Initial Study and Negative Declaration

Maclay Tanks and Reservoir Solar Project

Los Angeles, California

Los Angeles Department of Water and Power
111 North Hope Street
Los Angeles, California 90012

November 2010

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ABBREVIATIONS AND ACRONYMS

AC	alternating current
AQMP	Air Quality Management Plan
ARB	Air Resources Board
BMPs	best management practices
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CEQA	California Environmental Quality Act
CH_4	methane
CMP	Congestion Management Plan
CNEL	Community Noise Equivalent Level
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
dBA	decibel, A-weighted
DC	direct current
EPA	Environmental Protection Agency
FEMA	Federal Emergency Management Agency
GHG	greenhouse gas
HPOZ	Historic Preservation Overlay Zone
IS	Initial Study
LADWP	Los Angeles Department of Water and Power
LAMC	Los Angeles Municipal Code
LOS	level of Service
LST	Localized Significance Thresholds
ND	Negative Declaration
MW	megawatt
NAAQS	National Ambient Air Quality Standards
NPDES	National Pollutant Discharge Elimination System
N_2O	nitrous oxide
O_3	ozone
PCE	Passenger Car Equivalents
PF	Public Facilities
PM_{10}	particulate matter 10 microns or less in diameter
$PM_{2.5}$	particulate matter 2.5 microns or less in diameter
PV	photovoltaic
RPS	Renewable Portfolio Standard
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SWPPP	Storm Water Pollution Prevention Plan
URBEMIS	Urban Emissions Software Model

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1.0 INTRODUCTION

1.1 PROPOSED PROJECT

The Los Angeles Department of Water and Power (LADWP) proposes to install and operate solar photovoltaic (PV) modules at the sites of the existing Maclay Tanks and Reservoir located in the community of Sylmar in Los Angeles (*Figure 1: Regional Location Map*). The proposed Maclay Tanks and Reservoir Solar Project (also referred to as the Maclay Solar Project) would provide approximately 2.5 megawatts (MW) of generation capacity to help the City of Los Angeles meet its renewable energy goals. At the Maclay Tanks site, solar modules would be placed on the roof of the two existing concrete cylindrical tanks and on adjacent open ground; the total area to receive solar modules would be approximately 210,000 square feet, which would provide about 1.6 MW of energy. At the Maclay Reservoir site, solar modules would be placed on the roof of the existing rectangular reservoir. The total area at the Maclay Reservoir site to receive solar modules would be approximately 80,000 square feet, which would provide about 0.9 MW of energy.

1.2 CALIFORNIA ENVIRONMENTAL QUALITY ACT REQUIREMENTS AND FINDINGS

The California Environmental Quality Act (CEQA) applies to proposed projects initiated by, funded by, or requiring discretionary approvals from state or local government agencies. The proposed Maclay Solar Project constitutes a project as defined by CEQA (California Public Resources Code §§21000 et seq.). LADWP, as a municipal utility, will fund, implement, and operate the proposed project and will therefore act as the CEQA lead agency.

This Initial Study and Negative Declaration (IS/ND) has been prepared in accordance with CEQA guidelines to evaluate the potential environmental effects of the project. Based on the Initial Study contained herein, LADWP concludes that none of the potential effects of the project would result in significant adverse impacts on the environment and is issuing a Negative Declaration to document this finding.

1.3 PROJECT NEED AND BACKGROUND

The California Global Warming Solutions Act (Assembly Bill 32) was passed by the Legislature in 2006, establishing a statewide goal of reducing greenhouse gas emissions to 1990 levels by the year 2020 and to 80 percent below 1990 levels by 2050. The City of Los Angeles has further established the goal of reducing greenhouse gas emissions to 35 percent below 1990 levels by 2030. A primary source of greenhouse gases, particularly carbon dioxide (CO_2), is the combustion of fossil fuels for electrical generation. In response, the California Legislature modified the Renewable Portfolio Standard (RPS) program for the state, which had been established by Senate Bill 1078 (2002) and was then further modified by Senate Bill 107 (2006). The goal of the RPS program, as modified by Senate Bill 107, requires attaining 20 percent aggregate annual retail energy sales from eligible renewable resources by 2010. Municipal utilities, such as LADWP, were exempted from the specific provisions set forth in the bills, which applied only to investor-owned utilities; however, LADWP has nonetheless adopted a similar RPS to provide 20 percent of its energy sales to retail customers from renewable resources by 2010. In addition, through Executive Orders S-14-08 (2008) and S-21-09 (2009), the Governor of California established a target RPS for the state of 33 percent by 2020 and also included publicly owned as well as investor-owned utilities under this mandate. LADWP has furthermore established an RPS aimed at achieving 35 percent of its energy sales from renewable power resources by 2020.

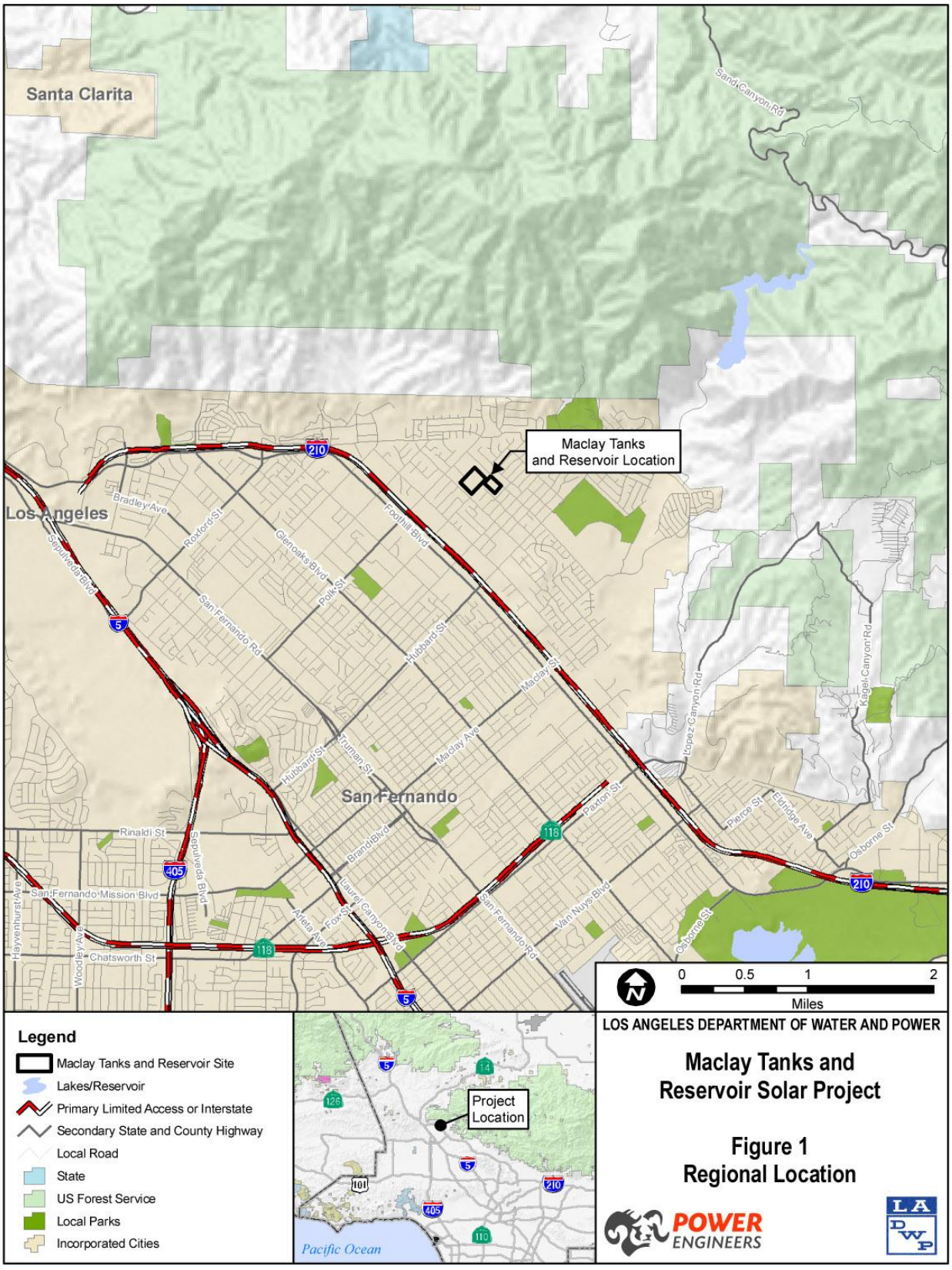
Against the backdrop of this need to reduce the combustion of fossil fuels for energy production, demand for energy continues to increase in the LADWP service area. Despite considerable progress in conservation in the City of Los Angeles through both energy efficiency and load management programs, the overall demand for electricity has continued to grow at a moderate pace since the early 1990s, driven primarily by increases in population, which is projected to expand in the City by approximately 25 percent between 2000 and 2025. As a result, the annual growth in demand for electricity in Los Angeles is expected to increase at an average annual rate of about 0.6 percent over the next 20 years, regardless of increasingly aggressive conservation efforts. It is estimated that between the years 2009 and 2030, growth in peak demand will necessitate an average increase of 62 MW in generation capacity per year. This would represent a 1,300 MW, or approximately 23 percent, increase in capacity (from approximately 5,650 MW in 2009 to 6,950 MW in 2030).

In the face of this increasing energy demand and the need to reduce its dependence on fossil fuels, LADWP has embarked on an aggressive renewable power program that includes solar, wind, geothermal, biomass, and small hydroelectric power sources. LADWP's Solar Incentive Program has encouraged the development of over 19 MW of solar power through both residential and commercial rooftop installations since 1999. The Department is also developing a program to significantly increase solar installations on large commercial and government building rooftops. However, in order to achieve its aggressive RPS goals and provide for increasing peak energy demand, LADWP must also implement mid- to large-scale solar power projects. Among the key factors that influence the feasibility of implementing these larger-scale solar projects are land ownership and available transmission facilities and capacity. The Maclay Solar Project responds to these factors because it would be located on LADWP-owned property, and it would utilize existing electrical distribution facilities that are located close to the center of demand and possess adequate capacity to deliver the solar energy generated. The Maclay Solar Project would help meet the RPS goals of reducing greenhouse gas emissions as well as other air pollutant emissions by displacing an equivalent amount of fossil fuel generation required to meet currently projected energy demand.

1.4 ENVIRONMENTAL DOCUMENT FORMAT AND CONTENT

This IS/ND contains an introduction, a description of the proposed project and its location, a CEQA Initial Study checklist impact evaluation, and other pertinent information about study preparers and references. The document is composed of five sections. Section 1 provides an introduction to the project along with information about the environmental document and lead agency. A description of the proposed project is provided in Section 2, including the location and principal components of the project. The CEQA Initial Study Checklist is included as Section 3 and provides the analysis of environmental impacts that could occur from project implementation. A list of references and a list of the Lead Agency staff and consultants participating in the study are provided in Sections 4 and 5, respectively.

FIGURE 1 REGIONAL LOCATION MAP



2.0 DESCRIPTION OF THE PROPOSED PROJECT

2.1 PROJECT LOCATION AND SETTING

The Maclay Tanks and Reservoir Solar Project (Maclay Solar Project) would be located within LADWP's Maclay drinking water storage properties, which include two parcels of land located in the Sylmar community of Los Angeles between Fenton Avenue (to the southwest) and Eldridge Avenue (to the northeast) and separated by Astoria Street. The Maclay Tanks site, consisting of about 16.5 acres of land, is located at 13601 West Astoria Street, and the Maclay Reservoir site, consisting of about six acres, is located immediately southeast of the Maclay Tanks site, at 13651 North Eldridge Avenue. Regional access to the sites is provided from Interstate 210, which is located approximately 0.5 miles southwest of the Maclay properties. The main access gate to the Maclay Tanks property is located on Astoria Street, with a secondary gate on Fenton Avenue. The main access gate to the Maclay Reservoir property is located on Eldridge Avenue, with a secondary gate located on Astoria Street. The proposed project properties are surrounded entirely by residential development. Around the Maclay Tanks property, the development generally consists of large to very large lots (approximately 0.25 to 2.5 acres) zoned for low-density residential or agricultural use. All of these lots, even those zoned as agricultural use, contain residential units. Residential lots surrounding the Maclay Reservoir property to the northeast, southeast, and southwest are comparatively smaller at approximately 0.13 to 0.2 acres. The Maclay Tanks and Maclay Reservoir properties themselves are zoned Public Facilities (PF), within which the existing uses are allowable under a conditional use permit (see *Figure 2: Project Setting*).

2.2 PROJECT SITES

The Maclay Tanks water storage facility consists of two large cylindrical reinforced concrete tanks that were constructed in 1990. The tanks are approximately 300 feet in diameter and are essentially subterranean, with only about two feet of the tank side walls extending above grade level. The tanks are entirely surrounded by asphalt paving. A chain link fence with barbed wire outriggers is located around the perimeter of the paved area. The tops of the tanks are generally higher in elevation than the adjacent Astoria Street to the southeast, along which an earthen embankment has been constructed to provide cover for the tanks. The roofs of the tanks are nine-inch thick reinforced concrete that can support the weight of the solar power system without additional reinforcement. Each tank would provide approximately 60,000 square feet of available area (120,000 square feet total) for the installation of solar modules. Areas on the roof containing vents and access hatches would be avoided.

Other than the tanks, the property is essentially undeveloped, except for a relatively small pumping station located at the intersection of Fenton Avenue and Astoria Street. However, in addition to the tanks themselves, 90,000 square feet of open land located within the property to the southwest of the tanks would also be used for solar modules. This area is a raised terrace because it was the stockpile for the earthen material excavated during the construction of the tanks. The terraced area is basically flat and is generally clear of larger vegetation, with the exception of relatively few scattered trees. In addition to the fence surrounding the tanks themselves, the entire Maclay Tanks property is secured by a perimeter chain link fence (see *Figure 3: Maclay Tanks Site*).

