Initial Study/Mitigated Negative Declaration

Silver Lake and Ivanhoe Reservoirs Aeration and Recirculation System Project

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

May 2020

CEQA Initial Study and Mitigated Negative Declaration

Silver Lake and Ivanhoe Reservoirs Aeration and Recirculation System Project

May 2020

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Acronyms and Abbreviations

AB	Assembly Bill
AQMP	Air Quality Management Plan
BMP	Best Management Practice
CalEEMod	California Emissions Estimator Model
CARB	California Air Resources Board
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFGC	California Fish and Game Code
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CH_4	methane
CO	carbon monoxide
Community Plan	Silver Lake-Echo Park-Elysian Valley Community Plan
CO_2	carbon dioxide
CO_2e	Carbon Dioxide Equivalent
CRHR	California Register of Historical Resources
CRPR	California Rare Plant Ranks
CWA	Clean Water Act
dB	decibel
FESA	federal Endangered Species Act
FP	Fully Protected
GHG	Greenhouse Gas Emissions
HRI	Historic Resources Inventory
LADOT	City of Los Angeles Department of Transportation
LADWP	Los Angeles Department of Water and Power
L_{eq}	Equivalent Noise Level
LAHCM	Los Angeles Historic Cultural Monument
LAMC	Los Angeles Municipal Code
LST	Localized Significance Threshold
MBTA	Migratory Bird Treaty Act
MG	million gallons
MND	Mitigated Negative Declaration
MS4	Municipal Separate Storm Sewer System
MT	metric tons
N_2O	nitrous oxide
NOx	nitrogen oxide
NRHP	National Register of Historic Places
O_3	ozone
$PM_{2.5}$	particulate matter 2.5 microns or less in diameter
PM_{10}	particulate matter 10 microns or less in diameter
PPV	peak particle velocity
PVC	polyvinyl chloride
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
RWQCB	Regional Water Quality Control Board
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District

SCCIC	South Central Coastal Information Center
SEA	Significant Ecological Area
SLRC	Silver Lake Reservoir Complex
SO_2	sulfur dioxide
SRP	Storage Replacement Project
SSC	Species of Special Concern
SWPPP	Storm Water Pollution Prevention Plan
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
VMT	vehicle miles traveled
VOC	volatile organic compounds
WL	Watch List
ZIMAS	City of Los Angeles Zoning Information and Map Access System

SECTION 1
PROJECT DESCRIPTION

1.1 Overview of the Project

The Los Angeles Department of Water and Power (LADWP) proposes to implement the Silver Lake and Ivanhoe Reservoirs Aeration and Recirculation System Project (proposed project) within its Silver Lake Reservoir Complex (SLRC), which comprises the Silver Lake and Ivanhoe Reservoirs (the reservoirs). This project is being proposed to manage algae growth and reduce related odors at SLRC.

1.2 California Environmental Quality Act

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 project constitutes a project as defined by CEQA (California Public Resources Code Section 21000 et seq.). The CEQA Guidelines Section 15367 states that "'Lead Agency' means the public agency which has the principal responsibility for carrying out or approving a project." Therefore, LADWP is the lead agency responsible for compliance with CEQA for the proposed project.

As the lead agency, LADWP must complete an environmental review to determine if implementation of the proposed project would result in significant adverse environmental impacts. To fulfill the purpose of CEQA, an Initial Study has been prepared to assist in making that determination. Based on the nature and scope of the proposed project and the evaluation contained in the Initial Study environmental checklist (contained herein), LADWP, as the lead agency, has concluded that a Mitigated Negative Declaration (MND) would be the proper level of analysis for this project. The MND will show that impacts caused by the proposed project are either less than significant or significant but mitigable with incorporation of appropriate mitigation measures as defined herein. This conclusion is supported by CEQA Guidelines Section 15070, which states that an MND can be prepared when "(a) the initial study shows that there is not substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment, or (b) the initial study identifies potentially significant effects, but (1) revisions in the project plans or proposals made by, or agreed to by the applicant before a proposed mitigated negative declaration and initial study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur; and (2) there is no substantial evidence, in light of the whole record before the agency, that the project as revised may have a significant effect on the environment."

1.3 Project Location and Setting

The proposed project would be located within the boundaries of the 127-acre, DWP-owned SLRC, located in the Silver Lake community of the City of Los Angeles, approximately 5 miles north of downtown Los Angeles. The SLRC is generally bound by Tesla Avenue on the north, Armstrong Avenue and Silver Lake Boulevard on the east, Van Pelt Place on the south, and Silver Lake Drive on the west. Local access to the project site is provided via Silver Lake Boulevard immediately east of the project site; Glendale Boulevard, approximately 0.2-mile east of the project site; Hyperion Avenue, approximately 0.4-mile west of the project site; and Sunset Boulevard, approximately 0.65-mile southwest of the project site. Regional access is

provided via Interstate 5, approximately 0.5-mile northeast of the project site; U.S. Route 101, approximately 1.4 miles south of the project site; and State Route 110, approximately 2.15 miles southeast of the project site. Figure 1 shows the regional vicinity of the project site. Figure 2 shows the project location.

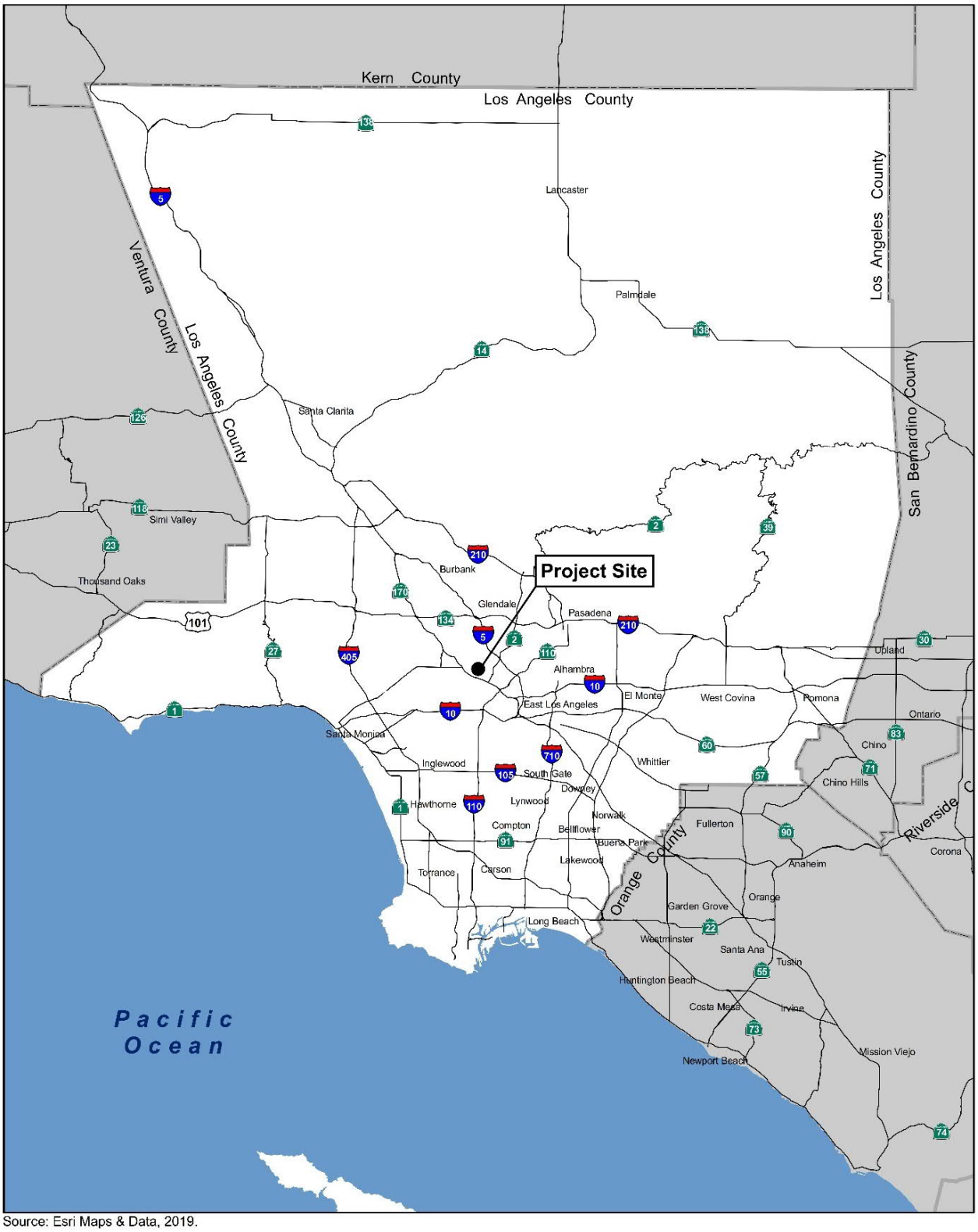
The SLRC includes the Silver Lake and Ivanhoe Reservoirs, dams, buildings, water and stormwater infrastructure, interior roads, and public recreational facilities. The proposed facilities would be installed within the reservoirs and the area adjacent to the edges of the reservoir within the SLRC in the areas that currently contain other LADWP facilities. The area surrounding the SLRC is characterized by low-rise single and multi-family residential structures with various commercial uses located along busier roadways in the neighborhood.

1.4 Project Background

Silver Lake and Ivanhoe Reservoirs are two adjacent water storage facilities that were engineered by William Mulholland in 1908 and are located within the 127-acre SLRC in the City of Los Angeles. Silver Lake and Ivanhoe Reservoirs were originally open-aired reservoirs that stored and supplied potable water to the City's distribution system. However, Silver Lake Reservoir was taken out of service in 2013 and Ivanhoe Reservoir in 2017 to comply with the United States Environmental Protection Agency's Long Term 2 Enhanced Surface Water Treatment Rule, which mandated covering, providing advanced treatment, or bypassing all remaining open-aired drinking water reservoirs.

Two buried water storage facilities, with a combined storage capacity of 110 million gallons (MG), are currently being implemented at the former Headworks Spreading Grounds Site to replace the storage capacity of the Silver Lake and Ivanhoe Reservoirs (SLRC Storage Replacement Project [SRP]). These storage facilities include the Headworks East reservoir, which is completed and in operation, and the Headworks West reservoir, which is still under construction. In addition to the storage facilities, the SRP also included the installation of approximately 4,600 feet of 66-inch diameter welded steel pipeline to convey water through the SLRC to the rest of the system, and a four-legged regulator station containing two 36-inch and two 30-inch valves. Approximately 3,000 feet of the pipeline was installed along the bottom of the Silver Lake Reservoir. The new pipeline routes water from the River Supply Conduit to the Headworks SRP, bypasses Ivanhoe Reservoir, travels along the bottom of Silver Lake Reservoir, and connects to the Silver Lake Reservoir Outlet Line. A regulator station and two supporting relief stations were also constructed at SLRC to reduce the pressure of the water from the Headworks Reservoir at 510-feet grade to the distribution system which has a maximum hydraulic grade of 451-feet.

These projects ceased Silver Lake and Ivanhoe Reservoirs' function to store potable water and isolated them completely from the distribution system. Silver Lake Reservoir was taken out of service in 2013 and drained in November 2015 to construct the bypass pipeline. In April 2017, the two reservoirs were refilled with surplus potable water from the Eastern Sierra. Ivanhoe Reservoir was isolated from the distribution system in December 2017.



Source: Esri Maps & Data, 2019.

Figure 1
Regional Map

Source: Esri, 2020; Prepared By AECOM, 2020.

0 250 500 1,000 Feet

SLRC Boundary
Project Site

Figure 2
Project Location Map

An Environmental Impact Report was prepared for the SLRC SRP, which stated that Silver Lake and Ivanhoe Reservoirs would be allowed to revert to a more natural state, maintained as view lakes, and to remain consistent with the community values that were set forth in the Silver Lake Master Plan. This includes maintaining these two reservoirs at historic levels, typically between an elevation of 440 and 451 feet, and ensuring a greenish hue of the water. Water levels at the reservoirs are maintained with nonpotable sources, such as groundwater and stormwater. Currently, there is no existing treatment regimen for the water in these reservoirs.

1.5 Project Objectives

The objectives of the proposed project are to:

- Comply with the requirements of the SLRC SRP Environmental Impact Report
- Install an aeration and recirculation system to ensure full water transfer between both basins and increase the oxygen levels at the bottom of the reservoirs, and properly mix and destratify the water in the reservoirs to minimize stagnation
- Control algal growth and associated odors at the reservoirs

1.6 Description of the Proposed Project

Silver Lake and Ivanhoe Reservoirs require an aeration and recirculation system to ensure that reasonable water quality parameters are met for visual aesthetics and controlling odors. The proposed project would include the installation of a bubble plume aeration system and a recirculation pipe system to ensure oxygenation and destratification of the reservoirs. Destratification allows for the mixing of the reservoir water to allow for oxygen levels to be maintained throughout the reservoir. The proposed project would be implemented in two phases as described below.

Phase 1 – Reservoir Aeration

Phase 1 would include installation of an aeration system consisting of air blowers, air piping to each of the reservoirs, bubble plume system diffusers in each of the reservoirs, and aftercoolers. Two air blowers would be installed for each reservoir, including one in continuous operation and one to serve as a backup. The air blowers would be housed in an enclosure with ventilation and sound insulation. The air blower package enclosure would be located under a canopy adjacent to an existing chlorination building in the northeast portion of the SLRC between the two reservoirs. Each air blower enclosure would consist of a local control panel and electrical power to support the air blowers and appurtenant equipment. Flow rate, air content, equipment's operational status, and pressure values would be monitored for each air blower. The aftercoolers would be located adjacent to the existing chlorination building, and would remove excess heat produced by the aeration system.

The air blowers would supply air via three- and four-inch pipes to a series of diffusing equipment inside each reservoir. After leaving the manifold enclosures, one-inch air piping would be installed along the eastern edges of the reservoirs. One air pipe would run from the air blower enclosure north to the Ivanhoe Reservoir and one air pipe would run south to the Silver Lake Reservoir. Each pipe would connect with diffusing equipment within each of the reservoirs. The diffusing equipment would increase the oxygen levels at the bottom of the

reservoir and locally mix the water around it. Each diffusing equipment assembly would consist of a diffuser and a manifold and would be strategically placed across the reservoirs for optimal aeration. Approximately six diffusers would be installed in Ivanhoe Reservoir and 14 diffusers would be installed in Silver Lake Reservoir. This aeration system would discourage algae growth and reduce related odors from anaerobic conditions.

Phase 2 – Recirculation System

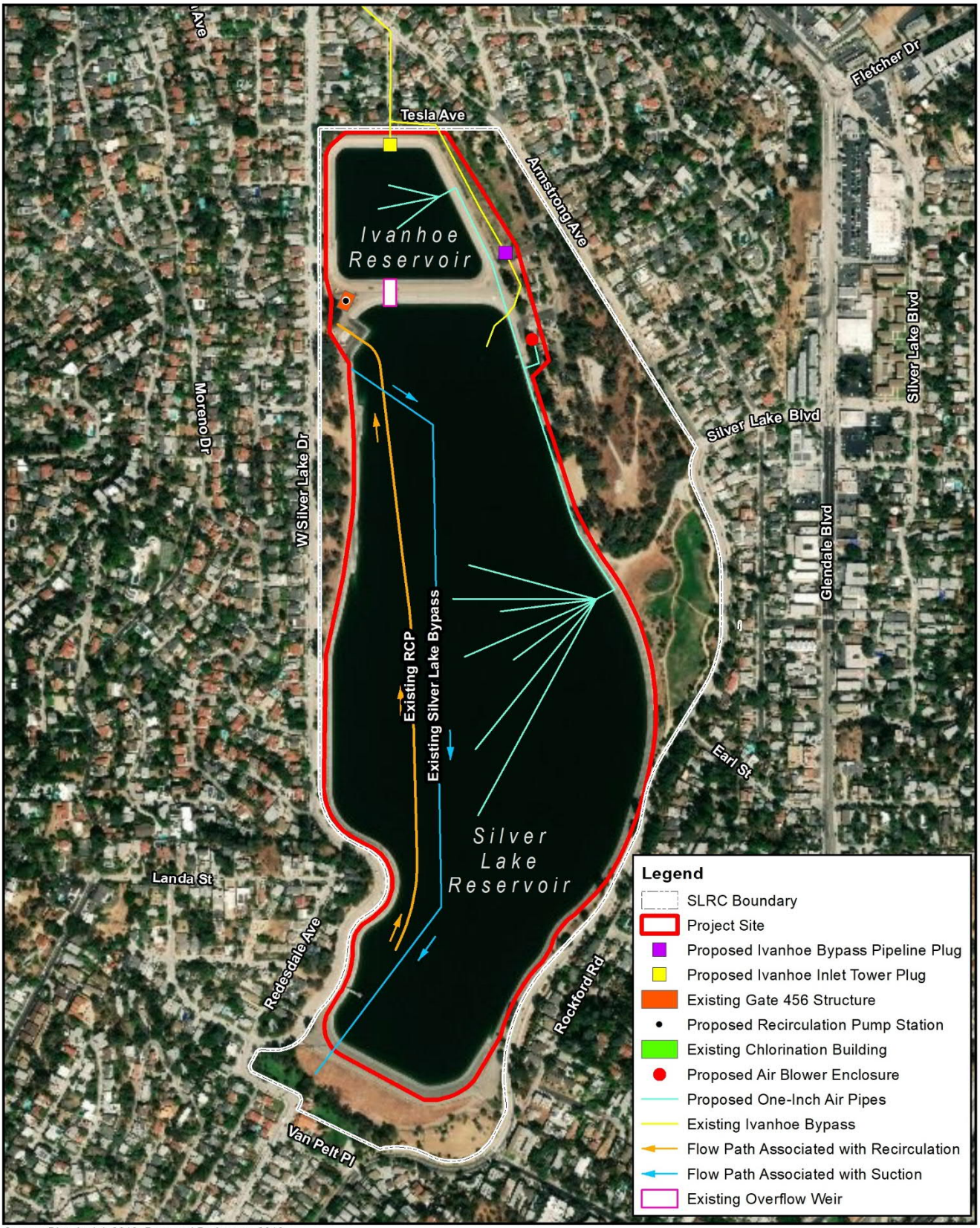
Phase 2 would include the installation of a recirculation system consisting of a recirculation pump station, recirculation piping, and inflow from Ivanhoe Reservoir to Silver Lake Reservoir via the existing overflow weir. Additionally, two concrete plugs and approximately 400 feet of new recirculation piping would be installed within Ivanhoe Reservoir. The concrete plugs would be installed at the existing Ivanhoe Bypass and Ivanhoe Inlet Tower, and would contain all recirculating water within the vicinity of the SLRC to avoid potential flooding of the Rowena-Ivanhoe pipeline. The recirculation pump equipment would be installed at the existing Gate 456 structure, which is a fenced gate structure on the northwest corner of Silver Lake Reservoir that was historically used for water bypass when both Silver Lake and Ivanhoe were connected to the potable water system. Two submersible recirculation pumps would be installed within the Gate 456 structure, with one pump on duty and the other on standby during normal operations. Both pumps would have the flexibility to operate simultaneously under special conditions. Suction intake would be located at the south end of the Silver Lake Reservoir along the existing Silver Lake Bypass pipeline and discharge would occur at the north end of Ivanhoe Reservoir. The recirculation piping would be connected to the recirculation pump to transfer water from Silver Lake to Ivanhoe over a partition wall within the Gate 456 structure. Inflow from Ivanhoe Reservoir to Silver Lake Reservoir would occur via the existing weir over the Silver Lake North Dam between the reservoirs. Figure 3 shows the aeration and recirculation systems proposed to be installed in the reservoirs.

