EXECUTIVE SUMMARY

ES.1 INTRODUCTION

Pure Water Southern California (Pure Water) is a proposed partnership between The Metropolitan Water District of Southern California (Metropolitan) and the Los Angeles County Sanitation Districts (Sanitation Districts) to beneficially reuse cleaned wastewater that is currently being discharged to the Pacific Ocean from the Sanitation Districts' A.K. Warren Water Resource Facility (Warren Facility) in the City of Carson. At full buildout, Pure Water would purify up to 150 million gallons per day (MGD), making it one of the largest programs of its kind in the world. Implementation of Pure Water would provide regional benefits to all Metropolitan member agencies by: (1) reducing reliance on imported water; (2) diversifying locally available supplies; (3) improving resilience to climate change and other stressors; and (4) enhancing operational reliability and flexibility.

This Environmental Impact Report (EIR) assesses the potential environmental effects of Pure Water and was prepared in accordance with the California Environmental Quality Act (CEQA) and its implementing guidelines. Metropolitan is serving as the lead agency in preparation of this EIR; the Sanitation Districts are serving as a responsible agency. The EIR is intended to inform governmental decisionmakers and the public about the potential environmental impacts associated with construction and operation of Pure Water, and to identify ways that potentially significant impacts can be avoided or reduced by making changes to the program, selecting an alternative, and/or adopting feasible mitigation measures.

ES.2 ENVIRONMENTAL REVIEW PROCESS

On September 30, 2022, Metropolitan circulated a Notice of Preparation (NOP) soliciting input and comment regarding Pure Water, in general, and the scope of the EIR, in particular. The NOP was published in various local papers; posted on Metropolitan's website; filed with Los Angeles and San Bernardino County clerks; and submitted to the State Clearinghouse for distribution to the appropriate state agencies. The NOP provided a general description of Pure Water, a summary of its probable environmental impacts, and the ways for comments to be submitted to Metropolitan. Metropolitan hosted virtual scoping meetings on October 12, October 18, October 27, and October 29, 2022. In addition, Metropolitan has been conducting a very robust outreach effort to solicit comments and input on Pure Water, including during the public scoping period.

During the 45-day scoping period, 39 comment letters were received. Based on these comments and other information known about Pure Water, Metropolitan determined that the EIR should analyze potential impacts associated with the following environmental resource topics: air quality, biological resources, cultural resources, energy, geology and soils, greenhouse gas emissions (GHG), hazards and hazardous materials, hydrology and water quality, land use and planning, noise, transportation, and tribal cultural resources (TCRs).

As required by CEQA, this Draft EIR will be circulated for public review and comment for a minimum of 45 days. Following the close of the public review period, Metropolitan will respond to comments received and prepare a Final EIR, which will consist of the following: the Draft EIR, supporting materials, and technical appendices – including any corrections, clarifications, or amplifications of the analysis included in those documents; comments on the Draft EIR; responses to comments on the Draft EIR; and a mitigation monitoring and reporting program for Pure Water.

As the decision-making body for the lead agency, Metropolitan's Board of Directors (Board) will consider whether to certify the Final EIR. To do so, the Board must find that the Final EIR has been completed in compliance with CEQA, that the Board has reviewed and considered the information in the Final EIR, and that the Final EIR represents its independent judgment and analysis. Once certified, Metropolitan, the Sanitation Districts, and other public agencies will consider and rely on the information in the Final EIR prior to approving, permitting, or taking other discretionary actions related to Pure Water. As required under CEQA, any such approval, permit, or action would be accompanied by certain findings of facts regarding the significant impacts of the program, a statement of overriding considerations for any impacts that cannot be mitigated to a less than significant level, and a notice of determination, where appropriate.

The State Clearinghouse reference number for Pure Water is **SCH No. 2022090654**, and all CEQA postings regarding this program can be found at: https://ceqanet.opr.ca.gov/. In addition, a copy of the Draft EIR and supporting appendices can be accessed at: https://www.mwdh2o.com/purewaterDEIR.

For any questions about the environmental review process for Pure Water, please contact:

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ES.3 PROJECT DESCRIPTION

Pure Water would produce a new sustainable local water supply by harvesting one of the region's largest untapped sources of cleaned wastewater to produce nearly 155,000 acre-feet per year (AFY) of highly purified water, enough to meet the annual needs of over 500,000 households. Pure Water's proposed facilities and components would be located within Los Angeles County and would extend from the City of Carson to as far north as the City of Azusa and as far east as the City of La Verne (**Figure ES-1**).

ES.3.1 Phasing and Facility Description

Pure Water is anticipated to be implemented in two primary phases. Phase 1 would focus on production of up to 115 MGD of purified water and would involve construction of the key treatment, conveyance, recharge, and support facilities needed for Pure Water. Construction of Phase 1 facilities is anticipated to start in 2027 and be completed by 2035. Phase 2 would involve expansion and/or addition of treatment facilities to produce another 35 MGD of purified water, bringing the program's full buildout capacity to 150 MGD. Construction of Phase 2 facilities is anticipated to start in 2035 and be completed in 2040. All water produced by Pure Water would meet the standards and criteria required for indirect potable reuse (IPR). In addition, a portion would undergo additional treatment to meet the standards and criteria required for direct potable reuse (DPR).

ES.3.1.1 Joint Treatment Site

Sanitation Districts A. K. Warren Water Resource Facility

The Joint Treatment Site would encompass a portion of the Warren Facility and adjacent property owned by the Sanitation Districts. The Joint Treatment Site would consist of a new Advanced Water Purification Facility (AWP Facility), improvements to the Warren Facility, and a new Workforce Training Center. The Joint Treatment Site would be located near the southwestern limits of the City of Carson and generally be bounded by Interstate 110 to the west, Main Street to the east, Lomita Boulevard to the south, and Sepulveda Boulevard to the north.

