DATE: February 9, 2012</td></tr>
<tr><td colspan="2">PROJECT TITLE/NUMBER:
Tujunga Spreading Grounds Enhancement Project / Number: N/A</td><td>CASE NUMBER:
N/A</td></tr>
<tr><td>PREVIOUS ACTIONS CASE NUMBER: None</td><td colspan="2"></td></tr>
<tr><td colspan="3">PROJECT DESCRIPTION: The proposed enhancement project for Tujunga Spreading Grounds (TSG) will alter the current intake facility to capture low flows; create a treatment area for the low flows; install two new intake facilities to capture high flows from the Tujunga Wash and Pacoima Wash Diversion Channels; install devices to prevent widespread distribution of trash within the TSG; reactivate, deepen and/or combine basins to increase the facility’s storage and recharge capacity; install new inter-basin flow controls; and install telemetry on all diversion facilities. The objective of the Tujunga Spreading Grounds Enhancement Project (project) is to increase stormwater recharge into the San Fernando Groundwater Basin through enhancement and operation of the TSG facility.</td></tr>
<tr><td colspan="3">PROJECT LOCATION: The LADWP TSG facility is located at 34° 13' 39" N and -118° 24' 54" W, adjacent to the Sheldon-Arleta Landfill in the City of Los Angeles, Los Angeles County. The TSG is located approximately 17 miles northwest of downtown Los Angeles in the northeastern portion of the San Fernando Valley at the intersection of Roscoe Boulevard and Sheldon Street.</td></tr>
<tr><td>PLANNING DISTRICT:
Sun Valley - La Tuna Canyon</td><td colspan="2">STATUS:
☐ PRELIMINARY
☐ PROPOSED _____
☐ ADOPTED (Date): _____</td></tr>
<tr><td>EXISTING ZONING:
OS-1XL, Open Space (City of Los Angeles)</td><td>MAX. DENSITY ZONING:
N/A</td><td>☐ DOES CONFORM TO PLAN</td></tr>
<tr><td>PLANNED LAND USE AND ZONE:
Open Space (City of Los Angeles)</td><td>MAX. DENSITY PLAN:
N/A</td><td>☐ DOES NOT CONFORM TO PLAN</td></tr>
<tr><td>SURROUNDING LAND USES:
Open Space, Residential, Commercial, School</td><td>PROJECT DESNITY:
N/A</td><td>☐ NO DISTRICT PLAN</td></tr>
</table>

CEQA Initial Study

Tujunga Spreading Grounds Enhancement Project

February 2012

General Manager
Ronald O. Nichols

Senior Assistant General Manager – Water System
James B. McDaniel

Manager, Watershed Management Group
Andy A. Niknafs

Director of Environmental Affairs
Mark J. Sedlacek

Manager of Environmental Planning and Assessment
Charles C. Holloway

Prepared by:

Los Angeles Department of Water and Power
111 North Hope Street, Room 1044
Los Angeles, CA 90012

Technical Assistance Provided by:

MWH Americas, Inc.
618 Michillinda Avenue, Suite 200
Arcadia, California 91007

Los Angeles Department of Water and Power

Table of Contents

Section Name **Page Number**

Table of Contents

List of Tables

Table Name **Page Number**

List of Figures

Figure Name **Page Number**

Appendices

Section 1
Project and Agency Information

1.1 PROJECT TITLE AND LEAD AGENCY

Project Title:	Tujunga Spreading Grounds Enhancement Project
Lead Agency Name:	City of Los Angeles, Department of Water and Power
Lead Agency Address:	111 North Hope Street, Room 1044 Los Angeles, CA 90012
Contact Person:	Mr. Hal Messinger
Contact Phone Number:	(213) 367-1276
Project Sponsor's Name:	Same as Lead Agency
Project Sponsor's Address:	Same as Lead Agency

1.2 PROJECT BACKGROUND AND OBJECTIVES

1.2.1 Project Background

The Tujunga Spreading Grounds (TSG) are owned by the Los Angeles Department of Water and Power (LADWP) and have been operated by the Los Angeles County Flood Control District (District) since 1990. The District operates TSG by diverting stormwater from the Tujunga Wash Channel using a rubber dam and distributing it through the facility using a canal system and flashboard structures. TSG consists of shallow basins and associated facilities, and covers approximately 160 acres. Three of the basins, covering approximately 8 acres, are presently not in use. The maximum intake of stormwater at TSG is 250 cubic feet per second (cfs) and the approximate percolation rate is 140 cfs. The total storage volume within the facility is approximately 100 acre-feet.

TSG is located adjacent to the unlined Sheldon-Arleta Landfill. In the past, when TSG recharged large amounts of water, methane gas migrated from the landfill to local residential properties. This issue caused temporary restrictions to be placed on the stormwater facility by the City of Los Angeles Bureau of Sanitation (LABOS). Those restrictions limited the maximum intake flowrate to 50 cfs and removed several basins from service. Those restrictions were intended to prevent methane gas migration into nearby schools and communities during stormwater spreading operations. Phase I of the Cesar Chavez Project (completed in 2010) upgraded the landfill's methane gas extraction system and mitigated this issue, allowing for full operation of the spreading facilities.

1.2.2 Project Objective

The objective of the Tujunga Spreading Grounds Enhancement Project (project) is to increase stormwater recharge into the San Fernando Groundwater Basin through enhancement and operation of the TSG facility. Due to increasing need for local water supplies in the Los Angeles area and subsequent demand on groundwater supplies, enhancement of the TSG facility will enable capture of a larger volume of stormwater than is currently possible.

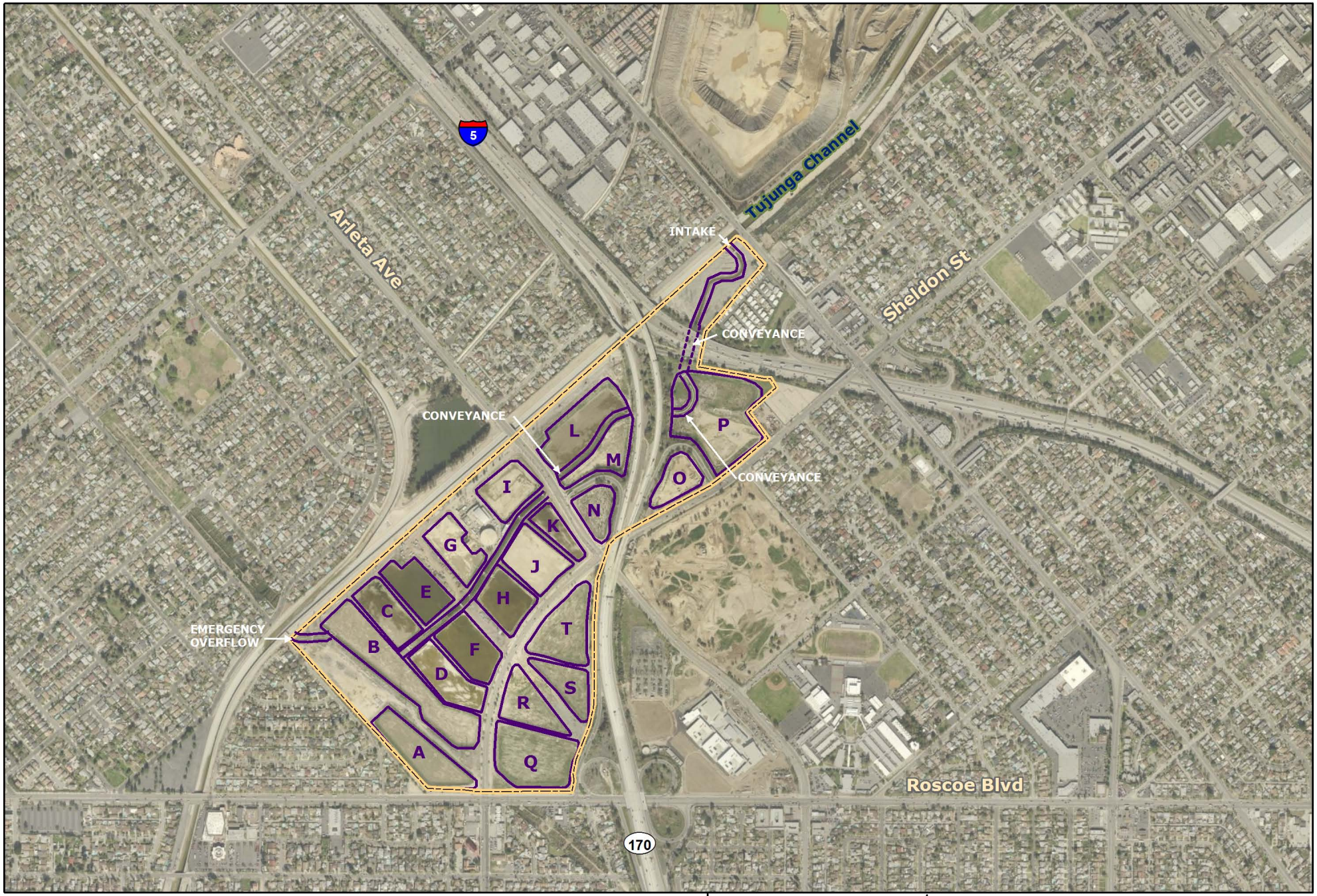
This Initial Study (IS) has been prepared in accordance with the California Environmental Quality Act (CEQA), Public Resources Code Section 21000 et seq., and the State CEQA Guidelines, Title 14 California Code of Regulations (CCR) Section 15000 et seq. The IS serves to identify the site-specific impacts, evaluate their potential significance, and determine the appropriate document needed to comply with CEQA. For this project, LADWP has determined that based upon the analysis contained in this IS, an Environmental Impact Report (EIR) is the appropriate CEQA document.

1.3 PROJECT LOCATION

The TSG facility is located at latitude 34° 13' 39" N and longitude -118° 24' 54" W, adjacent to the Sheldon-Arleta Landfill in the City of Los Angeles, Los Angeles County. The TSG is located approximately 17 miles northwest of downtown Los Angeles in the northeastern portion of the San Fernando Valley at the intersection of Roscoe Boulevard and Sheldon Street. The proposed project enhancements will be within the boundary of the existing 160-acre facility.

The regional location of the project is shown on **Figure 1.** The current spreading grounds configuration is shown on **Figure 2** and the proposed configuration is shown on **Figure 3**.


San Gabriel Mountains
SYLMAR
Project Site
BURBANK
PASADENA
LOS ANGELES
Pacific Ocean
TORRANCE
LONG BEACH
14
5
118
210
2
27
170
101
134
19
710
405
110
10
187
60
605
42
72
105
90
213
39
47
107
0 2.5 5 Miles
N
Document: TujungaLocation2.mxd
Date: February 5, 2010
Source: USGS, CaSil
Tujunga Spreading Grounds Enhancement Project Location
MWH
Figure 1



Key to Features

- Existing Spreading Grounds
- Project Site
- Existing Stormwater Conveyance (above ground open channel)
- Existing Stormwater Conveyance (below ground pipe)

N

0 550 1,100 Feet

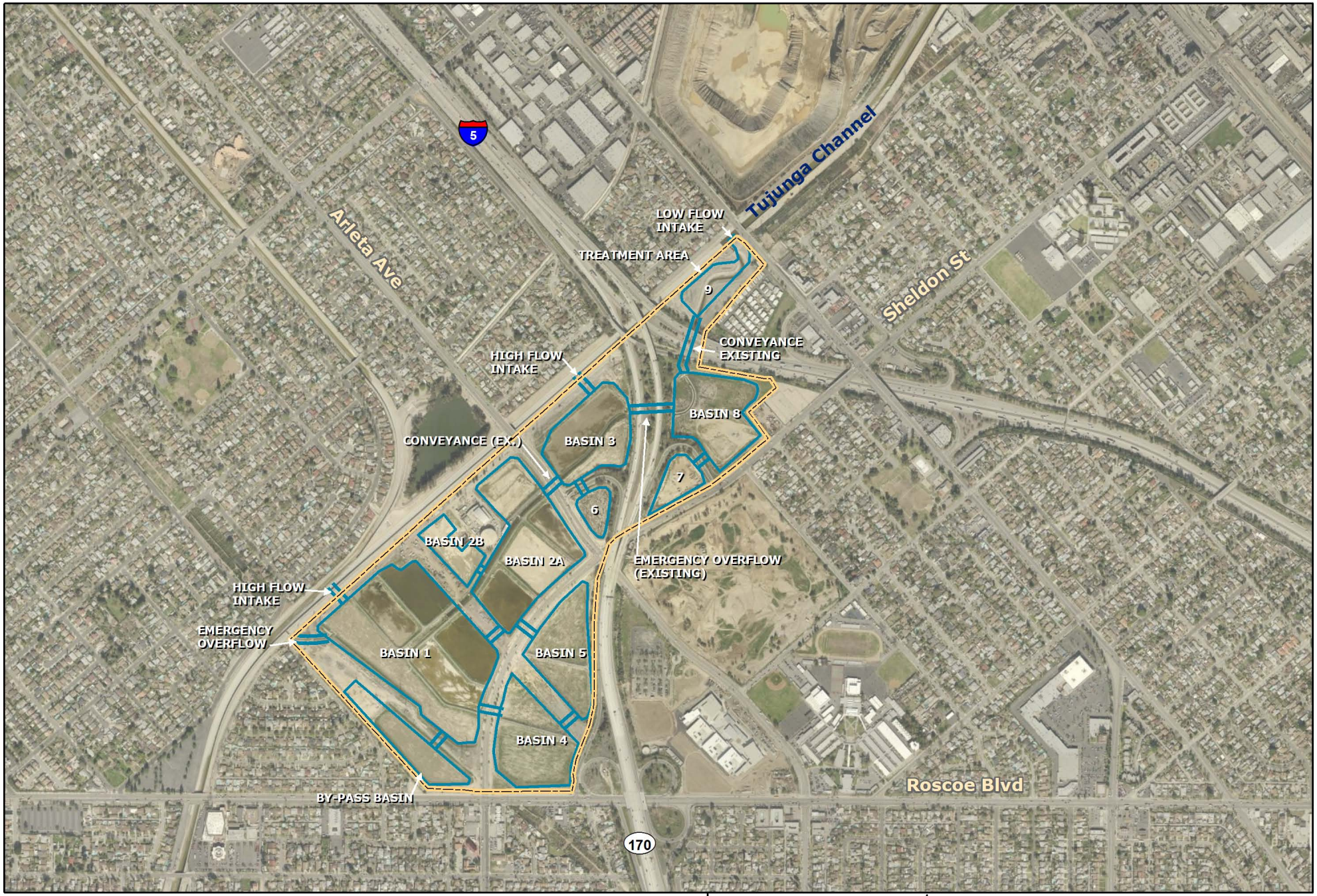
Document: TujungaConveyance.mxd

Date: February 2011

Existing Site Plan
Tujunga Spreading Grounds

MWH

Figure 2



Key to Features

- Proposed Spreading Grounds
- Proposed Conveyance
- Project Site

N

0 550 1,100 Feet

Document: TujungaSpreadingBasins.mxd

Date: February 2011

MWH.