1.7 Construction Schedule and Procedures

Construction of Phase I is anticipated to begin in November 2020 and take approximately 13 months to complete, concluding in December 2021. Construction of Phase II is anticipated to start toward the end of Phase I and take approximately 16 months to complete, concluding in December 2022. Construction activities would occur Mondays through Friday from 7 a.m. to 3 p.m. Construction vehicle access would be available via the existing driveway at the northeastern corner of the SLRC near the intersection of Tesla Avenue and Armstrong Avenue. It is anticipated that haul trucks and construction workers would travel south to the project site from Sun Valley using Interstate 5, then travel south on Riverside Drive to Glendale Boulevard, and then west on Lakewood Avenue to Armstrong Avenue. All construction activities would occur completely within the boundaries of the SLRC. Construction staging and laydown areas would also occur within the SLRC. Construction equipment would remain at the project site for the duration of its use.

Phase 1 – Reservoir Aeration

Construction activities at each reservoir would consist of construction of the aeration header at the existing chlorination building, installation of the pre-assembled air blower enclosures for the aeration system, installation of the pipeline connections, and assembly of the diffusers. As previously discussed, the air blowers for the aeration system would be housed in a sound-insulated enclosure. Site preparation for the enclosure would include demolition of



Source: Bing Aerial, 2019; Prepared By Aecom, 2019.

0 250 500 1,000 Feet

Figure 3
Proposed Project
Aeration and Recirculation System

existing concrete slabs, installation of polyvinyl chloride (PVC) conduits, and construction and casting of concrete and equipment pads. The concrete and equipment pads would require the site to be cleared, excavated up to 3 feet, and graded. The enclosure units would be installed adjacent to the existing chlorination building behind its concrete walls.

Following construction of the air blower enclosures, air pipes would be installed from the air blowers to diffuser systems at each reservoir. The pipes would be installed underground utilizing trenching and backfilling methods, with the exception of self-weighted lines that would extend within the reservoir. Approximately 1,021 linear feet of pipeline would be required for Ivanhoe Reservoir and approximately 1,076 linear feet of pipeline would be required for Silver Lake Reservoir. As previously discussed, the diffusers would consist of a diffuser and a manifold, which would be strategically placed across the reservoirs for optimal aeration.

After installation of the pipelines and diffuser systems, an existing control panel would be relocated and outfitted with newly constructed components. The air blowers and associated piping and supports and ventilation system would be installed within the enclosure. Aftercoolers would be located outside of the enclosures, and a sunshade would be constructed to protect the equipment.

It is anticipated that approximately 1,102 cubic yards of materials would be imported to the project site, including 684 cubic yards of crushed aggregate base, 78 cubic yards of asphalt, 98 cubic yards of concrete, and 233 cubic yards of slurry. Additionally, approximately 1,045 cubic yards of materials would be excavated and exported from the project site, including 982 cubic yards of soil, 35 cubic yards of asphalt, and 28 cubic yards of concrete. Materials required for construction would be stored on site, with the exception of asphalt and concrete. Construction of Phase 1 of the proposed project would require a total of approximately 277 truck trips consisting of 101 trips for imported materials, 88 trips for exported materials, and 88 additional haul truck trips.

The estimated daily average of on-site workers would consist of a peak of 29 workers per day. Construction worker vehicle trips would account for approximately 277 roundtrips for the duration of 13 months, with an average of approximately 22 roundtrips per month.

Construction activities for Phase 1 of the proposed project would require approximately 10 pieces of equipment, including an asphalt paver, backhoe loader, barge (a flat-bottomed boat needed for installation of piping within Silver Lake Reservoir), butt fusion machine (a machine used for fusion of pipes and associated fittings), crane, front end loader, fork lift, generator, roller, and vibrating plate as well as maintenance and dump trucks. All equipment would be stored on site. The estimated daily peak number of equipment on site would be 3 pieces with an average of 2 pieces. The estimated daily peak number of trucks on site would be 6 trucks during the construction of the air blowers and enclosures and 4 trucks during installation of the pipelines, with a daily average of 3 trucks on site for the entire duration of Phase 1.

Phase 2 - Recirculation System

Construction activities for Phase 2 include installation of pipeline in Ivanhoe Reservoir, installation of concrete plugs at the existing Ivanhoe Bypass Pipeline and Ivanhoe Inlet Tower, demolition of the existing equipment in the Gate 456 structure, installation of a suction intake on the existing Silver Lake bypass pipeline, and construction of the recirculation pump station within the Gate 456 structure, including a partition wall. Demolition would involve removal of

existing electrical and mechanical equipment and an existing concrete slab within the Gate 456 structure.

Prior to installation of the concrete plugs, the water from Ivanhoe Reservoir would be pumped into Silver Lake Reservoir. Following draining of the water, 400 linear feet of pipeline would be placed and casted with concrete within Ivanhoe Reservoir to recirculate water within this reservoir. The concrete plugs would be formed on-site, placed in the Ivanhoe Bypass and then the Ivanhoe Tower Inlet, and finished with additional concrete.

The recirculation pump station equipment would be located within the Gate 456 structure adjacent to the equipment enclosures associated with the Silver Lake Regulating Station. Construction activities for the recirculation pump station would include excavation up to 4 feet for a 15-foot by 27-foot duct bank, construction of PVC conduits, casting equipment pads and concrete slabs for a 6-foot by 3-foot sized enclosure, installation of the control system, and connecting the control panel to the equipment and pipes. The pumps would be placed below-grade within a hydraulic structure, which would be shielded from view at the property line.

Approximately 100 feet of piping would be installed within the Gate 456 structure, which would pump water from Silver Lake Reservoir over a partition wall to Ivanhoe Reservoir. Inflow from Ivanhoe Reservoir to Silver Lake Reservoir would occur via the existing weir over the Silver Lake North Dam between the reservoirs. Following installation of the piping, Ivanhoe Reservoir would be refilled via gravity through the existing Gate Well structure.

It is anticipated that approximately 167 cubic yards of materials would be imported to the project site consisting of 21 cubic yards of crushed aggregate base, 5 cubic yards of asphalt, 141 cubic yards of concrete, and 8 cubic yards of slurry. Additionally, approximately 64 cubic yards of materials would be exported from the project site consisting of 35 cubic yards of soil, 2 cubic yards of asphalt, and 27 cubic yards of concrete. Materials required for construction, except for asphalt and concrete, would be stored on site. Construction of Phase 2 of the proposed project would require a total of approximately 81 truck trips consisting of 45 trips for imported materials, 8 trips for exported materials, and 28 additional haul truck trips.

The estimated daily peak number of on-site workers would be 22 workers. Construction worker vehicle trips would account for approximately 278 roundtrips for the duration of 16 months, with an average of approximately 18 roundtrips per month.

Construction activities for Phase 2 of the proposed project would require approximately 10 pieces of equipment, including an asphalt paver, backhoe loader, barge, butt fusion machine, crane, front end loader, forklift, generator, roller, and vibrating plate as well as maintenance and dump trucks. All equipment would be stored on site. The estimated daily peak number of equipment on site would be 3 pieces with an average of 2 pieces. The estimated daily peak number of trucks on site would be 6 trucks with a daily average of 3 trucks on site for the entire duration of Phase 2.

Best Management Practices

An appropriate combination of monitoring and resource impact avoidance would be employed during all phases of the proposed project, including implementation of the following Best Management Practices:

- The construction contractor would implement Rule 403 dust control measures required by the South Coast Air Quality Management District (SCAQMD), which would include the following:
    - Water shall be applied to exposed surfaces at least two times per day to prevent generation of dust plumes.
    - All haul trucks hauling soil, sand, and other loose materials shall be covered (e.g., with tarps or other enclosures that would reduce fugitive dust emissions).
    - Construction activity on exposed or unpaved dirt surfaces shall be suspended when wind speed exceeds 25 miles per hour (such as instantaneous gusts).
    - Ground cover in disturbed areas shall be replaced in a timely fashion when work is completed in the area.
    - Identify a community liaison concerning on-site construction activity including resolution of issues related to PM_{10} generation.
    - Apply non-toxic soil stabilizers according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for ten days or more).
    - Traffic speeds on all unpaved roads to be limited to 15 mph or less.
    - Sweep streets at the end of the day if visible soil is carried onto adjacent public paved roads. If feasible, use water sweepers with reclaimed water.
- The construction contractor would develop and implement an erosion control plan and Storm Water Pollution Prevention Plan for construction activities. Erosion control and grading plans may include, but would not be limited to, the following:
    - Minimizing the extent of disturbed areas and duration of exposure;
    - Stabilizing and protecting disturbed areas;
    - Keeping runoff velocities low; and
    - Retaining sediment within the construction area.
    - Construction erosion control Best Management Practices may include the following:
        a. Temporary desilting basins;
        b. Silt fences;
        c. Gravel bag barriers;
        d. Temporary soil stabilization with mattresses and mulching;
        e. Temporary drainage inlet protection; and
        f. Diversion dikes and interceptor swales.
- The construction contractor would incorporate source reduction techniques and recycling measures and maintain a recycling program to divert waste in accordance with the Citywide Construction and Demolition Debris Recycling Ordinance.

- LADWP would conduct pre-construction surveys for nesting birds and provide a biological monitor as necessary should project activities be initiated during the nesting bird season, generally February 15 through September 1.

- LADWP would coordinate with emergency response agencies, including but not limited to the Los Angeles Fire Department and Los Angeles Police Department, regarding construction schedules and worksite traffic control plans to coordinate emergency response routing and maintain emergency access.

- LADWP would ensure all construction crews have fire-suppression equipment (such as fire extinguishers) on site to respond to the accidental ignition of a fire.

1.8 Required Permits and Approvals

Numerous approvals and/or permits would be required to implement the proposed project. The environmental documentation for the project would be used to facilitate compliance with federal and state laws and the granting of permits by various state and local agencies having jurisdiction over one or more aspects of the project. These approvals and permits may include, but may not be limited, to the following:

California Department of Water Resources, Division of Safety of Dams

- Notification of Excavations (less than 5 feet deep) near or on the dam walkway

Los Angeles Regional Water Quality Control Board

- Statewide Algae and Aquatic Weed Control General Permit

- National Pollutant Discharge Elimination System Permit for storm water management during construction

- Storm Water Pollution Prevention Plan for storm water management during construction

- Municipal Separate Storm Sewer System (MS4) National Pollutant Discharge Elimination System Permit

- Dredge and Fill Permit

SECTION 2
INITIAL STUDY CHECKLIST

The following discussion of potential environmental effects was completed in accordance with Section 15063(d)(3) of the CEQA Guidelines (2020) to determine if the proposed project may have a significant effect on the environment.

CEQA INITIAL STUDY FORM

Project Title:
Silver Lake and Ivanhoe Reservoirs Aeration and Recirculation System Project

Lead Agency Name and Address:
Los Angeles Department of Water and Power
Environmental Planning and Assessment
111 North Hope Street, Room 1044
Los Angeles, CA 90012

Contact Person and Phone Number:
Kathryn Laudeman
Environmental Planning and Assessment
Los Angeles Department of Water and Power
(213) 367-6376

Project Sponsor's Name and Address:
Los Angeles Department of Water and Power
111 North Hope Street
Los Angeles, CA 90012

Project Location:
The project site is located at the SLRC (2700 Tesla Avenue, Los Angeles, CA 90039) in the Silver Lake community of the City of Los Angeles, California.

General Plan Designation:
The project site is located on LADWP-owned property. Under the General Plan and Silver Lake-Echo Park-Elysian Valley Community Plan, the project site is designated Open Space, which is defined as land which is free of structures and buildings and/or is natural in character and functions. The Open Space designation allows for uncovered reservoirs and accessory uses which are incidental to the operation and continued maintenance of such reservoirs.

Zoning:
The project site is zoned OS (Open Space).

Description of Project:
Silver Lake and Ivanhoe Reservoirs require an aeration and recirculation system to ensure that reasonable water quality parameters are met for visual aesthetics and controlling odors. The proposed project would include the installation of a bubble plume aeration system and a recirculation pipe system to ensure oxygenation and destratification of the reservoirs. Destratification allows for the mixing of the reservoir water to allow for oxygen

levels to be maintained throughout the reservoir. The proposed project would be implemented in two phases, reservoir aeration and recirculation system.

Phase 1 would include installation of an aeration system consisting of air blowers, air piping to each of the reservoirs, bubble plume system diffusers in each of the reservoirs, and aftercoolers. The aeration system would discourage algae growth and reduce related odors from anaerobic conditions. Phase 2 would include the installation of a recirculation system consisting of a recirculation pump station, recirculation piping, inflow from Ivanhoe Reservoir to Silver Lake Reservoir via the existing overflow weir, and two concrete plugs. Suction intake would be located at the south end of the Silver Lake Reservoir along the existing Silver Lake Bypass pipeline and discharge would occur at the north end of Ivanhoe Reservoir. The recirculation piping would be connected to the recirculation pump to transfer water from Silver Lake to Ivanhoe over a partition wall within the Gate 456 structure. Inflow from Ivanhoe Reservoir to Silver Lake Reservoir would occur via the existing weir over the Silver Lake North Dam between the reservoirs.

Surrounding Land Uses and Setting:
The SLRC is generally bound by Tesla Avenue on the north, Armstrong Avenue and Silver Lake Boulevard on the east, Van Pelt Place on the south, and Silver Lake Drive on the west. The area surrounding the SLRC is characterized by low-rise single and multi-family residential structures with various commercial uses located along busier roadways in the neighborhood.

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 Environmental Impacts discussion in Section 3.

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

DETERMINATION

On the basis of this initial evaluation:

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

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

☐ I find that the proposed project MAY have a significant effect on the environment, and an environmental impact report is required.

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

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

_____ _____

Signature Date

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

		Potentially Significant Impact	Less Than Significant Impact After Mitigation Incorporated	Less Than Significant Impact	No Impact
I.	**AESTHETICS**. Except as provided in Public Resources Code Section 21099, would the project:				
a.	Have a substantial adverse effect on a scenic vista?			**X**	
b.	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?			**X**	
c.	In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?				**X**
d.	Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?				**X**
II.	**AGRICULTURE AND FORESTRY RESOURCES**. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department 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?				**X**
b.	Conflict with existing zoning for agricultural use, or a Williamson act contract?				**X**
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))?				**X**
d.	Result in the loss of forest land or conversion of forest land to non-forest use?				**X**
e.	Involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				**X**

		Potentially Significant Impact	Less Than Significant Impact After Mitigation Incorporated	Less Than Significant Impact	No Impact
III.	**AIR QUALITY**. Where available, the significance criteria established by the applicable air quality management district 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?			**X**	
b.	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?			**X**	
c.	Expose sensitive receptors to substantial pollutant concentrations?			**X**	
d.	Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			**X**	
IV.	**BIOLOGICAL RESOURCES**. Would the project:				
a.	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?			**X**	
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?				**X**
c.	Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?			**X**	
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?			**X**	
e.	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				**X**
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?				**X**
V.	**CULTURAL RESOURCES**. Would the project:				
a.	Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5?		**X**		

		Potentially Significant Impact	Less Than Significant Impact After Mitigation Incorporated	Less Than Significant Impact	No Impact
b.	Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?			X	
c.	Disturb any human remains, including those interred outside of formal cemeteries?			X	
VI.	**Energy.** Would the project:				
a.	Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			X	
b.	Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			X	
VII.	**GEOLOGY AND SOILS**. Would the project:				
a.	Directly or indirectly cause 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 California Geological Survey Special Publication 42.			X	
	ii) Strong seismic ground shaking?			X	
	iii) Seismic-related ground failure, including liquefaction?			X	
	iv) Landslides?			X	
b.	Result in substantial soil erosion, loss of topsoil, or changes in topography or unstable soil conditions from excavation, grading, or fill?			X	
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?			X	
d.	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?				X
e.	Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				X
f.	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			X	
VIII.	**GREENHOUSE GAS EMISSIONS**: Would the project:				
a.	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	

		Potentially Significant Impact	Less Than Significant Impact After Mitigation Incorporated	Less Than Significant Impact	No Impact
b.	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?				**X**
IX.	**HAZARDS AND HAZARDOUS MATERIALS**: Would the project:				
a.	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			**X**	
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?			**X**	
c.	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			**X**	
d.	Be located on a site that 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?				**X**
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 or excessive noise for people residing or working in the project area?				**X**
f.	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			**X**	
g.	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?			**X**	
X.	**HYDROLOGY AND WATER QUALITY**. Would the project:				
a.	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?			**X**	
b.	Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?				**X**
c.	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of stream or river, in a manner that would:				
	i) Result in substantial erosion or siltation on- or off-site?			**X**	
	ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?				**X**

		Potentially Significant Impact	Less Than Significant Impact After Mitigation Incorporated	Less Than Significant Impact	No Impact
	iii) Create or contribute runoff water which would exceed the capacity of existing or planner stormwater drainage systems or provide substantial additional sources of polluted runoff?			X	
	iv) Impeded or redirect flood flows?				X
d.	In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?			X	
e.	Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?				X
XI.	**LAND USE AND PLANNING**. Would the project:				
a.	Physically divide an established community?				X
b.	Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?				X
XII.	**MINERAL RESOURCES**. Would the project:				
a.	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				X
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?				X
XIII.	**NOISE**. Would the project result in:				
a.	Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?		X		
b.	Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?			X	
c.	For a project located within the vicinity of a private airstrip or 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?				X
XIV.	**POPULATION AND HOUSING**. Would the project:				
a.	Induce substantial unplanned 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)?				X
b.	Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				X

	Potentially Significant Impact	Less Than Significant Impact After Mitigation Incorporated	Less Than Significant Impact	No Impact
XV. PUBLIC SERVICES.				
a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i) Fire protection?				**X**
ii) Police protection?				**X**
iii) Schools?				**X**
iv) Parks?				**X**
v) Other public facilities?				**X**
XVI. RECREATION.				
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				**X**
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?				**X**
XVII. TRANSPORTATION. Would the project:				
a. Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?			**X**	
b. Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?				**X**
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				**X**
d. Result in inadequate emergency access?			**X**	
XVIII. TRIBAL CULTURAL RESOURCES. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is:				
a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?				**X**

		Potentially Significant Impact	Less Than Significant Impact After Mitigation Incorporated	Less Than Significant Impact	No Impact
b.	A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of the Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.		**X**		
XIX.	**UTILITIES AND SERVICE SYSTEMS**. Would the project:				
a.	Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction of which could cause significant environmental effects?				**X**
b.	Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?			**X**	
c.	Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				**X**
d.	Generate solid waste in excess of state or local standards, or in excess of the future capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?			**X**	
e.	Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?			**X**	
XX.	**WILDFIRE**. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a.	Substantially impair an adopted emergency response plan or emergency evacuation plan?			**X**	
b.	Due to slope, prevailing winds, and other factors, exacerbate wildland fires risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?			**X**	
c.	Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may result in temporary or ongoing impacts to the environment?				**X**
d.	Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				**X**

		Potentially Significant Impact	Less Than Significant Impact After Mitigation Incorporated	Less Than Significant Impact	No Impact
XXI.	**MANDATORY FINDINGS OF SIGNIFICANCE**.				
a.	Does the project have the potential to substantially 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, substantially 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?		**X**		
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.		**X**		
c.	Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?		**X**		

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SECTION 3
ENVIRONMENTAL IMPACT ASSESSMENT

INTRODUCTION

The following discussion addresses impacts to various environmental resources per the Initial Study checklist questions contained in Appendix G of the CEQA Guidelines.