The Maclay Reservoir water storage facility is a rectangular concrete reservoir with a 24-gauge corrugated metal roof supported on a steel girder system. The surface area of the reservoir roof is approximately 82,500 square feet (285 feet by 290 feet). Like the Maclay Tanks, the Maclay Reservoir structure is primarily subterranean, with the roof approximately eight feet above grade level at the peak, tapering to about three feet above grade level along the southwestern and northeastern edges of the reservoir. Because the natural grade of the Maclay Reservoir property slopes gradually downward to the southeast, embankments provide cover for the reservoir on three sides, including along Eldridge Street to

the northeast and adjacent to residential properties located to the southeast and southwest. The entire reservoir property is secured by a chain link fence with barbed wire outriggers. Other than the reservoir itself, the property is undeveloped. The property is generally clear of vegetation, with the exception of relatively few scattered trees, located predominantly along Eldridge Avenue. The roof over Maclay Reservoir was reconstructed in 1971, and it was retrofitted for earthquake safety in 1998. LADWP has determined that the reservoir roof can support solar module loads with some limitations. Approximately 80,000 square feet of area on the reservoir roof would be available for solar collectors (see *Figure 4: Maclay Reservoir Site*).

2.3 PROJECT FACILITIES

The solar modules would be installed in rows on an aluminum framework that would be mounted according to the underlying surface (i.e., concrete tanks, metal reservoir roof, or ground). On Maclay Tanks, to avoid damage to the concrete cover, the aluminum framework would be attached to precast concrete blocks, which would act as ballast to stabilize the frame and modules. On the terraced area adjacent to the tanks, the most cost-effective support system would be used; i.e., the structural framework would either rest on anchors that would be screwed into the ground or be ballasted in a manner similar to that expected to be used on the tanks. The area beneath the panels would remain essentially permeable surface. The mounted panels would have a low profile, with the high end of the slightly tilted panel less than five feet above the ground. On Maclay Reservoir, the aluminum framework would be attached into the structural metal framework of the roof, avoiding loading of the light-gauge metal roof itself. Further seismic analysis would be performed by LADWP that may result in some minor reinforcement of the roof system as necessary.

Individual rows of modules would be grouped into electrical circuits known as “strings.” These strings would in turn be combined to function as a single electrical array. Because the solar power system would create direct current (DC) power, inverters would be required to change the power to alternating current (AC) usable in the electrical distribution system. Each array would require one or more inverter units. Transformers would also be required to step up the voltage of the power from the inverters before it enters the distribution system. The total of 210,000 square feet of available area at the Maclay Tanks site would provide an estimated generation capacity of about 1.6 MW. The 80,000 square feet of available area on the Maclay Reservoir would provide an estimated generation capacity of about 0.9 MW. From both sites, the Maclay Solar Project would provide a total generating capacity of about 2.5 MW. The project facilities would be connected to existing LADWP distribution lines adjacent to the tank and reservoir properties, and no new distribution lines would be necessary.

FIGURE 2 PROJECT SETTING

FIGURE 3 MACLAY TANKS SITE

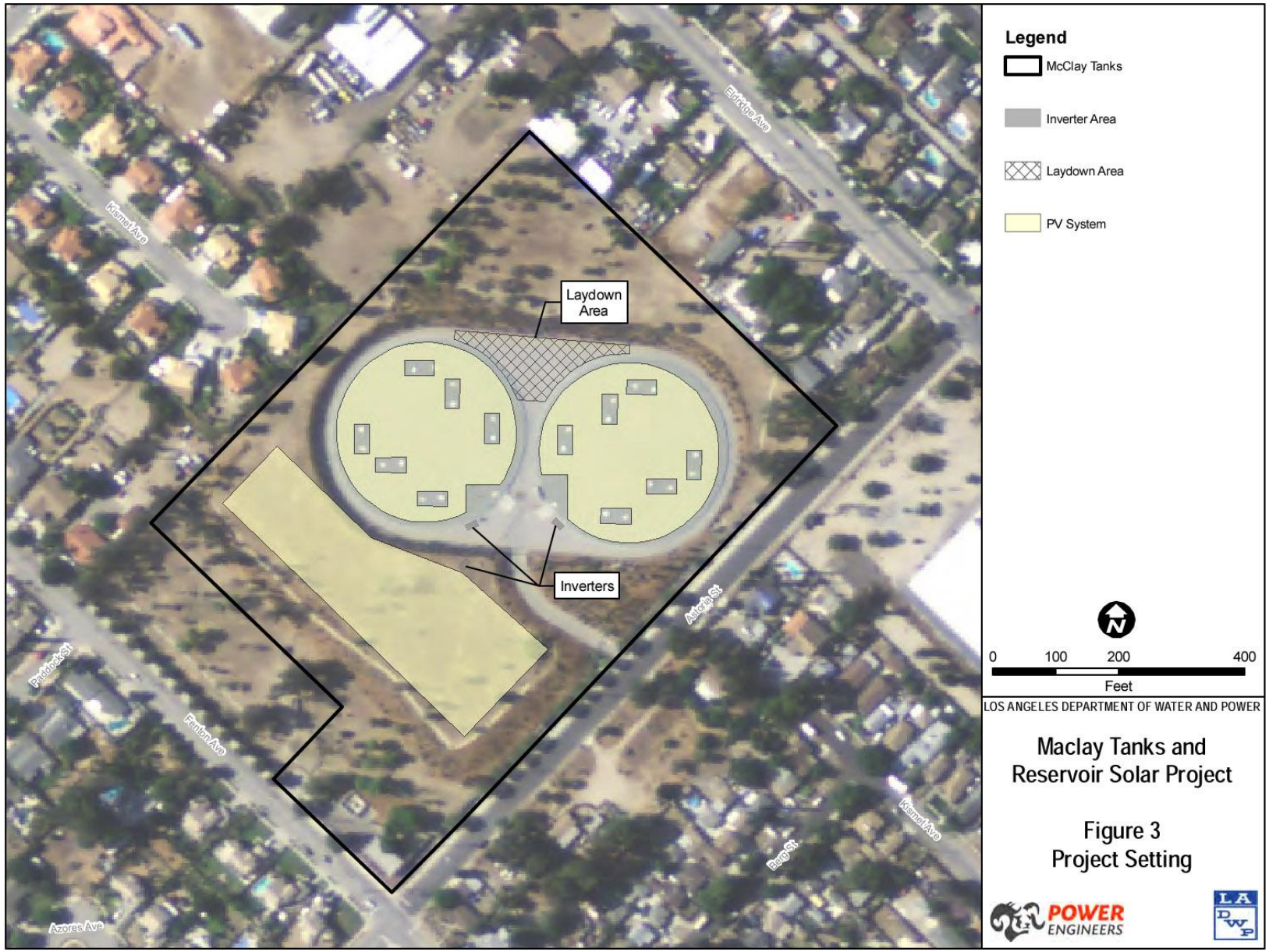


FIGURE 4 MACLAY RESERVOIR FACILITY LAYOUT

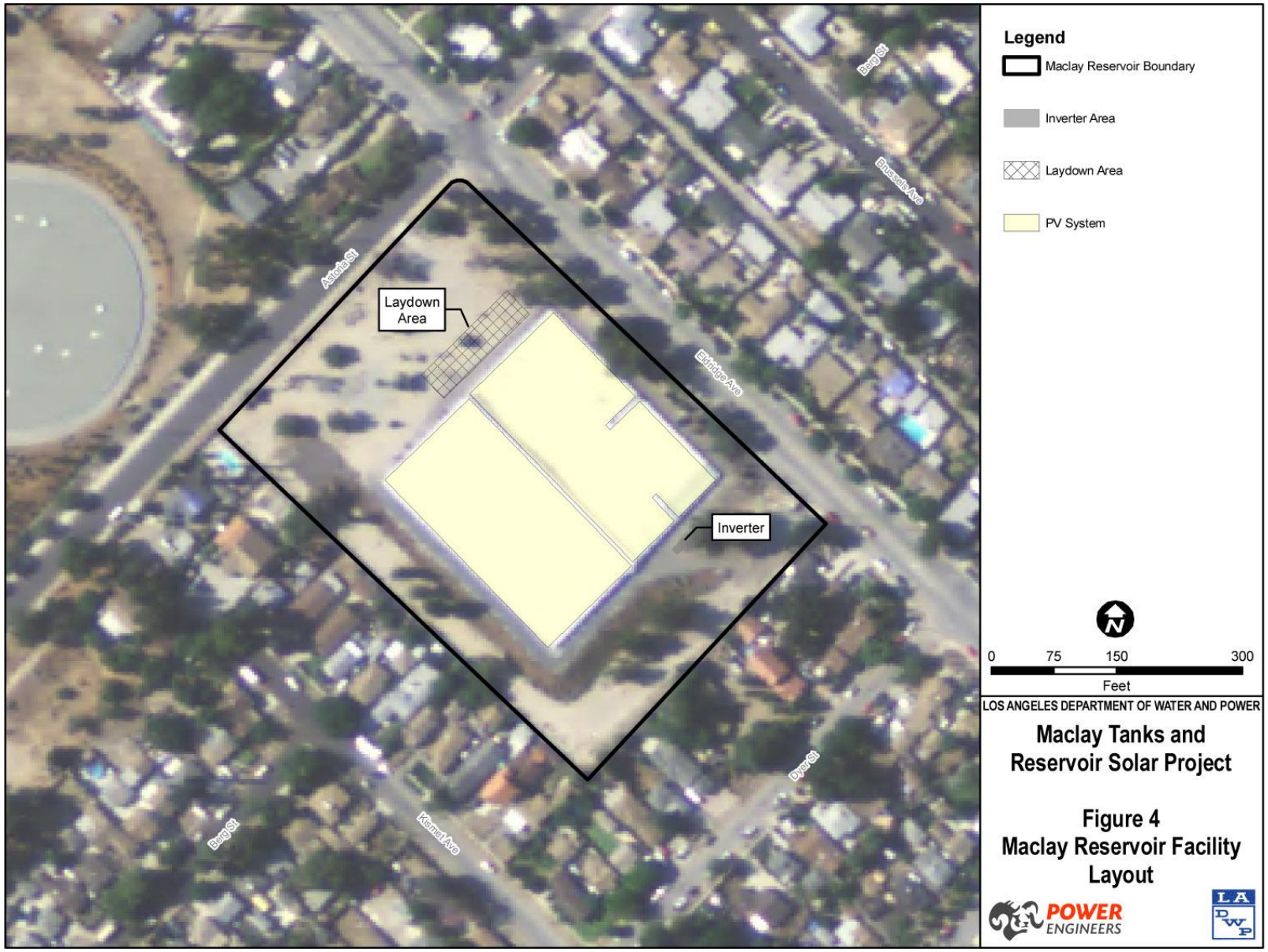


FIGURE 5 MACLAY TANKS SITE PHOTOS

Photo A. Tank roofs, looking west.

Photo B. Terrace area southwest of tanks, looking southeast.

FIGURE 6 MACLAY RESERVOIR SITE PHOTOS

Photo C. Northwest side of reservoir, looking south.

Photo D. Reservoir roof, looking west.

2.4 INSTALLATION OF SOLAR MODULES AND EQUIPMENT

The installation of the solar modules would involve several tasks, which would generally be completed concurrently, including the module installation and wiring, the installation of power inverters and transformers, and the interconnection of the solar power facility to the City electrical distribution system. Installation and commissioning would take approximately six months to complete, from July 2011 to December 2011. Three crews consisting of about five personnel each would work simultaneously to install modules and complete the wiring. During this task, an average of less than two truck deliveries per day for the solar modules and about one additional delivery per week for other components would be required. An on-site truck crane would be required to offload the modules. The proposed project construction activities would generally occur only on weekdays and, on those days, would be limited to between the hours of 7:00 a.m. and 6:00 p.m. Although not anticipated, if occasional Saturday work were required, it would not commence before 8:00 a.m., and it would cease by 6:00 p.m. No construction work would occur on Sundays or national holidays.

A pre-assembled inverter-transformer skid would be required adjacent to each power block (i.e., at each tank, the terraced area near the tanks, and the reservoir). Each inverter-transformer unit would require up to 300 square feet of area. Each skid-mounted inverter-transformer unit would be delivered by a single truck. The units would require a concrete pad with a compacted aggregate base or concrete pier foundation, depending on geotechnical studies conducted during detailed engineering design. This would entail a total of approximately three truck deliveries for the aggregate, reinforcing steel, and concrete. A backhoe would also be required to excavate the area for the pads. A small crane would be required to offload and position each of the inverter-transformer units. This task would generally involve fewer than six personnel and would take approximately two months to complete, including up to one month for the concrete pads to cure. However, the work would be entirely concurrent with the installation of the solar modules.

The interconnection of the solar power facilities to the distribution system would involve running new feeder lines from the transformers to an existing distribution line located adjacent to the properties. This task would occur concurrently with the installation of the solar modules. Once all of this work was completed, the final test, inspection, and commissioning of the system would take approximately one month.

Because some of the tasks involved in the solar power installation would occur concurrently, the peak on-site personnel may reach approximately 25 (during the simultaneous installation of the solar modules and the inverters-transformers). Truck deliveries would average about two per day, but a slightly higher number of daily truck trips may occur when both solar array components and foundation material for the inverters and transformer are delivered on the same day. Direct access to both the Maclay Tanks and the Maclay Reservoir sites would be from Astoria Street. Little equipment would be operating on site other than a truck crane, a compact excavator used to screw in the ground anchors for the terraced area installation, and, for brief periods during the transformer and inverter foundation installation, a backhoe, soil compactor, and concrete truck. No hazardous materials, other than typical vehicle fuels and lubricants, would be required during installation. Since the solar modules would be installed on the existing roof of the tanks and reservoir, and on the essentially flat terraced area near the tanks, no significant grading or site preparation would be required. Other than the trips required for the delivery of materials and supplies to the site, all construction activities would be confined to the tank and reservoir properties. Temporary construction materials and supplies laydown areas would be located on the paved area between the tanks and in the vacant area northwest of the reservoir.

2.5 PROJECT OPERATIONS

No additional personnel would be required at the Maclay properties on a daily basis to maintain and operate the solar power installation. A small number of personnel may be required during brief periods when certain maintenance operations must be performed. The solar arrays would be monitored by automated methods to ensure that they are generating electricity to the specified capacity. Static PV arrays generate electricity without moving parts, and general maintenance requirements are characteristically low. Maintenance activities, such as troubleshooting, repairing, replacing, or optimizing system components, would occur on an event-driven basis. Occasional washing of the solar arrays may be required in order to restore generation efficiency. However, such washing would involve less than 0.1 acre-feet of water per year, which is much less than the 0.5 acre-feet of water per year used by a typical Los Angeles household. Washing would be performed only as needed to maintain system performance and the manufacturer's warranties on electrical equipment.