Site Plan
Tujunga Spreading Grounds

Figure 3

1.4 SURROUNDING LAND USES AND SETTING

1.4.1 Regional Setting and Surrounding Land Uses

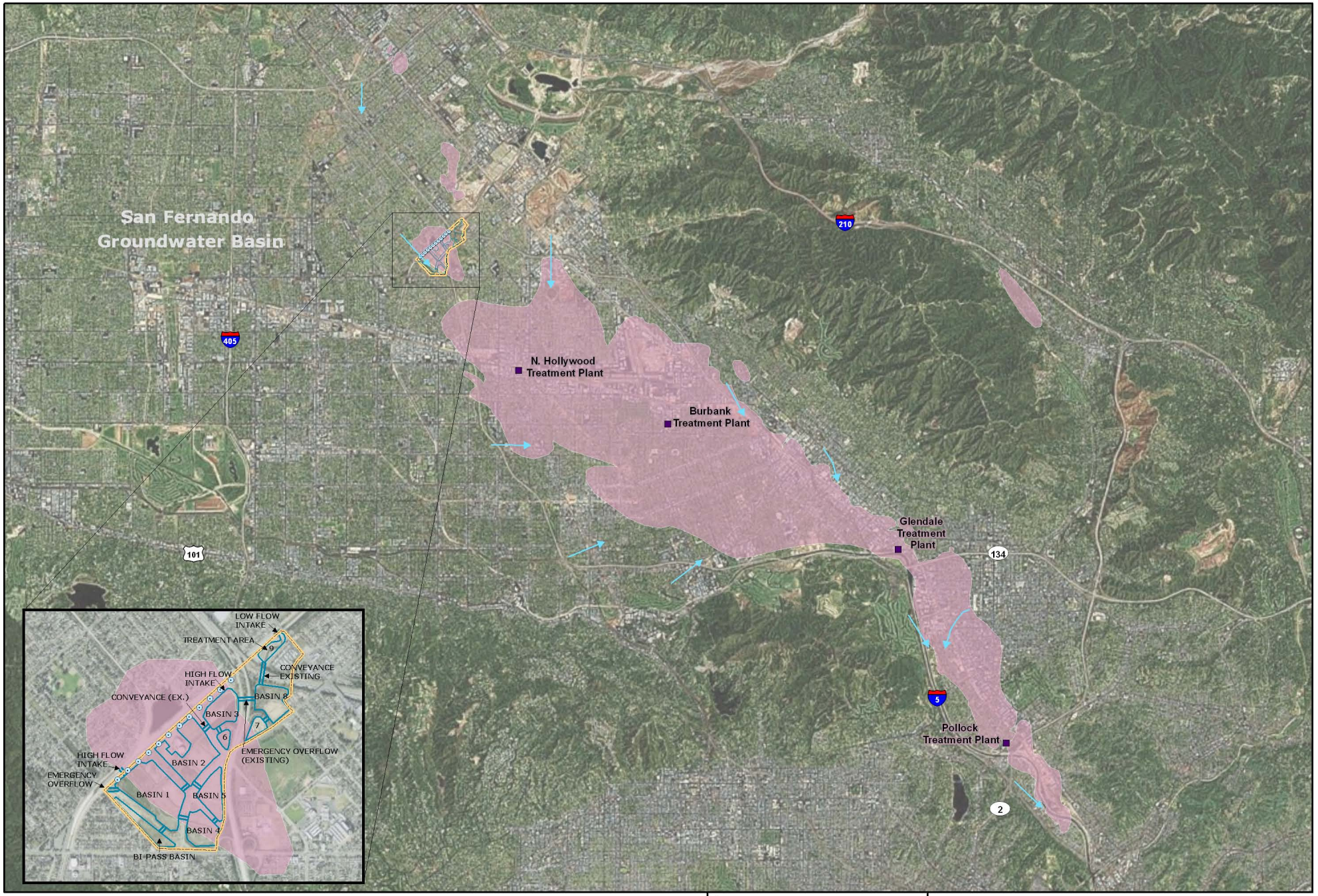
The project site is located south of the San Gabriel Mountains in an urbanized area of the City of Los Angeles (**Figure 1**). Stormwater flows from the largely undeveloped mountain areas flow first to Hansen Dam, where they are temporarily held, and then to the Pacoima and Tujunga Washes, which ultimately drain to the project site.

Historic land uses in the area contaminated the groundwater underneath the project site. Pollutants of concern are Trichloroethylene (TCE), Tetrachloroethylene (PCE), and Nitrate (NO_3). The extent of contamination as of 2006 is shown on **Figure 4** and discussed in more detail in Section 2.3.9. This contaminant plume is part of the San Fernando Valley Superfund Site, Zone 1 (North Hollywood Area), containing the North Hollywood Operable Unit (NHOU) and the Burbank Operable Unit (BOU). The contamination is managed through a monthly and quarterly monitoring program designed to assess extent and movement of the contamination plume. Groundwater is extracted from both operable units for treatment to remove contaminants and then the water is reintroduced into the aquifer. As of 2008, the existing North Hollywood groundwater pump and treat system has extracted and treated approximately 8 billion gallons of volatile organic compound (VOC)-contaminated groundwater to levels that are below state and federal maximum contaminant levels (MCLs) for drinking water. Similarly, as of 2008, the Burbank groundwater pump and treat system has extracted and treated approximately 36 billion gallons of VOC-contaminated groundwater to levels that are below state and federal MCLs for drinking water (EPA, 2008).

Freeways that provide access to the area are Interstate 5 (I-5, Golden State Freeway), State Highway 170 (SR-170, Hollywood Freeway), and Interstate 210 (I-210, Foothill Freeway). Major access roads from the freeways to the project site include Roscoe Boulevard, Arleta Avenue and Sheldon Street. The Burbank-Glendale-Pasadena Airport is approximately 2.5 miles to the southeast and Whiteman Airpark is located over 2 miles northwest of the project area.

Immediately adjacent land uses to TSG are low density residential development, small commercial operations such as restaurants, and a school (J. H. Francis Polytechnic High School located 0.5 miles southeast of the TSG site).

The upper portions of the watershed, north of the intersection of Tuxford Street and San Fernando Road, are primarily developed with industrial uses. These uses include actively mined as well as exhausted gravel pits, active landfills for inert construction debris, a power generating facility (Valley Steam Plant operated by LADWP), the Bradley Transfer Station and Materials Recycling Facility (operated by Waste Management, Inc.), the Vulcan gravel processing plant, various auto dismantling operations, and other industrial and commercial properties. Pacifica Hospital of the Valley is located across San Fernando Road from the Valley Steam Plant. The Hansen Spreading Grounds (operated by Los Angeles County Public Works, Flood Control Division) are located immediately northwest of the Valley Steam Plant. The Hansen Dam Golf Course, owned by the City of Los Angeles, is located at the north end of the watershed.



Key to Features

- Shallow Zone Contamination Plumes
- Proposed Spreading Basins
- Operable Units
- Project Site
- Location at Tujunga Wellfields

N

0 1 2 Miles

Document: TujungaPlume.mxd
Map Source: United States Environmental Protection Agency - 2006 San Fernando Valley Basin Groundwater Monitoring Program
Date: February 5, 2010

San Fernando Valley
TCE, PCE, NO_3 Contamination in Shallow Zone in 2006

MWH

Figure 4

1.4.2 Existing On-Site Land Uses

The 160-acre project site (at the intersection of Roscoe Boulevard and Sheldon Street and under the I-5 / SR-170 freeway interchange) is currently developed as 160 acres of ponds and associated facilities such as intake structures and pumps, and operated by Los Angeles County as a spreading ground for the infiltration of captured stormwater from Tujunga and Pacoima Washes into the San Fernando groundwater basin. Access to on-site facilities is through a gated driveway off Arleta Avenue. On-site facilities are a small office building, water storage tank, water pumping station, ammonization station, and various intake and water conveyance structures, in addition to power line right-of-ways for Southern California Edison and LADWP. Access within the site is via unpaved roads or the tops of existing berms. Adjacent to the site along the flood control channel are the 12 wells that form the Tujunga Wellfield. These wells were originally installed to increase production from the San Fernando groundwater basin, but were later taken off-line and studies are being conducted to determine what treatment would be necessary to resume production.

1.5 PROJECT DESCRIPTION

The proposed enhancement project for TSG will alter the current intake facility to capture low flows; create a treatment area for the low flows; install two new intake facilities to capture high flows from the Tujunga Wash and Pacoima Wash Diversion Channels; install devices to prevent widespread distribution of trash within the TSG; reactivate, deepen and/or combine basins to increase the facility's storage and recharge capacity; install new inter-basin flow controls; and install telemetry on all diversion facilities. **Figure 3** shows proposed facilities. Modeling conducted by LADWP indicates that an average of 7,980 acre-feet per year will be captured and recharged with the enhanced facility.

The operation of the existing intake structure will be altered to allow only low flow through the intake and a trash rack will be installed. Immediately northeast of the I-5 / SR-170 interchange, an underground pipe conveys diverted stormwater to the spreading basins. Under the proposed project, this area will be improved to provide treatment prior to recharging the groundwater. Treated stormwater will pass under I-5 using the existing conveyance pipe and will be released into the reactivated basins located southeast of the freeway interchange. Water treatment will include attenuation to allow for settling of larger solids.

Two new intake structures will be built to take high flows from both the Tujunga and Pacoima Wash watersheds. The first new intake facility (high flow intake) will be located immediately southwest of the freeway interchange and will divert 250 cfs into the upper portion of the TSG. The second new intake facility will be located immediately downstream of the confluence of the Tujunga Wash and Pacoima Wash Diversion Channels and will divert a maximum of 200 cfs into the lower portion of the TSG from either channel.

The existing TSG Basins A through N and Q through T shown on **Figure 2** will be graded to accept water from either intake system. The basins will be interconnected using weir spillways and bypass gates. Basin A, the southernmost basin, will act as an overflow, or bypass basin, and will have a small sump pump to drain the basins, if necessary. In addition, Basin A will be expanded to the northwest to increase recharge and storage capacity and allow for a new emergency overflow facility to link with the existing overflow facility.

Basins O and P, which are the dormant, uppermost basins, located between I-5 and SR-170, will be reactivated, deepened, and able to accept low flows throughout the dry season, and may be able to accept flows during the wet season, depending on operational limitations. All basins west of SR-170 (Basins A through N and Q through T) will be deepened, and some combined, increasing storage and recharge capacity.

Inter-basin flashboard structures (which connect and allow water to flow between basins) will be replaced with modernized weir structures. All new diversion facilities will be automated; operation will be managed remotely from LADWP's on-site facility. Maintenance activities will include periodic vegetation removal and sediment removal from the base of the basins. Approximate final basin capacities are shown in **Table 1**.

Table 1
Tujunga Spreading Grounds Proposed Basin Capacities

Basin	Cubic Yards	Acre-Feet
By-pass	89,521	55.49
1	568,558	352.41
2	367,374	227.71
3	207,857	128.84
4	175,998	109.09
5	115,854	71.81
6	21,246	13.17
7	20,973	13.00
8	96,800	60.00
9	5,808	3.60

Additional Community Enhancements

Depending on the availability of space on site, compatibility with the project, and funding opportunities, recreational enhancements may be added to the facility. Potential compatible uses for the property are walking trails, outdoor classrooms and associated educational activities, and native habitat enhancement.

1.5.1 Alternatives

In addition to No Project, different options for the disposal of approximately 1.3 million cubic yards of excess soil to be generated by the project will be evaluated in the EIR. The potential for environmental impacts from removal of soil from the site is anticipated to be affected by the distance from the TSG site to the disposal location. At this time, it is estimated that soil disposal activities may occur for more than 1 year. Alternatives include soil disposal at local rock and asphalt facilities for onsite improvements and disposal at area landfills. Specific disposal locations, haul routes and access points for disposal will be identified and described in further detail in the EIR.

1.5.2 Construction Activities

Approximately 10 acres would be graded per day and active grading areas and unpaved roads would be watered a minimum of three times per day to reduce migration of dust from the project area. Haul trucks would be used to remove excess soil from the site. Construction equipment required for the project would include: pick-up trucks, bulldozers, excavators, graders, dump trucks and water trucks. Construction personnel would include a foremen, equipment operators, truck drivers and laborers.

1.6 OTHER PUBLIC AGENCIES WHOSE REVIEW AND/OR APPROVAL MAY BE REQUIRED

The following permits or approvals are potentially relevant to the proposed project (**Table 2**).

Table 2
Permits or Approvals Potentially Required

Agency	Potentially Required Permit or Approval
U.S. Army Corps of Engineers	Clean Water Act (CWA) 404 Permit, as applicable
California Department of Fish and Game	Streambed Alteration Agreement, as applicable
California Department of Transportation, District 7	Encroachment Permit for installation of conveyance facilities under State Highways Permit for use of heavy equipment on state highways Review of Traffic Management Plan
State Water Resources Control Board	General NPDES Stormwater Permit for Construction Activity
California Regional Water Quality Control Board, Los Angeles Region	Section 401 Water Quality Certification, as applicable
South Coast Air Quality Management District (SCAQMD)	Compliance with Rule 403
City of Los Angeles, Department of Recreation and Parks	Approval of design of new recreation features
City of Los Angeles Department of Transportation (LADOT)	Review of Traffic Management Plan

Section 2
Environmental Analysis

2.1 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

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

☐ Aesthetics	☐ Geology and Soils	☒ Noise
☐ Agricultural Resources	☒ Hazards and Hazardous Materials	☐ Population and Housing
☒ Air Quality	☐ Hydrology and Water Quality	☐ Public Services
☐ Biological Resources	☐ Land Use and Planning	☐ Recreation
☐ Cultural Resources	☐ Mineral Resources	☒ Transportation and Traffic
	☒ Greenhouse Gas Emissions	☐ Utilities and Service Systems

2.2 AGENCY DETERMINATION

On the basis of this initial evaluation:

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

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

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

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

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

Charles C. Holloway — **Signature**

2/9/2012 — **Date**

Charles C. Holloway — **Printed Name**

Manager of Environmental Assessment — **Title**

2.3 ENVIRONMENTAL CHECKLIST

2.3.1 Aesthetics

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

Discussion:

a) **No Impact** The project site is located in an urbanized area, and no significant visual resources (City of Los Angeles General Plan, 2001) exist that would be negatively impacted by project implementation. The project does not involve any structures of significant size that would have the potential to obstruct scenic vistas. Therefore, no impacts will occur.

b) **No Impact.** No designated or nominated State scenic highways are located in the vicinity of the project site (Caltrans, 2009) and therefore the project will not affect scenic views from any scenic highways. In addition, the project will not add new structures taller than existing facilities and will therefore not have the potential to obstruct views from roadways. Because there are no rock outcroppings or historic buildings on the project site and tree cover is negligible, none will be impacted; therefore there will be no impact on scenic resources.

c) **Less Than Significant Impact**. The project site is located in an urban area and is currently developed and operated as a spreading ground with the project providing enhancements to existing operations. During construction of the project, grading, soil transport and other construction activities may degrade the visual character and quality of the project site and neighboring access roads. Once the construction is completed, the project may improve the visual character and quality of the TSG project site and its surroundings through the potential addition of community enhancements. Because the negative aesthetic impacts associated with project construction are temporary and are in keeping with the aesthetic nature of the existing traffic patterns (for the gravel and landfill operations in the surrounding area), the impact will be less than significant.

d) **Less Than Significant Impact**. The project may involve installation of new sources of light for illuminating walking trails created as a part of the potential community enhancements included in the project. This lighting would be shielded away from adjacent properties. Also, it is likely that the trails would be closed at night. The new lighting is not expected to result in significant impacts to day or nighttime views. The project will not require materials that will add a new source of glare to the project area. Construction activities are not anticipated to require additional lighting because activities will normally be scheduled to take place during daylight hours. However, if the construction schedule is such that nighttime activities are necessary, temporary lighting may be required. If necessary, additional lighting will be temporary and short-term and shielded away from adjacent properties. Project related impacts on light and glare are therefore less than significant.

2.3.2 Agricultural and Forest Resources

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

Discussion:

a), b), c), d), e) **No Impact**. The proposed project site is located in an urbanized area. The project site and potential soil disposal locations are not occupied by existing Farmland, Timberland or forest land as defined by the California Resources Agency (Public Resources Code, Sections 10213, 12220(g) and 4526), and are not located in the vicinity of existing agricultural operations. There is no agricultural zoning in the vicinity (City of Los Angeles Zoning Code effective December 7, 2009). In addition, the project does not

contain any timberland zoned for Timberland Production as defined by Government Code section 51104(g). Moreover, the project actions would be limited to the existing TSG site, which has no agriculture, forest or timber resources. Similarly, none of the soil disposal locations being evaluated has these types of lands. Therefore, the project will not result in conversion of Farmland, timberland or forest land to other uses. Therefore, no impacts will occur.