I. AESTHETICS

Would the project:

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

Less Than Significant Impact. Scenic views or vistas are generally defined as panoramic public views to various natural features, including large water bodies, striking or unusual natural terrain, or unique urban or historic features. Public access to these views may be from park lands, private and publicly-owned sites, and public rights-of-way.

The project site includes Silver Lake and Ivanhoe Reservoirs, which are urban water bodies that are important visual features of the community of Silver Lake. The proposed project would install an aeration and recirculation system to control algal growth in order to meet visual quality parameters. Visible construction features would include temporary material storage areas and equipment. Construction disturbances would be short-term and would not substantially change scenic vistas. Implementation of the proposed project would restore previously available greenish hues on the water. Equipment installed during construction of the project, including air blowers, aftercoolers, and the recirculation pump system, would be shielded from view in enclosures or with concrete walls. Following installation of the aeration and recirculation system, Silver Lake and Ivanhoe Reservoirs would be maintained as view lakes. As such, impacts to scenic vistas would be less than significant.

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

Less Than Significant Impact. The project site is not located near a state-designated scenic highway or historic buildings, and would not affect the trees or natural features located near Silver Lake and Ivanhoe Reservoirs. There are no state-designated scenic highways in the vicinity of the project site.[1] However, Silver Lake Boulevard from Duane Street to Armstrong Avenue, located near the western boundary of the project site, is a City-designated scenic highway with views of the Silver Lake and Ivanhoe Reservoirs and landscaped setbacks.[2] The project site, including temporary construction features, would be visible from the portion of Silver

[1] State of California Department of Transportation. *State Scenic Highway Program – Scenic Highway System Lists*, available at: https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways, accessed February 11, 2020.

[2] City of Los Angeles Department of City Planning. *Mobility Plan 2035, An Element of the General Plan*. September 2016, available at: https://planning.lacity.org/odocument/523f2a95-9d72-41d7-aba5-1972f84c1d36/Mobility_Plan_2035.pdf, accessed February 10, 2020.

Lake Boulevard designated as a scenic highway. However, construction activities would be temporary and short-term.

During operations, the proposed project would restore previously available greenish hues on the water and maintain the reservoirs at historic water levels, resulting in an aesthetic benefit. As discussed in Section I(a), permanent equipment installed for operation of the project would be shielded from view in enclosures or with concrete walls. Following installation of the aeration and recirculation system, Silver Lake and Ivanhoe Reservoirs would be maintained as view lakes, and views of the project site from the City-designated scenic highway would be similar to existing conditions. As such, impacts to scenic resources would be less than significant.

c) In non-urbanized areas, substantially degrade the existing visual character or quality of the site and its surroundings? If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

No Impact. As discussed in Section I(a), Silver Lake and Ivanhoe Reservoirs are urban water bodies that are important visual features of the community of Silver Lake. The project site is currently zoned OS (Open Space) and designated as Open Space in the General Plan. The Open Space designation allows for uncovered reservoirs and accessory uses which are incidental to the operation and continued maintenance of such reservoirs. No new uses would be introduced, and the project site would continue to include open space uses, similar to existing conditions.

The project site is located within the urbanized Silver Lake-Echo Park-Elysian Valley Community Plan (Community Plan) Area of the City of Los Angeles. The Community Plan encourages implementation of the Silver Lake Reservoir Master Plan, which identifies Silver Lake Reservoir as an important aesthetic resource in the community.[3] One primary objective of the proposed project is to install an aeration and recirculation system to meet aesthetics parameters consistent with the Master Plan, such as maintaining the reservoirs at historic water levels and ensuring a greenish hue of the water. As such, the proposed project would be consistent with applicable zoning and other regulations governing scenic quality for the project site. Therefore, no impacts would occur.

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

No Impact. Implementation of the proposed project would not create a new source of light or glare that would adversely affect day or nighttime views. No permanent night lighting or reflective surfaces would be installed as part of the proposed project. Equipment installed for operation of the proposed project would be shielded from view by concrete enclosures or walls. Additionally, installation of the aeration and recirculation systems would occur only during daytime hours, so no lighting would be required during construction. Therefore, no impact from light or glare would occur.

[3] City of Los Angeles, Department of City Planning, *Silver Lake-Echo Park-Elysian Valley Community Plan*. 2004. Available at: https://planning.lacity.org/odocument/e87507ac-8c40-49a0-aa1c-21df963f2298/Silver_Lake-Echo_Park-Elysian_Valley_Community_Plan.pdf accessed July 2018.

II. AGRICULTURE AND FORESTRY RESOURCES

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?

No Impact. There is no designated Farmland on or near the project site.[4] Neither the project site nor the surrounding area is designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance on the "Important Farmland in California" map prepared by the California Resources Agency pursuant to the Farmland Mapping and Monitoring Program.[5] Therefore, the proposed project would not convert farmland to a non-agricultural use, and no impact would occur.

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

No Impact. The project site is currently zoned OS for open space uses.[6] The City of Los Angeles does not offer Williamson Act contracts.[7] Therefore, the proposed project would not conflict with existing zoning for agricultural use or a Williamson Act contract, and no impact would occur.

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 project site is not located in an area zoned for forest land, timberland, or Timberland Production as defined in Public Resources Code Section 12220(g) and Government Code Section 4526.[8] Therefore, the proposed project would not conflict with existing zoning for or cause a rezoning of forest land or timberland. No impact would occur.

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

No Impact. No portion of the project site is developed for forest land use or located adjacent to forest lands.[9] Therefore, the proposed project would not result in the loss of forest land or conversion of forest land to non-forest use. No impact would occur.

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4 State of California Department of Conservation, Division of Land Resource Protection, Farmland Mapping and Monitoring Program, *Important Farmland in California, 2016* map. Published July 2017, available at: ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2016/los16.pdf, accessed February 10, 2020.

5 State of California Department of Conservation, Division of Land Resource Protection, Farmland Mapping and Monitoring Program, *Important Farmland in California, 2016* map. Published July 2017, available at: ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2016/los16.pdf, accessed February 11, 2020.

6 City of Los Angeles, Department of City Planning. Zoning Information & Map Access System (ZIMAS). Available at: http://zimas.lacity.org/, accessed February 10, 2020.

7 State of California Department of Conservation, Division of Land Resource Protection, Current and Historic Data About Land Conservation (Williamson) Act Status, available at: http://www.conservation.ca.gov/dlrp/lca/Pages/stats_reports.aspx, accessed February 10, 2020.

8 ZIMAS, available at: http://zimas.lacity.org/, accessed February 10, 2020.

9 ZIMAS, available at: http://zimas.lacity.org/, accessed February 10, 2020.

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

No Impact. As stated in Section II(a) above, no portion of the project site or surrounding area is identified as farmland. Additionally, as stated in Section II(d), no portion of the project site or surrounding area is designated as forest land. Therefore, the proposed project would not change the existing environment in a way that would result in the conversion of Farmland to non-agricultural use or forest land to non-forest use. As such, no impact would occur.

III. AIR QUALITY

Potential impacts related to air quality associated with the proposed project were determined from the results presented in the Air Quality Assessment prepared for the proposed project, which is included as Appendix A to this IS/MND.

Would the project:

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

Less Than Significant Impact. The South Coast Air Quality Management District (SCAQMD) and Southern California Association of Governments (SCAG) are responsible for preparing an Air Quality Management Plan (AQMP), which implements federal Clean Air Act and California Clean Air Act requirements, and details goals, policies, and programs for improving air quality in the South Coast Air Basin. The following analysis addresses the consistency with applicable South SCAQMD and SCAG policies, including the SCAQMD's 2016 AQMP and growth projections within the SCAG's 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). In accordance with the procedures established in the SCAQMD's CEQA Air Quality Handbook, the following criteria are required to be addressed in order to determine the consistency with applicable SCAQMD and SCAG policies.

- Would the proposed project result in any of the following?
  - An increase in the frequency or severity of existing air quality violations;
  - Cause or contribute to new air quality violations; or,
  - Delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP.
- Would the proposed project exceed the assumptions utilized in preparing the AQMP?
  - Is the project consistent with the population and employment growth projections upon which AQMP forecasted emission levels are based;
  - Does the project include air quality mitigation measures; or,
  - To what extent is project development consistent with the AQMP land use policies?

The first indicator is assessed by comparing emissions of air pollutants that would be produced by construction and operation of the proposed project to the SCAQMD significance thresholds, both on regional and localized scales. The regional and localized air quality significance thresholds were designed to prevent the occurrence and exacerbation of air quality violations resulting from construction and operation of individual CEQA projects in the context of existing ambient air quality conditions. The second indicator is assessed by determining consistency of permanent operations with population, housing, and employment assumptions that were used in the development of the AQMP and the RTP/SCS.

Construction

Construction of the proposed project has the potential to create air quality impacts through the use of heavy-duty construction equipment and through vehicle trips by construction workers and haul trucks traveling to and from the project site. Fugitive dust emissions would primarily result from site preparation (e.g., clearing, grading, excavation, and loading) activities. Nitrogen oxide (NO_X) emissions would predominantly result from the use of construction equipment and haul truck trips. The assessment of construction air quality impacts considers all of these emissions sources. Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation and, for dust, the prevailing weather conditions.

It is mandatory for all construction projects in the South Coast Air Basin to comply with SCAQMD Rule 403 for Fugitive Dust. Rule 403 control requirements include measures to prevent the generation of visible dust plumes. Measures include, but are not limited to, applying soil binders to uncovered areas, reestablishing ground cover as quickly as possible, utilizing a wheel washing system or other control measures to remove bulk material from tires and vehicle undercarriages before vehicles exit the project site, and maintaining effective cover over exposed areas. Compliance with the provisions and best management practices propagated by Rule 403, such as the application of water as a dust suppressant to exposed stockpiles and disturbed ground surfaces, would reduce regional fugitive dust particulate matter (PM) emissions associated with construction activities by approximately 61 percent.

Daily emissions of volatile organic compounds (VOC), NO_X, carbon monoxide (CO), sulfur oxides (SO_X), respirable particulate matter ten microns or less in diameter (PM_{10}), and fine particulate matter 2.5 microns or less in diameter ($PM_{2.5}$) were estimated using the California Emissions Estimator Model (CalEEMod). Tables 1 and 2 show the maximum unmitigated daily regional emissions for each construction activity for each phase of the project, including emissions from sources located both on- and off-site. As stated above, the unmitigated emissions account for the provisions of SCAQMD Rule 403, which requires best management practice in fugitive dust control that achieve a 61 percent reduction from on-site fugitive dust sources including disturbed ground surface and material stockpiles. Maximum daily emissions of all air pollutants would remain below all applicable regional SCAQMD thresholds during construction of the proposed project.

Table 1: Estimated Daily Construction Emissions - Phase 1

Phase	Daily Emissions (Pounds Per Day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Demolition						
On-Site Emissions	1.1	9.6	9.4	<0.1	0.6	0.5
Off-Site Emissions	0.2	11	1.8	<0.1	0.5	0.1
Total	***1.3***	***20.6***	***11.2***	***<0.1***	***1.1***	***0.6***
Site Preparation						
On-Site Emissions	3.2	27	22	<0.1	1.9	1.8
Off-Site Emissions	0.4	0.9	3.3	<0.1	1	0.3
Total	***3.6***	***27.9***	***25.3***	***<0.1***	***2.9***	***2.1***
Construction						
On-Site Emissions	1.4	13	13	<0.1	0.7	0.7
Off-Site Emissions	0.3	0.2	2.1	<0.1	0.7	0.2
Total	***1.7***	***13.2***	***15.1***	***<0.1***	***1.4***	***0.9***
Regional Analysis						
Maximum Regional Daily Emissions	**3.6**	**27.9**	**25.3**	**<0.1**	**2.9**	**2.1**
Regional Significance Threshold	75	100	550	150	150	55
Exceed Regional Threshold?	**No**	**No**	**No**	**No**	**No**	**No**
Localized Analysis						
Maximum Localized Daily Emissions	**--**	**27**	**22**	**--**	**1.9**	**1.8**
Localized Significance Threshold	--	74	680	--	5	3
Exceed Localized Threshold?	**--**	**No**	**No**	**--**	**No**	**No**

Note: Emissions modeling files can be found in the appendix to the Air Quality Assessment.
Source: TAHA, 2020.

Table 2: Estimated Daily Construction Emissions - Phase 2

Phase	Daily Emissions (Pounds Per Day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Demolition						
On-Site Emissions	1.0	8.8	9.4	<0.1	0.5	0.5
Off-Site Emissions	0.1	0.2	1.1	<0.1	<0.0	0.1
Total	***1.1***	***9.1***	***10.5***	***<0.1***	***0.5***	***0.6***
Site Preparation						
On-Site Emissions	1.4	12	11	<0.1	0.8	0.7
Off-Site Emissions	0.1	0.2	1	<0.1	0.3	0.1
Total	***1.5***	***12.2***	***12***	***<0.1***	***1.1***	***0.8***
Construction						
On-Site Emissions	2.3	23	25	<0.1	1.2	1.1
Off-Site Emissions	0.4	0.3	2.9	<0.1	1.0	0.3
Total	***2.7***	***23.3***	***27.9***	***<0.1***	***2.2***	***1.4***
Regional Analysis						
Maximum Regional Daily Emissions	**2.7**	**23.3**	**27.9**	**<0.1**	**2.2**	**1.4**
Regional Significance Threshold	75	100	550	150	150	55
Exceed Regional Threshold?	**No**	**No**	**No**	**No**	**No**	**No**
Localized Analysis						
Maximum Localized Daily Emissions	**--**	**23**	**25**	**<0.1**	**1.2**	**1.1**
Localized Significance Threshold	--	74	680	--	5	3
Exceed Localized Threshold?	**--**	**No**	**No**	**--**	**No**	**No**

Note: Emissions modeling files can be found in Appendix A.
Source: TAHA, 2020.

In addition to maximum daily regional emissions, maximum localized (on-site) emissions were quantified for each construction activity. Sources of emissions located on the project site include heavy-duty equipment exhaust and fugitive dust. SCAQMD Localized Significance Threshold (LST) values have only been derived for the pollutants NO_X, CO, PM_{10}, and $PM_{2.5}$. The LST values selected for the screening analysis are applicable to a one-acre daily disturbance area in source receptor area 1 (Central Los Angeles County) within 25 meters of sensitive receptors. Tables 1 and 2 present the results of emissions modeling from on-site construction sources and analysis in the context of the LST methodology, which is designed to prevent the occurrence of substantially elevated small-scale concentrations in close proximity to construction sites.

Maximum on-site emissions during project construction would not exceed the applicable LST values; therefore, construction of the proposed project would not result in a significant localized air quality impact related to the frequency or severity of air quality violations. With respect to the first criterion, localized concentrations of nitrogen dioxide as NO_X, CO, PM_{10}, and $PM_{2.5}$, have been analyzed for the proposed project. Sulfur dioxide (SO_2) emissions, assessed as SO_X within the SCAQMD thresholds, would be negligible during construction, and therefore, would not have the potential to cause or affect a violation of the SO_2 ambient air quality standard. Since VOCs are not a criteria pollutant, there is no ambient standard or localized

threshold for VOCs. Due to the role VOCs play in ozone formation, it is classified as a precursor pollutant, and only a regional emissions threshold has been established.

Operation

Operational activities associated with the proposed project would be minimal. Implementation of the proposed project would require one maintenance trip three times per week. Indirect emissions would be related to electricity consumption to power mechanical equipment. Both sources of emissions generate pollution off the project site, which means they are not localized sources of pollution. Table 3 shows that operational emissions would not exceed the SCAQMD thresholds. Operation of the proposed project would not have any potential to exacerbate the frequency or severity of air quality violations and would result in a less than significant air quality impact related to air quality violations.

Table 3: Estimated Daily Operational Emissions

Source	Daily Emissions (Pounds Per Day)					
	VOC	**NO_X**	**CO**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
Maintenance Trips (Off-Site Emissions)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Energy Use (Off-Site Emissions)	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total	***0.1***	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**
Regional Analysis						
Maximum Regional Daily Emissions	*0.1*	<0.1	<0.1	<0.1	<0.1	<0.1
Regional Significance Threshold	55	55	550	150	150	55
Exceed Regional Threshold?	**No**	**No**	**No**	**No**	**No**	**No**
Localized Analysis						
Maximum Localized Daily Emissions	**--**	**<0.1**	**<0.1**	**--**	**<0.1**	**<0.1**
Localized Significance Threshold	--	74	680	--	2	1
Exceed Localized Threshold?	**--**	**No**	**No**	**--**	**No**	**No**

Note: Emissions modeling files can be found in Appendix A.
Source: TAHA, 2020.

The second consistency criterion requires that the proposed project not exceed the assumptions in the AQMP, thereby rendering the regional emissions inventory inaccurate. Implementation of the proposed project would not introduce new population, housing, and employment projections for the region. The proposed project would not have any potential to result in growth that would exceed the projections incorporated into the AQMP or the 2016–2040 RTP/SCS. The proposed project would not interfere with air pollution control measures listed in the 2016 AQMP and would not conflict with the goals of the General Plan Air Quality Element. Therefore, impacts related to conflict with or obstruction of the applicable air quality plan would be less than significant.

b) 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?

Less Than Significant Impact. The South Coast Air Basin is currently designated nonattainment for O_3, PM_{10}, and $PM_{2.5}$ under the state standards and nonattainment for O_3 and $PM_{2.5}$ under the federal standards. Therefore, a project may result in a cumulatively considerable air quality impact if daily emissions of ozone precursors (VOC and NO_X) or particulate matter (PM_{10} and $PM_{2.5}$) exceed applicable air quality thresholds of significance established by the SCAQMD. The SCAQMD designed the regional mass daily thresholds and LST values to prevent projects from exceeding the ambient air quality standards and potentially resulting in air quality violations. The SCAQMD suggests that if any quantitative air quality significance threshold is exceeded by an individual project during construction activities or operation, that project is considered cumulatively considerable and would be required to implement effective and feasible mitigation measures to reduce air quality impacts.