2.6 ENVIRONMENTAL PROTECTION MEASURES

LADWP implements best management practices (BMPs) relative to design, construction, and operation for all projects that it develops. BMPs include standard procedures and precautions that are implemented to protect resources and avoid impacts, inasmuch as many LADWP projects occur in areas that contain sensitive biological, cultural, or human resources. BMPs are also provided to ensure compliance and consistency with local, state, and federal laws, regulations, and requirements. BMPs are not mitigation measures; rather, they are a part of the proposed project. The BMPs for the proposed project include the following:

Air Quality. LADWP would ensure that the construction contractor 1) complies with all requirements specified by the South Coast Air Quality Management District (SCAQMD) for any portable stationary equipment needed for construction (e.g., power generators), including the acquisition of applicable permits or appropriate registration with the California Air Resource Board; and 2) complies with all SCAQMD rules governing fugitive dust control (SCAQMD 403).

Biological Resources. LADWP would protect existing biological resources during construction and operations through the following measures:

- The project shall be planned and designed to utilize existing roads and already disturbed areas to the maximum extent feasible, and to minimize the number and length/size of new roads and lay-down areas.
- LADWP shall conduct construction and operations to protect nesting migratory birds, including observing appropriate setbacks, establishing buffers, and conducting preconstruction evaluations during the breeding season (March 15th to September 15th).
- Project development shall be consistent with any applicable adopted Habitat Conservation Plan or other regulation protecting biological resources, including tree protection ordinances.
- Trimming of specimen trees will only be conducted under the direction of a qualified arborist.

Cultural and Paleontological Resources. Unexpected discovery of cultural or paleontological resources during construction shall be brought to the attention of the responsible construction officer or LADWP construction manager immediately. Work shall be halted in the vicinity of the find to avoid further disturbance to the resources while they are being evaluated and appropriate mitigation measures are being developed.

Fire Safety and Control. During project construction and operations, LADWP would verify and ensure that adequate fire-suppression equipment (such as fire extinguishers) is provided on-site to respond to the accidental ignition of a fire.

Hydrology and Water Quality. LADWP would ensure that the construction contractor complies with federal and state permit approvals and requirements for water quality control and protection, and would implement the following BMPs during construction:

- All active construction areas, access roads, and staging areas will be watered as needed to control dust. Exposed stockpiles (dirt, sand, etc.) would be enclosed, covered, or watered twice daily.
- Refueling, or addition or changing of oil and other fluids for equipment and heavy machinery, will be performed only at approved staging areas. Spill containment measures will be used to minimize risk of spill drainage into storm drains or waterways. Oil and other fluids would be disposed of as required by California law.
- All construction vehicles will maintain a hazardous materials spill kit, which will include absorbent materials, tarps, small storage containers or waterproof bags, and latex gloves. Field personnel will be made aware of these kits and instructed on how to use them.
- Asphalt or cement equipment will not be rinsed in, nor excess products deposited into, any storm drain, stream, or other waterway. Asphalt or concrete effluent will not be allowed to enter into any storm drain, stream, or waterway. Effluent will be removed from standing water and prevented from entering a waterway.
- Sediment and erosion control BMPs, such as straw wattles or sandbags, will be implemented and maintained around active work areas to prevent sediment-laden storm water from flowing onto or off of the site.

Noise. LADWP would ensure that the construction contractor complies with the following BMPs relative to construction activities;

- The project will comply with the City of Los Angeles Noise Control Ordinance relative to time and duration of construction activities and peak noise levels.
- All equipment shall have sound-control devices no less effective than those provided on the original equipment.
- All construction equipment used shall be adequately muffled and maintained.
- All stationary construction equipment (i.e., compressors and generators) shall be located as far as practicable from nearby residences.

Solid Waste. In accordance with AB 939 and BMPs, LADWP requires contractors to implement source reduction techniques and recycling measures during project construction.

Transportation and Traffic. During construction, LADWP would implement the following BMPs when conducting work in residential areas:

- Establishing worker and vehicle routing to and from the project site to avoid travel on residential streets to the greatest extent possible
- Limiting on-street parking in residential neighborhoods to areas directly adjacent to the project site
- Limiting the delivery of heavy loads to and from the project site to between the hours of 9:30 a.m. and 3:00 p.m.

2.7 PERMITS AND APPROVALS

The Maclay Solar Project would be installed under the auspices of the City of Los Angeles (via LADWP) and would not require discretionary or regulatory permits from any other governmental agency.

3.0 CEQA INITIAL STUDY CHECKLIST AND ENVIRONMENTAL EVALUATION

3.1 PROJECT INFORMATION

1. **Project title:**
   Maclay Tanks and Reservoir Solar Project

2. **Lead agency name and address:**

   Los Angeles Department of Water and Power
   Environmental Planning and Assessment Services
   111 North Hope Street, Room 1044
   Los Angeles, California 90012

3. **Contact person and phone number:**
   Julie Van Wagner
   Environmental Specialist
   Los Angeles Department of Water and Power
   (213) 367-5295

4. **Project location:**
   Maclay Tanks:
   13554 N. Fenton Avenue, Sylmar, California 91342
   13560 N. Fenton Avenue, Sylmar, California 91342
   13600 N. Fenton Avenue, Sylmar, California 91342
   13601 W. Astoria Street, Sylmar, California 91342

   Maclay Reservoir:
   13651 N. Eldridge Avenue, Sylmar, California 91342

5. **Project sponsor's name and address:**
   Same as lead agency (see Section 2 above)

6. **City Council District:**
   7th District – Councilmember Richard Alarcon

7. **Neighborhood Council:**
   Sylmar

8. **General plan designation:**
   Maclay Tanks and Reservoir: Public Facilities

9. **Zoning:**
   Maclay Tanks: PF-1VL-K; Public Facilities (with 45-foot height limit and "K" Equine Keeping District overlay)
   Maclay Reservoir: PF–1VL; Public Facilities (with 45-foot height limit)

10. Description of project:

LADWP proposes to install and operate solar PV facilities on and adjacent to the existing Maclay Tanks and Reservoir in the community of Sylmar, California. The proposed Maclay Solar Project would provide approximately 2.5 megawatts of generation capacity to help the City of Los Angeles meet its renewable energy goals. At the Maclay Tanks site, solar modules would be placed on the roof of the two existing concrete cylindrical tanks and on adjacent open ground; the total area to receive solar modules would be approximately 210,000 square feet, which would provide about 1.6 MW of energy. At the Maclay Reservoir site, solar modules would be placed on the roof of the existing rectangular reservoir; the total area to receive solar modules would be approximately 80,000 square feet, which would provide about 0.9 MW of energy. See Section 2.3 of this document for additional information.

11. Surrounding land uses and setting:

The Maclay Tanks site, consisting of about 16.5 acres of land, is located at 13601 West Astoria Street, and the Maclay Reservoir site, consisting of about six acres, is located immediately southeast of the Maclay Tanks site, at 13651 North Eldridge Avenue. Regional access to the sites is provided from Interstate 210, which is located approximately 0.5 miles southwest of the Maclay properties. The proposed project properties are surrounded primarily by residential uses. Around the Maclay Tanks property, these uses generally consists of large to very large lots (approximately 0.25 to 2.5 acres) zoned for low-density residential or agricultural use. All of these lots, even those zoned as agricultural use, contain residential units. Residential lots surrounding the Maclay Reservoir property to the northeast, southeast, and southwest are comparatively smaller at approximately 0.13 to 0.2 acres. The Maclay Tanks and Maclay Reservoir properties themselves are zoned PF, within which the existing uses are allowable under a conditional use permit. See Section 2.1 of this document for additional information.

12. Other public agencies whose approval is required:

The Maclay Solar Project would be installed under the auspices of the City of Los Angeles (LADWP) and would not require discretionary or regulatory permits from any other governmental agency.

3.2 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

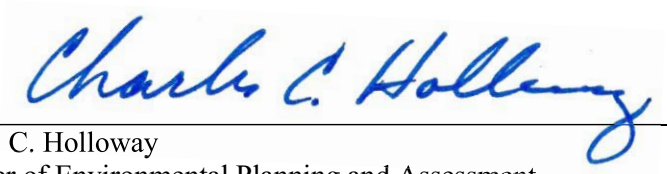
The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

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

3.3 DETERMINATION

On the basis of this initial evaluation:

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



November 22, 2010

Charles C. Holloway
Manager of Environmental Planning and Assessment
Los Angeles Department of Water and Power

Date

3.4 ENVIRONMENTAL EVALUATION

The following discussion of potential environmental effects was completed in accordance with Section 15063(d) (3) of the California Environmental Quality Act (CEQA) Guidelines (2010) to determine if the project may have a significant effect on the environment.

3.4.1 Aesthetics

Environmental Issues	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) Have a substantial adverse effect on a scenic vista?

No Impact. Scenic vistas are the panoramic public views of significant visual elements, including, for example, mountains, large water bodies, striking natural terrain, or historic features. The proposed project would be contained entirely within the Maclay Tanks and Maclay Reservoir properties, which are located on opposite sides of a single block in a primarily residential neighborhood. The existing tanks and surrounding pavement utilize approximately 4.5 acres of the 16.5-acre tanks property. The existing covered reservoir and surrounding pavement utilize approximately 2.5 acres of the 6-acre reservoir property. Although these properties are surrounded entirely by residential uses, some of which would have a view of the proposed solar facilities, the properties themselves are cleared of significant natural elements and do not include any scenic features. Based on the relatively low scale of the proposed solar panels and the relationship of the Maclay properties to the surrounding vicinity, no adverse effect on a scenic vista beyond the property boundaries caused by an obstruction or alteration of views would occur.

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

No Impact. The proposed project would be contained entirely within the existing Maclay Tanks and Maclay Reservoir property boundaries. The closest officially designated scenic highway, State Route 2, is located approximately 15 miles to the southeast of the project site. The closest eligible state scenic highway is Interstate 210, located approximately 0.5 miles southwest of the project properties.[1]

[1] California Department of Transportation. *California Scenic Highway Mapping System.* Website: http://www.dot.ca.gov/hq/LandArch/scenic_highways/index.htm.

Interstate 210 is also a designated scenic highway under the Transportation Element of the City of Los Angeles General Plan.[2] However, the Maclay properties are not visible from Interstate 210. Therefore, the project would not damage scenic resources within a designated scenic highway.

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

Less Than Significant Impact. The visibility of the proposed project elements from the surrounding residential areas would vary based on the existing terrain and vegetation at the Maclay properties. Most project elements located on the Maclay Tanks property would be largely obscured from viewpoints on Astoria Street (to the southeast) and Fenton Avenue (to the southwest) because of vegetation along the road frontages and/or the embankments located along the southeast and southwest edges of the proposed project site. Only those panels located along the southwest and southeast periphery of the project site would be at least partially visible from residential properties on Astoria Street and Fenton Avenue or from the streets themselves. Portions of many residential properties adjoining the Maclay Tanks property along the northeast and northwest boundaries consist of storage yards, utility buildings, or corrals, and a number of properties include walls or fences, which provide a visual barrier to the Maclay Tanks property. However, the proposed project would be visible from many of the residential properties located adjacent to the northeast and northwest boundaries of the tanks property, especially from second-story windows.

Most project elements located on the Maclay Reservoir property would be largely obscured from view from the residential properties adjoining the reservoir property along the southeast and southwest boundaries because of existing vegetation and/or embankments located adjacent to the reservoir. Only those solar panels located along the southwest and southeast periphery of the reservoir would be at least partially visible from these viewpoints. Likewise, except for those panels located along the periphery of the reservoir, project elements would be largely obscured by vegetation and embankments from viewpoints along Eldridge Avenue to the northeast. However, because of the decreasing height of the embankment surrounding the reservoir, project elements would become increasingly visible from viewpoints along Eldridge Avenue moving northwestward towards Astoria Street. Project elements would also be generally visible, although partially screened by existing trees, from Astoria Street on the northwest edge of the reservoir property.

Nonetheless, regardless of visibility, the proposed solar modules would not substantially degrade the visual character or quality of the existing Maclay Tanks and Reservoir properties or surroundings, which do not possess scenic value largely due the presence of the existing water storage facilities and the lack of other visually significant features on site.

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

Less Than Significant Impact. To keep the PV cells clean and protect them from damage but still allow for the collection of sunlight that is converted into energy, the surface of solar panels are covered with a pane of glass, which can normally be a reflective material. However, solar panels employ a low-iron content glass that is specifically designed to provide high transparency to increase light transmission to the PV cells and reduce the reflection of light by the glass. In addition, the glass used on the proposed project panels would be treated with an anti-reflective coating to further decrease reflection and increase the transmission of light through the glass to the cells. While these

[2] City of Los Angeles. *General Plan Transportation Element, Map E Scenic Highways in the City of Los Angeles.* June 1998. Website: http://cityplanning.lacity.org/cwd/gnlpln/transelt/TEMaps/E_Scnc.gif, accessed August 2010.

characteristics of the solar panel glass—intended to increase light absorption and, therefore, energy production—do not entirely eliminate reflection, the general appearance of the panels would be a dark field. Based on these properties, the reflectivity of the panels would be about 30 percent, which is generally similar to or less reflective than many building surfaces found in the area of the project.

The solar panels would be mounted on the support framework at an angle of approximately 10 to 20 degrees from horizontal and oriented to the south. Based on this orientation, the face of the panels would not be visible from viewpoints located north of each installation (i.e., Maclay Tanks and Maclay Reservoir), including from residential properties adjoining the northeast and northwest boundaries of the Maclay Tanks property or, in the case of the Maclay Reservoir installation, from Astoria Street and Eldridge Avenue. The face of the panels would be visible from viewpoints located to the south of each installation. However, as discussed above, only those panels located along the southwest and southeast peripheries of the Maclay Tanks project site and the Maclay Reservoir would be visible because of existing vegetation and terrain. In addition, based on the orientation and angle of the panels, the percentage of the sunlight that would not be absorbed by the PV cells would be reflected at a relatively steep angle upward (ranging from approximately 52 to 61 degrees from horizontal throughout the year at noon). The greatest potential for glare from the panels to be visible at ground level would occur in the early morning and late evening, when the sun is at a lower angle in the sky but when the intensity of the reflected light is also less. The low profile of the panels (less than five feet above ground level at the upper end) would also tend to limit visible glare from the project site. Any reflection experienced at a given location would also be brief due to the shifting position of the sun in the sky.