The AWP Facility would be constructed just east of the existing treatment structures at the Warren Facility, on vacant land that was purchased by the Sanitation Districts in 2000 and was formerly occupied by an oil refinery. The AWP Facility would employ a three-step, state-of-the-art treatment process (membrane bioreactors [MBR], reverse osmosis [RO], and ultraviolet light/advanced oxidation process [UV/AOP]) to produce purified water primarily for IPR purposes to recharge local groundwater basins. With additional treatment, some purified water would be used for DPR purposes to augment raw water supplies at water treatment plants (WTPs) owned and operated by Metropolitan. Such additional treatment processes could be located at the AWP Facility, Weymouth WTP, or a satellite facility, as discussed more fully below. A portion of the purified water also may be used for non-potable purposes, such as landscape irrigation or industrial process applications. Ancillary and support facilities required for the AWP Facility would include an influent screening facility (pretreatment); a clearwell and pump station (post-treatment); chemical storage systems; electrical facilities, including new electrical substations; administration buildings, laboratories, warehouses, and maintenance facilities; parking areas and charging stations; and a visitor center.

Certain Warren Facility improvements would be made to support the AWP Facility, including adding a sidestream centrate treatment system and associated ancillary facilities designed to reduce the amount of nitrogen in the cleaned wastewater going to the AWP Facility. The sidestream centrate treatment system would be constructed northwest of the AWP Facility, in an area of the Warren Facility that is paved, but otherwise unoccupied. Ancillary facilities required to operate the sidestream centrate treatment system include a centrate pump station and conveyance piping, process air compressors and conveyance ducting, chemical/nutrient supply and conveyance piping, building(s) for electrical facilities and blowers, treated centrate conveyance piping, associated electrical and chemical equipment and instrumentation, and a new electrical substation.

A Workforce Training Center would be established to provide training, experience, and certification in a variety of trades. This would include training directly related to and needed for construction and operation of Pure Water, as well as training more broadly associated with the water supply, wastewater management, and treatment industries. This center would consist of offices, meeting spaces, classrooms, workshops, and parking facilities, and would be constructed on the north side of Sepulveda Boulevard adjacent to existing Warren Facility structures, on property owned by the Sanitation Districts that is currently leased to a plant nursery.

ES.3.1.2 Backbone Conveyance System

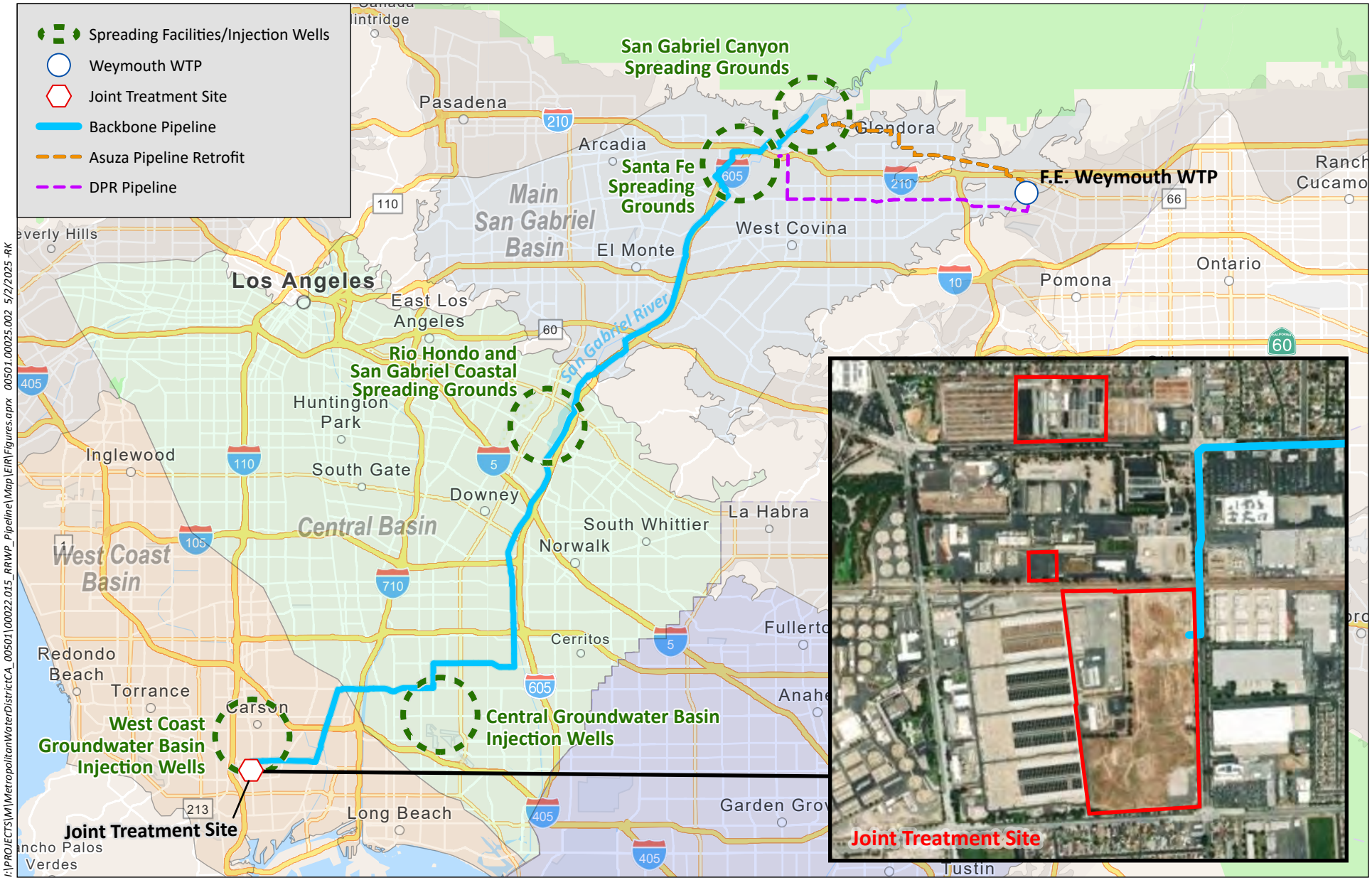
Distribution of purified water produced at the AWP Facility would require construction of a new backbone conveyance system consisting of approximately 39 miles of pipeline (backbone pipeline), two additional pump stations, and multiple service connections. The backbone pipeline would be divided into eight segments or "reaches" extending from the Warren Facility in the City of Carson to the San Gabriel Canyon Spreading Grounds in the City of Azusa. Approximately 25 miles of the southern portion would be 7 feet in diameter, with the capacity to convey approximately 150 MGD. The remainder would be up to 9 feet in diameter, with the capacity to convey approximately 300 MGD, allowing for potential future integration with other water delivery systems. The two pump stations along the backbone pipeline would be located in the Whittier Narrows area and near the Santa Fe Spreading Grounds. Service connections to provide water to users along the route would be located at various points along the alignment.