2.3.3 Air Quality

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

Discussion:

a), b), c), d) and e) **Potentially Significant Impact**. Construction of the project will involve the use of heavy equipment that will generate exhaust pollutants and may create nuisance odors from idling equipment. Due to the nature of the project, the deepening and enhancement of the existing spreading grounds, a significant volume of excess material may be generated. This excess material will be moved off-site by truck for disposal. Due to the large volume of material to be moved (approximately 1.3 million cubic yards), the limited capacity of each truck and the limited ability of trucks to enter and exit the site, it is currently estimated that transport of this material may occur for more than 1 year. Because truck traffic in and around the site could continue for more than a year, air pollutant emissions may be potentially significant. Therefore, air quality impacts will be further evaluated in the EIR.

2.3.4 Biological Resources

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

Discussion:

While the project site was highly disturbed during the construction of the existing spreading basins, and surrounding areas are fully developed as residential, commercial and transit routes, some ability to support habitat may remain or have developed since the end of previous construction efforts. A biological constraints survey was therefore conducted in 2009 (**Appendix A**). Sources used to identify significant biological resources that may be present at the site included special status plant and wildlife species lists published by the U.S. Fish and Wildlife Service (USFWS), the California Department of Fish and Game's (CDFG) California Natural Diversity Database (CDFG, 2009), and the California Native Plant Society's (CNPS) Inventory of Rare and Endangered Vascular Plants of California (CNPS, 2009). In addition, other biological studies conducted in the vicinity of the site were reviewed. All plant and wildlife species observed were recorded in field notes.

a) **No Impact**. Due to regular grounds maintenance, the site supports minimal vegetation; on-site plants are primarily non-native weedy (ruderal) species. Isolated native plants or small patches of native species are present in a few areas, generally limited to the basin banks. Basins 6 and 8 were the only areas on the site with sufficient native vegetation for the areas to be mapped separately from the disturbed areas. Of the 17 special status plant species recorded for the project vicinity, four species were determined to have the potential to occur in Basins 6 and 8: federally-listed Endangered Braunton's milk-vetch (*Astragalus brauntonii*), federally- and State-listed Endangered Nevin's barberry (*Berberis nevinii*), federally-listed Candidate and State-listed Endangered San Fernando Valley spineflower (*Chorizanthe parryi* var. *fernandina*), and federally and State-listed Endangered slender-horned spineflower (*Dodecahema leptoceras*). Therefore, focused botanical surveys were conducted in April 2010 (BonTerra Consulting, 2010) consistent with current CDFG protocols. During the course of the survey no special status plant species were observed.

Due to the disturbed nature of the site and its isolation from natural open space areas, wildlife use of the site is limited to birds and other highly mobile species, and those species adapted to urban environments. The open water habitats on the site are expected to attract a relatively large number and diversity of water birds, especially during migration and the winter season. Of the 26 special status wildlife species recorded for the project vicinity, six are State- or federally-listed as Threatened and/or Endangered: Santa Ana sucker (*Catostomus santaanae*), Sierra Madre yellow-legged frog (*Rana muscosa*), western yellow-billed cuckoo (*Coccyzus americanus occidentalis*), southwestern willow flycatcher (*Empidonax traillii extimus*), least Bell's vireo (*Vireo bellii pusillus*), and coastal California gnatcatcher (*Polioptila californica californica*). The site does not provide suitable habitat for the Santa Ana sucker and Sierra Madre yellow-legged frogs since they are found in stream systems with natural habitats; therefore, they are not expected to occur. The western yellow billed cuckoo, southwestern willow flycatcher, and least Bell's vireo nest in riparian habitats, which are lacking on the site; therefore, the project site does not provide suitable habitat for these three bird species and they are not expected to occur. Coastal California gnatcatcher occupies alluvial sage scrub and coastal sage scrub habitats; however, the amount of potentially suitable vegetation on the site is not considered substantial enough to support this species. Since there are no open space areas in the immediate vicinity of the site that could provide potentially suitable habitat, the limited amount of alluvial sage scrub and coastal sage scrub habitats on the site is not sufficient to support the coastal California gnatcatcher and it is not expected to occur.

Since special status plant species are not present on the project site and since sufficient suitable habitat for special status wildlife species is not present, the proposed project will not impact special status species.

b) and c) **Less Than Significant Impact**. The project site includes isolated areas of riparian vegetation. Additionally, alluvial sage scrub and California buckwheat scrub occur in basins 6 and 8. Due to the isolation of the TSG from natural open space areas (it is surrounded by urban development), and limited extent of these vegetation types, temporary disturbance during construction will not constitute a substantial impact to riparian habitat or other sensitive natural community identified by CDFG and/or USFWS. Consultation with applicable agencies will be conducted for the installation and modification of the intake structures in Tujunga and Pacoima Washes. The intake structures will be installed

in existing concrete channels where no vegetation currently exists. Therefore, the impact is less than significant.

d) **Less Than Significant Impact**. Maintenance activities including vegetation control are on-going at the project site. The proposed enhancement project will temporarily increase activity and equipment use at the site, but the disturbance to on-site wildlife (noise and vehicle traffic) will be of a similar nature. The project will not interfere with migration patterns of any fish species as the ponds are isolated from rivers or streams, contain water only periodically, and currently are not used by migrating fish. Non-native western mosquito fish (*Gambusia affinis*), released to control mosquitoes, is the only fish species expected to occur at the project site. Bird use of the site during migration is expected. Temporary effects on bird migration patterns may occur during the construction phase of the project. Since the impact is temporary and since construction activity will involve a few basins at a time (and thus not disturb the entire site at once), the impact is therefore less than significant. Project operation will increase the volume of water percolated at the site, thus expanding open water habitat for migratory birds; the effect is beneficial.

e) **No Impact**. The project will not conflict with the City's Native Tree Protection Ordinance (City of Los Angeles, 2006). The Los Angeles Municipal Code (Section 1.Subdivision 12 of Subsection A of Section 12.21; Ordinance 177404) provides for protection of native trees of four types: (1) oaks other than Scrub Oak (*Quercus dumosa*), (2) Southern California Black Walnut (*Juglans californica* var. *californica*), (3) Western Sycamore (*Platanus racemosa*), and (4) California Bay (*Umbellularia californica*). Based on the results of the biological constraints survey (Appendix A) conducted for the project, no species protected under the City's Native Tree Protection Ordinance occur on the project site. Therefore, since the project would not conflict with any local policies or ordinances protecting biological resources, no impact would occur.

f) **No Impact**. The project site does not fall within the boundaries of any Habitat Conservation Plan, Significant Ecological Area (Appendix A) or Natural Community Conservation Plan (CDFG, 2009), so there will be no impact.

2.3.5 Cultural Resources

Issues and Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

Discussion:

a) **No Impact**. A Cultural Resources Records Search and Field Reconnaissance were conducted by BonTerra Consulting (March 2009) (**Appendix B**). Those studies concluded that there were no historic resources in the project area and the nearest historic resource, in the Panorama City Historic District, was 1 mile west of the project area. Since there are no historic resources within or adjacent to the project area, there will be no impact.

b), c) and d) **Less than Significant Impact with Mitigation Incorporated**. An archaeological/historic records search conducted on February 2, 2009 at the South Central Coastal Information Center (SCCIC), California State University, Fullerton indicated that no cultural resources sites have been previously recorded and/or evaluated on the project site. The Panorama City Historic District is recorded approximately 1 mile west of the project area.

A paleontological records search requested from the Los Angeles County Museum Vertebrate Paleontology Department indicated that no vertebrate fossil localities are known on the project area, but there are fossil localities nearby from the same or similar sedimentary units that occur in the project area. The entire project area is underlain by surficial deposits of younger Quaternary Alluvium, derived primarily as fluvial deposits from Tujunga Wash that flows through the project area. These units do not typically contain significant vertebrate fossils. But younger alluvial units are typically underlain by older Quaternary deposits that may contain significant fossils.

The project site was previously disturbed during excavation, grading, and construction of the existing spreading grounds. The project site does not include any known cemeteries. Construction of the proposed project will involve up to an additional 18 feet of excavation and therefore may have an impact on archaeological resources, paleontological resources, and/or human remains if any exist in previously unimpacted deposits below the existing basins, although a records search conducted did not reveal any known resources in the project area. Since there is the possibility of disturbing resources in previously unimpacted deposits, construction personnel will receive cultural resources training by a qualified archaeologist to recognize signs of potential archaeological and paleontological resources. Any resources encountered during excavation will be treated appropriately under the guidance of a qualified archaeologist/paleontologist; therefore, there will be a less than significant impact with incorporation of mitigation measures CR-1 and CR-2.

Mitigation Measures

CR-1: Construction personnel and staff shall be given training by a qualified archaeologist on the identification of possible archaeological and paleontological resources that may be present in the area. In the event potential archaeological or paleontological resources are encountered during excavation, work in the vicinity of the discovery shall halt until appropriate treatment of the resource is determined by a qualified archaeologist/paleontologist in accordance with the provisions of CEQA Section 15064.5.

CR-2: If human remains are encountered during project activities, work within 25 feet of the discovery shall be redirected and the County Coroner notified immediately. At the same time, an archaeologist shall be contacted to assess the situation and consult with

agencies as appropriate. Project personnel shall not collect or move any human remains and associated materials. If the human remains are of Native American origin, the Coroner must notify the Native American Heritage Commission within 24 hours of this identification. The Native American Heritage Commission will identify a Most Likely Descendant to inspect the site and provide recommendations for the proper treatment of the remains and associated grave goods.

2.3.6 Geology and Soils

Issues and Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994) creating substantial risks to life or property?	☐	☐	☐	☒
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems, where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒

Discussion:

a)-i) **Less Than Significant Impact**. According to the California Geological Survey (2003) the project site is located outside of areas identified as Alquist-Priolo Earthquake Fault Zones. However, there are many active faults in the area, the closest of which is the Verdugo Fault (located 1.5 miles south from the project site). The project does not involve

construction of habitable structures or other large aboveground structures and therefore will not result in a substantial increase in the risk of damage from fault rupture. Damage to basin berms or other on-site facilities from seismic activity would be repaired as necessary. Therefore, the impact will be less than significant.

a)-ii) **Less Than Significant Impact**. Located in a seismically active area, the project site would be subject to ground shaking and potential damage during a seismic event. However, the project does not involve construction of habitable structures or other large aboveground structures and therefore would not result in a substantial increase in the risk of damage from seismic ground shaking. The construction and installation activities for the project would conform, as applicable, to the latest versions of the California Building Code, the Uniform Building Code, the City of Los Angeles Building Code and other applicable federal, state and local codes. Adherence to these regulations is required for the project and would reduce potential seismic impacts. Therefore, the impact will be less than significant.

a)-iii) **Less Than Significant Impact**. Liquefaction refers to loose, saturated sand or gravel deposits that lose their load supporting capability when subjected to intense shaking. The soils underlying the TSG area consist primarily of sands and gravels with intermittent layers and lenses of clays and silts (Geosyntec, 2009). Review of the State of California Seismic Hazard Zones Map for the Van Nuys Quadrangle (California Department of Conservation, 2009) indicates none of the project site is located in an area considered susceptible to liquefaction. In addition, the historic groundwater level is approximately 200 feet below ground surface (LADWP internal communication, 2008). However, recharge of additional stormwater in the basins will saturate soils below the TSG intermittently when basins are full. However, since the project site and surrounding area are not located in an area considered susceptible to liquefaction, the impact is less than significant.

a)-iv) **No Impact**. The State of California Seismic Hazard Zones Map for the Van Nuys Quadrangle (California Department of Conservation, 2009) indicates that the project site is not in an area susceptible to earthquake-induced landslides; therefore, there will be no impact.

b) **Less Than Significant Impact**. During construction of the project, on-site soils would be temporarily prone to erosion during the excavation and grading phase, especially during heavy rains. After the construction of the project is completed, project site surfaces would not be subject to substantial erosion or loss of topsoil because unpaved areas would be compacted to ensure stability for project uses. Therefore, project-related effects on soil erosion would be limited to temporary construction impacts. Standard erosion control measures will be defined in the Construction Stormwater Pollution Prevention Plan (SWPPP) prepared for the project in compliance with the General NPDES Stormwater Permit for Construction Activity. Therefore, the impact will be less than significant.

c) **Less Than Significant Impact**. As discussed above in items a)-iii) and a)-iv), although the proposed project site is located in a seismically active area, the site is not known for unstable soils related to liquefaction and/or landslides nor will the project make the area more unstable. Therefore, the impact will be less than significant.

d) **No Impact**. The proposed project involves continuation of the existing activity of infiltration of stormwater into the ground for groundwater recharge. To date, no effects from expansive soils have been reported. In addition, the project does not involve construction of habitable structures or other large aboveground structures and therefore is not expected to result in a substantial increase in risk to life or property due to expansive soils. Therefore, there will be no impact.

e) **No Impact**. The project site is served by a public sewer system. No septic tanks or alternative wastewater disposal systems will be required for the project. Therefore, no impacts will occur.

2.3.7 Greenhouse Gas Emissions

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

Discussion:

a) and b) **Potentially Significant Impact**. Because the project involves a significant amount of trucking of material from the TSG site for disposal, a process that could take more than 1 year, and will involve diesel-fueled trucks, the project could generate a significant amount of greenhouse gases that may affect the environment or be in conflict with a policy, plan or regulation aimed at reducing greenhouse gas emissions. Once completed, the spreading basins would not emit greenhouse gases, and emissions from maintenance vehicles would be minor. Because of the potential for production of significant amounts of greenhouse gases during construction, this effect is potentially significant and will be evaluated in the EIR. The EIR will include a brief evaluation of impacts to global climate change due to emissions of greenhouse gases from construction equipment and trucks transporting materials. The analysis will be conducted in accordance with the recommendations set forth by the California Office of Planning and Research, the SCAQMD, and guidance from the California Air Pollution Control Officers' Association (CAPCOA) on inclusion of greenhouse gas evaluations in CEQA documents.

2.3.8 Hazards and Hazardous Materials

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

Discussion:

a), b), and c) **Less Than Significant Impact**. The proposed project will not cause or contribute to a change in hazardous material transport or use in the project area and the nearest existing school is more than one-quarter mile from the project site. There are no known schools proposed within one-quarter mile of the project site. No hazardous chemicals will be generated by the project. Construction activities will require the use of hazardous substances, such as fuels, oils and lubricants. Improper use or storage of these materials could result in leaks or spills, and could contaminate runoff. However, best management practices (BMPs) will be implemented during construction as defined in the

SWPPP prepared for the project in compliance with the General NPDES Stormwater Permit for Construction Activity (Order 2009-0009-DWQ). The contractor will be required to implement temporary BMPs to prevent the migration of hazardous materials from the site in contaminated runoff during construction and to clean up any spills. **Table 3** provides a summary of potential construction BMPs. Therefore, impacts relative to construction-related hazardous materials will be less than significant.

Table 3
Summary of Potential Stormwater BMPs

Best Management Practices for the Protection of Stormwater Quality During Construction
Housekeeping Measures • Conduct an inventory of products used or expected to be used • Cover and/or berm loose stockpiled construction materials • Store chemicals in watertight containers
Employee Training • Brief staff on the importance of preventing stormwater pollution • Have staff review SWPPP • Conduct refresher training during the wet season, if relevant • Document training
Erosion and Sediment Controls • Establish and maintain effective perimeter control • Stabilize construction entrances and exits to control sediment – inspect ingress and egress points daily, and maintain as necessary • Control dust during earthwork • Place sandbags or other barriers to direct stormwater flow to suitable basins
Spill Prevention and Control • Inspect construction equipment for leaking • Use drip pans until equipment can be repaired • Cleanup spills immediately – remove adsorbent promptly • Notify the proper entities in the event of a spill
Concrete Truck Washing Waste • Provide containment for capture of wash water • Maintain containment area
Hazardous Waters Management and Disposal • Store hazardous wastes (including fuels) in covered, labeled containers
Materials Handling and Storage • Establish a designated area for hazardous materials (including fuels) • Berm, cover, and/or contain the storage area as necessary to prevent materials from leaking or spilling • Store the minimum volume of hazardous materials necessary for the work
Vehicle and Equipment Maintenance, Repair, and Storage • Inspect vehicles and equipment regularly • Conduct maintenance as necessary • Designate areas for storage – where fluids can be captured and disposed of properly
Scheduling • Avoid work during storm events • Stabilize work areas prior to predicted storm events

d) **Less Than Significant Impact**. Section 65962.5 of the California Government Code requires Department of Toxic Substances Control to compile and update a list of hazardous materials sites also known as the "Cortese List." The sites on the Cortese List are designated by the State Water Resources Control Board, the Integrated Waste Management Board, and the Department of Toxic Substances Control.