The solar panels would not require the addition of night lighting at the project site. Based on the low visibility of the solar panels in relation to adjacent uses and the low-glare nature, orientation, and angle of the panels, the proposed project would not create new sources of substantial light or glare that would result in a significant adverse effect to views in the area.

3.4.2 Agricultural and Forestry Resources

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.				
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?	☐	☐	☐	☒

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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 the conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

Discussion

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?

No Impact. The proposed project would be located entirely within the boundaries of the Maclay Tanks and Maclay Reservoir properties, which are owned by LADWP and do not contain land that is designated as Farmland as mapped by the Farmland Mapping and Monitoring Program.[3] The proposed project would be located on land that is zoned PF.[4] The properties are therefore not subject to a Williamson Act contract.

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

No Impact. See discussion under Section 3.4.2(a).

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))?

No Impact. The proposed project would be located entirely within the boundaries of the Maclay Tanks and Maclay Reservoir properties, which are owned by LADWP and occupied by drinking water storage facilities. The project site does not support native tree cover or timber resources and is therefore not considered forest land, timberland, or a timberland production zone as defined in the California Public Resources Code or Government Code.[5,6]

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[3] State of California, Division of Land Resource Protection. *Farmland Mapping and Monitoring Program*. Website: http://www.consrv.ca.gov/DLRP/fmmp/index.htm, accessed August 2010.

[4] City of Los Angeles. *Zimas – Zoning Information and Map Access System*. Website: http://zimas.lacity.org/, accessed August 2010.

[5] Legislative Council of California. *California Public Resources Code.* Website: http://www.leginfo.ca.gov/.html/prc_table_of_contents.html, accessed June 2010.

[6] Legislative Council of California. *California Government Code.* Website: http://www.leginfo.ca.gov/.html/gov_table_of_contents.html, accessed June 2010.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

No Impact. See discussion under Section 3.4.2(c).

e) Involve other changes in the existing environment which, due to their location or nature, could result in the conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?

No Impact. There is no Farmland or forest land within the proposed project properties. The electrical generation capacity of the proposed project is 2.5 MW and represents renewable energy capacity that would offset the use of fossil fuels for electrical generation to meet currently projected energy demand in the LADWP service area. It would not contribute to growth that may lead to the conversion of Farmland or forest land. Therefore, there would be no potential for construction or operation of the proposed project to convert Farmland to non-agricultural use or forest land to non-forest use, either directly or indirectly.

3.4.3 Air Quality

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.				
Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
b) Violate any air quality standards 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 concentration?	☐	☐	☒	☐
e) Create objectionable odors that would affect a substantial amount of people?	☐	☐	☒	☐

Discussion

During the construction phase of the proposed Maclay Solar Project, air pollutant emissions would be generated from construction equipment sources and ground disturbance. The solar arrays would create virtually no pollutants during the operational phases of the project. Also, greenhouse gas (GHG) emissions would occur during construction and are addressed in Section 3.4.7 of this IS/ND.

The Federal Clean Air Act (CAA) and its subsequent amendments establish air quality regulations and the National Ambient Air Quality Standards (NAAQS), and delegate the enforcement of these standards to the states. In California, the Air Resources Board (ARB) is responsible for enforcing both federal and state air pollution regulations. The ARB has, in turn, delegated the responsibility of regulating stationary emission sources to regional air agencies. In the project area, which is located in the South Coast Air Basin (SCAB), the South Coast Air Quality Management District (SCAQMD) has this responsibility.

Areas that do not meet the NAAQS or California Ambient Air Quality Standards (CAAQS) for a given criteria pollutant are designated as "nonattainment areas" by the US Environmental Protection Agency (EPA) and/or the ARB. Further classifications are given to nonattainment areas to identify the severity and number of violations experienced as well as the year in which attainment is anticipated based on implementation of attainment plans. The SCAB is designated a non-attainment area for ozone (O_3), particulate matter smaller than or equal to 10 microns in diameter (PM_{10}), and particulate matter smaller than or equal to 2.5 microns in diameter ($PM_{2.5}$).[7] The SCAQMD maintains an extensive air quality monitoring network to measure criteria pollutant concentrations throughout SCAB.

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

No Impact. For the SCAB, the 1997 Air Quality Management Plan (AQMP), as amended in 1999, 2003, and 2007, is the applicable management document. The SCAQMD and Southern California Association of Governments (SCAG) have responsibility for preparing and implementing an AQMP that addresses federal and state Clean Air Act requirements. There are two primary criteria for determining consistency with the AQMP. One criterion is whether the project would emit air pollutants that would substantially contribute to an air quality violation. The other criterion is whether the project would be consistent with adopted regional projections for housing, employment, and population (upon which the achievement of air quality standards in the AQMP are based). Relative to the first criterion, Item 3.4.3 (b) below shows that the primary impacts associated with the proposed project would occur during short-term construction and that emissions for all primary pollutants would be below significance thresholds in all cases. Relative to the second criterion, the construction and operation of the proposed project is being undertaken to meet RPS objectives for renewable energy consumption, meaning that the energy produced by the proposed project must replace energy generated from fossil fuel sources (not add to it). Consequently, implementation of the proposed project would not substantially affect (or induce) population, housing units, or employment in the SCAB, and would thus be consistent with regional growth projections on which the AQMP is based. Based on these criteria, the proposed project would not conflict with or obstruct implementation of the applicable air quality plan.

b) Violate any air quality standards or contribute substantially to an existing or projected air quality violation?

Less Than Significant Impact. The proposed project's air quality impacts are mainly attributable to the construction activity. To address the potential for impacts associated with construction of the project, it was assumed that overall project construction and commissioning would require six months of activity. It is anticipated that the solar installations on the tanks site and reservoir site would occur sequentially, starting with the tanks site. A total of about six months of construction would be required for the two sites. The minor grading for the installation of the inverters and transformer (2,000 square feet) at Maclay Tanks would occur in a single day. Emissions were calculated based on OFFROAD

[7] SCAQMD. *Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning.* May 6, 2005. website http://www.aqmd.gov/prdas/aqguide/aqguide.html, accessed June 2010.

emission factors from the SCAQMD's website[8] for heavy equipment and emission factors from the EMFAC2007 Model[9], assuming that the project would be constructed prior to 2012. Emissions of fugitive dust were calculated using the Urban Emissions Software Model (URBEMIS) emission factor[10] of 20 pounds per acre-day. In addition, it was assumed that the peak on-site personnel would reach approximately 25 (during the simultaneous installation of the solar modules and inverters-transformers).

A summary of the maximum daily construction emission estimates is provided in Table 1 below. This analysis is based on the maximum construction scenario, assuming grading and daily deliveries of materials would occur on the same day. Emissions were compared with both the SCAQMD regional significance thresholds for construction and the Localized Significance Threshold (LST)[11] for the East San Fernando Valley Source-Receptor Area. Using extremely conservative estimates of maximum daily construction activity, the analysis shows that the project would have a less than significant impact on air quality.

Operational emissions would include periodic inspection and maintenance activities, and would be lower than the emissions associated with construction (i.e., less than significant).

While emissions are below the SCAQMD's significance thresholds for regional and LSTs, LADWP will follow best management practices relative to SCAQMD dust abatement rules and plans (i.e., Rule 403) during grading and construction.

TABLE 1 ESTIMATED CONSTRUCTION EMISSIONS

Emissions, lbs/day						
Emission Source	**ROG**	**NOx**	**CO**	**SOx**	**PM10**	**PM2.5**
Fugitive Dust	-	-	-	-	0.55	0.12
Heavy Equipment (onsite)	3.79	14.16	27.38	0.03	1.69	1.50
Worker and Delivery vehicles (offsite)	1.19	15.33	9.85	0.03	8.71	1.87
TOTAL	**4.98**	**29.48**	**37.22**	**0.06**	**10.95**	**3.48**
SCAQMD Regional Thresholds	75	100	550	150	150	55
LST	N/A	262	994	N/A	13	8
Above Thresholds?	*No*	*No*	*No*	*No*	*No*	*No*

Source: Scientific Resources Associated, 2010

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)?

Less Than Significant Impact. As shown in Section 3.4.3(b), the proposed project would have minor grading and construction emissions that are individually less than significant on both a regional and

[8] http://www.aqmd.gov/ceqa/handbook/offroad/offroad.html
[9] http://www.arb.ca.gov/msei/onroad/latest_version.htm
[10] Rimpo and Associates. 2007. URBEMIS Model, Version 9.2.4.
[11] Assuming the graded portion of site is 1 acre, nearest receptor is 25 meters from site, LST for East San Fernando Valley Source-Receptor Area.

local level. Additionally, project emissions would be very short-term; project operations would have negligible air emissions. In section 3.4.18(b), several other projects in the general area of the project site are identified that are in various stages of planning, approval, and/or construction. Some of these projects would have significant project and cumulative air quality impacts (for instance, the LA Mission College) primarily associated with long-term operations.

However, the proposed project's small contribution to the cumulative projects' collective air quality impacts would not be cumulatively considerable. This is due to the very localized and short-term nature of the project's construction phase emissions and the fact the long-term operations would have negligible air quality impacts. It is noted that the cumulative projects either would be the subject of their own environmental documents (as required by CEQA) including any mitigation requirements or would have no impacts or less than significant impacts (Negative Declarations filed). Further, the projects are sufficiently far from the proposed project site that localized cumulative effects would not occur. For instance, the closest cumulative projects to the project site, which include the LA Mission College expansion and a 30-unit apartment building, are about one half mile to the east of the proposed project site, beyond the range of primary localized construction emissions. As a result, the proposed project's short-term construction emissions are not cumulatively considerable and are therefore less than significant.

d) Expose sensitive receptors to substantial pollutant concentration?

Less Than Significant Impact. Sensitive receptors are defined as residences, schools, daycare centers, playgrounds and medical facilities. Residential dwellings are located on many parcels adjacent to the proposed solar sites. The closest residential properties are about 75 feet away from the westernmost Maclay Tank, and several other residential properties are within 100 to 200 feet of the construction area of both project sites. However, as shown in Section 3.4.3(b), the project would not generate substantial emissions exceeding localized significance thresholds. With implementation of best management practices to curtail dust emissions in conjunction with SCAQMD Rule 403, sensitive receptors would not be exposed to substantial pollutant concentrations.

e) Create objectionable odors that would affect a substantial amount of people?

Less Than Significant Impact. Project construction could result in the emission of minor amounts of odor compounds associated with diesel and other construction equipment exhaust. Such emissions from the proposed project, which would be minor due to the limited construction size and duration, would not typically result in significant odor impacts, though some individuals at nearby residential properties may be able to detect some minor and short-term odor.

3.4.4 Biological Resources

Environmental Issues	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, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☐	☐	☒
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

Discussion

a) Have a substantial adverse effect, either directly or indirectly 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?

No Impact. The Maclay tanks and reservoir sites are completely surrounded by urbanized land consisting primarily of low-density residential uses. Both sites were extensively graded during the original facilities' construction. Both sites are situated in upland areas and are there are no streams, ponded water, riparian zones, or flood zones on the properties.

The tanks site is paved where solar panels would be attached to the roof and where construction staging would occur. The adjacent ground surface at the tanks site that would receive panels (i.e., the upper terraced portion of the site) is dominated by weedy and non-native grassland species such as

Russian thistle (*Salsola tragus*) and scattered goldenbush (*Isocoma menzeisii*), with an occasional sage and buckwheat. Vegetation throughout the tanks site is periodically controlled by mowing and clearing. Some trees have been planted or are present in the area where the proposed on-ground solar arrays would be situated and in the area immediately adjacent to it. A total of about 32 trees would require removal in this area, including eucalyptus, sycamore, and pine. All of the trees that would be removed are relatively small and most are non-native ornamentals (the exception being five small sycamores). It does not appear that any of the trees are naturally occurring, due primarily to their location within an upland non-native grassland habitat. Specifically, sycamore is a riparian species and not generally found in such habitat unless specifically planted. In addition to the sycamores, the remaining 27 trees at the site include numerous eucalyptus (*Eucalyptus* spp.), lodgepole pine (*Pinus contorta*) and other ornamentals.

Since the trees that would be removed are relatively small, are not part of larger habitat areas, and are not subject to a tree protection ordinance (see Item 3.4.4(e) for more information), no significant adverse biological impacts would result from their removal. LADWP will implement BMPs to avoid potential disturbance to migratory birds should tree removal occur in the breeding season (March 15th to September 15th).

The areas surrounding the reservoir site are denuded of vegetation except for a number of trees that exist around the site. Mature trees occur along the Astoria and Eldridge Avenue rights-of-way and on the other sides of the properties. None of the trees at the reservoir site would require removal; however, some trees closest to the reservoir, including one mature oak tree, may need to be trimmed to improve solar exposure. LADWP will implement BMPs and secure the services of a qualified arborist so that any required trimming does not damage the trees.

Overall, the proposed project facilities would be located on portions of the tanks and reservoir sites that are already disturbed by existing facilities and operations.[12] The existing Maclay Tanks are ringed by a paved area that would be used for staging and the location of inverters and transformers. The adjacent area for the ground-mounted solar arrays is also disturbed by previous grading for drainage facilities. At the Maclay Reservoir site, project construction activity would be limited to the reservoir roof and the already denuded perimeter area. Construction laydown on the north side of the reservoir would be on a disturbed area adjacent to the reservoir itself. The areas to be disturbed by construction do not include any sensitive habitats nor do they otherwise contain designated or critical habitat for any candidate, sensitive, or special status species of wildlife. Since none of the proposed project areas contain sensitive habitats or sensitive wildlife communities, or are inhabited by sensitive or special status species, no direct or indirect impacts due to project construction or operations would occur.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

No Impact. See response to 3.4.4(a). The existing Maclay tanks and reservoir are located on upland sites within an established residential community and do not include riparian habitat or other sensitive natural communities. Ancillary equipment would be sited adjacent to the existing tanks and reservoir on land owned by LADWP and used for reservoir operations. No impacts would occur.