ES.3.1.3 Groundwater Recharge Facilities

Approximately 90 MGD of Pure Water's output would be used for IPR purposes, specifically groundwater recharge. Purified water from the AWP Facility would be distributed along the backbone pipeline to various recharge facilities, including spreading grounds and injection wells, located in the West Coast, Central, and Main San Gabriel basins. Spreading grounds typically consist of large natural or manmade basins designed to hold water while it percolates into an underlying groundwater basin or aquifer. Injection wells deliver water directly into a groundwater basin or aquifer without relying on percolation through the soil. Most of the recharge facilities needed for Pure Water already exist. However, it is anticipated that new injection wells and spreading basins may need to be constructed as part of the program. In addition, all recharge facilities, whether existing or proposed, would require new connections to the backbone pipeline.

ES.3.1.4 DPR Facilities

During Phase 1, up to 25 MGD of the AWP Facility's output would be further purified at new DPR treatment facilities constructed at the southern portion of the Weymouth WTP. These facilities would include a UV reactor building, disinfection facilities, a treated water storage tank, and pumps. Purified water from the AWP Facility would be conveyed via the backbone pipeline to the western-most portion of the existing Azusa Pipeline, owned and operated by the San Gabriel Valley Municipal Water District. This water then would be pumped eastward through the Azusa Pipeline to the Weymouth WTP. Moving this water through the Azusa Pipeline would require construction of two additional pump stations, one located adjacent to the northern portion of the backbone pipeline and the second located in the City of Glendora. In addition, the Azusa Pipeline would be retrofitted and two new 30-inch pipelines connecting it to the backbone pipeline and Weymouth WTP would be installed.



Source: Base Map Layer (Esri)

PUREWATER SOUTHERN CALIFORNIA

Pure Water Area

Figure ES-1

Metropolitan F. E. Weymouth Water Treatment Plant

During Phase 2, between 60 and 150 MGD of the AWP Facility's output would be further purified at new DPR treatment facilities located at the AWP Facility, the Weymouth WTP, or a satellite location. If located at the AWP Facility, these DPR treatment facilities would include ozonation, biologically activated carbon (BAC) filtration, and membrane filtration (MF). The DPR treatment process would be integrated into the IPR process, specifically between MBR and RO. As a result, the AWP Facility's entire 150 MGD output would be treated to DPR standards. If located at the Weymouth WTP or a satellite location, these DPR facilities likely would be similar to those described for the AWP Facility, but they would be sized to treat only 60 MGD to DPR standards. Regardless of the DPR treatment location, this purified water would be conveyed to the Weymouth WTP for integration into Metropolitan's system. To do so, a new 54-inch-diameter pipeline, called the DPR pipeline, would be constructed between the northern portion of the backbone pipeline and the Weymouth WTP. An additional pump station also would be required along this pipeline and is expected to be located in the City of San Dimas.

ES.3.1.5 Non-Potable Water Facilities

Approximately 25 MGD of purified water from the AWP Facility would be used by water agencies, including the West Basin Municipal Water District and the Los Angeles Department of Water and Power, for non-potable end uses. In addition to non-potable uses by these agencies, purified water would also be used as utility and irrigation water at the Warren Facility and AWP Facility, as well as other potential nearby uses. Facilities for non-potable uses would include service connections at key locations along the backbone pipeline and small-diameter pipelines for distribution. While Metropolitan would install the service connections, the water agencies would be responsible for facilities to connect these service connections to their systems.

ES.3.1.6 Sanitation Districts Support Facilities

Although the site where the AWP Facility would be located is mostly vacant, there are several existing Sanitation Districts support facilities within its proposed footprint that would need to be relocated elsewhere within the Warren Facility. These support facilities include a warehouse with outdoor storage space; an outdoor grit, screenings, and sewer cleanings handling area; and a Secondary Treatment Area Research Facility. All the relocated Sanitation Districts support facilities would be located in vacant or underutilized areas in the northeastern portion of the Warren Facility.

ES.3.2 Construction and Operation

If approved, construction of Pure Water's facilities and components is expected to begin in 2027 with full buildout anticipated for completion by 2040. Operations are expected to begin as early as 2033, with initial deliveries of purified water from the AWP Facility occurring via the first two reaches of the backbone pipeline. Referred to as the "initial delivery subphase," up to 30 MGD of purified water would be distributed for non-potable uses via service connections in and around the cities of Carson and Long Beach and for IPR purposes via groundwater recharge in the West Coast and Central groundwater basins. Operations would continue to ramp up as various facilities and components come online.

ES.3.2.1 Joint Treatment Site

Construction activities at the Joint Treatment Site would include plugging and abandonment of eight existing oil wells; demolition of existing structures and pavement; clearing and grubbing; relocation of existing utilities; excavation; foundation preparation; installation of new utilities and equipment; construction of new facilities and buildings; and installation of pavement and groundcover. During operation, most administrative services, inspections, maintenance activities, and deliveries would occur during regular working hours. Treatment processes, water quality monitoring, pumping, and management of residual wastes would occur continuously throughout the day and night, as needed. To operate the fully built-out Joint Treatment Site, approximately 194 staff would be required. In addition, the visitor center at the AWP Facility is anticipated to receive an average of 10 visitors per day, and the Workforce Training Center is anticipated to serve approximately 31 trainees per day.