A records search of relevant federal, state, and local environmental regulatory databases, including the Cortese List, was conducted for the Project site by Environmental Data Resources, Inc. (EDR, 2009). The records search meets the requirements of the American Society for Testing and Materials (ASTM) Standard Practice for Environmental Site Assessments. Within a 1-mile radius of the approximate center of the project site, 142 sites listed on 29 hazardous materials databases were identified. Of those, eight sites were located in close proximity to the proposed construction area (**Table 4).**

- Sites 1, 2, and 3 are listed on the databases as small or large quantity generators of hazardous materials with no violations found. In addition, Site 4 is listed as a transporter of hazardous waste with no violations found. With a lack of violations and no recent inclusion on a list of contaminated sites, impacts to Sites 1, 2, 3, and 4 relative to potential groundwater or soil contamination will be less than significant.

Table 4
Summary of Potential Hazardous Materials Sites
in Close Proximity to the Project

Site Name / Address		Database	Status
1	Tujunga Wells / LADWP 8801 Arleta Ave.	RCRA-LQG, FINDS, HAZNET	Large quantity generator; no violations found
2	Ogden Power Pacific Sheldon 12730 Sheldon St.	RCRA-SQG, FINDS	Small quantity generator; no violations found
3	Fischer Trucking 9100 Laurel Canyon Blvd.	RCRA-SQG, FINDS	Small quantity generator; no violations found
4	P Raymundo Trucking 9134 Morehart Ave.	FINDS, RCRA-NonGen	Transports hazardous waste; no violations found
5	San Fernando Valley Area (Area 3) Glorietta Wellfield Area	CERCLIS, FINDS, NPL, Cortese, Delisted NPL, ROD, US ENG CONTROLS, ENVIROSTOR, HIST Cal-Sites	Delisted from NPL in 2004; EPA continues to monitor four times per year
6	Shell Service Station/ Roscoe Shell Market 12858 Roscoe Blvd.	HAZNET, Cortese, HIST UST, LUST, CA FID UST, UST, SWEEPS UST, RCRA-SQG, FINDS	Leaking UST; contaminated soil; case closed in 2001 and open for verification monitoring as of 2008. Small quantity generator; no violations found. Historical UST.
7	Helo's Exxon 12904 Roscoe Blvd.	HAZNET, CA FID UST, Cortese, LUST, UST, SWEEPS UST, SWRCY	Leaking UST; contaminated soil; case closed. Inactive recycler.
8	Mobil Service Station 12800 Roscoe Blvd.	CA FID UST, HIST UST	Historical UST

Source: EDR 2009
Notes:
CA FID UST - California Facility Inventory Database
FINDS – Facility Index System
SWEEPS - Statewide Environmental Evaluation and Planning System
HAZNET - Data extracted from hazardous waste manifests received annually by DTSC
UST - Underground Storage Tank Database
SWRCY - Listing of recycling facilities in California
RCRA-LQG - Resource Conservation and Recovery Act Large Quantity Generators
RCRA-SQG - Resource Conservation and Recovery Act Small Quantity Generators
FINDS - Facility Index System
HIST UST - Historical UST Registered Database

- Site 5 was listed on databases indicating previous groundwater contamination. Site 5 encompasses San Fernando Valley (SFV) Area 3 under the U.S. Environmental Protection Agency's (EPA) Superfund program that identifies, investigates and cleans up uncontrolled or abandoned hazardous waste sites throughout the U.S. In 1983, pursuant to California Assembly Bill 1803, wells within the SFV were sampled and results of the sampling indicated concentrations of volatile organic compounds (VOCs) in excess of Safe Drinking Water Act maximum contaminant levels (MCL) in several water supply production wells in the basin. In 1986, the State of California requested that the EPA designate four areas within the SFV as National Priorities List (NPL) sites, including Area 3. EPA subsequently entered into a cooperative agreement with LADWP to conduct a Remedial Investigation (RI) of the SFV, which was completed in 1992. EPA deleted this site from the NPL list on October 12, 2004, and has since continued to conduct groundwater sampling in the Verdugo Basin (located adjacent to the San Fernando basin) four times a year (EDR, 2009; EPA, 2008).

- Site 6 is listed as a small quantity generator with no violations found. In addition, Site 6 is listed on databases indicating soil contamination by gasoline. The site underwent remediation (abatement method not recorded) and was closed in 2001; closure of the case was confirmed by the RWQCB-LA Region's Underground Storage Tank (UST) division on December 17, 2009 (Y. Rong, pers. comm., 2009). The EDR records search indicated that the site is undergoing verification monitoring as of January 2008. The northern property boundary of Site 6 is located approximately 185 feet south of the southernmost portion of Basin 4, and the elevation of Site 6 is approximately 5 feet lower than Basin 4. Therefore, given the distance between Site 6 and Basin 4 as well as the topography of the immediate area, it is not likely that contaminated soil related to Site 6 would be encountered during project construction. Therefore, impacts relative to potential groundwater or soil contamination will be less than significant.

- Site 7 was also listed as having previous soil contamination by gasoline; however, the site underwent remediation (abatement method not recorded) and the case was closed in 2001. Site 7 is also listed as an inactive recycling facility. Therefore, since the site was remediated and since the site no longer functions as an active recycler, potential impacts involving groundwater or soil contamination will be less than significant.

- Site 8 is listed as an historical UST. This site is not included on a list of contaminated sites and, accordingly, is not considered to pose a threat to the soil or groundwater beneath the project site. Therefore, impacts related to Site 8 will be less than significant.

Given the above analysis, impacts related to hazardous materials in the soil or groundwater beneath the site will be less than significant.

e) **Less Than Significant Impact**. The Whiteman Airpark is located over 2 miles north and the Burbank-Glendale-Pasadena Airport is approximately 2.5 miles southeast of the project area. However, the project does not involve construction of housing or creation of long-term employment and therefore would not result in a permanent placement of people near these airports. Furthermore, the project does not involve structures of significant height that might interfere with the operation of the airports or air traffic. Therefore, the project would not result in exposure of people residing or working in the project area to safety hazards associated with the airports. Therefore, this impact will be less than significant.

Bird Air Strike Hazard (BASH) is a consideration for all airports. The Burbank-Glendale-Pasadena Airport reported 16 bird strikes in the first half of 2009 (LA Daily News, 2010), and 218 bird air strikes between 1990 and 2008 (City Data, 2009a). These involved only rock pigeons and unidentified small birds and no damage occurred to planes. Whiteman Airport reported eight bird airstrikes between 1995 and 2005, also involving pigeons and no damage to planes (City Data, 2009b). Bird habitat near airports can potentially increase the BASH. However, no connection to TSG operations was noted in the past relative to BASH. In addition, numbers of pigeons and small birds would not increase at TSG with the project. Large birds such as Canada geese would not be attracted to the ponds because of the small pond size, and the geese do not breed in this part of the valley (M. Blain, pers. comm., 2010). Therefore, implementation of the project is not anticipated to increase hazards to airport operations from BASH. The impact is therefore considered to be less than significant.

f) **No Impact.** The project site is not located within 2 miles of a private airstrip (Thomas Guide, 2009). Therefore, no impacts will occur.

g) **Potentially Significant Impact**. During construction of the project, temporary lane or road closures may be necessary for installation of project facilities and transport of materials. Due to the nature of the project, the deepening and enhancement of the existing spreading grounds, a significant volume of excess soil may be generated. This excess soil will need to be moved off-site by truck for disposal. Due to the large volume of soil to be moved (approximately 1.3 million cubic yards), the limited capacity of each truck and the limited ability of trucks to enter and exit the site, it is estimated that transport of this material could take more than 1 year. Restricted access to properties in the vicinity of the construction site may be more than temporary, and would be addressed by advanced notification of local emergency service providers such as the City of Los Angeles Fire Department, City of Los Angeles Police Department and local ambulance services. The project does not involve structures which would result in long-term or substantial changes in access to any property. The project would not contribute to a significant increase in the potential for hazards within the area. However, depending on the final soil disposal option selected, truck trips related to project construction may occur over 1 year or more. Therefore, project-related impacts on emergency response plans or emergency evacuation plans may be potentially significant. Impacts to emergency response and evacuation will be evaluated in the EIR.

h) **No Impact**. The project site is located within an urban area, and no wildlands are located onsite or in the vicinity. Therefore, no impacts will occur relative to wildland fires.

2.3.9 Hydrology and Water Quality

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

Discussion:

The topography of the project area is characterized by a moderate slope with drainage flowing from north to south. Ground surface elevation ranges from approximately 1,000 feet above mean sea level at Hansen Dam to 800 feet above mean sea level near Roscoe Blvd. Although much of the local area is developed and covered by impervious surfaces, the area is not served by any comprehensive underground stormdrain system. Therefore, stormwater is conveyed on street surfaces, and as a result, moderate to severe flooding occurs in the project area with even light or moderate rainfall. Stormwater leaving the watershed eventually drains to the Los Angeles River.

The project is located within the San Fernando Valley Groundwater Basin (Basin). The Basin, which provides a significant portion of Los Angeles' drinking water, is an unconfined alluvial aquifer. As a result, groundwater quality has been impacted by various industrial activities (**Figure 4**). Since the mid 1980s, the Basin has been subdivided into four discrete Superfund sites for cleanup of VOCs, including trichloroethylene (TCE) and perchloroethylene (PCE), and nitrate (NO_3). EPA is responsible for ongoing cleanup and monitoring activities. The project is expected to have a beneficial effect on the contamination in the basin immediately underneath the project site as the increased recharge of clean water will dilute concentrations of contaminants. The Water Quality Control Plan (Basin Plan) for the Los Angeles Region (LARWQCB 1994) identifies Tujunga Wash as having the potential to support Municipal and Domestic Water Supply, Warm Freshwater Habitat, Cold Freshwater Habitat and Wildlife Habitat beneficial uses as well as supporting Groundwater Recharge and Non-Contact Water Recreation intermittently. The Basin Plan identifies the Pacoima Wash as having the potential to support the beneficial use of Municipal and Domestic Water Supply while currently support the beneficial uses of Groundwater Recharge, Non-contact Water Recreation, Warm Freshwater Habitat, Wildlife Habitat and Rare, Threatened or Endangered Species Habitat. Specific Water Quality Objectives are included in the Basin Plan and this project is consistent with Basin Plan objectives in that it enhances the Groundwater Recharge beneficial use for both the Tujunga and Pacoima Washes.

a) **Less Than Significant Impact**. Operation of the proposed project would not include discharges of waste. The project involves collection, retention, and infiltration of high-quality stormwater that originates from a largely undeveloped watershed in the Angeles National Forest. The project will result in a reduction of stormwater runoff which subsequently becomes polluted from mixing with urban runoff and enters the Los Angeles River, and therefore is expected to have a beneficial impact on surface water quality. Additionally, the project includes stormwater attenuation to improve quality prior to recharge. Standard stormwater management efforts during construction (defined in the construction SWPPP) will address site run-off during construction and construction of the new and modified intake structures will be conducted only during dry conditions. **Table 3** provides a summary of potential construction BMPs. Therefore, the impact on water quality standards or waste discharge requirements will be less than significant.

b) **No Impact**. The project involves collection, retention, and infiltration of approximately 8,000 acre-feet per year (on average) of high quality stormwater that originates from a largely undeveloped watershed in the Angeles National Forest. Long term operation of the

project would enhance groundwater supplies by increasing groundwater recharge. Therefore, the project will have no impact related to groundwater depletion.

c), d), e) **Less Than Significant Impact**. The project involves modification to existing spreading basins which would modify drainage patterns within the boundaries of the project site but would not result in changes in drainage patterns off-site nor would it contribute to additional erosion off-site. Aside from modification of the intake structures in the Tujunga Wash Channel, the project would not alter any stream or river or increase flooding. The project is designed to capture additional stormwater, therefore having the beneficial effect of reducing runoff. Because the project is designed to capture stormwater it will not be a cause of on-site or off-site flooding and may have the beneficial effect of reducing flooding off-site. Therefore, the impact will be less than significant.

f) **Less Than Significant Impact**. Recharge of groundwater in the project area may have an impact on the existing VOCs and nitrate contamination plume in the vicinity of the Tujunga Wellfield operated by LADWP. The Tujunga Wellfield consists of 12 potable water wells located immediately northwest of the recharge facilities. The expected impact of increased stormwater infiltration would be 1) an increase in groundwater elevation and mounded groundwater gradient away from the facilities, and 2) a dilution of the concentration of existing contaminants. Since the soils below the TSG are not contaminated, no increase in contaminant levels in groundwater would occur. Therefore, the project is expected to increase aquifer volume and raise the local groundwater table level. This will be a beneficial effect with respect to groundwater supply and water quality. Therefore, the impact will be less than significant.

g) **No Impact**. The project area is located within the 100-year floodplain of Tujunga Wash (FEMA, 2008). However, the project will place no housing or other habitable structures in a 100-year flood area. Therefore, no impacts will occur.

h) **Less Than Significant Impact**. The project is located within the 100-year floodplain of Tujunga Wash. The project involves modification of existing facilities for the purpose of capturing stormwater runoff. The modifications will be designed to collect, retain, and infiltrate stormwater runoff, and therefore would impede or redirect flood flows in a controlled manner. Therefore, the project is expected to have a beneficial effect with respect to flooding. The impact will be less than significant.

i) and j) **Less Than Significant Impact**. The project area is located approximately 15 miles inland from the Pacific Ocean, and therefore there is no risk of tsunami (seismic sea waves) in the area. No mudflow hazards have been identified for the project area as it is not adjacent to a hillside that could be adversely affected by a rain event. Hansen Dam and Lake are located approximately 3 miles north of the project area. The project area could be subject to inundation in case of failure of Hansen Dam or a seiche at Hansen Lake. This risk would not be different from the current level of risk. In addition, the proposed project does not involve construction of housing or employment centers and therefore would not result in exposure of people or structures to a significant risk from failure of Hansen Dam. Therefore, the impact will be less than significant.

2.3.10 Land Use and Planning

Issues and Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

Discussion:

a) **No Impact.** The project does not involve construction of roads, large structures, or new easements which could disrupt the physical arrangement of an established community or isolate an existing land use. Therefore, no impacts will occur.

b) **No Impact**. The project would not conflict with any applicable land use plan, policy, or regulation, including the General Plan and the Planning and Zoning Code of the City of Los Angeles because the area is designated Open Space in City Zoning and planned use is the same as existing (City of Los Angeles Zoning Code effective December 7, 2009). Therefore, no impacts will occur.

c) **No Impact**. The project site is located in an urban area and is currently operated as a stormwater spreading ground surrounded by residential and commercial uses. No habitat conservation plans or natural community conservation plans have been implemented or are planned for the project area. Therefore, no impacts will occur.

2.3.11 Mineral Resources

Issues and Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☒

Discussion:

a) and b) **No Impact.** The project involves enhancements to existing developed spreading grounds that are currently being used for infiltration of stormwater. A review of USGS mineral data for the Van Nuys Quadrangle (USGS, 2010) revealed no known mineral resources on the project site. Because the project results in a continuation of existing operations and because there are no resources present, the project will not result in the loss of any mineral resources of local or regional importance. Therefore, the project will have no impact.