[12] Based on site survey, June 15, 2010.

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

No Impact. See responses to 3.4.4(a) and (b). All construction for the proposed Maclay tanks and reservoir would occur in upland areas and would not directly or indirectly affect federally protected wetlands through removal, filling, hydrological interruption, or other means. No impacts would occur.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

No Impact. The Maclay tanks and reservoir are located on sites that are surrounded by residential uses and consequently do not contain important wildlife corridors, nurseries, or habitat areas.[13] The installation of solar modules on the roof of the Maclay tanks and reservoir and the use of about 90,000 square feet (2.1 acres) of adjacent disturbed land for additional solar arrays would not interfere with any important wildlife activity at the site. No impact would occur.

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

No Impact. The City of Los Angeles Municipal Code (LAMC Section 46.00 through 46.06) protects certain species of native trees that measure four inches or more in cumulative diameter, four-and one-half feet above ground level at the base of the tree. The protected species include all native oak tree species (*Quercus* sp.) except for scrub oak; California Sycamore (*Platanus racemosa*); California Laurel (*Umbellularia californica*); and Southern California Walnut (*Juglans californica*). Removal of protected trees requires a removal permit from the Board of Public Works. Any act that may cause the failure or death of a protected tree requires inspection by the Urban Forestry Division. However, if the trees were planted and are growing in conditions where they do not naturally occur, they are not protected by the ordinance. The proposed Maclay Tanks site is in an upland area that had been cleared, graded, and partially planted with the trees on the site.

At the Maclay tanks site in the area where ground-mounted arrays would be located, there are five sycamores, with diameters at breast height (DBH) of 5.0 inches, 4.0 inches, 3.5 inches, and 3.0 inches. California native trees subject to the City's tree protection ordinance must have a DBH of 4.0 inches or greater. Consequently, only two of the five California sycamores at the Maclay tanks site are large enough to be subject to the ordinance. Additionally, the sycamores are not in their native habitat and were probably planted at their current locations. For these reasons, the trees would not be subject to the tree protection ordinance and there would be no impact relative to the ordinance resulting from their removal.

No protected trees would be removed at the Maclay reservoir site, though several specimen trees, including one coast live oak with a DBH of 29 inches, potentially would have to be trimmed to prevent shadowing of the solar panels. In accordance with LADWP BMPs, any necessary tree trimming would be done under the direction of a qualified arborist. No impacts would occur.

[13] City of Los Angeles. *Sylmar Community Plan Land Use Map*. February 6, 2008. Website: http://cityplanning.lacity.org/complan/valley/PDF/sylplanmap.pdf, accessed June 2010.

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?

No Impact. The use of the Maclay Tanks and Reservoir for the construction and operation of solar panels would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan because the project sites are not located in a conservation plan area.[14, 15, 16]

3.4.5 Cultural Resources

Environmental Issues	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 California Code of Regulations Section 15064.5?	☐	☐	☒	☐
b) Cause a substantial adverse change in the significance of an archaeological resource as defined in California Code of Regulations Section 15064.5?	☐	☐	☒	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?	☐	☐	☒	☐
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	☒

Discussion

a) Cause a substantial adverse change in the significance of a historical resource as defined in California Code of Regulations Section 15064.5?

Less Than Significant Impact. The proposed project would not cause an adverse change in the significance of a historical resource since no facilities of historic significance would be affected. In general, a resource would be considered historically significant under California and Federal regulations if it is associated with significant events in California or U.S. history, is associated with the lives of persons important in our past, or is included on National, California, and/or local historic resource lists. A resource is usually considered for its historical significance after it reaches the age of 50 years.

Historic aerial photography, site photos dating from the late 1920s, and LADWP internal information show that the existing Maclay Reservoir site has been used on and off for water storage for at least the past 90 years. Aerial photography from 1952 shows that the reservoir had, at that time, essentially the same footprint as the current reservoir. Maclay Reservoir was initially constructed as part of the San

[14] City of Los Angeles. *Sylmar Community Plan*. August 8, 1997.
[15] City of Los Angeles. *Zimas – Zoning Information and Map Access System*. website http://zimas.lacity.org/, accessed July 19, 2010.
[16] California Department of Fish and Game, BIOS Data, website http://dfg.ca.gove/biogeodata/gis/imaps.asp/, accessed July 19, 2010.

Fernando Reservoir/Owens Aqueduct and has provided a source of domestic water storage for the northern portion of the San Fernando Valley during its many years of operation.

However, it has been determined that the Maclay Reservoir is not a potentially significant historic resource since the reservoir structure has been significantly modified over the years and lacks historic integrity. Therefore, adding solar panels to the roof of the facility would not cause a substantial adverse change in the significance of a historic resource.

Relative to structural integrity, an LADWP internal memorandum indicates that the Maclay Reservoir was constructed in 1917.[17] The reservoir initially contained a concrete slab lining with a two-foot-high perimeter parapet wall and gabled wood roof. There is evidence that there have been a few years that the reservoir was not operating, including one documented occurrence of the reservoir being taken out of service in 1929, and including the years required to rebuild or repair the reservoir after the major earthquakes in 1971 and 1994.

According to LADWP engineering review[18], the reservoir was severely damaged by the 1971 San Fernando Earthquake. The wood roof and portions of the parapet wall collapsed. The concrete sides were displaced laterally and vertically and structurally compromised. The southeast and southwest embankments were severely cracked and weakened.

Due to the critical nature of this water storage facility, rebuilding of the reservoir began immediately. The damaged concrete side walls and the bottom of the reservoir were completely removed. The sides and bottom were replaced with mesh-reinforced shotcrete and gunite, and the cracks in the reservoir embankment were repaired. A new parapet wall, steel girders and aluminum roof were installed. The roof and girders were supported by new columns constructed of concrete and steel, which were placed throughout the structure. Aftershocks caused damage to the new roof and girder connections at the parapet wall, requiring the installation of fifty-five 2-foot-diameter caissons around the reservoir to stabilize the parapet wall in 1973. The reconstructed reservoir is now less than 40 years old.

After the 1994 Northridge Earthquake, the reservoir suffered additional damage that included partial foundation failure that caused a 40- by 20-foot portion of the roof to collapse. Again, the reservoir was repaired. In 1998, additional seismic strengthening of the roof support trusses was implemented.

In spite of the long duration of water storage use at the Maclay Reservoir site, the structure itself has been significantly altered as a result of damage and rebuilding after the 1971 San Fernando Earthquake, and, to a lesser degree, the 1994 Northridge Earthquake. All structural elements and remnants of the original reservoir have been replaced since 1971 and the structure does not retain any substantive elements of its historic past. The complete lack of historic integrity of the reservoir structure essentially eliminates the potential for historic significance under California Code of Regulations Section 15064.5. As a result, there would be no significant impact to a historic resource resulting from installation of solar panels on Maclay Reservoir.

According to LADWP records, the Maclay Tanks were constructed in 1990 and would not meet any criteria for historic status based on age or historic importance.

[17] LADWP Water Supply Division Memorandum, December 21, 1995, Maclay Reservoir 1994 Northridge Earthquake Crack Investigation and Subsequent Trenching.
[18] Ibid.

The LAMC Section 12.20.3 contains provisions for designation and protection of areas of the City that have structures, natural features, or sites of historic, architectural, cultural, or aesthetic significance. Areas so designated carry the additional zoning classification of HPOZ (Historic Preservation Overlay Zone). The HPOZ areas contain significant examples of architectural styles characteristic of different periods in the city's history. No HPOZ designations are associated with the project sites or the immediately surrounding parcels.[19] No impact to HPOZ designated properties would occur from project implementation.

b) Cause a substantial adverse change in the significance of an archaeological resource as defined in California Code of Regulations Section 15064.5?

Less Than Significant Impact. A comprehensive archaeological records search was recently conducted for the LA Mission College Master Plan project, which is about 0.5 mile east of the project site. During the nine previous archaeological studies conducted within one half mile of the college site, no archaeological sites have been recorded. Previous archaeological studies include a 1988 field survey of the Maclay Reservoir portion of the proposed project site; no cultural resources were observed.[20] In addition, the soils at the Maclay Tanks and Reservoir site have been substantially disturbed through previous reservoir construction, backfilling, and terracing, making it unlikely that a surface survey would reveal archaeological resources.

Though the presence of archaeological resource discoveries during construction is a possibility, the likelihood in this case is low due to the previous substantial soil disturbance at the site, the lack of resources as demonstrated by previous surveys, and the minimal amount of additional surface disturbance that is necessary for construction of the project. LADWP employs BMPs to instruct grading and excavation workers in the proper procedures to follow in the unlikely event archaeological resources are discovered during excavation. In such a case, excavation would be redirected to another location until a qualified professional could examine the find, determine significance, and, if necessary, take further actions in relation to the resource.

c) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?

Less Than Significant Impact. Though significant paleontological resources have been found in the northern San Fernando Valley[21, 22], there is low probability of uncovering significant paleontological resources during installation of solar panels at the Maclay Tanks and Reservoir properties. Resource studies have shown that area soils are comprised mainly of Quarternary alluvium derived as fan deposits from the mountains to the east, or as fluvial deposits from area washes. These deposits are not fossiliferous. At greater depths below-surface, the older Quarternary sediments are fossiliferous and have produced notable resources within several miles of the project site.

Consequently, excavations of only a few feet, such as would occur with the proposed project, would not typically encounter fossils. At greater depths (one northern San Fernando Valley discovery was at

[19] City of Los Angeles. September 2001. City of Los Angeles, General Plan, Conservation Element: Section 3 Archaeological and Paleontological, Section 4: Conservation, Section 5 Cultural and Historical. Available at: http://www.ci.la.ca.us/PLN/Cwd/GnlPln/ConsvElt.pdf.
[20] LA-1746. Archaeological Field Survey of the Maclay Reservoir. November 1988. Glodgett and Schneeberger.
[21] EDAW 2009, *Los Angeles Aqueduct Filtration Plant Disinfection Contact Tank Project Mitigated Negative Declaration.* Appendix C Phase 1 Cultural Resources Assessment, Los Angeles Department of Water and Power.
[22] Los Angeles Mission College, Final Subsequent EIR for the 2009 Facilities Master Plan, Appendix E

a depth of 75 feet[23]), the potential for encountering significant resources is greater. Project activities would occur on the roof of the Maclay Tanks and Reservoir or the land immediately adjacent to the tanks. The project would require limited and shallow excavations not exceeding about five feet, which are unlikely to uncover significant vertebrate fossils. LADWP employs BMPs to instruct grading and excavation workers in the proper procedures to follow in the unlikely event fossil resources are discovered during excavation. In such a case, excavation would be redirected to another location until a qualified professional could examine the find, determine significance, and, if necessary, take further actions in relation to the resource.

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

No Impact. No human remains are expected to be disturbed within the project site during construction. In the event that remains are unearthed during construction, State Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98 provide guidance with regard to the accidental discovery of human remains. Should remains be unearthed during construction, LADWP would be subject to these requirements by law.

3.4.6 Geology and Soils

Environmental Issues	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?	☐	☐	☒	☐

[23] Op. cit. EDAW

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☐	☒
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒

Discussion

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.

Less Than Significant Impact. As with all areas of southern California, the project site is located in a seismically active region, which is laced with numerous known earthquake faults. The project would be located within the active San Fernando Fault Zone, which was responsible for the 6.7 magnitude Sylmar earthquake in 1971. Within the San Fernando Fault Zone, specific areas are designated Alquist-Priolo Special Study Zone Areas.[24] These are areas that are mostly likely to experience surface rupture and intense shaking in a significant earthquake. At the project site, the Alquist-Priolo zone touches the northwestern portion of the property containing the Maclay Tanks, but it does not touch the Maclay Reservoir property.[25] The Alquist-Priolo Earthquake Fault Zoning Act was passed in 1972 to mitigate the hazard of surface faulting to structures for human occupancy. No occupied structures are associated with the project. The actual solar panels are limited in extent and are close to the ground, and would not expose people to significant effects should the support structures fail in an earthquake. Seismic characteristics and shaking intensity are well known in this area and would be incorporated into the design of the solar panel structural framework for both on-reservoir and on-ground components. It is noted that the solar modules would be installed on the roof of the existing tanks and reservoir, which were constructed or retrofitted (in the case of Maclay Reservoir) to withstand potential seismic events, including strong ground shaking and seismically related ground failure in the San Fernando Fault Zone. In addition, to minimize potential damage to the solar facilities from seismic events, all project structures would be designed and constructed in accordance with the latest versions of the California Building Code, the Uniform Building Code, and the City of Los Angeles Building Code relative to seismic criteria, and neither people nor structures would be exposed to potential substantial adverse effects.

[24] City of Los Angeles. *Safety Element Exhibit A: Alquist-Priolo Special Study Zones & Fault Rupture Study Areas in the City of Los Angeles*. November 1996. Website: http://cityplanning.lacity.org/cwd/gnlpln/saftyelt.pdf, accessed June 2010.
[25] Ibid.

ii. Strong seismic ground shaking?

Less Than Significant Impact. See discussion under Section 3.4.6(a)(i).

iii. Seismic-related ground failure, including liquefaction?

No Impact. Based on City of Los Angeles Safety Element hazard maps and California Department of Conservation Seismic Hazard Zone Map, the project site is not in an area identified as susceptible to liquefaction.[26, 27] No liquefaction impacts would occur with project implementation.

iv. Landslides?

No Impact. The Maclay Tanks and Reservoir sites are located on gradually sloping land, Neither the project site nor the surrounding parcels are subject to landslide hazard.[28,29]

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

Less Than Significant Impact. The proposed solar modules would be installed primarily on the tops of the existing reservoir and tanks, but some adjacent areas would be disturbed and/or graded at the project sites. These disturbed areas include about 90,000 square feet of level land for construction of solar arrays on the open ground at the Maclay Tanks site and temporary use of disturbed and denuded ground surface for construction staging at the Maclay Reservoir site. Construction in these areas would disturb the soil but would not result in substantial soil erosion or loss of topsoil.