ES.3.2.2 Backbone Conveyance System

Construction of the backbone pipeline and service connections would utilize a variety of methods, including both open-cut trenching and trenchless methods. Construction zones for trenching activities would generally be up to 90 feet in width, including a trench up to 18 feet wide. Typical trench depths are expected to be up to 21 feet deep. Trenchless methods would be used where applicable to minimize impacts to the Los Angeles and San Gabriel rivers, natural and improved channels and waterways, transportation systems, sensitive environmental resources, existing infrastructure, and areas with limited rights-of-way. The depth of the trenchless areas could vary; however, most trenchless areas currently are anticipated to be 45 feet deep or shallower. Temporary construction staging and storage areas would be required along the pipeline alignment to support these construction activities. After construction, temporarily disturbed areas would be restored to original conditions, which could include repaving, re-establishment of curb and gutter, and landscaping. Construction activities associated with the pump stations would include demolition of the structures (if applicable); clearing and grubbing; excavation; installation of utilities; structure construction; equipment installation; paving and fence installation; and architectural coatings. Operational activities for the backbone pipeline, pump stations, and service connections would include periodic inspection and maintenance. The pump stations would be monitored and operated from a regional operational control center with no regular onsite staff.

ES.3.2.3 Recharge Facilities

Piping would be constructed from service connections along the backbone pipeline to new discharge locations at new and existing spreading facilities and injection well sites. Improvements at spreading facilities are anticipated to include a concrete headwall with wingwalls and a velocity dissipating structure at each new pipe discharge location, as well as potential grading of existing and proposed

recharge basins. New injection wells would involve demolition (if applicable); site preparation; drilling the wells; installation of well casings; construction of well equipment pads; installation of piping, pump, and valving; and site restoration. Operational activities associated with the spreading facilities and injection wells would include periodic inspection and maintenance. These facilities would be unstaffed.

ES.3.2.4 DPR Facilities

Construction and operation information for DPR facilities at the AWP Facility are incorporated into the discussion presented above for the Joint Treatment Site. Construction activities for DPR treatment facilities at the Weymouth WTP or a satellite location would include demolition of existing structures (if applicable); site preparation, including asphalt removal, clearing, and grubbing; excavation; trenching; foundation development; grading; structure construction and installation; paving and fence installation; and architectural coating. Construction activities for the Azusa Pipeline retrofit and new DPR pipeline would involve a combination of trenching and trenchless methods. Construction of the pump stations for DPR would be similar to those described for the backbone conveyance system. Operational activities for these facilities would be similar to those described above for the Joint Treatment Site (for treatment facilities) and the backbone conveyance system (for pipelines and pump stations).

ES.3.2.5 Non-potable Water Facilities

Construction of the non-potable water facilities would typically involve excavating a trench, installing pipe, constructing turnout and meter structures, backfilling the trench, and restoring the disturbed ground to pre-existing conditions. These facilities are anticipated to be located within public roadways and on Sanitation Districts-owned property. Operational activities would include periodic inspection and maintenance.

ES.3.2.6 Sanitation Districts Support Facilities

Construction of the Sanitation Districts support facilities would involve demolition of existing structures and pavement; site preparation and grading; trenching to install utilities; foundation preparation; building construction; and paving. Operational activities at these facilities would generally be similar to those at the existing facilities that are being replaced.

ES.3.3 Fiscal and Economic

The estimated capital cost associated with full buildout of the Pure Water program is $8.1 billion, with approximately 80 percent of the costs being incurred during Phase 1. The estimated operations, maintenance, and repair costs associated with the full program total $228 million per year. These estimates are in 2023 dollars, without escalation. Costs for Pure Water may be funded through a combination of rates and charges, grants, loans, third-party contributions, or other financing mechanisms.

While implementing Pure Water would require a significant financial commitment, it would provide a host of economic benefits that extend well beyond Metropolitan's service area. According to a study prepared by the Los Angeles County Economic Development Corporation (LAEDC), construction of Pure Water's facilities and components is expected to generate over $15.1 billion in total economic output

and support approximately 75,660 job-years[1] across the Southern California region, including 43,700 job-years directly related to the program and another 31,950 job-years through indirect and induced effects. In addition, construction of Pure Water would contribute $719.4 million in state and local tax revenue and $1.4 billion in federal tax revenue. Pure Water also would have a recurring positive impact on the regional economy once construction is completed. The LAEDC study report indicates that annual operations and maintenance activities are expected to generate over $640 million in total economic output and support approximately 2,460 job-years across the Southern California region. Furthermore, these activities would contribute over $48 million in state and local taxes and over $57 million in federal taxes each year.

ES.4 PROJECT NEED AND OBJECTIVES

Metropolitan imports water from the Colorado River via the Colorado River Aqueduct (CRA) and from the Bay-Delta via the State Water Project (SWP) for distribution to its member agencies. Metropolitan's member agencies also rely on several local sources for water supply. Despite the diversity of water supplies in Metropolitan's portfolio and its support of water conservation measures, Metropolitan faces several challenges in continuing to provide adequate, reliable, and high-quality supplemental water supplies for Southern California.

Approximately 20 to 25 percent of Southern California's water supply currently comes from the Colorado River Basin, which historically has experienced large variations in annual hydrologic conditions. From 2000 to 2004, the Basin experienced five consecutive years of significantly below-average precipitation and runoff. Since then, precipitation levels have been near normal on average, but runoff levels have been less than average, indicating a potential shift in the precipitation-to-runoff relationship. This has resulted in a 22-year drying trend and, as of February 2025, Lake Mead and Lake Powell, the two primary storage reservoirs along the Colorado River, were both at 35 percent of capacity.