Conversely, the SCAQMD propagates the guidance that if an individual project would not exceed the regional mass daily thresholds or LST values, then it is generally not considered to be cumulatively significant. This method of impact determination allows for the screening of individual projects that would not represent substantial new sources of emissions in the South Coast Air Basin; it also serves to exclude smaller projects from the responsibility of identifying potentially concurrent new or proposed construction and operation emissions nearby since the incremental contribution to regional emissions is minor. As shown in Tables 1, 2, and 3 above, implementation of the proposed project would not exceed any applicable SCAQMD regional mass daily thresholds or LST values during construction or operation. Therefore, the proposed project would not generate cumulatively considerable emissions of ozone precursors or particulate matter and impacts would be less than significant.

c) Expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact. The SCAQMD devised its LST values to prevent the occurrence of localized hot spots of criteria pollutant concentrations at sensitive receptor locations surrounding the project site. The LST values were determined using emissions modeling based on ambient air quality measured throughout the South Coast Air Basin. If maximum daily emissions remain below the LST values during construction activities, it is highly unlikely that air pollutant concentrations in ambient air would reach substantial levels sufficient to create public health concerns for sensitive receptors. As shown in Tables 1, 2, and 3, maximum daily emissions of criteria pollutants and O_3 precursors from sources located on the project site would not exceed any applicable LST values. Therefore, construction of the proposed project would not result in exposure of sensitive receptors to substantial concentrations of criteria pollutants.

With regards to emissions of air toxics, carcinogenic risks, and non-carcinogenic hazards, the use of heavy-duty construction equipment and haul trucks during construction activities would release diesel PM to the atmosphere through exhaust emissions. Diesel PM is a known carcinogen, and extended exposure to elevated concentrations of diesel PM can increase excess cancer risks in individuals. However, carcinogenic risks are typically assessed over timescales of several years

to decades, as the carcinogenic dose response is cumulative in nature. Short term exposures to diesel PM would have to involve extremely high concentrations in order to exceed the SCAQMD Air Quality Significance Threshold of 10 excess cancers per million.

Over the course of construction activities, average diesel PM emissions from on-site equipment would be approximately 0.65 pounds per day. It is unlikely that diesel PM concentrations would be of any public health concern, and diesel PM emissions would cease upon completion of construction activities. Therefore, impacts related to exposing sensitive receptors to substantial pollutant concentrations would be less than significant.

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less Than Significant Impact.

Construction

Odors are the only potential construction emissions other than the sources addressed above. Potential sources that may produce objectionable odors during construction activities include equipment exhaust, application of asphalt and architectural coatings, and other interior and exterior finishes. Odors from these sources would be localized and generally confined to the immediate area surrounding the project site, would be temporary in nature, and would not persist beyond the termination of construction activities. The proposed project would utilize standard construction techniques, and the odors would be typical of most construction sites. In addition, as construction-related emissions dissipate away from the construction area, the odors associated with these emissions would also decrease and would be quickly diluted. LADWP would ensure that activities comply with SCAQMD Rules 402 (Nuisance) and 401 (Visible Emissions) to prevent the occurrence of public nuisances and visible dust plumes traveling off-site. Therefore, the proposed project would result in a less than significant construction impact related to odors and other nuisances.

Operation

Odors are the only potential operational emissions other than the sources addressed above. One objective of the proposed project is to control algal growth and associated odors at Silver Lake and Ivanhoe Reservoirs by installing an aeration and recirculation system to properly mix and destratify the water body and ensure full water transfer between both basins. As such, operation of the proposed project would result in a beneficial impact related to odors and would have no potential to generate new, adverse odors. In addition, land uses and industrial operations that are associated with odor complaints include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies and fiberglass molding. The proposed project would not include any of these uses. Therefore, the proposed project would result in a less than significant impact related to operational odors or other emissions that may have the potential to cause a public nuisance.

IV. BIOLOGICAL RESOURCES

Potential impacts to biological resources associated with the proposed project were determined from the results presented in the Biological Resources Memorandum prepared for the proposed project, which is included as Appendix B to this IS/MND.

The project area evaluated for biological resources includes the SLRC, plus a 500-foot survey buffer around the SLRC, combined as the study area. A field survey of the SLRC, focusing on areas where the proposed project components will be installed was conducted on January 10, 2020, to document existing biological resources that occur or have the potential to occur within and adjacent to the study area, and to evaluate the potential for special-status plant and wildlife species to occur within the study area.

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 Wildlife or U.S. Fish and Wildlife Service?

Less Than Significant Impact. A significant impact could occur if the proposed project removed or modified the habitat for, or otherwise directly or indirectly affected, any species identified or designated as a candidate, sensitive, or special status species in local or regional plans, policies, or regulation, or by the California Department of Fish and Wildlife (CDFW) or U.S. Fish and Wildlife Service (USFWS).

Sensitive Plants

Special-status plant species include those listed as Endangered, Threatened, Rare or those species proposed for listing by the USFWS under the federal Endangered Species Act (FESA), those listed by CDFW under the California Endangered Species Act (CESA), and the California Native Plant Society (CNPS).[10,11,12] The CNPS inventory is sanctioned by the CDFW and essentially serves as the list of candidate plant species for state listing. CNPS's California Rare Plant Ranks (CRPR) 1B and 2 species are considered eligible for state listing as endangered or threatened.

Vegetation in the SLRC includes mature groves of trees on both the east and west side of Silver Lake Reservoir; an approximate 5-acre green space known as Silver Lake Meadows that consists primarily of lawn on the east side of Silver Lake Reservoir; and an approximate 1-acre area along the west side of Ivanhoe Reservoir that formerly served as a staging area for work associated with the SRP, but has since been landscaped with ornamental trees, shrubs, and groundcover. Mature trees are also lined along fence lines around the SLRC.

[10] Species listed or proposed for listing as threatened or endangered under the federal Endangered Species Act (Title 50 Code of Federal Regulations [CFR] 17.12 [listed plants], Title 50 CFR 17.11 [listed animals] and includes notices in the Federal Register for proposed species).

[11] Species listed or proposed for listing by the State of California as threatened or endangered under the California Endangered Species Act (Title 14 California Code of Regulations 670.5).

[12] Plants listed as rare under the California Native Plant Protection Act (California Fish and Game Code Section 1900 *et seq*.).

The eucalyptus grove on the west side of Silver Lake Reservoir covers approximately 3 acres and contains mature blue gum (*Eucalyptus globulus*) with an understory of lawn. On the east side of Silver Lake Reservoir, mature red gum (*E. camaldulensis*) dominates, with mature cypress (*Cupressus* sp.), pine (*Pinus* sp.), oak (*Quercus* sp.), southern silk oak (*Grevillea robusa*), and other ornamental species also present.

Vegetation in the landscaped area on the east side of Ivanhoe Reservoir includes plantings of occasional spruce (*Picea* sp.) trees, mulefat (*Baccharis salicifolia*), willow (*Salix* sp.), olive (*Olea eruopaea*), and other shrubs, with a ground cover of deer grass (*Muhlenbergia rigens*) and ornamental iris (*Iris* sp.).

Residential development in the area surrounding the SLRC consists primarily of paved surfaces and residential lots which largely have only small areas of ornamental plantings or lawn, with an occasional tall mature ornamental tree occurring on an individual lot. Eucalyptus, pine, cedar, various palm tree species, African fern pine (*Afrocarpus gracilior*), and ficus (*Ficus benjamina*) trees were observed in the surrounding area.

No special-status plant species were observed in the study area during the field survey and no records of special-status plant species coincide with the study area. The nearest occurrences of special-status plants occur over 3 miles to the northwest in Griffith Park. The study area does not provide natural habitats potentially suitable for special-status plants. Additionally, no USFWS-designated critical habitat for any special-status plant species coincides with the study area. The nearest critical habitat area for any federally-listed plant species is approximately 16 miles to the west, in the Santa Monica Mountains near Topanga.

Construction

Individual special-status plant species could be damaged or destroyed from crushing or trampling during construction activities; however, no federal or state-listed plant species were identified during the field survey, and special-status plants are not expected to occur in the study area due to a lack of potentially suitable habitat. Since no special-status plants were observed during the field survey and the study area does not contain suitable habitat, none are expected to occur at the project site or surrounding area. As a result, direct impacts on special-status plants would be less than significant.

Indirect impacts to special-status plant species occurring outside the project site could result from construction-related habitat loss and modification of sensitive natural communities related to dust, noise, stormwater runoff, and through the potential spread of noxious and invasive plant species into these communities. However, suitable habitat for special-status plants is not present in the urbanized environment surrounding the project site. Therefore, indirect impacts to special-status plants would be less than significant.

Operation

Significant impacts to vegetation, special-status plant species, and sensitive natural communities during operations and routine maintenance of the project are not

anticipated as only ornamental vegetation occurs in the study area, and special-status plants are not expected to occur in the study area due to a lack of suitable habitat. As a result, impacts to vegetation, special-status plants, and sensitive natural communities during operation and routine maintenance of the pump station and pipeline alignment would be less than significant.

Sensitive Wildlife Species

Special-status wildlife species include those listed by USFWS under FESA and by CDFW under CESA. USFWS and CDFW officially list species as either threatened, endangered, or as candidates for listing. Additional species receive federal protection under the Bald Eagle Protection Act (e.g., bald eagle, golden eagle), the Migratory Bird Treaty Act (MBTA), and state protection under CEQA Section 15380(d).

All birds, except European starlings, English house sparrows, rock doves (pigeons), and non-migratory game birds such as quail, pheasant, and grouse are protected under the MBTA. However, non-migratory game birds are protected under California Fish and Game Code (CFGC) Section 3503. Many other species are considered by CDFW to be California Species of Special Concern (SSC) and others are on a CDFW Watch List (WL). The CNDDB tracks species within California for which there is conservation concern, including many that are not formally listed, and assigns them a CNDDB Rank.[13] Although CDFW SSC and WL species and species that are tracked by the CNDDB but not formally listed are afforded no official legal status, they may receive special consideration during the environmental review process. CDFW further classifies some species as "Fully Protected" (FP), indicating that the species may not be taken or possessed except for scientific purposes, under special permit from CDFW. Additionally, CFGC Sections 3503, 3505, and 3800 prohibit the take, destruction, or possession of any bird, nest, or egg of any bird except English house sparrows and European starlings unless authorization is obtained from CDFW.

No records of special-status wildlife species that coincide with the study area were identified during the database review. A few CNDDB records are known from within one mile of the project site, including for the federally and state-listed endangered least Bell's vireo, the state-threatened bank swallow, and the non-listed hoary bat, which is tracked by CDFW in the CNDDB. Records for the vireo and bank swallow are over 80 years old and these species, as well as other special-status wildlife species listed in Appendix B, are not expected in the study area due to a lack of suitable habitat for them. Three adult great blue heron (*Ardea herodias*) were observed in a cypress tree just outside the SLRC north of Ivanhoe Reservoir, at the intersection of Tesla Avenue and Rokeby Street. At least three large stick nests are visible in this tree; however, these herons did not exhibit signs of nesting during the field survey.

Although not conducive to supporting special-status wildlife, several such species have been documented at the SLRC. Great blue heron, which is tracked by CDFW in the CNDDB, are present during the breeding season in and around the SLRC, and

[13] California Department of Fish and Wildlife. 2019. California Natural Diversity Database (CNDDB). Special Animals List. August.

hoary bat was identified in the SLRC during a bat survey conducted in 2015. Additional special-status wildlife, including Peregrine falcon (*Falco peregrinus*; federally and state-delisted and FP), merlin (*F. columbarius*; WL), and California gull (*Larus californicus*; WL) were documented during surveys and monitoring efforts conducted by AECOM in 2015; however, none of these species were detected nesting within the SLRC or in the surrounding area.

Construction

Elements of project construction could potentially affect common wildlife; however, the mortality or injury of individual species is not likely, as the site does not support many species with limited mobility or that occupy burrows within the construction zone that could be crushed during proposed project activities. Short-term indirect effects on wildlife, primarily urban bird species (discussed further below), would occur due to noise disturbances, increased human activity, and vibrations caused by heavy equipment. Wildlife mortality, however, is unlikely to occur, and as a result, impacts to common wildlife would be less than significant.

Ornamental vegetation in the study area provides suitable nesting habitat for common urban bird species protected by the MBTA and by CFGC, including great blue heron, red-tailed hawk, and other common species that have been documented nesting in the study area during surveys and monitoring in support of previous projects implemented within the SLRC. By avoiding project construction during the nesting bird season (generally February 15 to September 1, and as early as January 1 for raptors), and/or by implementing and adhering to the BMP listed in Section 1.7 related to pre-construction surveys for nesting birds and providing a qualified biological monitor should nesting birds be present, direct impacts during project construction on nesting birds and associated nesting habitats would be less than significant.

Indirect impacts to nesting birds within the study area could occur during construction as a result of noise, dust, increased human presence, and vibrations resulting from construction activities. Such disturbances could result in increased nestling mortality due to nest abandonment or decreased feeding frequency. However, by implementing and adhering to the BMP listed in Section 1.7 related to pre-construction surveys and providing a qualified biological monitor as necessary, indirect impacts to nesting birds protected under the MBTA and by CFGC would be less than significant.

To facilitate installation of the Ivanhoe Inlet Tower plug and Ivanhoe Bypass Pipeline plug, water from Ivanhoe Reservoir would be pumped into Silver Lake Reservoir. The draining of Ivanhoe Reservoir is not anticipated to impact wildlife, as no food resources for wildlife exist in Ivanhoe Reservoir and Silver Lake Reservoir would not be drained, providing ample space immediately adjacent for water fowl to rest on.

Individual special-status wildlife species could be directly and indirectly affected during construction in the same manner as described above; however, no federal or State-listed wildlife species have been identified in the study area, and potentially suitable habitat for such species is absent from the study area. As a result, direct and indirect impacts to a federally and/or State-listed wildlife species is not anticipated, and impacts would be less than significant.

Non-listed special-status wildlife including great blue heron, Peregrine falcon, merlin, California gull, and hoary bat have been detected in the study area. Since these are mobile species and the removal of bird nesting (mature trees) and bat roosting (structures/buildings within the SLRC) habitats would not occur, direct impacts to non-listed special-status species would not occur. However, indirect impacts to non-listed special-status bird species within the vicinity of the project could occur as a result of noise, increased human presence, and vibrations resulting from construction activities. Such disturbances could result in increased nestling mortality due to nest abandonment or decreased feeding frequency. However, by implementing and adhering to the BMP listed in Section 1.7 related to pre-construction surveys and providing qualified biological monitors as necessary, indirect impacts to non-listed special-status birds nesting in the study area would be less than significant.

Indirect impacts to non-listed special-status bats roosting within the vicinity of the project could occur as a result of noise, increased human presence, and vibrations resulting from construction activities. Disturbances related to construction could result in displacement from daytime roosts. However, daytime roosting by bats in the SLRC has not been observed and is unlikely. Additionally, disruption of night-time roosts is not anticipated as construction would not occur during dusk or evening hours. As a result, direct and indirect impacts to special-status bats would be less than significant.

Operation

Activities would be conducted within previously disturbed and developed surfaces containing only ornamental vegetation, and would generally not change conditions from those present prior to and after project construction. As a result, operation and maintenance activities of the proposed project are not anticipated to affect special-status wildlife species. Impacts would be less than significant.

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

No Impact. Sensitive natural communities are those that are designated as rare in the region by the CNDDB, support special-status plant or wildlife species, or receive regulatory protection (i.e., Section 404 of the Clean Water Act (CWA) and/or Sections 1600 et seq. of the CFGC).

No sensitive natural communities occur within the study area. Vegetation in the project area consists of ornamental trees and shrubs that are common in urban environments. Additionally, no USFWS-designated critical habitat, or aquatic features (i.e. wetlands or other waters) under regulatory jurisdiction of the U.S. Army Corps of Engineers (USACE), CDFW, and/or the Regional Water Quality Control Board (RWQCB) coincide with the study area.

Implementation of the proposed project would not result in direct or indirect impacts to any sensitive natural communities, as none occur within the study area or surrounding area. The nearest natural communities occur over 2 miles northwest of

the study area in Griffith Park. As such, no impacts to sensitive natural communities would occur.

c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Less Than Significant Impact. As previously discussed, both Silver Lake and Ivanhoe Reservoirs were constructed as part of, and previously connected to, the City's potable water supply and distribution system. In coordination with USACE, it has been determined that the two reservoirs do not fall under their regulatory jurisdiction. As such, permits pursuant to CWA Sections 401 and 404 are not required for the proposed project. Although the reservoirs are not considered waters of the U.S. falling under federal jurisdiction of the USACE, they may be considered Waters of the State, which are broadly defined to include "any surface water or groundwater, including saline waters, within the boundaries of the state." The California State Water Resources Control Board recently developed regulatory procedures in their State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State, effective May 2020.[14] The procedures suggest that any surface water that is specifically identified in the respective Basin Plan may be considered a wetland or other water of the state. Artificial, constructed waters over one acre in size that meet specific criteria (e.g., features currently used and maintained, such as stormwater treatment and recycled water storage facilities) are not considered Waters of the State. Both the Ivanhoe and Silver Lake Reservoirs are listed within the Region 4 (Los Angeles) Basin Plan.[15] As such, the reservoirs may be considered Waters of the State and implementation of the proposed project may affect these waters. Thus, RWQCB's Waste Discharge Requirements under the Porter-Cologne Act would be required to implement the proposed project. In addition, although the reservoirs are constructed facilities and do not support wetland/riparian vegetation, a CDFW Lake and Streambed Alteration Agreement may also be required. Coordination with RWQCB and CDFW regarding adherence to existing permitting regulations would ensure direct impacts to potential Waters of the State would be less than significant.

Indirect impacts to the reservoirs may result from stormwater runoff during construction activities where a reduction in water quality resulting from increased sedimentation or other contaminants could occur. These water quality changes could potentially reduce the quality of the reservoirs. As previously discussed, an erosion control plan and SWPPP would be developed and implemented for the proposed project, which would include BMPs to minimize downstream effects of stormwater runoff or conveyance of sediment or other contaminants into the reservoirs. Implementation of an erosion control plan and SWPPP, and adherence to existing RWQCB and CDFW permitting regulations would ensure that indirect impacts to potential Waters of the State would be less than significant.

[14] California State Water Resources Control Board, State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State, available at: https://www.waterboards.ca.gov/water_issues/programs/cwa401/wrapp.html, accessed March 24, 2020.

[15] Los Angeles Regional Water Quality Control Board, Basin Plan, available at: https://www.waterboards.ca.gov/losangeles/water_issues/programs/basin_plan/, accessed March 24, 2020.

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/breeding sites?

Less Than Significant Impact. In an urban context, a wildlife migration corridor can be defined as a linear landscape feature of sufficient width and buffer to allow animal movement between two comparatively undisturbed habitat fragments, or between a habitat fragment and some vital resource that encourages population growth and diversity. Habitat fragments are isolated patches of habitat separated by otherwise foreign or inhospitable areas, such as urban tracts or highways. Two types of wildlife migration corridors seen in urban settings are regional corridors, defined as those linking two or more large areas of natural open space, and local corridors, defined as those allowing resident wildlife to access critical resources (food, cover, and water) in a smaller area that might otherwise be isolated by urban development.