Since the proposed project areas are essentially level, major earthwork is not anticipated during project construction. The potential for soil erosion is increased where surface disturbance must be accomplished. Since the proposed graded areas are greater than one acre, LADWP would require through BMPs that the design contractor prepare erosion control plans and reports, including, but not limited to, a Storm Water Pollution Prevention Plan (SWPPP). Erosion and sediment control measures shall be in accordance with applicable state and local regulations. In addition, LADWP must comply with the Storm Water Construction Activities General Permit. Compliance with these provisions would reduce potential soil erosion at the site to a less than significant level. After construction of the proposed project, exposed areas of the site would be stabilized with gravel, plant material, or other permeable cover, and no significant soil erosion or loss of topsoil would occur.

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?

Less Than Significant Impact. See discussion under Sections 3.4.6(a)(i) and 3.4.6(a)(iv).

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[26] City of Los Angeles. *Safety Element Exhibit B: Areas Susceptible to Liquefaction in the City of Los Angeles*. November 1996. Website: http://cityplanning.lacity.org/cwd/gnlpln/saftyelt.pdf, accessed June 2010.
[27] State of California, Department of Conservation, "*Seismic Hazard Zone Map, San Fernando Quadrangle*" March 25, 1999. Website: http://gmw/cpmsrv/ca.gov/shmp/download/pdf/ozn_sfer.pdf.
[28] City of Los Angeles. *Safety Element Exhibit C: Landslide Inventory & Hillside Areas in the City of Los Angeles*. November 1996. Website: http://cityplanning.lacity.org/cwd/gnlpln/saftyelt.pdf, accessed June 2010.
[29] Op. cit. Department of Conservation Seismic Hazard Zone Map

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?

No Impact. The proposed project is not located on expansive soils.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

No Impact. No personnel would be associated with the proposed project and no facility processes requiring wastewater disposal would be necessary as part of project operations. Therefore, no changes to the existing sanitary waste system operations would occur such that septic tanks or an alternative wastewater system would be required. During project construction, sanitary waste would be handled by temporary portable chemical toilets. The waste from temporary facilities would be removed by a private contractor and disposed at an approved offsite location.

3.4.7 Greenhouse Gas Emissions

Environmental Issues	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) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less Than Significant Impact. Greenhouse gas emissions would be generated from construction activities associated with the project. Greenhouse gas emissions were estimated using the same methodologies as criteria pollutants, and were compared with the SCAQMD's screening threshold of 900 metric tons of CO_2-equivalent (CO_2e) emissions, below which no cumulatively considerable impact would occur, and no further analysis is required. From the analysis, CO_2e emissions associated with the Maclay Solar Project construction would total approximately 261 metric tons per year, made up of approximately 222 metric tons of CO_2, 0.34 metric tons of methane CH_4, and 39 metric tons of nitrous oxide (N_2O).[30] The project emissions associated with construction would be below the 900 metric ton threshold, and would not result in a cumulatively considerable impact on global climate. Operational emissions would include periodic inspection and maintenance activities, and would be lower than the emissions associated with construction. Furthermore, due to the nature of the project in providing approximately 2.5 MW of generation capacity to help the City of Los Angeles meet its

[30] Scientific Resources Associated. 2010. Technical Memorandum, Maclay Tanks and Reservoir Project Air Quality and Global Climate Change. July 23, 2010.

renewable energy goals, the project is consistent with the goals of AB 32 in reducing greenhouse gas emissions overall in the region by providing non-fossil fuel energy sources.

b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less Than Significant Impact. See discussion under Section 3.4.7(a).

3.4.8 Hazards and Hazardous Materials

Environmental Issues	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 a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☒

Discussion

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

No Impact. Construction of the proposed project would include activities involving some hazardous materials, including on-site fueling and minor servicing of construction equipment. However, construction activities would be short-term in nature, and the types of materials that would be involved are not considered acutely hazardous. Furthermore, the handling of these materials is subject to federal, state, and local health and safety requirements. Therefore, project construction would not create a hazard to the public or environment from the routine transport, use, or disposal of hazardous materials or through a reasonably foreseeable upset or accident.

The proposed project would not involve hazardous materials or generate hazardous wastes during operation. The PV modules would not include any moving parts, and maintenance requirements, such as PV module washing, if necessary, would be minimal. Therefore, project operations would not create a hazard to the public or environment from the routine transport, use, or disposal of hazardous materials or through a reasonably foreseeable upset or accident.

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?

No Impact. See discussion under Section 3.4.8(a).

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

No Impact. Los Angeles Lutheran High School is located approximately 900 feet southeast of the Maclay Tanks property and 200 feet southeast of the Maclay Reservoir property. No other schools are located within one-quarter mile of the project properties. As discussed in Section 3.4.8(a), the proposed project, either during construction or operations, would not emit hazardous emissions or involve the handling of hazardous or acutely hazardous materials, substances, or waste that would pose a threat to off-site receptors.

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?

No Impact. Government Code Section 65962.5 applies to facilities that may be subject to the Resource Conservation and Recovery Act Corrective Action program involving the cleanup of improperly managed hazardous wastes. The proposed project site is not contained on any state or federal lists compiled pursuant to the act.[31, 32, 33, 34]

[31] Department of Toxic Substances Control. *DTSC's Hazardous Waste and Substances Site List – Site Cleanup (Cortese List)*. Website: http://www.dtsc.ca.gov/SiteCleanup/Cortese_List.cfm, accessed August 2010.
[32] EPA. *CERCLIS Hazardous Waste Sites*. Website: http://www.epa.gov/superfund/sites/cursites/index.htm, accessed August 2010.
[33] EPA. *National Priorities List*. Website: http://www.epa.gov/superfund/sites/npl/index.htm, accessed August 2010.
[34] Department of Toxic Substances Control. *EnviroStor*. Website: http://www.envirostor.dtsc.ca.gov/public/default.asp, accessed August 2010.

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?

No Impact. The proposed project site is not located within an airport land use plan area or within two miles of a public airport or public use airport. The project would include no occupied facilities that would result in a safety hazard for people or any facilities that would be of a height that would represent an obstruction to air navigation.

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?

No Impact. The project site is not located within the vicinity of a private airstrip. The project would include no occupied facilities that would result in a safety hazard for people or any facilities that would be of a height that would represent an obstruction to air navigation.

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

No Impact. The proposed project would be located entirely within the Maclay Tanks and Maclay Reservoir property boundaries. No permanent or temporary street closures are planned during either project construction or operations. Emergency access to and egress from the project sites or surrounding areas would not be adversely affected.

h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

No Impact. According to the City of Los Angeles General Plan Safety Element, the proposed project properties are located within a Fire Buffer Zone adjacent to the San Gabriel Mountains.[35] However, no construction or operational activity related to the project would increase the threat of fire nor would the project expose people or structures to a risk of loss, injury, or death involving wildland fires in the area.

3.4.9 Hydrology and Water Quality

Environmental Issues	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?	☐	☐	☒	☐

[35] City of Los Angeles. *General Plan Safety Element, Exhibit D Selected Wildfire Hazard Areas in the City of Los Angeles.* November 1996. Website: http://cityplanning.lacity.org/cwd/gnlpln/saftyelt.pdf, accessed August 2010.

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g. the production rate of preexisting nearby wells would drop to a level 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) Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

Discussion

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

Less Than Significant Impact. The proposed Maclay Solar Project would require minimal grading and result in little possibility of violating any water quality standards. A relatively small area (approximately 2.1 acres total) would receive minimal grading for solar modules, inverters and transformers. Materials and supplies laydown, equipment storage, and worker vehicle parking would be confined to existing paved areas or other previously disturbed areas near the Maclay Tanks and Reservoir sites. Based on the relatively small numbers of equipment and workers required for construction and the staged manner in which materials would be delivered to the site, minimal

disturbance that might contribute to a water quality or waste discharge violation would occur. The post-construction operation of the proposed solar modules would not involve activities that would contribute to a violation of a water quality standard or waste discharge requirement.

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)?

Less Than Significant Impact. During project construction, minor amounts of water would be required for various uses, such as the concrete mix required for the transformer and inverter foundations. However, because of the relatively small quantity of water required in the context of the available supply, no depletion of groundwater supplies would occur from project construction. During project operations, the solar modules may occasionally require washing to maintain energy generation efficiency. To wash the modules one to two times a year, a maximum of approximately 0.08 acre-feet of water would be required annually, which represents significantly less than the 0.5 acre-feet of water per year used by a typical Los Angeles household; no depletion of groundwater supplies would occur related to project operations.

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?

Less Than Significant Impact. The proposed Maclay Solar Project sites do not have flood control channels, stream channels, or drainage ways that would be the subject of federal or state jurisdiction. Due to the developed condition of the site and the minor alteration proposed, the project would not result in substantial erosion or siltation or a substantial increase in runoff that would result in flooding, exceed the capacity of existing or planned storm water drainage systems, or provide additional sources of polluted runoff. Nonetheless, there is still a potential that grading could cause erosion if construction sites are not properly prepared.

In accordance with BMPs and because the proposed graded areas are greater than one acre, LADWP shall require that the design contractor prepare erosion control plans and reports, including, but not limited to, a SWPPP. Erosion and sediment control measures shall be in accordance with applicable state and local regulations and BMPs. In addition, LADWP must comply with the Storm Water Construction Activities General Permit. Compliance with these provisions would reduce potential soil erosion at the site to a less than significant level. After construction of the proposed project, exposed areas of the site would be stabilized with gravel, plant material, or other permeable cover, and no significant soil erosion or loss of topsoil is expected to occur.

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?

Less Than Significant Impact. See discussion under Section 3.4.9(c).

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?

Less Than Significant Impact. See discussion under Section 3.4.9(c).

f) Otherwise substantially degrade water quality?

No Impact. Based on the type and minor extent of activities anticipated during project construction and operations, the proposed project would not 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?

No Impact. Based on City of Los Angeles hazard maps and Federal Emergency Management Agency (FEMA) flood mapping system, the proposed project is not located within either the 100-year FEMA flood hazard area or the City of Los Angeles 100 and 500-year flood boundaries. The proposed project does not include the construction of any housing.[36, 37]

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

No Impact. See discussion under Section 3.4.9(g).

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?

No Impact. The proposed solar facilities are designed so as not to compromise the integrity of the reservoirs on which the solar modules would be placed. There are no designated or actual inundation areas associated with the project sites.[38]

j) Inundation by seiche, tsunami, or mudflow?

No Impact. The proposed project site is not located within a tsunami hazard zone, nor is it subject to mudflows.[39] The Maclay Tanks and Reservoir, on which the solar modules would be installed, could be subject to seiche caused by a seismic event. However, seiche events were considered in the design of the structures to minimize the occurrence of and damage from standing waves. In addition, because the proposed project consists of solar modules, it would not expose people or habitable structures to significant risk in the event of a seismically-related seiche in the Maclay Tanks and Reservoir.

[36] FEMA Map Service Center. *Flood Insurance Rate Map (FIRM) 06037C1075F*. 2008 Website: http://msc.fema.gov/webapp/wcs/stores/servlet/FemaWelcomeView?storeId=10001&catalogId=10001&langId=-1, accessed July 2010.
[37] City of Los Angeles. *General Plan Safety Element, Exhibit F 100-Year & 500-Year Flood Plains in the City of Los Angeles.* November 1996. Website: http://cityplanning.lacity.org/cwd/gnlpln/saftyelt.pdf, accessed July 2010.
[38] City of Los Angeles. *General Plan Safety Element, Exhibit G Inundation and Tsunami Hazard Areas in the City of Los Angeles.* November 1996. Website: http://cityplanning.lacity.org/cwd/gnlpln/saftyelt.pdf, accessed July 2010.
[39] Ibid.

3.4.10 Land Use and Planning

Environmental Issues	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) Physically divide an established community?

No Impact. The project would be located entirely within the boundaries of the Maclay Tanks and Maclay Reservoir properties, which are owned by LADWP and occupied by drinking water storage facilities and are completely fenced. Therefore, construction and operation of the proposed project would not result in physical division of any established communities.

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?

No Impact. The project would be located entirely within the boundaries of the Maclay Tanks and Maclay Reservoir properties, which are owned by LADWP and currently occupied by drinking water storage facilities. The properties are designated in the City of Los Angeles General Plan as Public Facilities and zoned PF.[40] The proposed solar power generation facilities are consistent with electrical generation uses established within the PF zone in the City.

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

No Impact. The proposed project would not conflict with any habitat conservation plan. The project properties are not within a habitat conservation plan or a natural community conservation area.[41]

[40] City of Los Angeles. *Zimas – Zoning Information and Map Access System*. Website: http://zimas.lacity.org/, accessed August 2010.
[41] City of Los Angeles. *Sylmar Community Plan*. August 8, 1997. Website: http://cityplanning.lacity.org/complan/pdf/sylcptxt.pdf, accessed August 2010.

3.4.11 Mineral Resources

Environmental Issues	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) 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?

No Impact. The proposed project sites, which include the existing Maclay Reservoir, Maclay Tanks, and open land adjacent to the tanks, do not contain known mineral resources nor are they identified as locally important mineral resource sites delineated on a local general plan, specific plan, or other land use plan[42].

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?

No Impact. See discussion in Section 3.4.11(a).

3.4.12 Noise

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

[42] Op. Cit., Zimas Information

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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) 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?