Approximately 30 percent of water deliveries to Metropolitan's service area are conveyed through the SWP. Annual SWP supplies vary greatly depending on hydrologic conditions. For example, below-average precipitation in 2020 resulted in Metropolitan receiving only 20 percent of its SWP-contracted water supplies. For calendar year 2021, the SWP allocation decreased from an initial allocation of 10 percent to 5 percent based on ongoing dry conditions. In 2022, for the first time in the history of the SWP, the initial allocation was zero percent. This drought sequence was then followed in 2023 by the first 100-percent allocation in nearly 20 years, equivalent to over 1.9 million acre-feet (AF) allocated to Metropolitan. As of April 2025, the allocation stands at 40 percent.

Groundwater pumping represents more than 35 percent of Southern California's drinking water, making replenishment and storage programs for groundwater basins critically important. Metropolitan's service area overlies numerous groundwater basins, most of which rely on artificial recharge to sustain groundwater pumping. Following record low precipitation in 2016, groundwater basins dropped to very low levels, with more than 62 percent falling below their established operating ranges. While some basins have begun to recover due to more recent precipitation, they remain below healthy storage levels. Within Metropolitan's service area, more than 8 percent of these basins are experiencing

[1] One job-year refers to a worker working full time for that year. In analyzing the total economic impacts of a multi-year development project, employment impacts are typically expressed in job-years rather than the number of jobs. This is because many associated positions are sustained over multiple years over the development period.

declines in storage levels and approximately 48 percent are still below their established operating ranges.

Climate change is expected to continue affecting the level of supplies available from the Colorado River, SWP, and local sources for the foreseeable future. In addition, climate change has the potential to adversely impact the water supply system in other ways. For example, aging infrastructure may be more vulnerable to extreme storm events, and the number and scale of capital improvement projects needed to respond to changing circumstances likely will increase. As another example, constraints on hydropower from fluctuating water flows and climate vulnerabilities of the electrical grid may affect electrical power generation and access.

Apart from climate change, deliveries from the CRA and SWP are vulnerable to seismic events. Both the CRA and California Aqueduct cross the San Andreas Fault in Southern California prior to reaching Metropolitan's service area. While water deliveries have not been affected by seismic activity to date, a strong earthquake could severely damage these conveyance systems and halt the flow of imported water to Southern California. Potential outages are estimated to range from a few months to up to five years.

Metropolitan's Integrated Water Resources Plan (IRP) serves as the long-term, comprehensive strategy for ensuring that its member agencies continue to receive reliable and affordable water supplies. Since its adoption in 1996, the IRP has been updated approximately every five years to adapt to changing conditions that affect water resource reliability. In February 2020, in connection with the development of its next IRP, Metropolitan initiated a new two-phase process for its long-term resource planning, which guides a 25-year planning cycle through 2045. The two phases consist of: (1) a needs assessment phase, and (2) an implementation phase. While past IRPs focused on annually variable hydrologic conditions, this new planning process builds upon Metropolitan's adaptive management strategy by utilizing a scenario planning approach that addresses a wider range of uncertainties and considers a host of factors when modeling future water supply demands.

Consistent with this new approach, Metropolitan's Board adopted a Regional Needs Assessment in April 2022, which identified the need for 100,000 AF to 650,000 AF of new annual core water supply under various planning scenarios. Subsequently, in February 2023, the Board directed staff to integrate water resources, climate considerations, and financial planning into a comprehensive Climate Adaptation Master Plan for Water (CAMP4W), the second phase of Metropolitan's long-term resource planning process. CAMP4W incorporates the results and findings of the Regional Needs Assessment into a collaborative process to identify and evaluate integrated regional solutions.

Pure Water would add 155,000 AFY to this core supply, which would help reduce the likelihood of future net shortages and contribute to regional reliability targets. Pure Water also would help Metropolitan reduce its reliance on imported water, diversify its water supply portfolio, and enhance its operational resilience, reliability, and flexibility. In this way, Pure Water would assist Metropolitan in addressing ongoing challenges and constraints associated with climate change, seismic risks, and other factors, and, in turn, ensure Southern California continues to have the water it needs to grow and prosper in the years ahead. Pure Water will be evaluated using the CAMP4W Decision-Making Framework, developed with Board, member agency, and public engagement, to support Board decision-making and Metropolitan's overall climate adaptation strategy.

Considering the above, the following objectives have been established for Pure Water:

- Provide a new high-quality local water source that is reliable, cost-effective, and climate-resilient to help meet regional water demands, with expedited or phased deliveries of such supplies where feasible;

- Diversify Metropolitan's water supply portfolio, increase regional operational flexibility, and provide opportunities for improved coordination and potential future integration with other water supply and distribution systems;

- Contribute to improving water supply resiliency and overall water quality of local groundwater basins;

- Provide advanced water purification to maximize beneficial reuse of wastewater that would otherwise be discharged into the ocean, while maintaining compliance with water quality requirements for ocean discharge;

- Further statewide goals of increasing use of recycled water as a sustainable, environmentally sound water source for indirect and direct potable reuse;

- Reduce reliance on imported water supplies and provide greater resilience of local water supplies; and

- Increase the locally available water supply to protect against seismic events impacting imported water supplies and other service disruptions.

ES.5 AREAS OF CONTROVERSY/ISSUES TO BE RESOLVED

During the NOP period, comment letters were received from 4 state agencies, 3 regional agencies, 13 local agencies, 4 Tribes, 6 organizations, and 9 individuals. Areas of concern raised in response to the NOP include comments related to air quality, biological resources, cultural resources, energy, GHG emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, transportation, and TCRs. Several comments also suggested modifications to Pure Water.

Metropolitan's Board must review Pure Water and this EIR and determine if Pure Water or one of the alternatives presented in Chapter 9, *Project Alternatives*, should be adopted and implemented. If Pure Water is selected for adoption, the Board will be required to certify the Final EIR, determine whether and how to mitigate significant impacts, and adopt associated Findings pursuant to CEQA Guidelines Section 15091. Furthermore, a Statement of Overriding Considerations pursuant to CEQA Guidelines Section 15093 would be required for those impacts found to be significant and unavoidable.