The project site is located within an urbanized area and the study area does not occur within or intersect a recognized/established regional wildlife corridor. Ornamental trees within and adjacent to the SLRC provide opportunities for cover, foraging, resting, and nesting to localized bird populations, and most significantly have supported the heron rookery that herons have returned to for years to nest. Overall, however, the study area does not provide functions as a significant wildlife movement corridor. The two reservoirs in the SLRC attract water fowl that would otherwise not typically be present in an urban setting. In addition to the ducks, geese, gulls, and American coots that were present on the reservoirs during the time of the field survey, other duck species, terns, grebes, and gulls have been observed on the reservoirs, and herons have been observed along its perimeter. Although these bodies of water provide a place for water fowl to rest, no emergent or submerged vegetation, significant invertebrate populations, or fish exist within the reservoirs to support a residence waterfowl population. Due to past chemical treatment of water in the reservoirs and the isolated nature of the reservoirs (from other water sources and the public), suitable food resources for foraging water fowl has not developed in the reservoirs. Herons utilizing the on-site rookery are known to forage in the Los Angeles River, which lies approximately 1 mile to the east. There is no suitable foraging habitat for herons in the reservoirs.

Construction

As discussed, the study area does not serve as a regional wildlife corridor and no suitable food resources for foraging water fowl or heron have developed within the reservoirs, and they do not support residence populations of waterfowl. Additionally, construction activities would occur within the two reservoirs and adjacent paved areas containing existing equipment. No construction activities would occur at the on-site heron rookery. As a result, direct impacts to a regional wildlife movement corridor would not occur. Project construction activities (i.e., increased noise, human presence, vibration) would likely result in bird species traveling through the area avoiding the immediate project vicinity, or in increased nestling mortality due to nest abandonment or decreased feeding frequency in the event that active bird nests are present. Such indirect effects would be temporary in nature, restricted to the project construction duration. By implementing and adhering to the BMP listed in Section 1.7 related to pre-construction surveys and providing qualified biological monitors as

necessary, indirect impacts to localized bird movement and nesting are not anticipated, and impacts would be less than significant.

Operation

The project site is located within an urbanized area and the study area does not occur within or intersect a recognized/established regional wildlife corridor. Project operations would be conducted within previously disturbed and developed surfaces, and would generally not change from existing conditions. During project operation, the reservoirs could continue to serve as a resting area for waterfowl. As a result, operation and maintenance activities of the proposed project are not anticipated to affect wildlife movement, and impacts would be less than significant.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance (e.g., oak trees or California walnut woodlands)?

No Impact. In response to the City's declining oak tree population, the City enacted an oak tree protection ordinance in 1982. To further slow the decline of native trees, the City amended the two City Municipal Code sections pertaining to oak trees in April 2006 to include southern California black walnut (*Juglans californica*), western sycamore (*Platanus racemosa*), and California bay (*Umbellularia californica*) (Section 17.02 of City Municipal Code). Additionally, trees must be four inches or greater in diameter at 4.5 feet above ground to be considered protected. The Board of Public Works must issue a permit before any alterations to protected trees are made that could cause them to be damaged, relocated or removed. Pruning also requires a permit and must comply with the pruning standards set forth by the Western Chapter of the International Society of Arboriculture.

No trees would be removed or impacted during implementation of the proposed project. As a result, the proposed project would not conflict with the City's tree protection ordinance. No impact would occur.

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 proposed project 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. Additionally, the study area does not coincide with a Significant Ecological Area (SEA). The Griffith Park SEA lies approximately 1.5 miles northwest of the study area. Due to its distance from Griffith Park, implementation of the proposed project is not anticipated to affect resources within this SEA. Therefore, no impact would occur.

V. CULTURAL RESOURCES

The project area evaluated for cultural resources includes the SLRC, plus a 0.5-mile survey buffer around the SLRC, combined as the cultural resources study area. Potential impacts to historical and archaeological resources associated with the proposed project were determined from the results presented in the Cultural, Paleontological, and Tribal

Cultural Resources Technical Memorandum prepared for the proposed project, which is included as Appendix C to this IS/MND.

Would the project:

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

Less Than Significant Impact After Mitigation Incorporated. Archival research for the project site included review of previously recorded archaeological site records and reports, historic site and property inventories, and historic maps. Inventories of the National Register of Historic Places (NRHP), the California Register of Historical Resources (CRHR), the California State Historic Resources Inventory (HRI), California Historical Landmarks and Points of Interest, and the list of City of Los Angeles Historic-Cultural Monuments (LAHCMs) were also reviewed to identify cultural resources within a 0.5-mile radius of the project site.

A resource is generally considered "historically significant" if the resource meets at least one of the four criteria for listing on the CRHR (Public Resources Code Section 5024.1[a]). The CRHR is used as a guide by state and local agencies, private groups, and citizens to identify the state historical resources and to include which properties are to be protected, to the extent prudent and feasible, from substantial adverse change. The CRHR evaluation criteria are similar to the NRHP criteria. For a property to be eligible for inclusion in the CRHR, it must meet one or more of the following criteria:

1. It is associated with events that have made a significant contribution to the broad patterns of California history and cultural heritage;

2. It is associated with the lives of persons important in our past;

3. It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or

4. It has yielded, or may be likely to yield, important information in prehistory or history.

The CRHR may also include various other types of historical resources that meet the criteria for eligibility, including the following:

- Individual historic resources

- Resources that contribute to a historic district

- Resources identified as significant in historic resource surveys

- Resources with a significance rating of Category 3 through Category 5 in the State Inventory (Categories 3 and 4 refer to potential eligibility for the NRHP; Category 5 indicates a property with local significance)

Although the NRHP standard includes the evaluation of resources that are 50 years old or older, the California Office of Historic Preservation (OHP) endorses recording and evaluating resources over 45 years of age to accommodate the five-year lag in the planning process.

Previously Recorded Cultural Resources

The SCCIC records search identified eight previously recorded cultural resources mapped within 0.5 mile of the project area. These resources have been previously evaluated for eligibility for listing in the CRHR and the NRHP. Of the resources, six are historic buildings and two are stairways. None of the resources are located within the project area itself.

Additionally, the SLRC SRP Cultural Resources Assessment Report, prepared by Greenwood and Associates in 2004, details the results of a cultural resources survey which examined 100 percent of the proposed project footprint. This study found the SLRC eligible for listing in the CRHR as a historic district. A historic district is a unified geographic entity that contains a concentration of historic buildings, structures, objects, or sites united historically, culturally, or architecturally. An intensive built-environment survey conducted in 2018 concluded that the SLRC Historic District includes 15 contributing features with a period of significance spanning 1906 to 1953. The SLRC Historic District is eligible under CRHR Criteria 1, 2, and 3 for its contribution to water infrastructure development history, association with William Mulholland, and for its design and engineering. The district appears to meet CRHR eligibility for Criteria 1, 2, and 3 and retains the principal character-defining exterior features and aspects of integrity necessary to convey its significance.

California State Historic Resources Inventory

Study of the California Office of Historic Preservation (OHP)'s HRI focused on properties within 0.5 mile of the project area that faced streets bordering the project area. The HRI lists 4 historic resources within 0.5 mile of the project site, including two single-family residences dating to the first half of the twentieth century, and the Silver Lake Recreation Center to the south of Silver Lake Reservoir within the SLRC. All project activities would occur within the Silver Lake and Ivanhoe Reservoirs and adjacent areas currently containing associated equipment. The proposed project does not include activities outside of the SLRC boundary or at the Silver Lake Recreation Center. As such, no impact to these resources would occur.

California Historical Landmarks

California Historical Landmarks are buildings, structures, sites, or places that have been determined to have statewide historical interest. A search of the California Historical Landmarks list revealed no California Historic Landmarks within 0.5 mile of the project area.

Los Angeles Historic-Cultural Monuments

LAHCMs are sites in Los Angeles that have been designated by the Los Angeles Cultural Heritage Commission as worthy of preservation based on their architectural,

historic, and cultural merits. A search of the LAHCMs found 12 monuments within 0.5 mile of the project area. These include nine residential houses, one fire station, one mixed-use office/shop/studio/living space complex, and one structure. One LAHCM is located within the project area. LAHCM 422 is Silver Lake and Ivanhoe Reservoirs themselves. The proposed project would not adversely affect LAHCM 422, and its eligibility status would be maintained. The proposed project would not have an obtrusive appearance or form, and the finish materials would be compatible with the historic setting of the project site while also being easily distinguished as modern construction so as not to be interpreted as an original part of the SLRC. The proposed project would not destroy or change any features which are important to defining the character of the SLRC, and the property's historic and contextual setting would be retained.

As the SLRC has been deemed eligible for listing in the CRHR as a historic district, it qualifies as a historical resource for purposes of CEQA. As such, any improvements planned for the property should be consistent with the Secretary of the Interior's Standards for Rehabilitation to ensure a less than significant impact on the SLRC Historic District. Thus, Mitigation Measure CR-A would be implemented in order to minimize any potential impacts to the district's eligibility under the CRHR. With implementation of CR-A, the impact to the historical resource would be reduced to less than significant.

Mitigation Measures

CUL-1 Any proposed alterations planned for the SLRC Historic District shall be consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties, particularly the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings. Per the National Park Service, rehabilitation is defined as the process of returning a property to a state of utility, through repair or alteration, which makes possible an efficient contemporary use while preserving those portions and features of the property that are significant to its historic, architectural, and cultural values. Rehabilitation assumes that at least some repair or alteration of the historic building will be needed to provide for an efficient contemporary use; however, these repairs and alterations must not damage or destroy materials, features, or finishes that are important in defining the building's historic character. Any proposed alterations shall be designed under the guidance of a Secretary of the Interior qualified architectural historian in order to comply with the Secretary of the Interior's Standards for Rehabilitation.

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

Less Than Significant Impact. An archaeological field survey of the study area was conducted on August 9, 2018, to identify and record cultural resources that are at least 45 years old and evaluate any discovered resources for historical significance based on criteria for listing in the CRHR. No archaeological resources were identified during the field survey or archival search. Based on the results of the archival research and field survey, there is low potential that archaeological resources would

be encountered during ground-disturbing activities associated with the proposed project.

During construction activities, ground disturbance required for the proposed project would not exceed 4 feet in depth. Due to the developed nature of the study area, soils at this shallow depth can reasonably be assumed to have been disturbed in the recent past, in particular by utilities excavations and by the construction and demolition of the commercial building, which occupied most of the project footprint until the late 1980s or early 1990s. Therefore, the proposed project would not cause a substantial adverse change in the significance of a known archaeological resource. Although not expected to occur due to the low potential in the study area, in the event previously uncovered archaeological resources are encountered during project construction activities, the proposed project would be subject to California Public Resources Code Section 21083.2(i) regarding provisions related to the accidental discovery of archaeological resources. These provisions include immediately halting construction work in the vicinity of the find, and LADWP contacting a qualified archaeologist to evaluate the significance of and determine appropriate treatment for the resource in accordance with the provisions of CEQA Guidelines Section 15064.5 and the National Historic Preservation Act. Work in the area may not resume until evaluation and treatment of the resource is completed or the resource is recovered and removed from the site. Construction activities may continue on other parts of the construction site while evaluation and treatment of archaeological resources take place, if necessary. Compliance with these existing regulations would ensure that the impact to archaeological resources would be less than significant.

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

Less Than Significant Impact. There are no known cemeteries located within the project vicinity. Based on the results of the archival research and field survey, there is low potential for archaeological resources to be encountered during ground-disturbing activities. Additionally, as discussed in Section V(b), excavations would not exceed 4 feet in depth; soils at this shallow depth can reasonably be assumed to have been disturbed in the recent past. Therefore, human remains are not expected to be encountered. Although not expected to occur, in the event that any human remains or related resources are discovered, such resources would be treated in accordance with state and local regulations and guidelines. In accordance with the provisions of the California Health and Safety Code Section 7050.5, in the event that human remains are discovered during project construction, no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains would occur, and the Los Angeles County Coroner would be notified. The coroner would provide recommendations concerning the treatment and disposition of the human remains within two working days. If the remains and/or related resources, such as funerary objects, are determined to be of Native American origin, the coroner would contact the Native American Heritage Commission within 24 hours. In accordance with California Public Resources Code Section 5097.98, the Native American Heritage Commission would immediately notify the person it believes to be most likely descended from the deceased Native American. The most likely descendent would be given access to the site where the remains were discovered and may make recommendations for the treatment and

disposition of the remains, and related resources, and the potential for other remains. Work at the discovery site may commence only after consultation with the most likely descendent and treatment of the remains and any associated resources have been concluded. Work may continue on other parts of the project site while consultation and treatment are conducted. Compliance with these existing regulations would ensure that the impact to human remains would be less than significant.

VI. ENERGY

Potential impacts related to energy usage resulting from implementation of the proposed project were determined from the results presented in the Energy Resources Assessment prepared for the proposed project, which is included as Appendix D to this IS/MND.

Would the project:

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Less Than Significant Impact. The following analysis discusses short-term construction and long-term operational use of electricity, natural gas, and petroleum.

Electricity

Construction

Construction of the proposed project would require electricity for lighting, construction trailers, and operation of electrically powered hands tools. Electricity to the site would be provided by LADWP and it is likely that most electrically powered equipment would connect to the grid. Consumption of electricity for construction would be minimal and would cease after completion of the proposed project. Electricity use would be minimized to the extent feasible through incorporation of sustainability features and best management practices in compliance with the 2017 LADWP Power Strategic Long-Term Resource Plan. Therefore, construction of the proposed project would result in a less than significant impact related to wasteful, inefficient, or unnecessary consumption of electricity.

Operation

Electricity would be needed to continuously operate the air blower units. The estimated energy consumption of the recirculation network is 120 megawatt-hours (MWh) for Phase I and 97 MWh for Phase 2, totaling 217 MWh. The aeration and recirculation system would ensure that water quality parameters are met for visual aesthetics and controlling odors. The proposed project would allow the reservoirs to revert to a more natural state, maintained as view lakes, and to remain consistent with the community values that were set forth in the Silver Lake Master Plan. Using electricity to achieve the objectives would not be wasteful, inefficient, or unnecessary. Therefore, operation of the proposed project would result in a less than significant impact related to the consumption of electricity.

Natural Gas

Construction

Construction activities typically do not require the consumption of natural gas to power equipment or heavy machinery. Natural gas that would be consumed during construction would be negligible and would not result in a significant drain on natural gas resources. Therefore, construction of the proposed project would result in a less than significant impact related to wasteful, inefficient, or unnecessary consumption of natural gas.

Operation

The proposed project would not use natural gas. Therefore, operation of the proposed project would not result in a significant impact related to wasteful, inefficient, or unnecessary consumption of natural gas.

Petroleum

Construction

Petroleum would be consumed during the demolition, excavation, and construction phases of the proposed project by heavy-duty equipment, which is usually diesel powered. Construction of the proposed project would result in an increased consumption of gasoline and diesel fuels associated with haul trucks, deliveries, and worker commute trips. Table 4 shows that a one-time expenditure of approximately 3,551 gallons of diesel fuel and 896 gallons of gasoline would be needed to construct the proposed project.

Table 4: Construction Petroleum Demand

Source	CO_2 (Metric Tons)	kg/CO_2/Gallon	Gallons
Diesel			
Equipment – Phase 1	247	10.21	2,522
Equipment – Phase 2	97	10.21	990
Trucks – Phase 1	3.4	10.21	35
Trucks – Phase 2	0.4	10.21	4.1
		Total Diesel Consumption	3,551
Gasoline			
Worker Vehicles – Phase 1	79	8.78	694
Worker Vehicles – Phase 2	23	8.78	202
		Total Gasoline Consumption	896

Source: The Climate Registry, 2018; TAHA, 2020.

The proposed project would use best practices to eliminate the potential for the wasteful consumption of petroleum. Exported materials (e.g., demolition debris and soil hauling) would be disposed of at the closest facility that accepts such materials, and the proposed project would be required to comply with California Air Resources Board's (CARB's) Airborne Toxics Control Measure, which restricts heavy-duty diesel vehicle idling time to five minutes. Therefore, because petroleum use would be minimized to the extent feasible and represents a relatively small amount of fuel

consumption, construction of the proposed project would result in a less than significant impact related to wasteful, inefficient, or unnecessary consumption of petroleum.

Operation

Petroleum consumption during operation of the proposed project would be related to vehicle trips for periodic maintenance. Maintenance would require one daily trip up to three times per week. This minimal vehicle use would have a negligible effect on petroleum supplies. Therefore, operation of the proposed project would not result in a significant impact related to wasteful, inefficient, or unnecessary consumption of petroleum.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Less Than Significant Impact. There is no potential for the proposed project to conflict with renewable energy or energy efficiency plans. A review of plans and policies described in the Regulatory Framework did not identify plans or policies relevant to an aeration and recirculation systems project. Electricity will be provided from the LADWP system, and LADWP has a long-term plan to provide 100 percent of the City's electrical power through renewable resources by 2045. The electricity needed to operate the proposed project, 120 MWh for Phase I and 97 MWh for Phase 2, would not interfere with this long-term plan for renewable energy. Regarding energy efficiency, the proposed project will comply with Title 24, Part 6, of the California Code of Regulations and construction activities would use best practices to eliminate the potential for the wasteful consumption of energy (e.g., compliance with CARB's Airborne Toxics Control Measure, which restricts heavy-duty diesel vehicle idling time to five minutes). Therefore, the proposed project would result in a less than significant impact related to energy plans and energy efficiency.

VII. GEOLOGY AND SOILS

Would the project:

a) Directly or indirectly cause 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 California Geological Survey Special Publication 42.

Less Than Significant Impact. There are numerous earthquake faults in the project vicinity, but the project site is not located within an Alquist-Priolo Earthquake Fault Zone.[16] The proposed project does not include the construction of any habitable structures nor would the use of the project site change following the proposed project. Therefore, impacts related to directly or indirectly causing

[16] California Geological Survey, Earthquake Zones of Required Investigation Map, Hollywood Quadrangle, November 2014, available at: https://gmw.conservation.ca.gov/SHP/EZRIM/Maps/HOLLYWOOD_EZRIM.pdf, accessed April 13, 2020.

potential adverse effects from the rupture of a known earthquake fault would be less than significant.

ii) Strong seismic ground shaking?

Less Than Significant Impact. The project site is located within a seismically active region, and as with all locations in Southern California, is subject to strong seismic ground shaking. However, as discussed in Section VII(a)(i) above, the proposed project does not include the construction of any habitable structures nor would the use of the project site change following the proposed project. Therefore, impacts related to strong seismic ground shaking would be less than significant.

iii) Seismic-related ground failure, including liquefaction?

Less Than Significant Impact. The project site is located within a City-designated liquefaction area. However, the proposed project does not include construction of any structures that would be susceptible to liquefaction. Following installation of the aeration and recirculation system, the proposed project is intended for passive uses and the project site would remain similar to existing conditions. Therefore, impacts related to seismic-related ground failure, including liquefaction, would be less than significant.

iv) Landslides?