2.3.12 Noise

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

e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f)	For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Discussion:

a), c), d) **Potentially Significant Impact**. Construction of the project would result in noise generated by equipment and by vehicles entering and leaving the project site to carry off excess soil and for on-site earthwork. Due to the nature of the project, the deepening and enhancement of the existing spreading grounds, a significant volume of excess material may be generated. This excess material will be moved off-site by truck for disposal. Due to the large volume of material to be moved (approximately 1.3 million cubic yards), the limited capacity of each truck and the limited ability of trucks to enter and exit the site, it is estimated that transport of this material could take more than 1 year. Once complete, the project will have no effect on existing noise levels in the project vicinity. Because the noise generated by excavation and construction activities could continue for more than a year, the impacts could be potentially significant. Therefore, noise effects will be evaluated in the EIR.

b) **Less than Significant Impact.** Groundborne vibration and noise would be created during project construction by on-site earthwork and by the movement of soil hauling trucks. Since the project site is operated for groundwater recharge, on-site earthwork would not create excessive vibration experienced by a substantial number of people. Similarly, the soil hauling trucks would not create groundborne vibration greater than that created by existing equipment and vehicles on project area streets. Therefore, the impact will be less than significant.

e) and f) **No Impact.** The proposed project is not located within an airport land use plan or within 2 miles of a public airport or private airstrip. In addition, the project does not include new habitable structures and would involve no change in land use. Therefore, there will be no impact.

2.3.13 Population and Housing

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

Discussion:

a) **No Impac**t. The proposed project does not involve construction of new homes or businesses and does not include construction of new, potentially growth-inducing, infrastructure such as roads or potable water or wastewater systems. While the project will capture stormwater for the purpose of supplementing groundwater supplies, there will be no additional potable water distribution systems built as part of or as a result of this project. Therefore, the project will not, either directly or indirectly, induce substantial population growth in the area. Therefore, no impacts will occur.

b) **No Impac**t. No housing would be displaced by the proposed project. Therefore, no impacts will occur.

c) **No Impac**t. No individuals would be displaced by the proposed project. Therefore, no impacts will occur.

2.3.14 Public Services

Issues and Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i) Fire protection?	☐	☐	☐	☒
ii) Police protection?	☐	☐	☒	☐
iii) Schools?	☐	☐	☐	☒
iv) Parks?	☐	☐	☐	☒
v) Other public facilities?	☐	☐	☐	☒

Discussion:

a)-i) **No Impact.** Fire protection and emergency medical services for the project area are provided by the Los Angeles Fire Department (LAFD). The project area is served by LAFD Fire Station (FS) 81 (14355 Arminty Street, Panorama City). The project does not involve construction of housing or other structures that would result in a substantial increase in the demand for fire protection or emergency medical services. The project will not substantially increase fire hazards in the area. Therefore, the project is expected to be adequately served by existing resources of LAFD, and would not require new or physically altered facilities for fire protection or emergency medical services. Therefore, no impacts will occur.

a)-ii) **Less Than Significant Impact**. Police protection for the project area is provided by the Los Angeles Police Department (LAPD) Foothill Community Police Station (12760 Osborne Street, Pacoima). The project would not result in an increase in residential, commercial, or industrial area but may include the addition of recreational features. Additional recreation at the project site would increase the use of the site by the public but is not expected to result in a significant increase in demand for security or calls for police services. Current and future site security measures include gated and controlled access as well as periodic patrols by LADWP security personnel. Therefore, the project is expected to be adequately served by existing resources of LAPD, and would not require new or physically altered facilities for police protection. Therefore, project-related impacts on police services will be less than significant.

a)-iii) **No Impact**. The project area is located in District B of the Los Angeles Unified School District (LAUSD). The project would not result in an increase in residential

area, and will not result in an increased demand on existing schools or require new or physically altered facilities for the school system. Therefore, no impacts will occur.

a)-iv) **No Impact**. The project may include construction of new recreational facilities such as trails. No existing parks would be affected and no parks would face an increase in use during construction or operation of the project. Therefore, no impacts will occur.

a)-v) **No Impact**. The project does not involve or result in construction of housing or employment centers and would not induce population growth. No public facilities or services would be affected by the construction or operation of the project. Therefore, no impacts will occur.

2.3.15 Recreation

Issues and Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☒	☐

Discussion:

a) **No Impact**. The project may include construction of new recreational facilities such as trails. However, the project does not include, nor would it induce, housing development. Therefore no existing parks would be affected and no parks would face an increase in use during construction or operation of the project. Therefore, no impacts will occur.

b) **Less Than Significant Impact**. The project may include construction of new recreational facilities. The facilities to be constructed would likely include walking trails and associated amenities such as benches and signage. The trails would be located on previously disturbed areas of the project site, or areas included as part of the proposed enhancements. Because the proposed construction of these new facilities will be integrated with the construction of the overall project, impacts will be less than significant.

2.3.16 Transportation and Traffic

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

Discussion:

a) and b) **Potentially Significant Impact**. The project would not result in any permanent change to the existing roadways or in any permanent increase in traffic. During construction of the project, lane or road closures may be necessary for installation of project features. In addition, increases in traffic would occur from construction vehicles needed for the removal of excess soil. Therefore, construction of the project may cause an increase in traffic and/or loss of capacity due to lane or road closures, and may result in an exceedance of the level of service standard (LOS E) established by the Los Angeles County Metropolitan Transportation Authority (MTA) Congestion Management Program (Congestion Management Program for Los Angeles County, 2004). This impact may be potentially significant. The EIR will include a detailed evaluation of project-related impacts on traffic.

c) **No Impact**. There are two public airports located in the vicinity of the project area. The Bob Hope Airport is located approximately 2.5 miles southeast of the project area. The

Whiteman Airpark is located northwest of the project area and is approximately 2 miles north of the project site. The project does not involve structures of significant height that would result in a change in air traffic location. The project would not result in any increase in air traffic levels. Therefore, no impacts will occur.

d) **Potentially Significant Impact**. The project would not result in any permanent change to the design, location, or sizes of existing roadways; however, during construction of the project, lane or road closures may be necessary for the transport of equipment and soil in and out of the project site. These impacts could continue for more than 1 year. The proposed project may involve signage and landscaping which would be visible from the roadways. Such landscaping and signage would be designed to maintain vehicular sight lines. This impact may be potentially significant for increase in traffic hazards. The EIR will include a detailed evaluation of project-related impacts on traffic.

e) **Potentially Significant Impact**. During construction of the project, lane or road closures may be necessary for the transport of equipment and soil in and out of the project site. These impacts could continue for more than 1 year. This impact may be potentially significant. The EIR will include a detailed evaluation of project-related impacts on emergency access.

f) **No Impact**. Project-related impacts on transportation would be limited to project construction. The project would not result in any long-term increase in traffic or in a permanent change in existing transportation systems. Therefore, the project would not conflict with adopted policies, plans, or programs supporting public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. Therefore, no impacts will occur.

2.3.17 Utilities and Service Systems

Issues and Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
c) Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☒	☐	☐	☐
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☒
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐
g) Comply with federal, state, and local statues and regulations related to solid waste?	☐	☐	☐	☒

Discussion:

a) **No Impact**. Stormwater runoff collected as part of the project would be infiltrated into the ground for groundwater recharge. Therefore, the project would not require any new connections to the existing sewer system and would have no impact on existing wastewater treatment systems. Therefore, no impacts will occur.

b) **No Impact**. No new water or wastewater facilities are required for the project. Therefore, there will be no impact.

c) **Potentially Significant Impact**. The project involves enhancement of an existing stormwater drainage facility. Construction of the facility may result in significant environmental impacts that will be analyzed in the EIR.

d) **No Impact**. LADWP is the water service provider for the project area. The project includes collection of stormwater for groundwater recharge. The project would not require any new connections to the existing potable water system. Therefore, no new or expanded water supply sources or entitlements would be required. Therefore, no impacts will occur.

e) **No Impact**. Stormwater runoff collected for the project would be infiltrated into the ground for groundwater recharge. The project would not require any new connections to the existing sewer system and would have no impact on the capacity of existing wastewater treatment systems. Therefore, no impacts will occur.

f) **Less Than Significant Impact**. Excavation, demolition, and other construction activities related to the project would generate solid waste such as excavated soil, concrete, and asphalt. Solid waste generated during the operational phase of the project would be limited to sediments and trash removed periodically from the stormwater basins and the trash rack during maintenance.

The nearest active landfill to the project area is the Sunshine Canyon Landfill, located at 14747 San Fernando Road in Sylmar and owned by Browning-Ferris Industries (BFI) of California. Sunshine Canyon Landfill is permitted to accept up to 12,100 tons per day, Monday through Saturday (Solid Waste Facilities Permit, 2008). The facility accepts non-hazardous Class 3 and inert wastes. Other active landfills in the area accepting municipal wastes include Chiquita Canyon Landfill in Valencia.

While the project is expected to generate a large amount of soil, that material will be re-used off-site. Based on the limited volume of non-soil solid waste generated by the project, it is expected that solid waste disposal could be accommodated by Sunshine Canyon Landfill or other landfills in the area. Therefore, project-related impacts related to landfill capacity will be less than significant.

g) **No Impact**. The California Integrated Waste Management Board (CIWMB) is responsible for managing California's solid waste stream. The City of Los Angeles is the Solid Waste Local Enforcement Agency (LEA) and mandated by the CIWMB to enforce state and local minimum standards for solid waste collection, transfer, processing, and disposal (Los Angeles, 2002). The project would comply with all federal, state, and local statutes and regulations related to solid waste, including requirements for integrated waste management (e.g. recycling). Therefore, no impacts will occur.

2.3.18 Mandatory Findings of Significance

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

Discussion:

a) **Less Than Significant Impact with Mitigation Incorporated**. The proposed project site is located in an urbanized area. The proposed project is not expected to substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, or threaten to eliminate a plant or animal community. Based on survey of the project site, sensitive wildlife species are not known or anticipated at the site and significant impacts to wildlife species are not anticipated. Focused plant surveys failed to detect the presence of any special status plant species. Since the project will not impact wildlife or plant species of concern, impacts on biological resources will be less than significant.

Construction of the proposed project will involve up to an additional 18 feet of excavation to deepen basins and increase percolation. Therefore, there is some potential for project construction to impact archaeological resources, paleontological resources, and/or human remains if any exist in previously unimpacted deposits below the existing basins, although a records search conducted did not reveal any known resources in the project area.

Since there is the possibility of disturbing resources in previously unimpacted deposits, construction personnel will receive cultural resources training from a qualified archaeologist to recognize signs of potential archaeological and paleontological resources. Any resources encountered during excavation will be treated appropriately under the guidance of a qualified archaeologist/paleontologist; therefore, there will be a less than significant impact with incorporation of mitigation measures CR-1 and CR-2.

b) **Potentially Significant Impact**. The proposed project may create temporary cumulatively considerable air quality, noise, and traffic impacts related to construction activities when considered with other planned development. The EIR will include an analysis of the significance of these potential cumulative impacts. These impacts may be potentially significant.

c) **Potentially Significant Impact**. The proposed project may have direct or indirect adverse impacts on humans. Potential temporary impacts on humans resulting from the proposed project are related to the following environmental issue areas: air quality, noise, and transportation and traffic. These impacts may be potentially significant. The EIR will include an analysis of the significance of these impacts and will also include a discussion of climate change relative to the proposed project.

Section 3
References and Report Preparation

3.1 REFERENCES

Blain, Mark, Manager, Biological Resources, BonTerra Consulting. Personal communication with Janet Fahey, MWH, January 28, 2010.

Browning-Ferris Industries, Sunshine Canyon Landfill. March 1, 2011. Available: http://www.sunshinecanyonlandfill.com/index.htm.

Browning-Ferris Industries, Sunshine Canyon Landfill, Solid Waste Facility Permit. July 7, 2008. Available: http://www.sunshinecanyonlandfill.com/home/safety_joint.html.

California Department of Conservation. 2009. State of California Seismic Hazard Zones, Burbank Quadrangles. Available: http://gmw.consrv.ca.gov/shmp/.

California Department of Fish and Game. 2009. California Natural Diversity Database.

California Department of Transportation. 2009. California Scenic Highway Mapping System. Available: http://www.dot.ca.gov/hq/LandArch/scenic_highways/index.htm.

California Geological Survey. 2003. GIS Files of Official Alquist-Priolo Earthquake Fault Zones, Southern Region. Available: http://www.conservation.ca.gov/cgs/rghm/ap/official_release/Pages/index.aspx

California Native Plant Society (CNPS). 2008. Electronic Inventory of Rare and Endangered Vascular Plants of California. Records of Occurrence for Van Nuys, San Fernando, Sunland, and Burbank, California, U.S. Geological Survey (USGS) 7.5-minute quadrangle maps. Sacramento, CA: Available: http://www.cnps.org/inventory.

California Regional Water Quality Control Board, Los Angeles Region. 1994 (and later amendments). Water Quality Control Plan: Los Angeles Region.

City Data. 2009a. Bob Hope Airport: Wildlife Incidents - Airplane Bird Strikes Available: http://www.city-data.com/wildlife/Bob-Hope-Airport-Burbank-California.html.

City Data. 2009b. Whiteman Airport: Wildlife Incidents - Airplane Bird Strikes Available: http://www.city-data.com/airports/Whiteman-Airport-Los-Angeles-California.html.

Environmental Data Resources, Inc. (EDR). 2002. EDR Area Study Report: Study Area, Sun Valley Watershed, Los Angeles, CA 91340. October 03, 2002.

Environmental Data Resources, Inc. (EDR). 2009. EDR Radius Map with GeoCheck for the Tujunga Spreading Grounds Enhancement Project, Inquiry Number: 2408884.2s, January 27, 2009.

Environmental Protection Agency (EPA). 2008. San Fernando Valley (area 1 North Hollywood And Burbank) Site Overview Available: http://yosemite.epa.gov /r9/sfund/r9sfdocw.nsf/ce6c60ee7382a473882571af007af70d/a7dbbd3edaaf5cd788257007005e945f!OpenDocument. San Fernando Valley (Area 3 Verdugo) Site Overview Available: http://yosemite.epa.gov /r9/sfund/r9sfdocw.nsf/webdisplay/oid-7ff8a82b0ffeb4418825660b007ee677?OpenDocument.

FEMA. September 26, 2008 Flood Insurance Rate Map (FIRM) #06037C1310F.

GeoSyntec Consultants. 2009. Recharge Pilot Test Tujunga Spreading Grounds. Prepared for the City of Los Angeles.

Los Angeles, City of, Environmental Affairs Department. 2002. City of Los Angeles Environmental Affairs Department Local Enforcement Agency. Available: http://www.environmentla.org/.

-----. 1996. Conservation Element of the Los Angeles City General Plan. Available: http://cityplanning.lacity.org/cwd/gnlpln/consvelt.pdf.

-----. 1996. Safety Element of the Los Angeles City General Plan. Available: http://cityplanning.lacity.org/cwd/gnlpln/saftyelt.pdf.

-----. 1999a. Sunland-Tujunga-Lake View Terrace-Shadow Hills-East La Tuna Canyon New Community Plan. Available: http://sites.google.com/site/sunlandncp/.

-----. 1999b. Noise Element of the Los Angeles City General Plan City Plan. Available: http://cityplanning.lacity.org/cwd/gnlpln/noiseElt.pdf.

Los Angeles, City of, Department of Water and Power. 2008. Internal Communication dated December 30, 2008 from Thomas Erb, Director of Water Resources, Department of Water and Power, City of Los Angeles to Michael Young, Department of City Planning, City of Los Angeles.

Los Angeles, City of. 2006. Native Tree Protection Ordinance. Los Angeles Municipal Code (Section 1. Subdivision 12 of Subsection A of Section 12.21; Ordinance 177404).

Los Angeles, County of. 2004. Congestion Management Program.

Los Angeles Daily News. 2010. Government says bird-plan collisions may surpass 10,000. Available: http://www.dailynews.com/news/ci_14175560. January 12, 2010.

Rong, Yue, Environmental Program Manager, Underground Storage Tank Program, State Water Quality Control Board – Los Angeles Region. 2009. Personal communication with Lauren Siniawer, MWH, December 17, 2009.

South Coast Air Quality Management District (SCAQMD). 1993. CEQA Air Quality Handbook.

Thomas Guide. 2010. Map for Los Angeles County. Published by Rand McNally.