ES.6 SUMMARY OF ALTERNATIVES

As required by CEQA, a reasonable range of alternatives to Pure Water is considered and discussed in this EIR. Those alternatives are set forth in detail in Chapter 9, and they were developed, following an extensive screening process, with the goal of identifying potentially feasible means of attaining the basic program objectives, while avoiding or substantially lessening potentially significant environmental effects. The alternatives considered in detail include each of the following:

- **No Project Alternative**: As required by CEQA, the EIR presents what would be reasonably expected to occur in the foreseeable future if Pure Water is not constructed and operated.

- **115-MGD Alternative**: This alternative would treat and convey 90 MGD of water for non-potable and IPR purposes, similar to Pure Water as proposed. However, the amount of water purified and conveyed for DPR purposes under this alternative would be reduced from 60 MGD to 25 MGD. This reduced scale of water production would also involve a reduction in the scale of the DPR treatment facilities. The size and operational requirements of the backbone conveyance facilities would also be reduced and the need for a new DPR pipeline and associated pump stations would be avoided.

- **Indirect Potable Reuse Only (90-MGD) Alternative**: This alternative would provide for treatment and conveyance of 90 MGD of water for non-potable and IPR purposes, similar to Pure Water as proposed. However, this alternative would not include any treatment or conveyance of water for DPR purposes. This alternative would involve foregoing construction and operation of the DPR treatment facilities (including at the AWP Facility, Weymouth WTP, and/or a satellite treatment facility), upgrades to the existing Azusa Pipeline, and construction of a new DPR pipeline and pump stations. The size and operational requirements of the backbone conveyance facilities would also be reduced.

- **Seven-foot-diameter Pipeline Alternative**: This alternative would be similar to Pure Water as proposed, except that the portion of the backbone pipeline north of Whittier Narrows would be seven feet in diameter rather than the nine-foot-diameter that is currently proposed. This alternative would provide sufficient capacity to convey all Pure Water flows to their intended destinations, but would not provide capacity in the northern portion of the pipeline for potential future integration with other regional water supply systems. Additionally, the reduced size of the pipeline in this alternative would enable approximately 2.6 miles more of the pipeline to be constructed via trenched construction rather than tunneling.

- **Northern Pipeline Re-route Alternative**: This alternative would re-route the alignment of the backbone pipeline north of Huntington Drive. This alternative would place more of the backbone pipeline in roadways.

- **Los Angeles River Backbone Alignment Alternative**: This alternative would re-route the portion of the backbone pipeline south of Whittier Narrows to place the pipeline primarily within Southern California Edison and Los Angeles County Flood Control District rights-of-way, paralleling the Los Angeles River and then the Rio Hondo Channel, and would include placement of portions of the pipeline within public streets and rights-of-way where necessary based on corridor width.

Table ES-1 summarizes the environmental comparison between Pure Water and the six alternatives. Environmental resource categories for which an alternative would result in reduced impacts relative to Pure Water are indicated with a minus sign ('-'), while environmental resource categories for which an alternative would result in increased impacts are indicated with a plus sign ('+').

Table ES-1
COMPARISON OF PURE WATER AND ALTERNATIVE IMPACTS

Environmental Resource Category	Pure Water	No Project Alternative	115-MGD Alternative	Indirect Potable Reuse Only (90-MGD) Alternative	Seven-foot-diameter Pipeline Alternative	Northern Pipeline Re-route Alternative	Los Angeles River Backbone Alignment Alternative
Air Quality	SU*	N	SU*-	SU*-	SU*+	SU*	SU*
Biological Resources	SM	N	SM-	SM-	SM-	SM-	SM-
Cultural Resources	SU	N	SU-	SU-	SU	SU-	SU-
Energy	N	N	N-	N-	N+	N	N-
Geology and Soils (Paleontological Resources)	SM	N	SM-	SM-	SM	SM	SM-
Greenhouse Gas Emissions	N	N	N-	N-	N+	N	N-
Hazards and Hazardous Materials	N	N	N-	N-	N-	N+	N+
Hydrology and Water Quality	N	N	N-	N-	N	N	N-
Land Use and Planning	N	N	N	N	N	N	N
Noise	SU*	N	SU*-	SU*-	SU*+	SU*+	SU*
Transportation	N	N	N-	N-	N+	N+	N-
Tribal Cultural Resources	SU	N	SU-	SU-	SU	SU	SU-

SM = significant but mitigable impacts
SU = significant and unavoidable impacts
SU* = Significant and unavoidable impact during construction only
N = no significant impacts
– = reduced impact level(s) relative to Pure Water as proposed
+ = increased impact level(s) relative to Pure Water as proposed

ES.7 SUMMARY OF IMPACTS AND MITIGATION MEASURES

This EIR provides a detailed discussion and analysis of the potential environmental impacts associated with Pure Water. The format, scope, and content follow the requirements set forth in CEQA Guidelines Sections 15125 through 15126.4. However, three aspects of the environmental analysis are worth highlighting.

First, different levels of detail exist with respect to Pure Water's various facilities and components. In general, there is more detail and certainty with respect to the facilities at the Joint Treatment Site and the backbone pipeline at this time. As a result, potential impacts are analyzed on a program-level basis for Pure Water as a whole and then further analyzed on a project-level basis for those facilities and components for which there is sufficient information. The chart below identifies which facilities and components are analyzed at a project level.

LEVEL OF ANALYSIS	
Components	**Project Level?**
Joint Treatment Site	
• AWP Facility	Yes
• Warren Facility Improvements	Yes
• Workforce Training Center	Yes
Backbone Conveyance System	
• Backbone Pipeline	Yes
• Backbone Pump Stations[1]	Partial (AQ/GHG/Energy Only)
• Service Connections	No
DPR Facilities (for Weymouth or Satellite Location)	No
Recharge Facilities	No
Non-potable Water Facilities	No
Sanitation Districts Support Facilities	No

[1] While the specific locations for the pump stations are currently not known, they are analyzed at the project-level for air quality, GHG emissions, and energy consumption since associated impacts are not location-specific.