Less Than Significant Impact. The project site is not identified as a potential landslide hazard area but is located in a designated hillside area.[17] However, the project site is located within the existing Silver Lake and Ivanhoe Reservoirs, and adjacent paved areas within the SLRC that contain associated equipment. These areas do not contain slopes that would be susceptible to landslides. The proposed project would not increase the risk of landslides. Therefore, impacts related to landslides would be less than significant.

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

Less Than Significant Impact. Construction activities would include excavation of approximately 982 cubic yards of soil during Phase 1 and 35 cubic yards of soil during Phase 2, allowing for possible erosion. During construction, transport of sediments from the project site by stormwater runoff and winds would be prevented through the implementation of appropriate BMPs, as discussed in Section 1.7 of this MND. These BMPs include implementation of Rule 403 dust control measures and the development and implementation of an erosion control plan and a Storm Water Pollution Prevention Plan (SWPPP) for construction activities, in compliance with the latest Los Angeles Regional Water Quality Control Board's National Pollutant Discharge Elimination System permit requirements for stormwater discharges. The SWPPP would list the measures to be implemented in order to prevent erosion from project construction-related activities. With adherence to applicable regulations and implementation of appropriate BMPs, construction impacts associated with soil erosion or the loss of topsoil would be less than significant.

[17] ZIMAS, available at: http://zimas.lacity.org/, accessed February 11, 2020.

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. As discussed in Sections VII(a)(iii) and VII(a)(iv), the project site is not identified as a potential landslide hazard area, but is located in a designated hillside area and liquefaction area. Lateral spreading is a type of liquefaction-induced ground failure on mildly sloping ground. However, the project site is located within the existing Silver Lake and Ivanhoe Reservoir boundaries, and implementation of the proposed project would not increase the risk of landslides. Therefore, impacts related to liquefaction and landslides would be less than significant.

Subsidence is the lowering of surface elevation due to changes occurring underground, such as extraction of large amounts of groundwater. When groundwater is extracted from aquifers at a rate that exceeds the rate of replenishment, overdraft occurs, which can lead to subsidence. No groundwater extraction would occur as part of the proposed project. Therefore, subsidence would not occur.

Collapsible soils consist of unconsolidated, low-density materials that may collapse and compact under the addition of excessive water or loading. Collapsible soils are prevalent throughout the southwestern United States, specifically in areas of young alluvial fans. Soil collapse occurs when the land surface is saturated at depths greater than those reached by typical rain events. The project area is underlain by young alluvium;[18] however, the proposed project involves minor modifications to an existing asphalt-lined structure, and does not include the construction of any new habitable structures. Therefore, impacts from collapsible soils would be less than significant.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

No Impact. Expansive soils are clay-based soils that tend to expand (increase in volume) as they absorb water and contract (lessen in volume) as water is drawn away. If soils consist of expansive clay, foundation movement and/or damage can occur if wetting and drying of the clay does not occur uniformly across the entire area. The geologic materials within the project site do not contain expansive clay.[19] Therefore, no impact would occur.

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

No Impact. The proposed project involves the aeration and recirculation of water within Silver Lake and Ivanhoe Reservoirs in order to produce green algae at the surface level. No septic tanks or alternative wastewater disposal systems are

[18] AMEC, *Geotechnical Baseline Report*, January 2012, prepared for the Los Angeles Department of Water and Power Proposed Silver Lake Bypass Tunnel.

[19] AMEC, *Geotechnical Baseline Report*, January 2012, prepared for the Los Angeles Department of Water and Power Proposed Silver Lake Bypass Tunnel.

proposed as part of the project. Therefore, no impact associated with the use of such systems would occur.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less Than Significant Impact. No paleontological resources have been previously encountered during ground disturbing activities, including maintenance activities at the project site. Therefore, the proposed project would not directly or indirectly destroy a unique paleontological resource or site or unique geological feature. Although not expected to occur, in the event previously uncovered paleontological resources are encountered during project construction, the construction manager would halt construction activities in the immediate area, in accordance with CEQA Guidelines Section 15064.5(f). LADWP would retain a qualified paleontologist to make an immediate evaluation of the significance and appropriate treatment of the resource. Construction activities may continue on other parts of the construction site while evaluation and treatment of paleontological resources take place, if necessary. Compliance with these existing policies would ensure that the impact to paleontological resources would be less than significant.

VIII. GREENHOUSE GAS EMISSIONS

Potential impacts related to greenhouse gas emissions associated with the proposed project were determined from the results presented in the Greenhouse Gas Emissions Assessment prepared for the proposed project, which is included as Appendix E to this IS/MND.

Would the project:

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

Less Than Significant Impact. Greenhouse gas (GHG) emissions refer to a group of emissions that are generally believed to affect global climate conditions. GHGs, such as carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O), keep the average surface temperatures of the Earth close to 60 degrees Fahrenheit. Of all the GHGs, CO_2 is the most abundant gas that contributes to climate change, including through fossil fuel combustion. The other GHGs are less abundant but have a higher global warming potential than CO_2. To account for this higher potential, emissions of other GHGs are frequently expressed in the equivalent mass of CO_2, denoted as CO_2e.

The proposed project would generate GHG emissions primarily from construction activities, maintenance activities, and electricity to operate the aeration and circulation system. Table 5 presents the estimated emissions of GHGs that would be released to the atmosphere on an annual basis. Construction of the proposed project would produce approximately 448 metric tons (MT) CO_2e, which equates to approximately 15 $MTCO_2e$ annually when amortized over a 30-year period. The annual operating emissions for Phase I would be approximately 72 $MTCO_2e$ per year, including 72 $MTCO_2e$ attributed to electricity use and approximately 0.5 $MTCO_2e$ for maintenance trips. The annual operating emissions for Phase 2 would be approximately 59 $MTCO_2e$ per year, including 59 $MTCO_2e$ attributed to electricity

use and approximately 0.5 $MTCO_2e$ for maintenance trips. The total annual amortized mass emissions of 147 $MTCO_2e$ is substantially below the most applicable quantitative draft interim threshold of 1,400 $MTCO_2e$ per year as recommended by the SCAQMD. Therefore, implementation of the proposed project would result in a less than significant impact related to GHG emissions.

Table 5: Estimated Annual Greenhouse Gas Emissions

Scenario and Source	Annual GHG Emissions ($MTCO_2e$ per Year)
Phase 1 Construction Emissions (Direct)	329
Phase 2 Construction Emissions (Direct)	120
Total Construction GHG Emissions (Direct)	448
30-Year Amortized Annual Construction Emissions (Direct)[a]	15
Energy Source Emissions – Electricity (Indirect)	131
Maintenance Trips (Direct)	1.1
Total Annual GHG Emissions	**147**
SCAQMD Draft Interim Significance Threshold	1,400
Exceed Threshold?	**No**

[a] Based on SCAQMD guidance, the emissions summary also includes construction emissions amortized over a 30-year span.
Source: TAHA, 2020.

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

No Impact. There is no potential for the water aeration and recirculation system to conflict with GHG reduction plans. GHG plans, policies, and regulations were reviewed for relevant GHG reduction strategies. No GHG reduction strategies were identified relevant to the proposed project. As previously discussed, project-related GHG emissions would be below the level of significance. GHG emissions are regionally cumulative in nature and it is highly unlikely construction of any individual project would generate GHG emissions of sufficient quantity to conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. Standard construction procedures would be undertaken in accordance with SCAQMD and California Air Resources Board regulations applicable to heavy duty construction equipment and diesel haul trucks. Adhering to requirements pertinent to construction equipment maintenance and inspections and emissions standards, as well as diesel fleet requirements, including idling time restrictions and maintenance, would ensure that construction of the proposed project would not conflict with GHG emissions reduction efforts. No impact would occur.

IX. HAZARDS AND HAZARDOUS MATERIALS

Would the project:

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

Less Than Significant Impact. Implementation of the proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Construction activities would be

temporary in nature and would involve the limited transport, storage, use, and disposal of hazardous materials for the purpose of installing the aeration and recirculation pumping systems. Such hazardous materials could include on-site fueling/servicing of construction equipment, and the transport of fuels, lubricating fluids, and solvents. These types of materials are not acutely hazardous, and all storage, handling, and disposal of these materials are regulated by the California Department of Toxic Substances Control, United States Environmental Protection Agency, the Occupational Safety & Health Administration, the Los Angeles County Fire Department, and the Los Angeles County Health Department. The transport, use, and disposal of construction-related hazardous materials would occur in conformance with applicable federal, State, and local regulations governing such activities. Therefore, the construction impacts would be less than significant.

Operation of the proposed project would not require the routine transport, storage, use, or disposal of hazardous materials as the aeration and recirculation system are passive uses. Therefore, project operation would not pose a significant hazard to the public or the environment. No operational impact related to hazardous materials would occur.

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?

Less Than Significant Impact. Installation of the aeration and recirculation system would not create reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. As discussed in Section IX(a) above, construction activities may involve limited transport, storage, and use of some hazardous materials, such as fuel for construction equipment. These types of materials are not acutely hazardous, and compliance with existing federal, State, and local regulations would ensure that construction impacts related to reasonably foreseeable upset accident conditions involving the release of hazardous materials would be less than significant. As discussed previously, the long-term operation of the proposed project would not involve the use of any hazardous materials.

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

Less Than Significant Impact. The Neighborhood Nursery School is located adjacent to the northeast corner of the project site. Construction of the proposed project would involve the handling of hazardous materials (fuels, lubricating fluids, and solvents). However, construction activities are temporary in nature and the handling of minor amounts of hazardous materials would be in compliance with applicable regulations. Additionally, the proposed project would not pose a substantial risk involving the routine transport, use, and disposal of hazardous materials. Further, operation of the proposed project would not generate industrial wastes or toxic substances. Therefore, the potential impact associated with the emission of hazardous materials near an existing or proposed school would be less than significant.

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. The project site is not included on any hazardous waste site lists including the Department of Toxic Substances Control's EnviroStor database, which includes CORTESE sites, the State Water Resources Control Board's GeoTracker site, the Environmental Protection Agency's database of regulated facilities, or other lists compiled pursuant to Section 65962.5 of the Government Code.[20,21,22] As such, the proposed project would not create a significant hazard to the public or the environment, and no impact would occur.

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 or excessive noise for people residing or working in the project area?

No Impact. The project site is not located within an airport land use plan or within two miles of a public airport.[23] The closest airport is Hollywood Burbank Airport, located 8.4 miles northwest of the project site. Due to the distance from the nearest airport, the proposed project would not result in a safety hazard for the people residing or working in the project area. No impact would occur.

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

Less Than Significant Impact. During construction activities, vehicles and equipment would access the project site via the existing driveway at the northeastern corner of the SLRC near the intersection of Tesla Avenue and Armstrong Avenue. No road or lane closures are anticipated during construction of the proposed project. Project activities would be confined to the project site with the exception of haul trucks. During construction, ingress and egress to the site and surrounding area, particularly for emergency response vehicles, would be maintained at all times. In addition, operation of the proposed project would not alter the adjacent street system. Therefore, construction and operation of the proposed project would not interfere with implementation of an adopted emergency response plan or emergency evacuation plan. The impact would be less than significant.

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

Less Than Significant Impact. The project site is located within an urban area of the City of Los Angeles in a City- and State-designated very high fire hazard severity

[20] California Department of Toxic Substances Control, EnviroStor Database, Search by Map Location, available at: http://www.envirostor.dtsc.ca.gov/public/, accessed February 10, 2020.
[21] California State Water Resources Control Board, GeoTracker Database, Search by Map Location, available at: http://geotracker.waterboards.ca.gov/map/, accessed February 10, 2020.
[22] United States Environmental Protection Agency, Envirofacts Database, available at: https://enviro.epa.gov/, accessed February 11, 2020.
[23] Airnav.com, Airports Search by Location, available at: http://www.airnav.com/airports/get, accessed February 11, 2020.

zone.[24,25] The project site is surrounded by residential uses. During construction of the proposed project, safe handling of flammable products would be required. Additionally, construction crews would have fire-suppression equipment available on-site to respond to the accidental ignition of a fire. Following installation of the aeration and recirculation system, the proposed project would not increase the risk of wildland fires. Therefore, impacts related to exposing people or structures to wildland fires would be less than significant.

X. HYDROLOGY AND WATER QUALITY

Would the project:

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Less Than Significant Impact. Construction activities would require excavation during both phases of the proposed project, which would expose soils to potential erosion and runoff. However, the proposed project would be required to adhere to local, state, and federal storm water quality compliance standards, which would include compliance with storm water permits, as discussed in Section 1.8, and other relevant standards and regulations. Additionally, LADWP would develop and implement an erosion control plan and SWPPP to control runoff from the project site during construction, as discussed in Section 1.7. Therefore, adherence to project BMPs and local, state, and federal storm water quality compliance standards would ensure that impacts related to water quality standards or waste discharge requirements during construction would be less than significant. Operation of the proposed project would not generate polluted runoff, and no operational impact would occur.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

No Impact. The proposed project would install an aeration and recirculation system within the existing reservoirs at SLRC, which are not used for groundwater recharge. During construction, the proposed project would not require excavation to a depth that would encounter groundwater, affect the rate of groundwater recharge, or involve the extraction of groundwater. Following construction, nonpotable water sources would be used to maintain water levels, similar to existing conditions. Therefore, no impact would occur.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner, which would:

i) Result in substantial erosion or siltation on- or offsite?

Less Than Significant Impact. As discussed in Section VII(b) and X(a), construction activities would expose soils to potential erosion. However, as a

[24] ZIMAS, available at: http://zimas.lacity.org/, accessed February 11, 2020.
[25] California Department of Forestry and Fire Protection, Fire Hazard Severity Zone Maps, Fire Hazard Severity Zones in Local Responsibility Areas, Los Angeles County Map, available at: https://osfm.fire.ca.gov/media/5830/los_angeles.pdf, accessed February 11, 2020.

component of the project BMPs listed in Section 1.7, both an erosion control plan and SWPPP would be implemented to prevent erosion during construction. Therefore, there would be no substantial soil erosion or siltation from construction activities. Installation of the aeration and recirculation system would require the addition of concrete and equipment pads on which associated equipment would be installed. These new pads would be installed near existing, similar facilities in areas that are currently paved with concrete or asphalt. As such, implementation of the proposed project would not increase the amount of impervious surfaces at the project site. Therefore, no operation impacts related to erosion or siltation would occur.

ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?

No Impact. As discussed in Section X(c)(i) above, the proposed project would require the installation of concrete and equipment pads in areas that are currently paved with concrete or asphalt. As such, the proposed project would not be expected to change the existing drainage pattern in the area. Therefore, no impact related to the alteration of the existing drainage pattern resulting in flooding on- or off-site would occur.

iii) 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. As discussed, installation of the concrete plugs would require the draining of water from Ivanhoe Reservoir. However, the water from Ivanhoe Reservoir would be pumped into Silver Lake Reservoir. Following installation of piping, Ivanhoe Reservoir would be refilled via gravity through the existing Gate Well structure. As such, any water drained during construction would remain in Silver Lake Reservoir and would not be routed to the storm drain system. Additionally, as previously discussed, an erosion control plan and SWPPP would be implemented to control runoff during construction. Following construction, operation of the proposed project would not create additional runoff water. Therefore, the impact related to the alteration of the existing drainage pattern resulting in flooding on- or off-site would be less than significant.

iv) Impede or redirect flood flows?

No Impact. A 100-year flood is a flood defined as having a 1.0 percent chance of occurring in any given year. The project site is located within the confines of the Silver Lake and Ivanhoe Reservoirs boundary, which is designated as a 100-year flood hazard area as mapped by the Federal Emergency Management Agency.[26] However, as discussed in Section X(c)(ii), the proposed project would not change the existing drainage pattern in the area or affect flood flows. No impact related to the alteration of the existing drainage pattern resulting in impeding or redirecting flood flows would occur.

[26] Federal Emergency Management Agency, FEMA Flood Map Service Center: Search by Address, available at: https://msc.fema.gov/portal/search#searchresultsanchor, accessed February 10, 2020.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

Less Than Significant Impact. As discussed in Section X(c)(iv), the project site is located within the confines of the SLRC boundary, which is designated as a 100-year flood hazard area as mapped by the Federal Emergency Management Agency. Various materials containing pollutants (e.g. fuels, lubricating fluids, and solvents) would be used during construction. However, the potential for reservoir flooding is low, as LADWP maintains the water levels of the two reservoirs at historic levels, typically between 440 and 451 feet. Following implementation of the proposed project, the water levels in the reservoirs would not be increased and the risk of release of pollutants due to flooding would remain low, similar to existing conditions. Therefore, the impact would be less than significant.

Tsunamis are large ocean waves caused by the sudden water displacement that results from an underwater earthquake, landslide, or volcanic eruption. Tsunamis affect low-lying areas along the coastline. The project site is located approximately 14.5 miles east of the Pacific Ocean and is not located within a designated Tsunami Hazard Area.[27] No impact would occur.

Seiches are oscillations generated in enclosed bodies of water usually as a result of earthquake related ground shaking. The project site encompasses the Silver Lake and Ivanhoe Reservoirs, which are subject to seiche. The potential to release pollutants due to seiche would be low as the walls of the reservoirs are designed to contain potential wave overflows and water levels within the reservoirs are monitored by LADWP and maintained in compliance with the requirement of the California Department of Water Resources, Division of Safety of Dams. Following implementation of the proposed project, the risk of release of pollutants due to a seiche would be low, similar to existing conditions. Therefore, the impact would be less than significant.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

No Impact. As previously discussed, LADWP would develop and implement an erosion control plan and SWPPP to control runoff from the project site during construction. Additionally, operation of the proposed project is not anticipated to create runoff in excess of or in varying quality to existing conditions. Following construction, water would remain in Silver Lake and Ivanhoe Reservoirs and nonpotable water sources, including groundwater and stormwater, would be used to maintain water levels, similar to existing conditions. Therefore, the project would not obstruct implementation of a water quality control plan or sustainable groundwater management plan. No impact would occur.

[27] City of Los Angeles, Department of City Planning. *City of Los Angeles General Plan – Safety Element*, available at: https://planning.lacity.org/odocument/31b07c9a-7eea-4694-9899-f00265b2dc0d/Safety_Element.pdf, accessed February 10, 2020.

XI. LAND USE AND PLANNING

Would the project:

a) Physically divide an established community?

No Impact. The proposed project would not divide an established community. The project site is located entirely within the boundaries of the SLRC on LADWP-owned land. Construction and operational activities would not occur outside of the reservoir boundaries, and no roads would be closed within the project vicinity. No separation of uses or disruption of access between land use types would occur as a result of the proposed project. No impact would occur.

b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

No Impact. The project site is located within the Silver Lake-Echo Park-Elysian Valley Community Plan Area. The Silver Lake- Echo Park-Elysian Valley Community Plan is one of 35 community plans that comprise the Land Use Element of the City of Los Angeles General Plan. The community plan establishes the goals, objectives, policies, and programs applicable to the Silver Lake-Echo Park-Elysian Valley Community Plan Area.