3.2 PREPARERS OF THE INITIAL STUDY

PREPARED BY

Los Angeles Department of Water & Power
Environmental Services
111 North Hope Street, Room 1044
Los Angeles, CA 90012

Charles C. Holloway, Manager of Environmental Planning and Assessment
Hal Messinger, Environmental Project Manager
Art Castro, Project Engineer

TECHNICAL ASSISTANCE PROVIDED BY

MWH Americas, Inc.
Sarah Garber, Project Manager
Juan Diaz-Carreras, AICP, Task Leader
Janet Fahey, D.Env., P.E., Technical Reviewer
Lauren Siniawer, Environmental Analysis

BonTerra Consulting
Patrick O. Maxon, RPA, Director, Cultural Resources
Mark T Blain, Manager, Biological Resources

3.3 ACRONYMS AND ABBREVIATIONS

AQMP	Air Quality Management Plan
ASTM	American Society for Testing and Materials
BASH	Bird Air Strike Hazard
BMPs	Best Management Practices
Cal/EPA	California Environmental Protection Agency
CARB	California Air Resources Board
CEQA	California Environmental Quality Act
CIWMB	California Integrated Waste Management Board
dBA	Decibel, A-weighted scale
EDR	Environmental Data Resources, Inc.
EIR	Environmental Impact Report
EPA	U.S. Environmental Protection Agency
GHG	Greenhouse Gas
Farmland	Prime Farmland, Unique Farmland, or Farmland of Statewide Importance
FEMA	Federal Emergency Management Agency
FMMP	Farmland Mapping and Monitoring Program
Hwy	Highway
IS	Initial Study
IRWMP	(Greater Los Angeles) Integrated Regional Water Management Plan
LABOS	(City of) Los Angeles Bureau of Sanitation
LADWP	(City of) Los Angeles Department of Water and Power
LAFD	Los Angeles Fire Department
LAMC	Los Angeles Municipal Code
LAPD	Los Angeles Police Department
LEA	(Waste) Local Enforcement Agency
Leq	Equivalent noise level
MTA	(County of Los Angeles) Metropolitan Transportation Authority
NAHC	Native American Heritage Commission
NO_3	Nitrate
NPDES	National Pollutant Discharge Elimination System

NPL	National Priorities List
PCE	Tetrachloroethylene
PM10	particulate matter 10 microns or less in diameter
PM2.5	particulate matter 2.5 microns or less in diameter
RWQCB	Regional Water Quality Control Board
SCAB	South Coast Air Basin
SCAQMD	South Coast Air Quality Management District
SCCIC	South Central Coast Information Center
SFV	San Fernando Valley
SOx	sulfur oxides
SNA	Significant Natural Areas
SR	State Route
SWPPP	Storm Water Pollution Prevention Plan
TAC	Toxic Air Contaminants
TCE	Trichloroethylene
TSG	Tujunga Spreading Grounds
UST	Underground Storage Tank
VOC	volatile organic compound

Appendix A

BonTerra CONSULTING

MEMORANDUM

February 24, 2009

To: Ms. Sarah Garber
MWH Americas, Inc.
626 Wilshire Blvd, Ste 850
Los Angeles, CA 90017

From: Brian Daniels
Senior Biologist

Marc Blain
Biological Resources Manager

Subject: **Tujunga Spreading Grounds Enhancement Project Biological Constraints Analysis**

Introduction

This Memorandum describes the biological resources constraints analysis undertaken for the proposed Tujunga Spreading Grounds Enhancement Project, Los Angeles, California. When the Tujunga Spreading Grounds facility recharges large amounts of water, the nearby presence of the Sheldon-Arleta Landfill causes the migration of methane gas from the landfill to local residences. The proposed Tujunga Spreading Grounds project consists, in part, of an alteration to the current intake facility, creation of a low-flow treatment area, installation of two new intake facilities, and reactivation, deepening and/or combining of existing water basins to alleviate this problem.

Methods

BonTerra Consulting Senior Biologist Brian Daniels conducted a general biological survey on February 11, 2009 in order to evaluate potential biological constraints to proposed activities at the Tujunga Spreading Grounds (hereafter referred to as the site). Sources used to identify significant biological resources that may be present at the site included special status plant and wildlife species lists published by the U.S. Fish and Wildlife Service (USFWS), the California Department of Fish and Game's (CDFG) California Natural Diversity Database (CDFG 2009), and the California Native Plant Society's (CNPS) Inventory of Rare and Endangered Vascular Plants of California (CNPS 2009). In addition, other biological studies conducted in the vicinity of the site were reviewed. All plant and wildlife species observed were recorded in field notes.

Site Description

The Los Angeles Department of Water and Power owns the approximately 160 acre site that is located in the City of Los Angeles (Exhibit 1). Operation and maintenance of the site is provided by the Los Angeles County Department of Public Works Flood Maintenance Division. The site consists of 17 shallow basins of varying sizes and configurations along with associated facilities such as a pump station and rubber dam located on the Tujunga Wash Channel.

The site is on level ground located at the east end of the San Fernando Valley. It is situated at the intersection of Interstate-5 (Golden State Freeway) and State Route-170 (Hollywood Freeway) and surrounded by urban areas. The Tujunga Wash Channel forms the northern boundary of the site but otherwise it is isolated from natural open space areas (Exhibit 2). Tujunga Wash flows southward into the Los Angeles River. Just east of the site is the west end

of the Verdugo Mountains. The site is located within the Van Nuys U.S. Geological Survey (USGS) 7.5-minute quadrangle map.

Survey Results

Vegetation

The site supports minimal vegetation, as the basins and surrounding dikes are generally maintained on a regular basis. On-site vegetation consists primarily of non-native weedy (ruderal) vegetation. Areas that are dominated by ruderal vegetation would be mapped as "disturbed" areas unless water was present, in which case they would be mapped as "open water". A few of the basins contained water during the survey. Native vegetation is scarce in the disturbed areas and is found as either isolated individuals or in small patches, and is generally limited to the basin banks. This native vegetation includes riparian species such as black willow (*Salix gooddingii*), narrow-leaved willow (*Salix exigua*), and mule fat (*Baccharis pilularis*). Other native species present included California buckwheat (*Eriogonum fasciculatum*), California sagebrush (*Artemisia californica*), deerweed (*Lotus scoparius*), California croton (*Croton californicus*), laurel sumac (*Malosma laurina*), scale-broom (*Lepidospartum squamatum*), and coastal prickly pear (*Opuntia littoralis*). Only in Basins 6 and 8, where active maintenance activities do not occur or have not occurred for at least a few years, was native vegetation present in quantities sufficient to be mapped separately from the disturbed areas. Scale-broom was the dominate species in Basin 6 and this was mapped as "alluvial sage scrub" vegetation type. Basin 8 supported a mix of sage scrub species dominated by California buckwheat and non-native annual grasses. In addition to the above vegetation types, ornamental vegetation is present on the site around the buildings and as isolated individuals elsewhere.

Wildlife

The disturbed nature of the site and its isolation from natural open space areas limits the number and variety of wildlife species expected to occur. Apart from birds and other highly mobile species, only those species that have adapted to urban habitats are expected to occur. Other than the non-native western mosquito fish (*Gambusia affinis*), released in urban areas to control mosquitoes, no fish species are expected to occur at the site. Native amphibian species that may occur include the Pacific treefrog (*Pseudacris regilla*) and western toad (*Bufo boreas*). However, the non-native bullfrog (*Rana catesbeiana*) and African clawed frog (*Xenopus laevis*) are expected to occur. These two non-native amphibian species are detrimental to native wildlife species.

Reptile species expected to occur on the site include the western fence lizard (*Sceloporus occidentalis*), southern alligator lizard (*Elgaria multicarinata*) and the gopher snake (*Pituophis catenifer*). The open water habitats on the site are expected to attract a relatively large number and diversity of water birds, especially during migration and the winter season. Observed during the survey were Canada goose (*Branta Canadensis*), gadwall (*Anas strepara*), American wigeon (*Anas Americana*), mallard (*Anas platyrhynchos*), northern shoveler (*Anas clypeata*), and ring-necked duck (*Aythya collaris*). Sandpipers are expected to be common at the site, especially during migration and when the ponds are shallow enough to expose mud habitats for foraging. The least sandpiper (*Calidris minutilla*) was observed at the site during the survey. Gulls are expected to be occasionally numerous at the site during the winter season, but only a few ring-billed gulls (*Larus delawarensis*) was observed during the survey. Raptors are also expected to be relatively common at the site during the winter season and turkey vulture (*Cathartes aura*), red-tailed hawk (*Buteo jamaicensis*), and American kestrel (*Falco sparverius*)

were observed during the survey. No mammal species were observed during the survey but the Virginia opossum (*Didelphis virginiana*), California ground squirrel (*Spermophilus beecheyi*), black rat (*Rattus rattus),* coyote (*Canis latrans*), and raccoon (*Procyon lotor*) are expected to occur at the site. Other mammal species that are expected to occur on the project site include several bat species, but these will mainly occur during migration and only for foraging activities as roosting habitat is limited to the few man-made structures on the site.

Conclusions

Special Status Plant and Wildlife Species

The search for occurrences of special status species in the vicinity of the site produced a total of 17 special status plant species and 26 special status wildlife species. Each of these 43 species was evaluated for their potential to occur on the site. The construction and maintenance of the site has resulted in a level of disturbance that precludes the presence of most, if not all of these species. Even if some do occur, they are not expected to occur in substantial enough numbers or to use the site for important ecological reasons (i.e., nesting) that would warrant a finding of significance under CEQA if impacted by the project. However, the presence of any State- or federally-listed Threatened and/or Endangered species would present a constraint to any proposed activities on the project site.

Five of these 17 special status plant species are State- or federally-listed as Endangered: Braunton's milk-vetch (*Astragalus brauntonii*), Nevin's barberry (*Berberis nevinii*), San Fernando Valley spineflower (*Dodecahema parryi* var. *fernandina*), slender-horned spineflower (*Dodecahema leptoceras*), and California Orcutt grass (*Orcuttia californica*). The site does not provide suitable habitat for the California Orcutt grass as it is found in vernal pools and it is not expected to occur. However, the other four species may occur in coastal sage scrub/grassland and alluvial sage scrub vegetation types, similar to the habitats present in Basins 6 and 8. Since these two basins have not been maintained for at least a few years, as evidenced by the maturity of existing vegetation, and the relative lack of disturbance, there is potential for these four plant species to occur in Basins 6 and 8 on the site.

Six of the 26 wildlife species are State- or federally-listed as Threatened and/or Endangered: Santa Ana sucker (*Catostomus santaanae*), Sierra Madre yellow-legged frog (*Rana muscosa*), western yellow-billed cuckoo (*Coccyzus americanus occidentalis*), southwestern willow flycatcher (*Empidonax traillii extimus*), least Bell's vireo (*Vireo bellii pusillus*), and coastal California gnatcatcher (*Polioptila californica californica*). The site does not provide suitable habitat for the Santa Ana sucker and Sierra Madre yellow-legged frog as they are found in stream systems with natural habitats and they are not expected to occur. The western yellow-billed cuckoo, southwestern willow flycatcher, and least Bell's vireo nest in riparian habitats, which are lacking on the site; therefore, the project site does not provide suitable habitat for these three bird species and they are not expected to occur. The site does provide potentially suitable habitat for the coastal California gnatcatcher as it occupies alluvial sage scrub and coastal sage scrub habitats; however, the amount of potentially suitable habitat on the site is not considered substantial enough to support this species. Since there are no open space areas in the immediate vicinity of the site that could provide potentially suitable habitat, the limited amount of alluvial sage scrub and coastal sage scrub habitats on the site are not sufficient to support the coastal California gnatcatcher and it is not expected to occur.

Special Status Habitats

Special status habitats are typically protected by ordinance, code, or regulation under which conformance typically requires a permit or other discretionary action prior to impacting the habitat. Coastal sage scrub occurs throughout the undeveloped foothills of southern California; it has high potential to support special status plant and wildlife species in natural areas and impacts to it typically require mitigation in Los Angeles County. Alluvial sage scrub is more restricted in range than coastal sage scrub and is typically associated with rivers, creeks, and washes. As with coastal sage scrub habitat, alluvial sage scrub has a high potential to support special status plant and wildlife species. In addition, the basins and channels on the sites may be considered jurisdictional by the U.S. Army Corps of Engineers (USACE), CDFG and/or Regional Water Quality Control Board (CDFG).

Significant Ecological Areas (SEAs) were established in 1976 by Los Angeles County to designate areas with sensitive environmental conditions and/or resources in order to preserve biological diversity. SEA boundaries are general in nature, and broadly outline the biological resources of concern. Although the site was initially considered as SEA # 46 for Los Angeles County (England & Nelson 1976), it was determined through further analysis that the existing biological resources were not significant enough for inclusion as an SEA (PCR Services Corporation 2000).

Recommendations

In order to ensure that project implementation would not result in significant impacts on special status plant species or jurisdictional waters, the following mitigation measures are recommended.

(1) Prior to commencement of construction activities, focused botanical surveys shall be conducted in Basins 6 and 8 to determine the presence or absence of Braunton's milk-vetch (*Astragalus brauntonii*), Nevin's barberry (*Berberis nevinii*), San Fernando Valley spineflower (*Dodecahema parryi* var. *fernandina*), and slender-horned spineflower (*Dodecahema leptoceras*). For special status plants impacted by project implementation, mitigation will include transplantation and/or seed collection and revegetation into a suitable mitigation site in the undeveloped portion of the project site or the adjacent undeveloped acreage. The City will select a qualified Biologist to prepare and implement a Mitigation Plan, which shall include performance measures for plant survival, to the satisfaction of the City of Los Angeles. The mitigation area shall be preserved as open space in perpetuity.

(2) Prior to the initiation of project activities, USACE, CDFG, and RWQCB permit authorizations shall be obtained if named agencies claim jurisdiction over jurisdictional waters and/or associated riparian habitat that may be impacted. All provisions or conditions of the permits shall be complied with. Impacted jurisdictional resources will be replaced as stipulated by permit conditions but will be at a minimum 1:1 ratio.

References

California Department of Fish and Game (CDFG). 2009. California Natural Diversity Database. Records of Occurrence for Van Nuys, San Fernando, Sunland, and Burbank, California, U.S. Geological Survey (USGS) 7.5-minute quadrangle maps. Sacramento, CA: CDFG, Natural Heritage Division.