Less Than Significant Impact. The City of Los Angeles regulates noise through several sections of its municipal code. These include Section 41.40, which establishes time prohibitions on noise generated by construction activity, and Section 112.05, which establishes maximum noise levels for powered equipment and powered hand tools. According to Section 41.40, no construction activity that might create loud noises in or near residential areas or buildings shall be conducted between the hours of 9:00 p.m. and 7:00 a.m. on weekdays, before 8:00 a.m. or after 6:00 p.m. on Saturday and national holidays, or at any time on Sunday. As discussed above, the proposed project construction activities would generally occur only on weekdays and, on those days, would be limited to between the hours of 7:00 a.m. and 6:00 p.m. Although not anticipated, if occasional Saturday work were required, it would not commence before 8:00 a.m., and it would cease by 6:00 p.m. No construction work would occur on Sundays or national holidays. According to Section 112.05 of the municipal code, noise from construction activity shall not exceed the noise limits established by the federal government for various powered tools and pieces of operating equipment. As discussed above, the construction of the proposed project would involve a relatively small number of equipment, which would operate for only brief periods of time. Some power tools would also be used for the actual installation of the solar modules. All equipment and tools would comply with the established federal noise limits and, consistent with these limits, would generally not exceed 85 decibels for single pieces of larger equipment, such as dozers used to clear the area adjacent to the Maclay Tanks or compact excavators used to set the anchors for the solar module framework on the properties. Therefore, the construction of the project would not generate noise levels in excess of local standards. None of the equipment used during construction would generate excessive groundborne vibration or groundborne noise. Based on the nature of the project facilities, the operation of the project would generate only negligible noise related to periodic maintenance activities, including the use of vehicles and equipment, and no significant impact related to noise generation from post-construction operations would occur.

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

No Impact. See discussion in Section 3.4.12(a).

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

No Impact. See discussion in Section 3.4.12(a).

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

Less Than Significant Impact. See discussion in Section 3.4.12(a).

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?

No Impact. The proposed project site is not located within an airport land use plan area or within two miles of a public airport or public use airport. Furthermore, the project would include no occupied facilities that would expose people to excessive noise levels related to aircraft use.

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?

No Impact. The project site is not located within the vicinity of a private airstrip. Furthermore, the project would include no occupied facilities that would expose people to excessive noise levels related to aircraft use.

3.4.13 Population and Housing

Environmental Issues	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) 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)?

No Impact. The project does not include construction of new homes or businesses or the extension of roads or other infrastructure that would induce population growth. The proposed solar project would provide energy to help meet existing and projected demand in the LADWP service area and, based on City of Los Angeles RPS goals, would replace existing fossil fuel generated power. The project thus would not indirectly induce population growth through the provision of additional energy supply.

Due to the relatively low number of personnel required for project construction and the expected relatively short duration of construction (approximately six months), workers would be drawn from local communities, and no population growth in the area would occur.

The operation of the proposed solar power generation facility would not require any new employees on site and thus would not induce population growth or the need for new housing in the area.

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

No Impact. The project would be located entirely within the existing Maclay Tanks and Maclay Reservoir property boundaries. There is no existing housing within the project properties, nor does the project require removal of any housing outside the properties.

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

No Impact. See discussion in Section 3.4.13(b).

3.4.14 Public Services

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:				
Fire Protection?	☐	☐	☐	☒
Police Protection?	☐	☐	☐	☒

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other Public Facilities?	☐	☐	☐	☒

Discussion

a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:

Fire protection?

No Impact. Fire protection for the project properties is provided by the Los Angeles Fire Department. The proposed project would not generate a requirement for additional fire protection.

Police protection?

No Impact. Police protection for the project properties is provided by the Los Angeles Police Department. The proposed project would not generate a requirement for additional police protection.

Schools?

No Impact. The proposed project is a solar power generation facility within the existing Maclay Tanks and Maclay Reservoir properties. No feature of the project would directly generate a demand for school services, nor would the project lead directly or indirectly to substantial population growth such that new or physically altered school facilities would be required.

Parks?

No Impact. The proposed project is a solar power generation facility within the existing Maclay Tanks and Maclay Reservoir properties. No feature of the project would directly generate a demand for parks, nor would the project lead directly or indirectly to substantial population growth such that new or physically altered park facilities would be required.

Other public facilities?

No Impact. The proposed project is a solar power generation facility within the existing Maclay Tanks and Maclay Reservoir properties. No new housing or businesses would be constructed as part of the project, nor would the project directly or indirectly induce population growth in the area such that new or physically altered governmental facilities would be required to adequately provide services.

3.4.15 Recreation

Environmental Issues	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) 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?

No Impact. Neither the construction nor operation of the proposed project would generate any additional population that would increase the use of existing neighborhood or regional parks or other recreational facilities.

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?

No Impact. The proposed project is a solar power generation facility within the existing Maclay Tanks and Maclay Reservoir properties. It does not include recreational facilities or require construction or expansion of recreational facilities that might have an adverse physical effect on the environment.

3.4.16 Transportation and Traffic

Environmental Issues	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 a measure 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 result 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, bikeways, or pedestrian facilities, or otherwise substantially decrease the performance or safety of such facilities?	☐	☐	☐	☒

Discussion

a) Conflict with an applicable plan, ordinance, or policy establishing a measure 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?

Less Than Significant Impact. The proposed project would result in a temporary but short-term increase in traffic volumes associated with construction activities. Off-site construction-phase vehicle trips would be generated by worker commute trips, truck deliveries of solar equipment, concrete deliveries, and haul trucks for miscellaneous equipment and/or waste disposal. It is anticipated that construction would be done at the two Maclay sites sequentially and would last up to six months total for both sites. Access to both sites would occur from gates off Astoria Street. It is expected that the majority of project traffic would get to the Sylmar area via Interstate 210, then exit the freeway using either the Polk Street or Hubbard Street ramps. From there, traffic would utilize either Polk Street or Hubbard Street to get to either Fenton Avenue or Eldridge Avenue, then turn onto Astoria Street.

According to County of Los Angeles Transportation Impact Report guidelines, a detailed traffic report must be prepared for projects that generate over 500 trips per day or where other possible adverse impacts are identified.[43] To determine the trip generation from construction worker commutes, it was assumed that workers would travel to and from the project site with average vehicle occupancy of 1.2 passengers. This assumption, derived from a factor of one of every six workers carpooling, is reasonable based on the location of the project site in relation to the regional workforce supply. Based on this vehicle occupancy factor, 25 project workers would generate 21 inbound vehicle trips in the morning and 21 outbound trips in the afternoon (42 trips per day total from worker commutes).

The overall level of truck traffic during construction of the Maclay Solar project is considered minimal, with an average of about two trips per day during the peak construction period. The average of two truck trips per day is equivalent to about five one-way trips per day (using a passenger car equivalent [PCE] value of 2.5 car trips per truck) or 10 total trips per day. The total of 52 daily trips generated by the project construction (42 worker commute trips and 10 truck trips) would not require a Transportation Traffic Report.

It is likely that some workers would arrive at the project site prior to the a.m. peak traffic period (generally considered 7:00 a.m. to 9:00 a.m.) and depart before the p.m. peak period (generally considered 4:00 p.m. to 6:00 p.m.). However, for the purpose of impact analysis, it is assumed that a high percentage of workers (90%) would still be on the road during peak traffic periods. It is also assumed that one truck delivery would be made during the a.m. peak hour. Based on these assumptions, a daily total of 22 a.m. and 19 p.m. peak hour trips could occur during the peak three months of construction activity.

A recent source of information regarding traffic volumes and intersection level of service (LOS) in the project vicinity is provided in the LA Mission College 2009 Master Plan EIR.[44] Existing LOS data for selected intersections in the project vicinity during peak-hour conditions are provided in Table 2.

TABLE 2 PEAK HOUR INTERSECTION LOS (EXISTING CONDITIONS)

No.	Intersection	AM Peak Hr.		PM Peak Hr.	
		LOS	V/C	LOS	V/C
2	Polk Street / I-210 EB Ramp	F	1.087	A	0.546
3	Polk Street / I-210 WB Ramp	C	1.768	A	0.597
4	Polk Street / Gladstone Avenue [1]	C	20.9	B	14.2
5	Polk Street / Eldridge Avenue [1]	B	13.2	A	9.3
7	Sayre Street / Eldridge Avenue [1]	B	13.2	B	11
10	Hubbard Street / I-210 EB Ramp	E	0.931	C	0.780
11	Hubbard Street / I-210 WB Ramp	E	0.93	E	0.972
12	Hubbard Street / Gladstone Avenue	C	0.741	B	0.605
13	Hubbard Street / Fenton Avenue	B	0.631	A	0.509
14	Hubbard Street / Eldridge Avenue	B	0.616	A	0.571

[1] Unsignalized Intersection
Source: LA Mission College 2009 Master Plan EIR, 2009

Based on Table 2 data, intersections in the vicinity of the proposed project operated at acceptable levels of service (LOS D or better) in recent years with the exception of the Hubbard Street/I-210

[43] Los Angeles County Department of Public Works, 1997, Traffic Impact Analysis Report Guidelines
[44] Op. cit. LA Mission College, 2009 Master Plan EIR, 2009

ramps (which operate at congested conditions during both peak hours), and the Polk Street/I-210 eastbound ramp (which is congested during the morning peak hour only).

The traffic study for the LA Mission College (2009) predicted worsening of LOS at key intersections by Year 2015 as a result of the implementation of the LA Mission College Master Plan, construction of other projects in the nearby area, and assuming a two percent population growth rate. Several traffic system improvements were adopted under the study that would alleviate some of the identified impacts, including improvements to Hubbard Street and Eldridge Avenue.

Relative to the proposed project, the 52 trips per day during construction (workers and project deliveries) would have virtually no effect on traffic conditions in the project area. For example, if all project traffic were to utilize Polk Street (which between Gladstone and Fenton Avenue has an existing volume of 11,838 vehicles per day) for site access and egress, the project would increase traffic volume on that street by less than 0.5 percent. This would be less than significant according to LA City standards. Coupled with the fact that the peak construction traffic would occur for only approximately three months of the total six-month construction period, the project would not cause an increase in traffic that is substantial in relation to the local traffic system and the impact is less than significant.

Operation of the proposed project would not cause any increase in traffic in relation to the existing traffic load and capacity of the street system because no operating personnel are required at the site on a daily basis. A small number of personnel may be required during brief periods when certain maintenance operations must be performed. These activities would generate minimal traffic to and from the project site, and project operations would not conflict with an applicable plan, ordinance, or policy establishing a measure of effectiveness for the performance of the local circulation system.

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?

Less Than Significant Impact. According to the Los Angeles County traffic impact analysis guidelines, a congestion management plan (CMP) impact analysis must be provided for any project that would add 50 or more trips to a CMP roadway segment during either the a.m. or p.m. peak hours, including freeway on-ramps. As noted above, the Maclay Solar Project would add about 22 trips during the a.m. peak period and 19 trips during the p.m. peak periods daily. None of the surrounding surface streets are designated CMP segments, although I-210, including the ramps at Polk Street and Hubbard Street, is a CMP roadway. The proposed project's traffic generation would not exceed the CMP study criteria and a CMP impact analysis is not required. The short-term and minimal level of trips required for construction of the project would not substantially adversely affect the level of service at street intersections in the vicinity. No conflict with congestion management or transportation management measures would occur.

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

No Impact. The proposed project would not result in a change in air traffic patterns. The proposed project site is not located within two miles of a public airport or within an airport land use plan.[45, 46] The construction and operation of the proposed project would not generate air traffic. Further, the

[45] Thomas Bros. Maps. *The Thomas Guide of Los Angeles and Orange Counties*, 2007.
[46] City of Los Angeles General Plan. Noise Element, February 3, 1999.

proposed project would not include any structures of a height that could act as a hazard to aircraft navigation. No impact would occur.

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

No Impact. The proposed project would not include the construction of any new off-site roads or the modification of any existing off-site roads either for the purposes of long-term project operations or temporarily to support project construction. Construction of the project would include the truck deliveries of materials, components, and supplies to the site, which would be completed within the boundaries of each property. No storage of materials or off-loading of materials would occur on public roads. A very limited number of oversize loads may be required to deliver large equipment to the site at the outset of construction and remove the equipment after construction is completed. If oversize loads are needed, permits specifying route and time limits, as well as any necessary traffic control measures, would be required from state, county, and/or city agencies. With required transportation precautions, this infrequent project truck traffic would be compatible with the surrounding street system and would not substantially increase motor vehicle hazards.

e) Result in inadequate emergency access?

No Impact. The proposed project would not hinder emergency access in the area. No permanent or temporary road closures or modifications are proposed as part of the project. All construction activities and staging would take place on LADWP property at the solar installation sites.

f) Conflict with adopted policies, plans, or programs regarding public transit, bikeways, or pedestrian facilities, or otherwise substantially decrease the performance or safety of such facilities?

No Impact. The proposed project would not conflict with adopted policies supporting alternative transportation. Construction activities would take place entirely within the Maclay Tanks and Reservoir sites and would not require the removal or relocation of alternative transportation facilities (i.e., bus stops and bike lanes).

3.4.17 Utilities and Service Systems

Environmental Issues	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?	☐	☐	☐	☒

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
d) Have sufficient water supplies available to serve the Project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☒
e) Result in a determination by the wastewater treatment provider which serves or may serve the Project that it has adequate capacity to serve the Projects projected demand in addition to the providers existing commitments?	☐	☐	☐	☒
f) Be served by a landfill with sufficient permitted capacity to accommodate the Projects solid waste disposal needs?	☐	☐	☐	☒
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒

Discussion

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

No Impact. The proposed Maclay Solar Project does not generate wastewater and thus would not require wastewater treatment facilities or services. No impact to wastewater treatment requirements of the applicable Regional Water Quality Control Board would occur.

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?

No Impact. See response to Section 3.4.17(a) regarding wastewater facilities. Water for solar panel washing would be supplied by LADWP from existing sources and represents a relatively small demand requirement. To wash solar modules one to two times a year, up to 0.08 acre-feet (about 26,000 gallons) of water would be required annually. This represents significantly less than the 0.5 acre-feet annual water use of a typical Los Angeles household. This quantity of water use is not significant and would not require new or expanded water production and treatment facilities, or new water entitlements.

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

No Impact. The proposed Maclay Solar Project would not require construction of new storm drainage facilities. The existing drainage system for both solar sites would not require modification for the solar modules and associated facilities. The area of impervious surface at each site would remain essentially the same as under present conditions. Since the reservoir roofs are impervious, the solar modules would not affect the quantity of runoff to the drainage system. Runoff from the on-ground solar modules would not change since the ground surface would remain permeable. At the Maclay Reservoir

site, up to 1,000 square feet of flat concrete pad would be constructed to accommodate the inverters and transformers, resulting in an insignificant increase in the amount of impervious surface contributing to storm water runoff. This small addition of impervious surface is insignificant with respect to the overall drainage from the 5.8-acre site and could be accommodated without causing 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?