The project site is currently zoned OS (Open Space) and designated as Open Space in the General Plan.[28] The Open Space designation allows for uncovered reservoirs and accessory uses which are incidental to the operation and continued maintenance of such reservoirs. No new land uses would be introduced with implementation of the proposed project, and the project site would continue to include open space uses, similar to existing conditions. The Silver Lake-Echo Park-Elysian Valley Community Plan encourages implementation of the Silver Lake Reservoir Master Plan, which identifies Silver Lake Reservoir as an important aesthetic resource in the community.[29] Implementation of the proposed project would ensure that reasonable water quality parameters are met for visual aesthetics to remain consistent with the community values that were set forth in the Silver Lake Master Plan. As such, the proposed project would be consistent with land use plans and policies applicable to the project site. Therefore, no impacts related to conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect would occur.

[28] ZIMAS, available at: http://zimas.lacity.org/, accessed February 11, 2020.
[29] City of Los Angeles, Department of City Planning. *Silver Lake – Echo Park – Elysian Valley Community Plan*. 2004, available at: https://planning.lacity.org/odocument/e87507ac-8c40-49a0-aa1c-21df963f2298/Silver_Lake-Echo_Park-Elysian_Valley_Community_Plan.pdf, accessed February 11, 2020.

XII. MINERAL RESOURCES

Would the project:

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

No Impact. No mineral resources of value to the region and the residents of the state are identified within the project site.[30] Therefore, no impact would occur.

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. The project site is not delineated as a locally-important mineral resource recovery site in the General Plan.[31] Therefore, implementation of the proposed project would not result in the loss of availability of a locally-important mineral resource recovery site, and no impact would occur.

XIII. NOISE

Potential impacts related to noise associated with the proposed project were determined from the results presented in the Noise and Vibration Assessment prepared for the proposed project, which is included as Appendix F to this IS/MND.

The standard unit of measurement for noise is the decibel (dB). The human ear is not equally sensitive to sound at all frequencies. On this scale, the range of human hearing extends from approximately 3 to 140 dBA. The noise analysis discusses sound levels in terms of Equivalent Noise Level (L_{eq}). L_{eq} is the average noise level on an energy basis for any specific time period. The L_{eq} for one hour is the energy average noise level during the hour. The average noise level is based on the energy content (acoustic energy) of the sound. L_{eq} can be thought of as the level of a continuous noise which has the same energy content as the fluctuating noise level. The equivalent noise level is expressed in units of dBA.

30 California Department of Conservation, Mineral Lands Classification. *Update of Mineral Land Classification of Portland Cement Concrete Aggregate in Ventura, Los Angeles, and Orange Counties, California, Part II - Los Angeles County*, *Map Plate1b*. 1994, available at: https://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=mlc, accessed February 11, 2020.

31 City of Los Angeles, Department of City Planning. *City of Los Angeles General Plan – Conservation Element*, available at: https://planning.lacity.org/odocument/28af7e21-ffdd-4f26-84e6-dfa967b2a1ee/Conservation_Element.pdf, accessed February 11, 2020.

Would the project result in:

a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of applicable standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Less Than Significant Impact After Mitigation Incorporated.

Construction

Noise impacts from construction of the proposed project would fluctuate depending on the construction phase, equipment type and duration of use, distance between the noise source and receptor, and presence or absence of noise attenuation barriers. Construction activities typically require the use of numerous pieces of noise-generating equipment. Typical noise levels from various types of equipment that would be used during construction are listed in Table 6. Noise levels from individual pieces of equipment typically are between 71.0 and 79.4 dBA L_{eq} at 50 feet. The standard unit of measurement for noise is the decibel (dB). The human ear is not equally sensitive to sound at all frequencies. The A-weighted scale, abbreviated dBA, reflects the normal hearing sensitivity range of the human ear. L_{eq}, or Equivalent Noise Level, is the average noise level on an energy basis for any specific time period.

Table 6: Noise Level Ranges of Typical Construction Equipment

Construction Equipment	Noise Level at 50 feet (dBA)
Barge	75.0
Backhoe	73.6
Crane	72.6
Dump Truck	72.5
Front End Loader	75.4
Generator	77.6
Gradall Excavator	79.4
Paver	74.2
Pickup Truck	71.0
Roller	73.0
Compactor (vibrating plate)	76.2

Source: Federal Highway Administration, *Roadway Construction Noise Model*, Version 1.1, 2008.

To more accurately characterize construction-period noise levels, the noise levels shown in Table 7 take into account the likelihood that multiple pieces of construction equipment would be operating simultaneously and the typical overall noise levels that would be expected. Equipment utilized during both Phases 1 and 2 would be similar, and therefore, the combined noise levels would be representative of each phase. When considered as an entire process with multiple pieces of equipment, the loudest noise level generated from construction on-land would be approximately 82.2 dBA L_{eq} at 50 feet. Barge construction activities would generate a noise level of approximately 81.4 dBA L_{eq} at 50 feet.

Table 7: Phased Construction Noise Levels

Construction Method	Noise Level at 50 feet (dBA, L_{eq})
Site Preparation	
Backhoe	73.6
Paver	74.2
Compactor (vibrating plate)	76.2
Site Preparation Combined	79.6
Excavation/Materials Export	
Backhoe	73.6
Front End Loader	75.4
Dump Truck	72.5
Excavation/Materials Export Combined	78.8
On-Land Construction	
Backhoe	73.6
Gradall Excavator	79.4
Generator	77.6
On-Land Construction Combined	82.2
Barge Construction	
Barge	75.0
Crane	72.6
Gradall Excavator	79.4
Barge Construction Combined	81.4

Source: Federal Highway Administration, *Roadway Construction Noise Model*, Version 1.1, 2008.

Tables 8 and 9 present the estimated noise levels at the sensitive receptors nearest to the project site for Phases 1 and 2, respectively. Construction activities would occur Monday through Friday, and workers would typically be onsite for eight hours per day from 7:00 a.m. to 3:00 p.m. No work outside of these hours, or work on weekends or national holidays, is anticipated. Construction activity would comply with the allowable hours of construction in the Los Angeles Municipal Code (LAMC) Section 41.40 (Noise Due to Construction, Excavation Work – When Prohibited), including 7:00 a.m. to 9:00 p.m. Monday through Friday, 8:00 a.m. to 6:00 p.m. on Saturday, and no construction activity on Sundays or federal holidays. The LAMC limits equipment noise levels to 75 dBA L_{eq} at 50 feet unless technically infeasible. Phase 2 construction activities would not generate significant noise levels. However, Phase 1 construction activities would potentially generate significant noise levels at the Neighborhood Nursery School. The proposed project would implement Mitigation Measures NOI-1 to NOI-6 to reduce on-site construction noise impacts to a less than significant level.

Mitigation Measures NOI-1 through NOI-6 are designed to reduce construction noise levels. The equipment mufflers associated with Mitigation Measure NOI-1 would reduce construction noise levels by approximately 3 dBA. Mitigation Measures NOI-2 through NOI-6, although difficult to quantify, would also reduce and/or control construction noise levels. Table 10 shows mitigated noise levels for the Neighborhood Nursery School. The implementation of Mitigation Measures NOI-1 through NOI-6 would reduce noise levels at the Neighborhood Nursery School to less than 75 dBA. Therefore, the proposed project would result in a less than significant impact with mitigation related to construction noise.

Table 8: Typical Construction Noise Levels at Receptors - Phase 1

Sensitive Receptor	Distance (feet)[a]	Existing Noise Level (dBA)[b]	Project Noise Level (dBA)
On-Land Construction			
Neighborhood Nursery School east of the proposed one-inch air pipes	100	56.7	76.2
Residences along Armstrong Ave. east of the proposed air blower enclosure	350	56.7	65.9
Residences along Armstrong Ave. east of the proposed one-inch air pipes	450	56.7	64.0
Barge Construction			
Residences along Tesla Avenue north of proposed one-inch air pipes in Ivanhoe Reservoir	280	56.7	66.9
Neighborhood Nursery School east of the proposed one-inch air pipes in Ivanhoe Reservoir	250	56.7	67.8
Residences along Silver Lake Blvd. between Earl St. and Baxter St. east of the proposed one-inch air pipes in Silver Lake Reservoir	350	57.2	65.2
Residences along Silver Lake Dr. to the west of the proposed one-inch air pipes in Silver Lake Reservoir	400	57.2	64.3
Residences along Armstrong Ave. to the east of the proposed one-inch air pipes in Ivanhoe Reservoir	500	56.7	62.7
Chase Bell Music Studio south of the proposed one-inch air pipes in Ivanhoe Reservoir[c]	500	57.2	60.1

[a] Measured from the work area to the nearest property boundary.
[b] The average hourly noise level for weekday daytime (7:00 a.m. to 9:00 p.m.) activities.
[c] Includes a 4.5 dB reduction for intervening rows of buildings.
Source: TAHA, 2020.

Table 9: Typical Construction Noise Levels at Receptors - Phase 2

Sensitive Receptor	Distance (feet)[a]	Existing Noise Level (dBA)[b]	Noise Level at Sensitive Receptor (dBA)
On-Land Construction			
Residences along Silver Lake Dr. to the west of the proposed recirculation pump	120	57.2	74.7
Residences along Kenilworth Ave. to the west of the proposed recirculation pump	250	57.2	64.6
Neighborhood Nursery School north of the proposed Ivanhoe Bypass Pipeline Plug	330	56.7	66.3
Residences along Armstrong Ave. to the east of the proposed Ivanhoe Bypass Pipeline Plug	290	56.7	67.3
Barge Construction			
Residences along Tesla Avenue to the north of the proposed Ivanhoe Inlet Tower Plug	120	56.7	73.9
Residences along Silver Lake Dr. to the west of the proposed recirculation piping in Ivanhoe Reservoir	300	57.2	66.4
Residences along Armstrong Ave. to the east of the proposed recirculation piping in Ivanhoe Reservoir	370	56.7	64.8
Residences along Silver Lake Dr. to the west of the proposed recirculation piping in Ivanhoe Reservoir	500	57.2	62.8

[a] Measured from the work area to the nearest property boundary.
[b] The average hourly noise level for weekday daytime (7:00 a.m. to 9:00 p.m.) activities.
Source: TAHA, 2020.

Table 10: Mitigated Construction Noise Levels - Phase 1

Sensitive Receptor	Distance (feet)[a]	Existing Noise Level (dBA)[b]	Attenuation (dBA)[c]	Noise Level at Sensitive Receptor (dBA)
On-Land Construction				
Neighborhood Nursery School east of the proposed one-inch air pipes	100	56.7	3	73.3

[a] Measured from the work area to the nearest property boundary.
[b] The average hourly noise level for weekday daytime (7:00 a.m. to 9:00 p.m.) activities.
[c] Includes a 3-dB reduction for equipment mufflers.
Source: TAHA, 2020.

In addition to on-site construction activities, noise would be generated off-site by construction-related trucks. Construction of Phase 1 of the proposed project would require a total of approximately 277 truck trips consisting of 101 trips for imported materials, 88 trips for exported materials, and 88 additional haul truck trips. Construction of Phase 2 of the proposed project would require a total of approximately 81 truck trips consisting of 45 trips for imported materials, 8 trips for exported materials, and 28 additional haul truck trips. Daily truck trips are not anticipated to exceed 10 trips per day. It is anticipated that haul trucks and construction workers would travel south to the project site from Sun Valley using Interstate 5, then travel south on Riverside Drive to Glendale Boulevard, and then west on Lakewood Avenue to Armstrong Avenue. A doubling of traffic volume is typically needed to audibly increase noise levels along a roadway segment.

According to the City of Los Angeles Department of Transportation, Glendale Boulevard experiences approximately 31,912 vehicle trips a day.[32] Lakewood Boulevard experiences approximately 2,067 vehicle trips a day.[33] An additional 10 truck trips per day would not double the volume on any roadway segment. It is not anticipated that off-site vehicle activity would audibly change average daily noise levels due to the low volume of haul truck trips per day. Therefore, the proposed project would result in less than significant noise impacts from construction trucks.

Mitigation Measures

NOI-1 Construction equipment shall be properly maintained and equipped with mufflers.

NOI-2 Rubber-tired equipment shall be used rather than tracked equipment when feasible.

NOI-3 Equipment shall be turned off when not in use for an excess of five minutes, except for equipment that requires idling to maintain performance.

NOI-4 A public liaison shall be appointed for project construction will be responsible for addressing public concerns about construction activities, including excessive noise. As needed, the liaison shall determine the cause of the concern (e.g., starting too early, bad muffler) and implement measures to address the concern.

NOI-5 Prior to initiating construction activity, LADWP shall coordinate with the site administrator for the Neighborhood Nursery School to discuss construction activities that generate high noise levels. Coordination between the site administrator and LADWP shall continue on an as-needed basis throughout the construction phase of the project to mitigate potential disruption of classroom activities.

NOI-6 The public shall be notified in advance of the location and dates of construction hours and activities.

Operation

Sources of operational noise include the air blower system and pumps. The bubble plume aeration system and recirculation pipe system are passive non-noise generating project components and have not been assessed further. The air blower system would be housed in an enclosure with ventilation and sound insulation. The air blower package enclosure would be located under a canopy adjacent to an existing chlorination building in the northeast portion of the SLRC between the two reservoirs. The aftercoolers would be located adjacent to the existing chlorination building, and would remove excess heat produced by the aeration system.

[32] City of Los Angeles Department of Transportation, 24 Hours Traffic Volume Glendale Boulevard at Fletcher Drive, October 8, 2014.
[33] City of Los Angeles Department of Transportation, 24 Hours Traffic Volume Lakewood Avenue at Angus Street, October 3, 2013.

Two pumps would be located within the Gate 456 structure and would be submerged under water. The submerged pumps have no potential to generate audible noise. Both of the pumps would be placed below-grade within a hydraulic structure, which would be shielded from view at the property line. Pump noise would not be audible at existing residences.

A single air blower system produces a noise level of 74.0 dBA L_{eq} at three feet. Aftercoolers would generate a noise level of approximately 75.0 dBA at three feet. Two air blowers would be operating continuously at any time with two additional air blowers as backups. Equipment noise related to the two air blower systems and the aftercooler system operating in tandem would be approximately 79.1 dBA L_{eq}. However, noise levels decrease with distance from the noise source. As such, due to the distance of the equipment, noise levels at the sensitive receptors would decrease to a point that they would be similar to existing conditions. Table 11 shows mechanical equipment noise levels at the nearest sensitive land uses. Project related equipment noise would result in an increase in noise that would be less than 1.0 dBA. This would be in compliance with the requirements of LAMC Section 112.02, which prohibits noise from air conditioning, refrigeration, heating, pumping, and filtering equipment from exceeding the ambient noise level on the premises of other occupied properties by more than 5 dB. Therefore, the proposed project would result in a less than significant operational impact related to stationary noise.

Table 11: Air Blower System Noise Level

Sensitive Receptor	Distance (feet)	Existing Ambient (dBA, L_{eq})[a]	Project Noise Level (dBA, L_{eq})	Existing + Project Noise Level (dBA, L_{eq})	Increase (dBA, L_{eq})	Exceeds LAMC 5-dB Threshold?
Residences to the east along Armstrong Avenue	350	53.5	27.5	53.5	0.0	No
Neighborhood Nursey School to the north	750	53.5	19.2	53.5	0.0	No
Residences to the north along Tesla Drive	960	53.5	16.5	53.5	0.0	No
Residences to the west along Silver Lake Drive	980	52.5	16.3	52.5	0.0	No
Residences to the south along Silver Lake Boulevard	1,500	52.5	11.7	52.5	0.0	No

[a] Average noise level in dBA L_{eq} over 24-hour period.
Source: TAHA, 2020.

Periodic maintenance activities may be required to for maintenance of the aeration and recirculation system. Vehicle trips related to periodic maintenance would be infrequent and would not audibly change existing noise levels. Furthermore, equipment and activity associated with operation of the proposed project would be required to comply with the provisions of LAMC Section 112.04 (Powered Equipment Intended for Repetitive Use In Residential Areas and Other Machinery, Equipment, and Devices). The proposed project would also be required to comply with LAMC

Section 112.05 (Maximum Noise Level of Powered Equipment or Powered Hand Tools) and LAMC Section 116.01 (Loud, Unnecessary, and Unusual Noise), which would be enforced through the Los Angeles Police Department. With compliance to existing regulations, the proposed project would not generate excessive noise levels that would conflict with City standards. Therefore, the proposed project would result in a less than significant impact related to operational noise.

b) Generation of excessive groundborne vibration or groundborne noise levels?

Less Than Significant Impact.

Construction

Construction activity can generate varying degrees of vibration, depending on the procedure and equipment. Operation of construction equipment generates vibrations that spread through the ground and diminish in amplitude with distance from the source. The effect on buildings located in the vicinity of a construction site often varies depending on soil type, ground strata, and construction characteristics of the receiver building(s). The results from vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibration at moderate levels, and to slight damage at the highest levels. In most cases, the primary concern regarding construction vibration relates to damage.

Construction equipment would be most similar to a large bulldozer, which would be used on the project site and produces a peak particle velocity (PPV) of 0.089 inches per second at 25 feet. Construction would occur within the boundaries of the existing SLRC and would be located at distances greater than 25 feet from the nearest off-site structures. As shown in Table 12, construction vibration associated with the proposed project would not exceed the 0.3 inches per second damage criterion. Therefore, the proposed project would result in a less than significant impact related to vibration damage during construction.

Table 12: Construction Vibration Levels at Sensitive Receptors (Damage)

Sensitive Receptor	Distance (feet)[a]	Vibration Level (Inches per Second)	Threshold (Inches per Second)	Exceeds Threshold?
Phase 1				
Neighborhood Nursery School east of the proposed one-inch air pipes	100	0.001	0.2	No
Residences along Armstrong Ave. east of the proposed air blower enclosure	350	0.002	0.2	No
Phase 2				
Residences along Silver Lake Dr. to the west of the proposed recirculation pump	120	0.008	0.2	No

[a] Measured from the project site to the nearest structure.
Source: TAHA, 2020.

Vibration annoyance is another concern related to construction activity. However, perceptible vibration is not typically a concern for human health and is a common

occurrence within the urban environment. Special uses such as research facilities and recording studios would be potentially impacted by construction vibration annoyance due to the presence of sensitive equipment (e.g., Chase Bell Music Studio). In addition to on-site construction activities, construction trucks on the roadway network have the potential to expose vibration-sensitive land uses. Rubber-tired vehicles, including trucks, rarely generate perceptible vibration. It is not anticipated that project-related trucks would generate perceptible vibration adjacent to the roadway network. Table 13 shows that vibration levels would not exceed the annoyance criteria. Therefore, the proposed project would result in a less than significant impact related to vibration annoyance during construction.

Table 13: Construction Vibration Levels at Sensitive Receptors (Annoyance)

Sensitive Receptor	Distance (feet)[a]	Vibration Level (VdB)	Threshold (VdB)	Exceeds Threshold?
Phase 1				
Neighborhood Nursery School east of the proposed one-inch air pipes	100	69	72	No
Residences along Armstrong Avenue east of the proposed air blower enclosure	350	53	72	No
Chase Bell Music Studio	1,600	33	65	No
Phase 2				
Residences along Silver Lake Drive to the west of the proposed recirculation pump	120	67	72	No

[a] Measured from the project site to the nearest structure.
Source: TAHA, 2020.