D:\Projects\MWATSON\J009\Ex_RL_022309.mxd

Regional Location

Exhibit 1

Tujunga Spreading Grounds

BonTerra CONSULTING

R:\Projects\MWATSON\J009\Graphics\Ex1_RL_022309.pdf

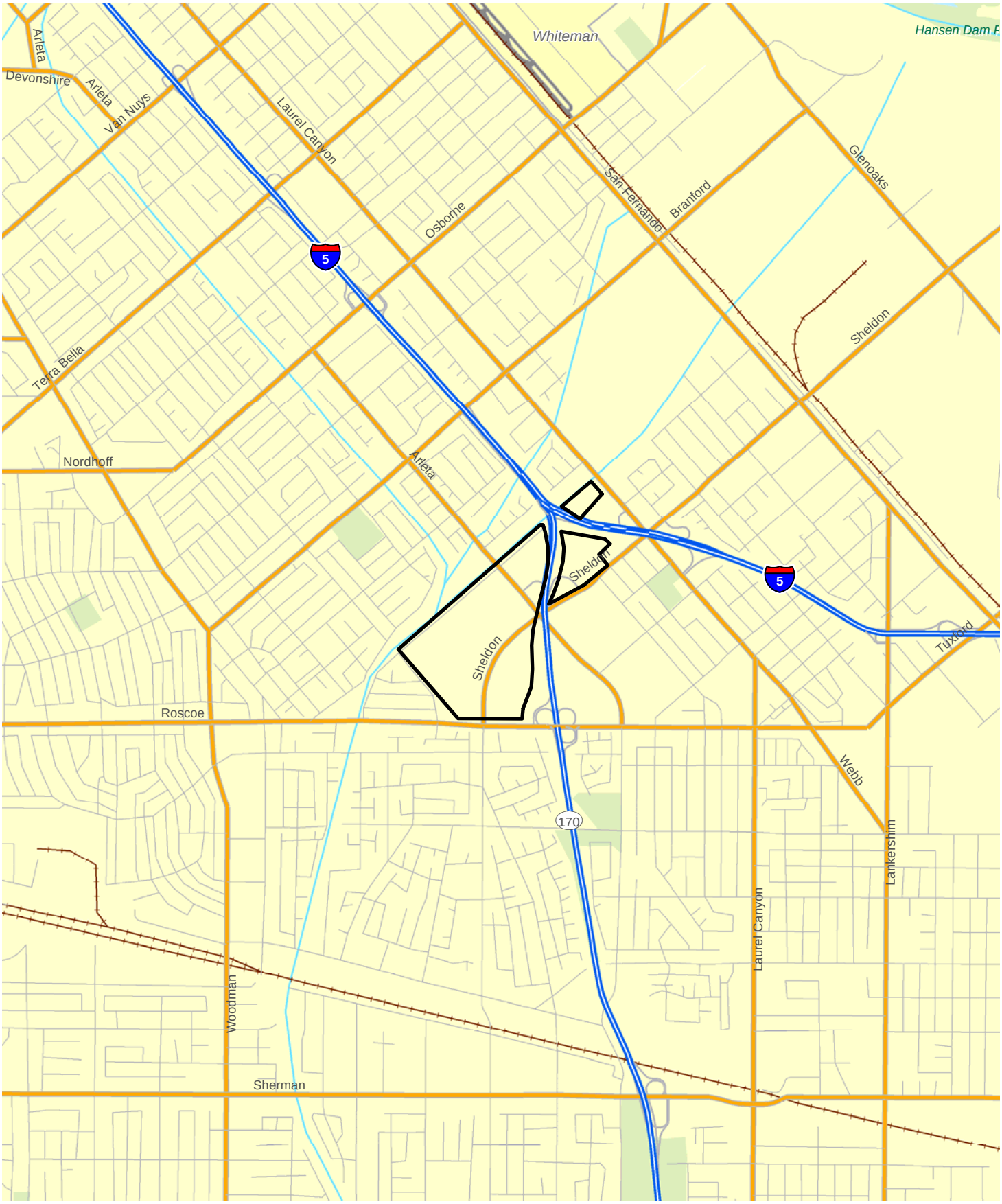
California Native Plant Society (CNPS). 2008. Electronic Inventory of Rare and Endangered Vascular Plants of California. Records of Occurrence for Van Nuys, San Fernando, Sunland, and Burbank, California, U.S. Geological Survey (USGS) 7.5-minute quadrangle maps. Sacramento, CA: CNPS. http://www.cnps.org/inventory.

England & Nelson Environmental Consultants. 1976. *Land Capability/Suitability Study, Los Angeles County General Plan Revision Program, Significant Ecological Areas Report.* Riverside, California.

PCR Services Corporation, 2000. *Los Angeles County Significant Ecological Area Update Study*, *Background Report*. Prepared for Los Angeles County Department of Regional Planning.

Attachments:
Exhibit 1 – Regional Location
Exhibit 2 – Local Vicinity

R:\PAS\Projects\MWatson\J009\Tujunga\Tujunga Bio Memo-022409.doc



Local Vicinity

Exhibit 2

Tujunga Spreading Grounds

N
W
E
S

0.5 0.25 0 0.5 Miles

BonTerra CONSULTING

R:\Projects\MWATSON\J009\Graphics\Ex2_LV_022309.pdf

D:\Projects\MWATSON\J009\Ex_LV_022309.mxd

BonTerra CONSULTING
COSTA MESA PASADENA
T: (626) 351-2000 F: (626) 351-2030
www.BonTerraConsulting.com
3452 E. Foothill Blvd., Suite 420
Pasadena, CA 91107

July 13, 2010

Mr. Juan H. Diaz-Carreras
Lead Supervising Environmental Scientist
MWH Americas, Inc.
626 Wilshire Boulevard, Suite 850
Los Angeles, California 90017

VIA EMAIL AND U.S. MAIL
Juan.H.Diaz-Carreras@us.mwhglobal.com

Subject: Results of Focused Plant Surveys for Basins 6 and 8 of the Tujunga Spreading Grounds Enhancement Project, Los Angeles County, California

Dear Mr. Diaz-Carreras:

This Letter Report presents the findings of focused plant surveys conducted for Basins 6 and 8 of the Tujunga Spreading Grounds Enhancement Project in Los Angeles County, California. Surveys were conducted for federally listed Endangered Braunton's milk-vetch (*Astragalus brauntonii*), federally and State-listed Endangered Nevin's barberry (*Berberis nevinii*), federally listed Candidate and State-listed Endangered San Fernando Valley spineflower (*Chorizanthe parryi* var. *fernandina*), and federally and State-listed Endangered slender-horned spineflower (*Dodecahema leptoceras*). Presence/absence surveys were recommended for these species in Basins 6 and 8 based on the results of a biological constraints analysis (BonTerra Consulting 2009).

PROJECT LOCATION AND BACKGROUND

The project site is located in the City of Los Angeles in the San Fernando Valley. It is situated at the intersection of Interstate 5 (Golden State Freeway) and State Route 170 (Hollywood Freeway) and surrounded by urban areas (Exhibits 1 and 2). The site is located within the U.S. Geological Survey (USGS) Van Nuys 7.5-minute quadrangle map, with an elevation of approximately 840 feet above mean sea level (msl). The survey area for Basin 6 is approximately 2.7 acres, and for Basin 8 is approximately 13.1 acres.

Land use history for the project site consists primarily of flood maintenance, as these 2 basins are part of 17 basins located in the Tujunga Wash Channel, which flows south into the Los Angeles River. The Los Angeles Department of Water and Power owns the site; operation and maintenance is provided by the Los Angeles County Department of Public Works, Flood Maintenance Division. When the Tujunga Spreading Grounds facility recharges large amounts of water, the nearby presence of the Sheldon-Arleta Landfill causes the migration of methane gas from the landfill to local residences. The proposed Tujunga Spreading Grounds project consists, in part, of an alteration to the current intake facility; creation of a low-flow treatment area; installation of two new intake facilities; and reactivation, deepening, and/or combining of existing water basins to alleviate this problem.

METHODS

Botanical surveys were floristic in nature and consistent with the current protocols created by the California Department of Fish and Game (CDFG 2009). Prior to the field survey, a

literature review was conducted to identify special status plants known from the general vicinity. This included a review of the USGS Van Nuys, San Fernando, Sunland, and Burbank 7.5-minute quadrangles in the CDFG's California Natural Diversity Database (CDFG 2010) and the California Native Plant Society's (CNPS') Electronic Inventory of Rare and Endangered Vascular Plants of California (CNPS 2010).

Reference populations were monitored for annual and difficult-to-detect target species to ensure that the scheduled surveys were comprehensive. Braunton's milk-vetch was flowering in the Monrovia area on April 28, 2010. San Fernando Valley spineflower was flowering west of the San Fernando Valley on April 22, 2010. Slender-horned spineflower was flowering in the Soledad Canyon area on April 22, 2010. Reference populations were not monitored for Nevin's barberry because it is a large perennial species that would be visible during the time of the surveys.

According to the National Weather Service, downtown Los Angeles (located about 17 miles from the survey areas) has received 16.3 inches of precipitation for Water Year 2010 (October 1, 2009 through Spring 2010), which is about 114 percent of the normal average (National Weather Service 2010).

BonTerra Consulting Botanist Andrea Edwards and Ecologist David Hughes conducted special status plant surveys on April 29, 2010, which were comprised of five total person-hours. The survey areas were systematically surveyed during the site visit. All plant species observed were recorded in field notes. Plant species were identified in the field or collected for subsequent identification using keys in Hickman (1993) and Munz (1974). Taxonomy follows Hickman (1993) and current scientific data (e.g., scientific journals) for scientific and common names.

SITE DESCRIPTION

Basin 6 contains high quality alluvial sage scrub vegetation and is surrounded by a developed area consisting of a paved road. Basin 8 contains California buckwheat scrub and non-native grassland vegetation, which are co-dominant across much of the site. Non-native grassland is also present along the northern and eastern edges of the basin. The central portion of the basin consists of recently disturbed areas generally devoid of vegetation, and a disturbed area consisting of a dirt road which surrounds the basin. Developed areas are present, including a concrete-lined channel and small concrete check dam. Soil types generally consist of the Tujunga Soboba association, which is composed of sand, loamy sand, and sandy loam layers (USDA 1969). Exhibit 3 includes a map of vegetation types and Exhibit 4 contains site photographs.

RESULTS

No special status plant species were observed during the surveys. A list of all plants observed within each survey area during focused surveys can be found in Attachment A. Although reference populations and regional rainfall amounts were monitored to ensure the scientific adequacy of these focused surveys, there is always a minimal potential for false negative survey results as species could possibly be present on a site but may not be detectable at the time of survey. Based on the negative survey findings, no potential threats or impacts to any federally or State-listed special status plant species are expected, and no avoidance or mitigation measures are recommended.

If you have any comments or questions, please call Andrea Edwards at (626) 351-2000.

Sincerely,

BONTERRA CONSULTING

Marc T. Blain
Associate, Biological Resources Manager

Andrea D. Edwards
Biologist

Enclosures: Exhibit 1 – Regional Location
Exhibit 2 – Local Vicinity
Exhibit 3 – Vegetation Types
Exhibit 4 – Site Photographs
Attachment A – Plant Compendia

R:\PAS\Projects\MWatson\J019\SS Plant Report 071310.doc

REFERENCES

BonTerra Consulting. 2009 (February 24). *Tujunga Spreading Grounds Enhancement Project Biological Constraints Analysis*. Pasadena, CA: BonTerra Consulting.

California Department of Fish and Game (CDFG). 2010. California Natural Diversity Database. Records of Occurrence for Van Nuys, San Fernando, Sunland, and Burbank quadrangle maps. Sacramento, CA: CDFG, Natural Heritage Division.

———. 2009 (November 24). *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities*. Sacramento, CA: CDFG.

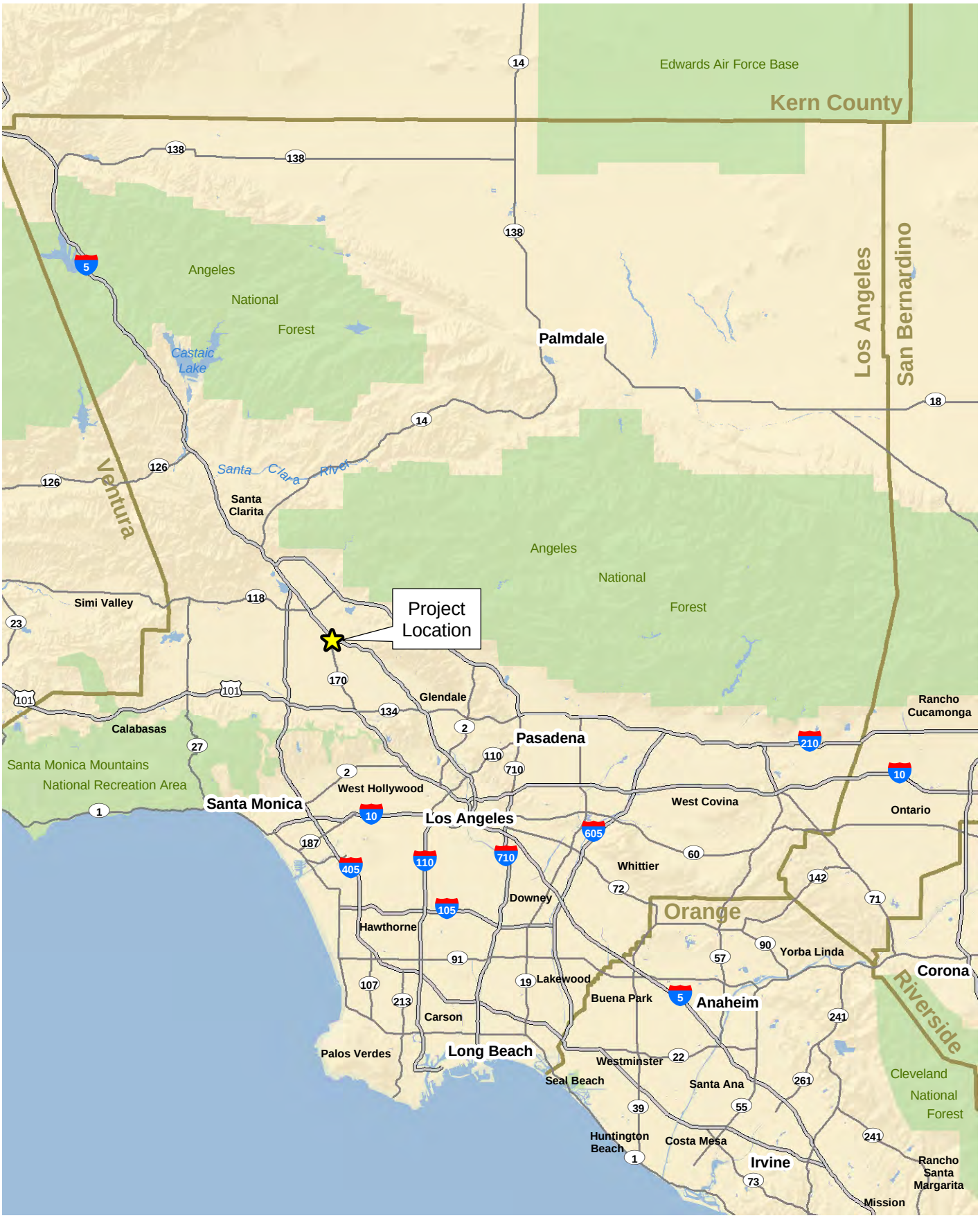
California Native Plant Society (CNPS). 2010. Electronic Inventory of Rare and Endangered Vascular Plants of California. Records of Occurrence for Van Nuys, San Fernando, Sunland, and Burbank quadrangle maps. Sacramento, CA: CNPS. http://www.cnps.org/inventory.

Hickman, J.C., Ed. 1993. *The Jepson Manual of Higher Plants of California*. Berkeley, CA: University of California Press.

Munz, P.A. 1974. *A Flora of Southern California*. Berkeley, CA: University of California Press.

National Weather Service. 2010 (May 18). Monthly Precipitation Summary Water Year 2010. Sacramento, CA: National Weather Service, California-Nevada River Forecast Center. http://www.cnrfc.noaa.gov/monthly_precip.php.

U.S. Department of Agriculture (USDA). 1969 (revised). Report and General Soil Map, Los Angeles County, California. Lancaster, CA: USDA, Natural Resources Conservation Service.