No Impact. See discussion in Section 3.4.17(b).

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 Projects projected demand in addition to the providers existing commitments?

No Impact. See discussion in Section 3.4.17(a).

f) Be served by a landfill with sufficient permitted capacity to accommodate the Projects solid waste disposal needs?

No Impact. Since no demolition and minimal grading are required to accommodate the proposed project, and since most components are prefabricated, minimal solid waste would be generated during project construction. Construction debris would be recycled or transported to a landfill site and disposed of appropriately. In accordance with AB 939 and BMPs, LADWP would work to ensure that source reduction techniques and recycling measures are incorporated into project construction. Operation of the proposed project would not result in any increase in personnel at the project site and would generate negligible quantities of waste that would not significantly impact landfill capacities.

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

No Impact. As required by regulation and law, LADWP would comply with federal, state, and local solid waste diversion, reduction, and recycling mandates.

3.4.18 Mandatory Findings of Significance

Environmental Issues	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?	☐	☐	☒	☐

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Does the project have Impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☒	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

Discussion

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?

Less Than Significant Impact. As described in various subsections of Section 3.4 (in particular, Section 3.4.4 Biological Resources and Section 3.5.5 Cultural Resources), the proposed Maclay Solar Project would not degrade the environment or cause significant environmental impacts. The proposed project would primarily affect existing reservoir structures and previously disturbed areas, and would not affect significant resources. Accordingly, there would be no impacts to biological resources and less than significant impacts to cultural resources.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

Less Than Significant Impact. CEQA Guidelines Section 15355 defines cumulative impacts as "two or more individual effects that, when considered together, are considerable or which compound or increase other environmental impacts." Cumulative impacts, therefore, may result from the combined effect of the proposed project with other projects under development in the project area. No specific list of "cumulative" projects that are either in the planning stages, approved, scheduled for construction, or under construction in the project area is compiled and maintained by the City of Los Angeles; however, Table 3 contains a representative list of related or cumulative projects located within about 1.5 miles of the proposed project site based on a review of recent land use case files from the Los Angeles Department of City Planning[47] and the cumulative project list from the LA Mission College Final Subsequent EIR.[48] The location of these other projects is shown in Figure 7.

When a proposed project by itself would have no impact with respect to a particular resource issue, it follows that the project's impact also is not cumulatively considerable. For the Maclay Tanks and

[47] City of Los Angeles Department of City Planning, Case Information Summaries for Sylmar Plan Area (http://cityplanning.lacity.org/).
[48] Los Angeles Mission College, Final Subsequent EIR for the 2009 Facilities Master Plan

Reservoir Solar Project, the following issues were found to have no impact and thus would have no cumulative impact:

- Agricultural and Forestry Resources
- Biological Resources
- Hazards and Hazardous Materials
- Land Use and Planning
- Mineral Resources
- Population and Housing
- Public Services
- Recreation
- Utilities and Service Systems

For the other issues addressed in the IS/ND, the cumulative effects of the proposed project in combination with other projects (as reflected in existing environmental conditions and the reasonably foreseeable future projects contained in Table 3) are discussed below.

TABLE 3 CUMULATIVE LIST OF PROJECTS IN SYLMAR COMMUNITY PLAN AREA (JUNE 2010)

No.	Address	Project	Description
1.	13159 Wheeler Ave.	Residential Development	59 Dwelling Units
2.	13140 Gladstone	Olson Sylmar Residential	69 Dwelling Units
3.	13551 Foothill Blvd.	Townhouse Residential	95 Dwelling Units
4.	13461 Foothill Blvd.	Condominium Residential	92 Dwelling Units
5.	13441 Foothill Blvd.	LA Family Housing	Mixed Use
6.	13356 Eldridge Ave.	Mission Hills Community College	Master Plan modification
7.	13803 Foothill Blvd.	Retail and Medical Office	Retail Commercial
8.	13160 Dronefield Ave.	Apartment Complex	96 Dwelling Units
9.	13260 Maclay St.	Maclay Street Apartments	141 Dwelling Units
10.	13211 Hubbard St.	Apartment Complex	30 Dwelling Units
11.	13245 Hubbard St.	Charter Public School	26 classrooms
12.	14124 Foothill Blvd.	Medical Office Building	14,381 square feet
13.	13300 Maclay St.	LAUSD Valley E. School #8	725 seats
14.	14400 Olive View Dr.	Self-storage Facility	324,156 square feet
15.	14110 Hubbard St.	Sylmar Shopping Center	20,000 square feet
16.	14113 Hubbard St.	Commercial Center	42,000 square feet
17.	14580 Bledsoe St.	LAUSD Valley Region Span School #1	1,047 students
18.	14445 Olive View Dr.	Olive View Medical Center ER Expansion	85 beds
19.	13261 Glenoaks Blvd.	Telecommunications	Wireless Facility
20.	13361 Glenoaks Blvd.	First Lutheran School	350 new students
21.	13425 Glenoaks Blvd.	Telecommunications	50 foot-tall Wireless Tower

Sources: City of Los Angeles Department of City Planning, Case Information Summary for Sylmar Plan Area (http://cityplanning.lacity.org/); LA Mission College Final Subsequent EIR, 2009.

Aesthetics. Implementation of the proposed project would not contribute to cumulative visual resource impacts associated with adding solar facilities, since the project occurs in an urbanized area on a site currently developed with water storage facilities. The closest cumulative projects to the reservoir site involve the improvements at Los Angeles Mission College about 0.5 miles to the east on Eldridge Avenue and two other projects, a proposed charter school and an apartment complex on Hubbard Street about 0.4 miles east of the project site. However, views of the reservoirs from adjacent areas would not be affected by views of any of the cumulative projects. Accordingly, there is no potential for the project to contribute to the cumulative visual impacts associated with the related projects.

Air Quality. The proposed project is located within the Los Angeles County portion of the SCAB, which is designated a non-attainment area for O_3 and particulate matter (PM_{10} and $PM_{2.5}$). However, the proposed project would not contribute to cumulative impacts because of the very localized and short-term nature of the project's air quality impacts (see Item 3.4.3(c)).

Cultural Resources. The general area of the proposed project is known to contain important archaeological, historic, and paleontological resources. No known cultural resources exist at the Maclay Tanks or Reservoir properties. Development of the cumulative projects could adversely affect cultural resources that may exist in surrounding areas unless appropriate measures are employed to avoid, document, and/or compensate for any resources that are found. To the extent that related projects are required to mitigate their individual cultural and paleontological resources, the proposed project would not contribute to potential cumulative impacts associated with the destruction of unknown or undiscovered cultural resources during construction at the project site.

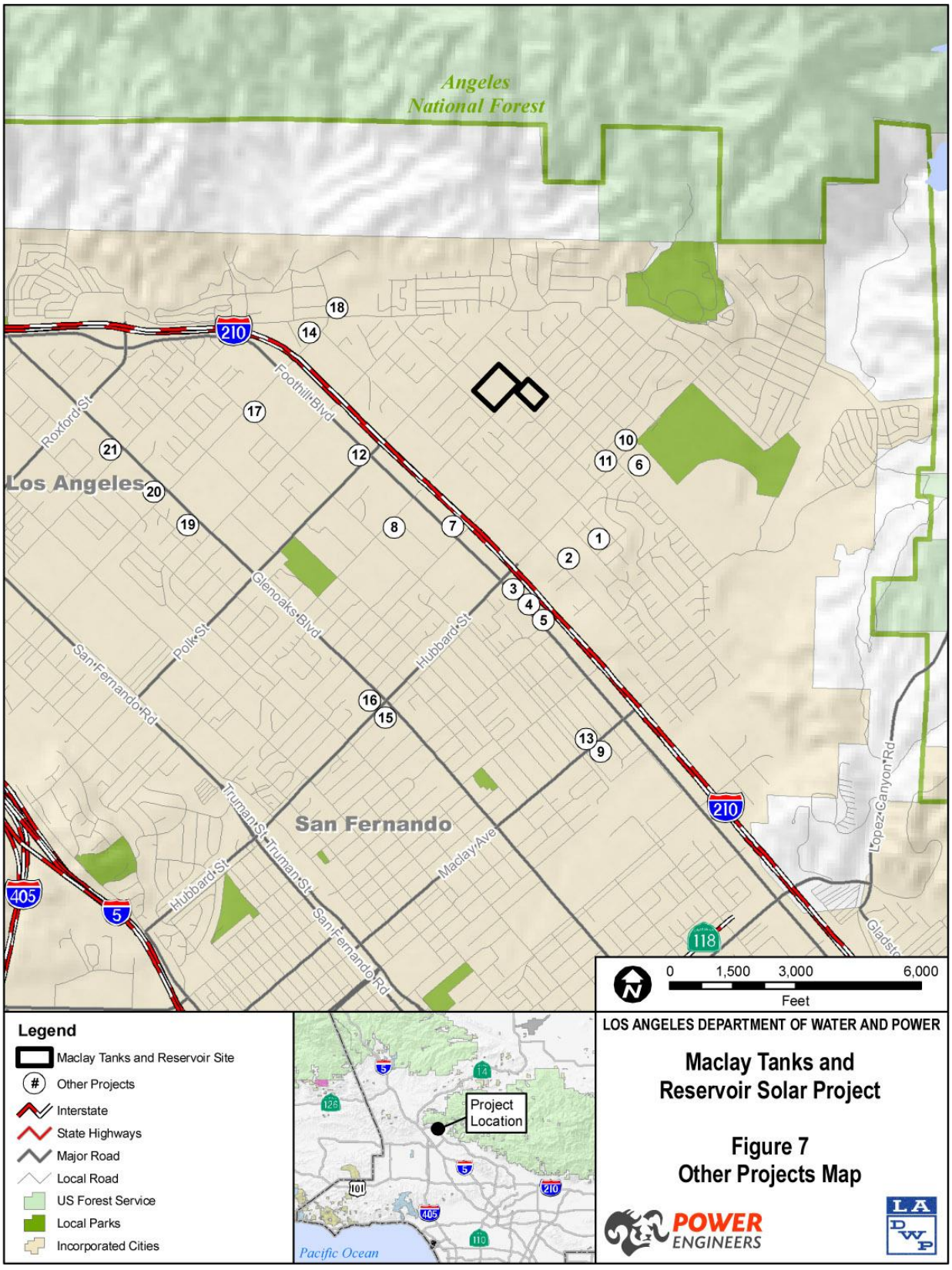
Geology and Soils. Though the impacts related to geologic and soil factors are largely site-specific, governmental agencies in California have established standards of review, permitting requirements, and design protocols based on anticipated geotechnical hazards and issues such as earthquake faults, adverse soil conditions, effects of grading, and erosion. In that these standards would apply to the proposed project and other projects in the area, the proposed project would not cumulatively contribute to significant geology and soil impacts.

Greenhouse Gas Emissions. GHG emissions were estimated in Section 3.4.7, and were compared with the SCAQMD's screening threshold (900 metric tons of CO_2e emissions), below which no cumulatively considerable impact would occur and no further analysis is required. From the analysis, CO_2e emissions associated with the Maclay Solar Project construction would total approximately 261 metric tons per year, made up of approximately 222 metric tons of CO_2, 0.34 metric tons of methane CH_4, and 39 metric tons of N_2O. The project emissions associated with construction would be below the 900 metric ton threshold, and would not result in a cumulatively considerable impact on global climate.

Hydrology and Water Quality. The proposed project would negligibly increase storm drainage flows at the project site, representing a minor contribution to the total runoff in the local watershed. The project is not located in a flood zone and would not affect flood elevations or flow quantities in any designated flood zone. Cumulative projects in the City of Los Angeles are required to adhere to the Statewide General Permit for Construction Discharges and the County of Los Angeles' National Pollution Discharge Elimination System (NPDES) General Permit (LA MS4 Permit) regulating storm water and urban runoff. Given the project's very small quantity of runoff and the construction and operation protections provided through implementation of a SWPPP, the proposed project's impacts on hydrology and water quality would not be cumulatively considerable.

Noise. The proposed project would temporarily and incrementally add to ambient noise levels at the site due to operation of construction machinery and personnel, and it would incrementally contribute to noise exposure along the area road system from travel to and from the site by motor vehicles during construction.

FIGURE 7 OTHER PROJECTS MAP



The most recent source of information about cumulative noise levels in the vicinity of the project site is contained in the LA Mission College EIR.[49] That cumulative analysis considered a list of related projects (similar to the list for the Maclay Solar Project) and predicted cumulative noise level increases of between 0.7 decibels (dB) to 4.4 dB Community Noise Equivalent Level (CNEL) with implementation of the college master plan and related projects. Only one roadway segment, Harding Street north of Eldridge Avenue, would have significant cumulative noise exposure (4.4 dB). Project traffic would typically not travel on Harding Street to access the tanks and reservoir sites. Prediction of cumulative noise level increases on other streets closer to the Maclay Tanks and Reservoir sites were provided for Polk Street between Gladstone Avenue and Fenton Avenue (0.7 A-weighted [dBA] CNEL increase), Hubbard Street between Gladstone Avenue and Fenton Avenue (1.3 dBA CNEL increase), Eldridge Avenue west of Hubbard Street (0.8 dBA CNEL increase), and Eldridge Avenue east of Hubbard Street (2.5 dBA CNEL). A 3 dB increase is typically considered significant. The proposed project's minor daily increase in traffic would be a small fraction of the projected traffic volumes on these roadways and would cause very limited or no increase in traffic noise exposure on the roadways that were evaluated. The impacts are not cumulatively significant.

On-site noise generation from construction activities at the project site would be controlled in accordance with the City Municipal Code, and it is assumed that the related projects would be controlled in a similar manner. Because of the distance to other receptors, the construction noise exposure would not be cumulatively considerable.

Transportation/Circulation. As described in Item 3.4.16, the proposed project would generate minor traffic volumes during the six-month construction period and negligible traffic during operations. Potential for significant cumulative impact would not occur due to the minimal volumes and short-term nature of the construction impact.

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Less Than Significant Impact. The analysis presented in this document does not identify significant adverse impacts on human beings related to either the construction phase or operations phase of the proposed project. Therefore, the project would not have significant environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly.

[49] Op. cit., LA Mission College 2009 Master Plan EIR, 2009

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