Second, there are essentially two ways potential environmental impacts associated with Pure Water are being addressed. One way is through incorporation of up-front measures to protect the environment, as part of the program's design and responsible stewardship. Referred to as "environmental commitments," these features are factored into the assessment of whether and to what extent Pure Water would have potentially significant impacts without mitigation. The other way is through adoption and implementation of feasible mitigation measures to reduce the potential impacts of the program as proposed. These measures are factored into the assessment of whether and to what extent Pure Water would have potentially significant impacts even with mitigation.

While the distinction between environmental commitments and mitigation measures is relevant for analytical purposes, it does not alter the ultimate determination and conclusion of whether Pure Water would have potentially significant impacts with respect to any given resource category. All environmental commitments and mitigation measures will be incorporated into and fully enforceable as part of the mitigation monitoring and reporting program adopted for Pure Water.

Third, in addition to the specific environmental commitments and mitigation measures proposed as part of Pure Water, Metropolitan has a variety of programs, plans, and initiatives aimed at fulfilling its mission to provide "its service area with adequate and reliable supplies of high-quality water to meet present and future needs in an environmentally and economically responsible way." These include an adopted Climate Action Plan designed to reduce GHG emissions; a proposed CAMP4W intended to guide selection and investment in sustainable capital projects; and a wide variety of sustainability, resilience, and innovation initiatives. These programs, plans, and initiatives are expected to help inform and guide implementation of Pure Water as it moves forward and, where applicable, also have been factored into the EIR's analysis of potential impacts.

Likewise, Metropolitan and the Sanitation Districts are working together to ensure Pure Water is pursued in a manner that is sensitive to the communities that would be most affected by this program. Among other things, Metropolitan and the Sanitation Districts intend to: (1) follow the Envision Framework and American Society of Civil Engineers Standard for Sustainable Infrastructure in constructing Pure Water's facilities and components, where appropriate; (2) establish a Workforce

Training Center to provide education, training, and certification in a wide variety of trades pertinent to Pure Water, as well as across the broader water supply, wastewater management, and treatment sectors; (3) make certain community improvements and develop a community benefits program aimed at offsetting economic, social, or other effects, over and above what may be legally required for Pure Water; and (4) follow "good neighbor guidelines" when undertaking work in areas that may impact neighborhoods, homes, and businesses.

Table ES-2 summarizes the environmental commitments, potential impacts, and mitigation measures for Pure Water. As shown, with implementation of the proposed environmental commitments and mitigation measures, most of the potential environmental impacts would be reduced to less than significant. The remaining significant and unavoidable impacts are associated with construction and pertain to the following environmental resource topics: air quality (criteria pollutant emissions), cultural resources (historic and archaeological resources), noise (increase in ambient noise), and TCRs.

Table ES-2
SUMMARY OF ENVIRONMENTAL IMPACTS

Topic	Environmental Commitment(s)	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
5.1 Air Quality					
Consistency with Air Quality Plans	**AQ-EC-1: Diesel Engine Idling.** Idling for a vehicle's primary diesel engine shall be restricted to five minutes or less at any location, except as allowed by California Air Resources Board (CARB) regulation: Title 13 California Code of Regulations (CCR), Division 3, Chapter 10, Section 2485. **AQ-EC-2: Fugitive Dust Control.** The contractor shall comply with South Coast Air Quality Management District (SCAQMD) Rule 403 (Fugitive Dust), including implementing the Best Available Control Measures (BACM) listed in Table 1 of Rule 403 for all construction activities, the BACM listed in Table 2 of Rule 403 for large operations (50 or more acres of disturbed surface area or earth moving operations of 5,000 cubic yards/day for more than 3 days), and the Contingency Control Measures in Table 3 of Rule 403 when wind speeds, including instantaneous gusts, exceed 25 miles per hour.	Pure Water would result in emissions of volatile organic compounds (VOCs) and nitrogen oxides (NO_X; for which the South Coast Air Basin [SCAB] is in nonattainment) during temporary construction and/or concurrent construction and operations that are expected to exceed thresholds. Pure Water would therefore have the potential to result in an increase in the frequency or severity of existing air quality violations or delay the timely attainment of air quality standards specified in the Air Quality Management Plan (AQMP), and thus have the potential to conflict with or obstruct implementation of the AQMP.	Potentially Significant	**AQ-MM-1: Tier 4 Final Off-Road Construction Equipment.** All diesel-fired construction equipment, equal to or greater than 25 horsepower shall meet U.S. Environmental Protection Agency (USEPA) Tier 4 Final standards at a minimum. **AQ-MM-2: Alternative Fuel Construction Equipment.** As practical, on- and off-road vehicles and equipment shall be electrically powered or utilize other alternative fuels. **AQ-MM-3: Onsite Power Sources.** If available, the contractor shall use existing onsite power sources (e.g., power poles) or renewable fuel generators rather than diesel generators. **AQ-MM-4: Electric Vehicle Charging Stations.** Prior to completion of Phase 1 Pure Water construction activities at the Joint Treatment Site, a minimum of 12 electric vehicle charging stations shall be installed at the existing compressed natural gas fueling station owned and operated by the Sanitation Districts at the Warren Facility.	Less than Significant
Criteria Pollutant Emissions	**AQ-EC-1: Diesel Engine Idling** **AQ-EC-2: Fugitive Dust Control**	Pure Water would result in emissions of VOC, NO_X, and carbon monoxide (CO) during temporary construction and/or concurrent construction and operations that are expected to exceed thresholds. Pure Water would therefore have the potential to result in a cumulatively considerable net increase of criteria pollutants for which the project region is in non-attainment under an applicable federal or state ambient air quality standard.	Potentially Significant	**AQ-MM-1: Tier 4 Final Off-Road Construction Equipment.** **AQ-MM-2: Alternative Fuel Construction Equipment.** **AQ-MM-3: Onsite Power Sources.** **AQ-MM-4: Install Electric Vehicle Charging Stations.**	Significant and Unavoidable (Construction Only)
Sensitive Receptors	**AQ-EC-1: Diesel Engine Idling** **AQ-EC-2: Fugitive Dust Control**	Pure Water would not expose sensitive receptors to substantial pollutant concentrations.	Less than Significant	No mitigation is required.	Less than Significant
Other Emissions	No applicable environmental commitments.	Pure Water would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.	Less than Significant	No mitigation is required.	Less than Significant
5.2 Biological Resources					
Special-status Species	**GM-EC-1: Environmental Awareness Training.** Prior to construction, the Contractor shall attend an Environmental Awareness Training with Metropolitan's construction management team and designated environmental monitors (i.e., qualified biologist, archaeologist, Native American monitor, paleontologist, hazardous materials specialist, as applicable). An Environmental Awareness Training program shall inform all employees of the sensitive resources known or with potential to occur in the local area; the sensitivity of the area in which they will be working; and environmental measures and requirements to comply with project approvals and environmental permits and regulations.	Pure Water would have the potential to result in a substantial adverse effect on 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.	Potentially Significant	**BIO-MM-1: Riparian Vegetation Monitoring Plan and Water Deliveries Mitigation.** Metropolitan shall prepare a Riparian Vegetation Monitoring Plan for the reach of the San Gabriel River, between USG-3 and Santa Fe Dam, to monitor potential changes to wetland and riparian communities in response to the suspension of water deliveries at USG-3. If the water delivery changes are determined to have resulted in adverse impacts and loss of wetland and riparian habitat along the monitored reach during the monitoring period, additional measures shall be implemented to ensure no net loss of wetland and riparian habitat occurs within the monitoring reach as a result of Pure Water operations.	Less than Significant