Operation

The primary sources of operational vibration would include vehicles traveling to the project site for periodic maintenance. Vehicular movements would generate similar vibration levels as existing traffic conditions. The proposed project would not introduce any significant stationary sources of vibration that would be perceptible off the project site. Therefore, operational activities associated with the proposed project would result in a less than significant impact related to vibration

c) For a project located within the vicinity of a private airstrip or 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 project site is not located within the vicinity of a private airstrip or two miles of a public airport or within an airport land use plan. The nearest airport is Hollywood Burbank Airport, located approximately 8.4 miles northwest of the project site.[34] Due to the distance from the nearest airport, the proposed project would not expose people working or residing in the project area to excessive noise. Therefore, no impact would occur.

[34] AirNav, Airport Information, available at: https://www.airnav.com/cgi-bin/airport-search, accessed February 11, 2020.

XIV. POPULATION AND HOUSING

Would the project:

a) Induce substantial unplanned 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 proposed project would install an aeration and recirculation system at Silver Lake and Ivanhoe Reservoirs to ensure visual aesthetics and control odors. The proposed project would not directly or indirectly induce substantial unplanned population growth because it does not include a residential or commercial element, nor would it change the existing use of the project site. Furthermore, the reservoirs are not a part of the potable water supply distribution system. No impact would occur.

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

No Impact. The project site is developed with the Silver Lake and Ivanhoe Reservoirs and associated uses. There are no residential uses on the project site. As such, no people or housing would be displaced as a result of the proposed project. No impact would occur.

XV. PUBLIC SERVICES

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 public services:

i) Fire protection?

No Impact. The proposed project does not include the development of new housing or businesses that would substantially increase the residential or employee populations in the area; thus, the demand for fire protection services would not substantially increase. The proposed project would be constructed in accordance with all applicable fire codes set forth by the State Fire Marshall and Los Angeles Fire Department. Therefore, the proposed project would not exceed the capacity of the Los Angeles Fire Department to serve the site or other areas with existing fire protection services. No impact would occur.

ii) Police protection?

No Impact. As discussed in Section XV(a)(i), the proposed project would not generate population growth. During construction activities, LADWP would implement standard site security features, such as fencing, to secure the project site. Following installation of the aeration and recirculation system, the project site would be similar to existing conditions. As such, implementation of the proposed project is not expected to generate additional calls for police protection service. Therefore, construction and operation of the proposed project would not require additional police protection services or facilities. No impact would occur.

iii) Schools?

No Impact. The proposed project would not induce employment or population growth, either directly or indirectly, and would therefore not increase the demand for schools in the area. No impact would occur.

iv) Parks?

No Impact. Residential development typically has the greatest potential to result in impacts to parks since these types of developments generate a permanent increase in residential population. As stated previously, the proposed project does not include development of any residential uses and would not generate any new permanent residents that would increase the demand for local and regional park facilities. Therefore, no impact would occur.

v) Other public facilities?

No Impact. The proposed project does not include development of residential or commercial uses and would not increase the demand for other public facilities. Additionally, the proposed project would not result in indirect population growth, which would increase demand for other public facilities. No impact would occur.

XVI. RECREATION

Would the project:

a) 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. The proposed project would install an aeration and recirculation system in the Silver Lake and Ivanhoe Reservoirs to ensure visual aesthetics and odor control. Neither construction nor operation of the proposed project would generate new permanent residents that would increase the use of existing parks and recreational facilities. Although there are recreation facilities within the SLRC boundary, all project activities would take place with the Silver Lake and Ivanhoe Reservoirs and adjacent areas that currently contain associated equipment. The proposed project would not impact the recreational facilities within the SLRC. During operation, the proposed project would restore previously available greenish hues on the water and maintain the reservoirs at historic water levels, resulting in an aesthetic benefit, and views of the project site would similar to existing conditions. Therefore, substantial physical deterioration of these facilities would not occur or be accelerated with implementation of the proposed project. No impact would occur.

b) Include recreational facilities or require construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

No Impact. The proposed project does not include development of any residential uses and, thus, would not generate new permanent residents that would increase the demand for recreational facilities. Additionally, the proposed project would not indirectly induce new development that would require the construction or expansion of recreational facilities as the proposed project would improve visual aesthetics for existing residents. Furthermore, as discussed in Section XVI above, the proposed

project does not include any activities within the recreational facilities at SLRC. Therefore, no impact would occur.

XVII. TRANSPORTATION

Would the project:

a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

Less Than Significant Impact. Existing transit facilities in the project area include several bus stops operated by the Los Angeles County Metropolitan Transportation Authority. Silver Lake Boulevard on the south and east sides of the SLRC is identified as a Tier 2 Bicycle Lane in the General Plan Mobility Element.[35] Pedestrian facilities in the project area include sidewalks and crosswalks on local roadways around SLRC, and a soft surface walking trail around the eastern boundary of the property.

The project site is located entirely within the boundaries of the SLRC and does not contain any public roadways. No road, lane, or sidewalk closures would be required during construction of the proposed project. However, construction activities requiring large equipment or haul truck trips could potentially hinder circulation in the project area. Nonetheless, daily truck trips are not anticipated to exceed 10 trips per day. This nominal increase in truck trips during construction would not be expected to impact roadway facilities in the project area. Operation of the proposed project would require routine maintenance activities similar to existing conditions. As such, operation of the proposed project would not result in a significant increase in traffic trips that could affect roadway facilities. Therefore, the impact related to conflict with adopted policies addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities would be less than significant.

b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

No Impact. CEQA Guidelines section 15064.3 establishes vehicle miles traveled (VMT) as the most appropriate measure of transportation impacts. VMT refers to the amount and distance of automobile travel attributable to a project. The City of Los Angeles Department of Transportation (LADOT) Transportation Assessment Guidelines (LADOT Guidelines) establishes instructions and standards for preparation of transportation assessment in the City of Los Angeles.[36] LADOT has not established a significance threshold for construction impacts. Due to the temporary nature of construction traffic associated with the proposed project, and the relatively low increase in added traffic trips from construction workers, haul/delivery trucks, and equipment, a substantial increase in VMT is not anticipated to result from construction. During operation, the proposed project would require maintenance similar to existing conditions. As such, the proposed project is not expected to generate additional vehicle trips during operation. Neither construction

[35] City of Los Angeles Department of City Planning, Mobility Plan 2035, Adopted August 2015; available at: https://planning.lacity.org/odocument/523f2a95-9d72-41d7-aba5-1972f84c1d36/Mobility_Plan_2035.pdf, accessed February 13, 2020.

[36] City of Los Angeles Department of Transportation, Transportation Assessment Guidelines, July 2019, available at: https://ladot.lacity.org/sites/g/files/wph266/f/LADOT_TA_Guidelines_DRAFT%2020190708.pdf.

nor operation of the proposed project would conflict with CEQA Guidelines section 15064.3, subdivision (b). No impact would occur.

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

No Impact. The project site is located entirely within the boundaries of the SLRC. No new roads would be constructed as part of the proposed project and the proposed project would be consistent with the existing land use. Therefore, no impacts related to increased hazards due to a geometric design feature or incompatible land uses would occur.

d) Result in inadequate emergency access?

Less Than Significant Impact. The proposed project would not require any roadway closures as the project site is located entirely within the boundaries of the existing SLRC property. Construction activities requiring large equipment or haul truck trips could potentially hinder emergency access along Armstrong Avenue due to roadway widths. However, as listed in the construction BMPs in Section 1.7, LADWP would coordinate with emergency responders, including the Los Angeles Fire Department and Los Angeles Police Department, regarding construction schedule and traffic control plans so as to coordinate emergency response routing during construction work. Coordination with emergency response agencies would ensure a less than significant impact to emergency access during construction activities.

Operation of the proposed project would require only routine maintenance similar to existing conditions and would not restrict emergency access. No impact would occur.

XVIII. TRIBAL CULTURAL RESOURCES

The following analysis is based on Native American consultation by LADWP in accordance with Assembly Bill 52 (AB 52), which requires that a lead agency must consult with interested California Native American tribes who request formal consultation regarding impacts to tribal cultural resources. Additional information on these consultation efforts are provided in the Cultural, Paleontological, and Tribal Cultural Resources Technical Memorandum, which is included as Appendix C to this Initial Study/MND.

Would the project:

a) Cause a substantial adverse change in the significance of a tribal cultural resource that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?

No Impact. Tribal cultural resources include sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe. The sensitivity of the project area for tribal cultural resources is considered low. No potential tribal cultural resources were identified at the project site based on the Sacred Lands File search conducted by the NAHC, archival research, the field survey, or consultation with Native American tribal

representatives. Although the SLRC is eligible for listing in the CRHR as a Historic District, it is not considered a tribal cultural resource, and no other cultural resources at the site are listed or eligible for listing in the CRHR or local register. Therefore, the proposed project would not result in a substantial adverse change in the significance of a tribal cultural resource that is listed or eligible for listing in a state or local register of historical resources. No impact would occur.

b) Cause a substantial adverse change in the significance of a tribal cultural resource that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of the Public Resources Code Section 5024.1?

Less Than Significant Impact After Mitigation Incorporated. As discussed in Section XVIII(a) above, no tribal cultural resources were identified within the project area; however, AB 52 consultation with the Native American Heritage Commission and Native American contacts in the project area is ongoing. No specific tribal cultural resources have been identified thus far, and the project site is considered to have a low potential for tribal cultural resources. Nonetheless, during the construction of the proposed project, unknown tribal cultural resources could potentially be encountered, particularly during ground-disturbing activities. As such, Mitigation Measure TCR-1 would be implemented during construction. With implementation of Mitigation Measure TCR-1 and ongoing consultation with Native American representatives, impacts to tribal cultural resources would be less than significant.

Mitigation Measure

TCR-1 If any Native American cultural material is encountered within the project site during construction activities, interested Native American parties established through consultation with the lead agency shall be notified. LADWP shall determine during consultation if the resources constitute tribal cultural resources and solicit any comments the Native American parties may have regarding appropriate treatment and disposition of the resources.

XIX. UTILITIES AND SERVICE SYSTEMS

Would the project:

a) Require or result in relocation or the construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction of which could cause significant environmental effects?

No Impact. The proposed project would install an aeration and recirculation system for the Silver Lake and Ivanhoe Reservoirs in order to ensure visual water quality aesthetics and odor control. Wastewater generated by project-related construction activities is expected to be nominal and would be collected and transported through existing local, trunk, and mainline sewers. Although construction activities would require the draining of Ivanhoe Reservoir, this water would be pumped into Silver Lake Reservoir for holding until activities in Ivanhoe Reservoir are completed. Then, Ivanhoe Reservoir would be refilled via gravity through the existing Gate Well

structure. During operation, water levels in Silver Lake and Ivanhoe Reservoirs would be maintained with nonpotable water sources (i.e. groundwater, stormwater, etc.). Operation of the proposed project would not discharge wastewater. The proposed project would not require new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities. Therefore, no impact would occur.

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Less Than Significant Impact. No new structures or facilities would be constructed requiring the use of potable water. The proposed project would install an aeration and recirculation system in the Silver Lake and Ivanhoe Reservoirs to ensure visual water quality aesthetics. The reservoirs have historically been filled with potable drinking water sources. As discussed previously, both reservoirs have been isolated from the potable water distribution system as part of the SRP. Following construction water levels would be maintained using nonpotable water sources (i.e. groundwater, stormwater, etc.). As such, no potable water supplies would be required to implement the proposed project. Therefore, the proposed project would not decrease the potable water supply available to existing and reasonably foreseeable future development. The impact to water supply would be less than significant.

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

No Impact. No new structures that would generate wastewater would be constructed or operated as part of the proposed project. Therefore, implementation of the proposed project would not result in new demand for wastewater treatment. No impact to wastewater treatment capacity would occur.

d) Generate solid waste in excess of state or local standards, or in excess of the future capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Less Than Significant Impact. Construction of the proposed project would generate approximately 1,110 cubic yards of construction waste, comprised of soil, asphalt, and concrete, that would need to be exported from the project site. However, the proposed project would incorporate source reduction techniques and recycling measures in accordance with the Citywide Construction and Demolition Debris Recycling Ordinance, which would reduce the amount of construction-generated solid waste that would require disposal in the landfill. Any non-recyclable construction waste generated would be disposed of at a landfill approved to accept such materials. Once operational, the proposed project would generate minor amounts of debris that would be removed during routine maintenance activities, similar to existing conditions. Debris removed would be disposed of at the LADWP-owned Pangborn Pit which has adequate capacity to accommodate the waste. Therefore, impacts to solid waste disposal during construction and operation of the proposed project would be less than significant.

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

Less Than Significant Impact. As described above, the construction waste generated by the proposed project would be properly disposed of in existing solid waste facilities. Construction materials and excavated soils will be disposed of in accordance to federal, state, and local statutes and regulations. LADWP would comply with the City's Construction and Demolition Ordinance would also comply with the County-wide Integrated Waste Management Plan. The impact would be less than significant.

XX. WILDFIRE

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

Less Than Significant Impact. The project site is located within an urban area of the City of Los Angeles in a City- and State-designated very high fire hazard severity zone. During construction activities, vehicles and equipment would access the project site via the existing driveway at the northeastern corner of the SLRC near the intersection of Tesla Avenue and Armstrong Avenue. No road or lane closures are anticipated during construction of the proposed project. Project activities would be confined to the project site with the exception of haul trucks. During construction, ingress and egress to the site and surrounding area, particularly for emergency response vehicles, would be maintained at all times. Additionally, as listed in the construction BMPs in Section 1.7, LADWP would coordinate with emergency response agencies regarding construction schedules and worksite traffic control plans to maintain emergency access. Operation of the proposed project would not alter the adjacent street system. Therefore, construction and operation of the proposed project would not interfere with implementation of an adopted emergency response plan or emergency evacuation plan. The impact would be less than significant.

b) Due to slope, prevailing winds, and other factors, exacerbate wildland fires risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

Less Than Significant Impact. The project site is located at the SLRC, which is located in a hillside area, but is not located in a high wind velocity area.[37] The nearest fire station to the project site is Los Angeles Fire Department, Station 56, located approximately 0.6 miles to the north. During construction of the proposed project, safe handling of flammable products would be required. Additionally, as listed in the construction BMPs in Section 1.7, construction crews would have fire-suppression equipment available on-site to respond to the accidental ignition of a fire. As such, construction of the proposed project would not exacerbate wildland fire risks. Following installation of the aeration and recirculation system, the project site would

[37] ZIMAS, available at: http://zimas.lacity.org/, accessed February 10, 2020.

consist of passive uses as a view lake and is not expected to increase wildland fire risk. The impact would be less than significant.

c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may result in temporary or ongoing impacts to the environment?

No Impact. The proposed project would install an aeration and recirculation system to control algal growth in order to meet visual quality and odor control parameters. No roads, fuel breaks, emergency water sources, power lines, or other utilities would be installed as part of the proposed project. No impact would occur.

d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

No Impact. The project site is located entirely within the SLRC complex, which is not located in a landslide area.[38] The project is being proposed to manage algae growth to maintain visual quality and odor control parameters at SLRC. As discussed in Section X(a) and (c), an erosion control plan and SWPPP would be implemented to control runoff from the project site during construction. During operation, the project site would be similar to existing conditions, and would not increase the chance of runoff, post-fire slope instability, or drainage changes. Therefore, no impact would occur.

XXI. MANDATORY FINDINGS OF SIGNIFICANCE

a) Does the project have the potential to substantially 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, substantially 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 After Mitigation Incorporated. As discussed in Section IV(a), ornamental vegetation in the study area provides suitable nesting habitat for common urban bird species protected by the MBTA and by CFGC, including great blue heron, red-tailed hawk, and other common species documented nesting in the study area during surveys and monitoring in support of projects previously implemented within the SLRC. Additionally, indirect impacts to nesting birds within the study area could occur during construction as a result of noise, dust, increased human presence, and vibrations resulting from construction activities. Such disturbances could result in increased nestling mortality due to nest abandonment or decreased feeding frequency. By avoiding project construction during the nesting bird season (generally February 15 to September 1, and as early as January 1 for raptors), and/or by implementing and adhering to the BMP listed in Section 1.7 related to pre-construction surveys for nesting birds and providing a qualified biological monitor should nesting birds be present, direct impacts during

[38] ZIMAS, available at: http://zimas.lacity.org/, accessed February 10, 2020.

project construction on nesting birds and associated nesting habitats are not anticipated.

No special-status plant species were observed in the study area during the field survey and no records of special-status plant species coincide with the study area. As a result, direct and indirect impacts to special-status plant are not anticipated.

As discussed in Section V(a) above, the SLRC property, which contains the project site, qualifies as a historical resource eligible for listing in the CRHR. As such, any improvements planned for the property should be consistent with the Secretary of the Interior's Standards for Rehabilitation to ensure a less than significant impact on the SLRC Historic District. Thus, Mitigation Measure CR-A would be implemented in order to minimize any potential impacts to the district's eligibility under the CRHR. With implementation of CR-A, the impact to the historical resource would be reduced to less than significant.

b) Does the project have environmental effects that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are significant 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 After Mitigation Incorporated. As discussed in Section III(b) above, the proposed project is located within the Los Angeles County portion of the South Coast Air Basin, which is currently designated nonattainment for ozone (O_3), PM_{10}, and $PM_{2.5}$ under the state standards and nonattainment for O_3 and $PM_{2.5}$ under the federal standards. Implementation of the proposed project would not exceed any applicable SCAQMD regional mass daily thresholds or LST values during construction or operation. Therefore, the proposed project would not generate cumulatively considerable emissions of ozone precursors or particulate matter and impacts would be less than significant

As discussed in Section VIII(a) and (b) above, GHG emissions contribute to the global condition known as the greenhouse effect. As this issue is by its very nature cumulative, the California Air Resources Board established a threshold of significance and climate reduction strategies. The proposed project would generate short-term emissions of GHGs during construction. However, these emissions would be far less than the thresholds of significance. The cumulative impact would be less than significant.

As discussed in Section XIII(c) above, operation of the proposed project would not result in increased noise levels over existing conditions. However, construction activities could result in temporary increases in noise levels at the project site; however, construction noise impacts would be temporary in nature and implementation of Mitigation Measures NOI-1 through NOI-6 would reduce impacts to less than significant levels. As such, there would be no permanent increase in ambient noise levels, and the proposed project would not result in cumulatively considerable noise 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 After Mitigation Incorporated. Numerous factors discussed above in the CEQA Initial Study Checklist pertain to the quality of the human environment. These potentially include Aesthetics, Air Quality, Geology and Soils, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Noise, Population and Housing, Public Services, Recreation, Transportation, and Wildfire. Based on the analysis contained above, the environmental impacts created by the proposed project in relation to most of these factors would be less than significant. With the incorporation of appropriate mitigation measures, as described above, significant impacts related to cultural resources and noise would be reduced to less than significant. Therefore, the project would not create environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly. The impact is less than significant with implementation of the identified mitigation measures.

SECTION 4
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