D:\Projects\MWatson\J019\MXD\Ex_RL.mxd

Regional Location

Exhibit 1

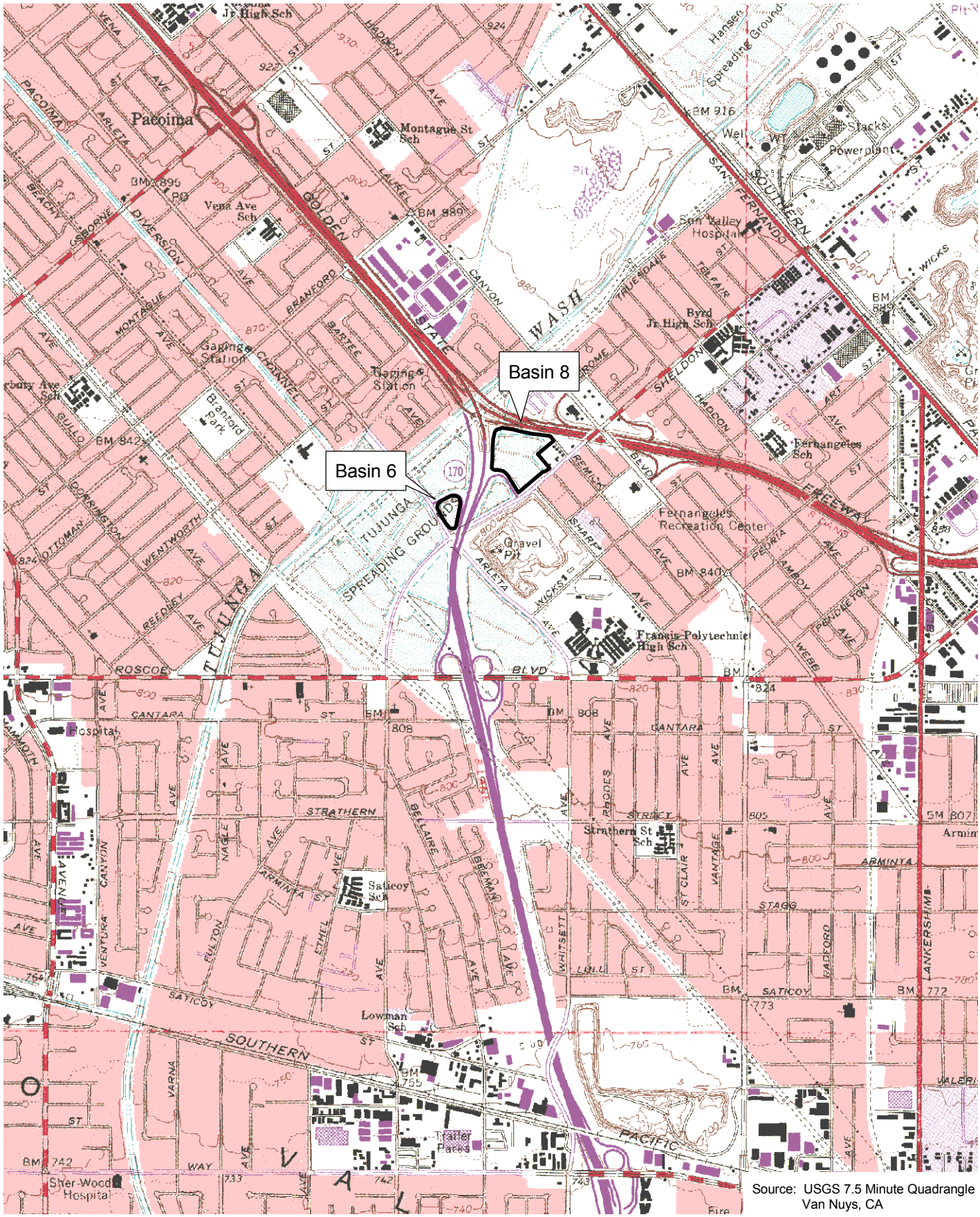
Tujunga Spreading Grounds Enhancement Project, Los Angeles County, California

N
W
E
S

10 5 0 10
Miles

BonTerra CONSULTING

(Rev 06/24/10 CJS) Projects\MWatson\J019\Ex1_RL.pdf



Source: USGS 7.5 Minute Quadrangle
Van Nuys, CA

D:\Projects\MWatson\J019\MXD\Ex_LV_quad.mxd

Local Vicinity

Exhibit 2

Tujunga Spreading Grounds Enhancement Project, Los Angeles County, California

N
W E
S

2,000 1,000 0 2,000
Feet

BonTerra CONSULTING

(Rev 06/24/10 CJS) Projects\MWatson\J019\Graphics\Ex2_LV_quad.pdf

D:\Projects\MWatson\J019\MXD\Ex_veg.mxd

Vegetation Types

Exhibit 3

Tujunga Spreading Grounds Enhancement Project, Los Angeles County, California

N W E S

300 150 0 300 Feet

BonTerra CONSULTING

(Rev 07/09/10 CJS) Projects/MWatson/J019/Graphics/Ex3_veg.pdf

Basin 6

Basin 8

D:\Projects\MWatson\J019\Graphics\Ex_photosA.ai

Site Photographs

Exhibit 4

Tujunga Spreading Grounds Enhancement Project, Los Angeles County, California

BonTerra CONSULTING

ATTACHMENT A

PLANT COMPENDIA
TUJUNGA SPREADING GROUNDS ENHANCEMENT PROJECT

July 13, 2010

BASIN 6 PLANT COMPENDIUM

FLOWERING PLANTS
CLASS DICOTYLEDONES (DICOTS)
ASTERACEAE (COMPOSITAE) - SUNFLOWER FAMILY
Achillea millefolium common yarrow
Ambrosia acanthicarpa annual bursage
*Cnicus benedictus** blessed thistle
Heterotheca sessiliflora ssp. *fastigiata* (?) fastigiate golden aster
*Hypochaeris glabra** smooth cat's ear
Lepidospartum squamatum scale-broom
*Senecio vulgaris** common groundsel
*Sonchus oleraceus** common sow-thistle
BRASSICACEAE (CRUCIFERAE) - MUSTARD FAMILY
*Hirschfeldia incana** shortpod mustard
CACTACEAE - CACTUS FAMILY
Opuntia sp. prickly pear
CHENOPODIACEAE - GOOSEFOOT FAMILY
*Chenopodium album** lamb's quarters
EUPHORBIACEAE - SPURGE FAMILY
Croton californicus California croton
FABACEAE (LEGUMINOSAE) - LEGUME FAMILY
Lotus scoparius deerweed / California broom
Lupinus sparsiflorus Coulter's lupine
GERANIACEAE - GERANIUM FAMILY
*Erodium botrys** long-beaked filaree
*Erodium cicutarium** red-stemmed filaree
ONAGRACEAE - EVENING PRIMROSE FAMILY
Camissonia californica mustard-like evening primrose

BASIN 6 PLANT COMPENDIUM (Continued)

FLOWERING PLANTS
POLEMONIACEAE - PHLOX FAMILY
Eriastrum densifolium ssp. *elongatum* (?) woolly-star
POLYGONACEAE - BUCKWHEAT FAMILY
Eriogonum fasciculatum var. *foliolosum* interior flat-topped buckwheat
SOLANACEAE - NIGHTSHADE FAMILY
Datura wrightii jimson weed
CLASS MONOCOTYLEDONES (MONOCOTS)
POACEAE [GRAMINEAE] - GRASS FAMILY
*Avena barbata** slender wild oat
*Avena fatua** wild oat
*Bromus diandrus** ripgut grass
Bromus madritensis ssp. *rubens** foxtail chess
*Schismus barbatus** Mediterranean schismus
** indicates non-native species*

BASIN 8 PLANT COMPENDIUM

FLOWERING PLANTS
CLASS DICOTYLEDONES (DICOTS)
ANACARDIACEAE - SUMAC FAMILY
Malosma laurina laurel sumac
*Schinus terebinthifolius** Brazilian pepper tree
ASTERACEAE (COMPOSITAE) - SUNFLOWER FAMILY
Ambrosia acanthicarpa annual bursage
Artemisia californica California sagebrush
Baccharis salicifolia mule fat
*Centaurea melitensis** tocalote
Conyza canadensis common horseweed
Filago californica fluffweed
Gnaphalium bicolor bicolored everlasting / Bioletti's cudweed
Gnaphalium canescens everlasting

BASIN 8 PLANT COMPENDIUM (Continued)

FLOWERING PLANTS
Helianthus gracilentus slender sunflower
Heterotheca grandiflora telegraph weed
Heterotheca sessiliflora ssp. *fastigiata* (?) fastigiate golden aster
*Hypochaeris glabra** smooth cat's ear
*Lactuca serriola** prickly lettuce
Lepidospartum squamatum scale-broom
Malacothrix saxatilis cliff malacothrix
*Senecio vulgaris** common groundsel
*Sonchus oleraceus** common sow-thistle
BRASSICACEAE (CRUCIFERAE) - MUSTARD FAMILY
*Hirschfeldia incana** shortpod mustard
CAPRIFOLIACEAE - HONEYSUCKLE FAMILY
Sambucus mexicana blue elderberry
CHENOPODIACEAE - GOOSEFOOT FAMILY
*Chenopodium album** lamb's quarters
*Salsola tragus** Russian thistle
CONVOLVULACEAE - MORNING-GLORY FAMILY
Calystegia macrostegia morning-glory
EUPHORBIACEAE - SPURGE FAMILY
Croton californicus California croton
*Ricinus communis** castor bean
FABACEAE (LEGUMINOSAE) - LEGUME FAMILY
Lotus purshianus Spanish clover
Lotus salsuginosus ssp. *salsuginosus* alkali lotus
Lotus scoparius deerweed / California broom
Lupinus bicolor miniature lupine
Lupinus sparsiflorus Coulter's lupine
Lupinus succulentus arroyo lupine
Lupinus truncatus truncate lupine / collar lupine

BASIN 8 PLANT COMPENDIUM (Continued)

FLOWERING PLANTS
*Medicago polymorpha**   California burclover
*Melilotus indica**   sourclover
*Trifolium hirtum**   rose clover
GERANIACEAE - GERANIUM FAMILY
*Erodium botrys**   long-beaked filaree
*Erodium cicutarium**   red-stemmed filaree
MALVACEAE - MALLOW FAMILY
*Malva parviflora**   cheeseweed
ONAGRACEAE - EVENING PRIMROSE FAMILY
Camissonia bistorta   California sun cup
Camissonia californica   mustard-like evening primrose
Camissonia intermedia   intermediate primrose
POLEMONIACEAE - PHLOX FAMILY
Eriastrum densifolium ssp. *elongatum* (?)   woolly-star
POLYGONACEAE - BUCKWHEAT FAMILY
Eriogonum fasciculatum var. *foliolosum*   interior flat-topped buckwheat
SOLANACEAE - NIGHTSHADE FAMILY
Datura wrightii   jimson weed
*Nicotiana glauca**   tree tobacco
Solanum xanti   chaparral nightshade
ULMACEAE - ELM FAMILY
*Ulmus parvifolia**   Chinese elm
CLASS MONOCOTYLEDONES (MONOCOTS)
POACEAE [GRAMINEAE] - GRASS FAMILY
*Avena barbata**   slender wild oat
*Avena fatua**   wild oat
*Bromus diandrus**   ripgut grass
Bromus madritensis ssp. *rubens**   foxtail chess
*Cynodon dactylon**   bermuda grass
*Hordeum murinum**   foxtail barley

BASIN 8 PLANT COMPENDIUM (Continued)

FLOWERING PLANTS
*Schismus barbatus**   Mediterranean schismus
*Vulpia myuros**   foxtail fescue
** indicates non-native species*

Appendix B

BonTerra CONSULTING

MEMORANDUM

March 19, 2009

To: Ms. Sarah Garber
MWH Americas, Inc.
626 Wilshire Blvd, Ste 850
Los Angeles CA 90017

From: Patrick Maxon, RPA
Director, Cultural Resources

Subject: **Tujunga Spreading Grounds Enhancement Project Cultural Constraints Assessment**

This Memorandum describes the cultural resources constraints assessment undertaken for the proposed Tujunga Spreading Grounds Enhancement Project, Los Angeles, California. When the Tujunga Spreading Grounds facility recharges large amounts of water, the nearby presence of the Sheldon-Arleta Landfill causes the migration of methane gas from the landfill to local residences. The proposed Tujunga Spreading Grounds project consists, in part, of an alteration to the current intake facility, creation of a low-flow treatment area, installation of two new intake facilities, and reactivation, deepening and/or combining of existing water basins.

The cultural resources study consisted of a records search undertaken at the South Central Coastal Information Center (SCCIC), California State University, Fullerton; initiation of Native American scoping by consultation with the Native American Heritage Commission (NAHC); a paleontological records search at the Los Angeles County Museum (LACM); and this assessment of the project's potential to adversely impact cultural resources, with recommendations for mitigating any adverse impacts to a less than significant level.

Location

The 160-acre Tujunga Spreading Grounds project area is located at the juncture of Interstate 5 and the Hollywood (170) Freeway, in the City of Los Angeles. Roscoe Boulevard forms the southern boundary of the property. The project location is located within the USGS 7.5 Minute Quadrangle Van Nuys, CA; Township 2 North; Range 15 West.

Cultural Resources Records Search

An archaeological/historic records search conducted by BonTerra Consulting archaeologist Patrick Maxon on February 2, 2009 at the SCCIC indicated that no cultural resources sites have been previously recorded and/or evaluated on the property. The Panorama City Historic District is recorded approximately one-mile west of the project area.

Paleontological Resources Records Search

A paleontological records search was requested of Dr. Sam McLeod at the Los Angeles County Museum Vertebrate Paleontology Department. A response was mailed to BonTerra Consulting on March 4, 2009. No vertebrate fossil localities are known on the project area, but there are fossil localities nearby from the same or similar sedimentary units that occur in the project area.

The entire project area is underlain by surficial deposits of younger Quaternary Alluvium, derived primarily as fluvial deposits from Tujunga Wash that flows through the project area. These units do not typically contain significant vertebrate fossils. But younger alluvial units are typically underlain by older Quaternary deposits that do contain significant fossils.

If excavation will penetrate the older Quaternary deposits, careful monitoring, to quickly and professionally collect exposed fossils, should be undertaken. Collected fossils should be deposited in an accredited and permanent scientific institution (McLeod 2009).

Native American Scoping

A Sacred Lands File Search was requested of the NAHC. The search failed to indicate the presence of Native American cultural resources within the project area; however, sacred sites were identified in close proximity to the project. The NAHC suggested early consultation with local Native American tribes. The NAHC also provided BonTerra Consulting with a list of Native American individuals/organizations that may have knowledge of cultural resources in the project area. All individuals and tribes on the list were mailed a letter affording them an opportunity to comment on the project and share any knowledge they have of cultural resources in the project vicinity. As of this date, no response has been received.

Field Reconnaissance

On February 11, 2009, BonTerra Consulting archaeologist Patrick Maxon, and Department of Water and Power staff, Art Castro and Harold Messinger, toured the Spreading Grounds project area by automobile. Each of the basins was visited, as well as the areas proposed for upgrades to the current intake facility, and areas of new construction. No significant cultural resources were noted as a result of the survey.

Management Recommendations

Since the existing facility buildings and structures will not be removed, and they do not appear to be of sufficient age, there would be no significant impacts to historic resources. The only elements of the project that may have the potential to impact cultural resources are during excavations for new intake facilities and during expansion and deepening of the basins.

During the original construction of the Spreading Grounds and surrounding infrastructure, it is unlikely that cultural resources studies were performed. Additionally, it is likely that existing structures, streets, parking lots, etc. were built without the benefit of cultural resources monitoring. Therefore, undisturbed resources may remain under existing development. In order to ensure that potential impacts to cultural resources are less than significant, the following mitigation measures are recommended:

(1) If the proposed project will disturb native alluvial sediments (as opposed to man-made fill, stockpile, etc.), a qualified Archaeologist shall be retained to monitor construction activities in those areas deemed sensitive for archaeological resources. Should archaeological resources be encountered during earth-moving activities (i.e., grading and excavation), a qualified Archaeologist shall implement procedures for temporarily halting or redirecting work to permit the sampling, identification, and evaluation of the resources, as appropriate. If the resources are found to be significant, the Archaeologist shall determine appropriate actions—in cooperation with the City of Los Angeles—for

preservation and/or data recovery. If the monitor determines that the sediments are not sensitive for the presence of resources, monitoring efforts can be terminated.

(2) If the proposed project will disturb bedrock formations that are sensitive for paleontological resources, a qualified Paleontologist shall be retained to monitor construction activities in those areas. Should paleontological resources be encountered during earth-moving activities (i.e., grading and excavation), the Paleontologist shall implement procedures for temporarily halting or redirecting work to permit the sampling, identification, and evaluation of the resources, as appropriate. If the resources are found to be significant, the Paleontologist shall determine appropriate actions—in cooperation with the City of Los Angeles—for preservation and/or data recovery. If the Paleontologist determines that the sediments are not sensitive for the presence of resources, monitoring efforts can be terminated.

A qualified, cross-trained monitor can be retained to monitor for both cultural and paleontological resources.

R:\PAS\Projects\MWatson\J009\Tujunga\Tujunga Cultural Memo-031909.doc