Topic	Environmental Commitment(s)	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	AQ-EC-2: Fugitive Dust Control **BIO-EC-1: Temporary Construction Fencing.** Prior to construction, to prevent inadvertent impacts to environmentally sensitive areas outside of the approved direct impact area, temporary construction fencing shall be installed at all locations where the project facilities and components occur adjacent to riparian habitat, sensitive natural communities, and aquatic resources, including jurisdictional waters or wetlands. Temporary fencing may also include silt fencing, as appropriate and where determined necessary by the Stormwater Pollution Prevention Plan (SWPPP). A qualified biologist shall monitor the installation of the temporary construction fencing wherever it would abut environmentally sensitive areas. Construction activities shall be restricted to areas within the approved impact limits at all times during construction. **BIO-EC-2: Nesting Bird and Raptor Avoidance.** Trimming, grubbing, and clearing of vegetation shall be avoided during the general avian breeding season (January 15 to July 15 for raptors; February 1 to August 31 for other avian species) to the extent feasible based on schedule considerations and coordination with local agencies. If trimming, grubbing, or clearing of vegetation is proposed during the general avian breeding season, a pre-construction survey shall be conducted by a qualified biologist no more than seven days prior to disturbance of vegetation to determine if active bird nests are present in the affected areas. If there are no nesting birds (includes nest building or other breeding/nesting behavior) within the survey area, trimming, grubbing, and clearing of vegetation will be allowed to proceed. If active bird nests are confirmed to be present during the pre-construction survey, a buffer zone shall be established by the qualified biologist. Construction activities shall avoid any active nests and buffer zone until a qualified biologist has verified that the young have fledged or the nest has otherwise become inactive. **BIO-EC-3: Nighttime Lighting.** Any artificial nighttime lighting shall be shielded and directed away from native habitat and other sensitive biological resource areas.			Metropolitan shall prepare and implement a Riparian Vegetation Monitoring Plan for the reach of the San Gabriel River between Metropolitan service connection USG-3 and Santa Fe Dam to monitor potential changes to wetland and riparian communities in response to the suspension of water deliveries at USG-3. The monitoring shall also include potential changes to such habitat potentially serving as breeding habitat for the federally and state endangered least Bell's vireo and southwestern willow flycatcher; potential adverse modification of critical habitat for the southwestern willow flycatcher; and potential impacts to habitat for other special-status species, as applicable. The plan shall identify the purpose of the monitoring, monitoring period, monitoring protocols, thresholds for determining if the suspension of water deliveries has resulted in an adverse impact to wetland and riparian habitats within the monitoring area, reporting requirements, and subsequent actions to be taken to ensure that no net loss of wetland or riparian habitat occurs within the monitoring reach as a result of Pure Water operations. If, through implementation of the Riparian Vegetation Monitoring Plan, a significant adverse impact on wetland and/or riparian habitat; breeding habitat for the least Bell's vireo and/or southwestern willow flycatcher; critical habitat for southwestern willow flycatcher; and/or habitat for other special-status species is identified, then Metropolitan shall consult with the U.S. Fish and Wildlife Service (USFWS) and/or California Department of Fish and Wildlife (CDFW), as applicable, to address potential adverse impacts on special-status species and/or adverse modification of critical habitat. Metropolitan shall implement requirements determined through the consultation process, which could include adjusting surface flows, as appropriate, and/or compensation at a minimum 1:1 ratio to ensure no net loss or degradation of wetland and/or riparian habitat, breeding habitat for the least Bell's vireo and/or southwestern willow flycatcher, and/or southwestern willow flycatcher critical habitat. This could occur through one or more of the following: onsite and/or offsite establishment, re-establishment, rehabilitation, and/or enhancement; acquisition and preservation of onsite and/or offsite land demonstrated to support the habitat; and/or purchase of mitigation credits at an approved mitigation bank. Metropolitan shall comply with any additional measures (e.g., avoidance, conservation) incorporated into any permits or authorizations issued by the regulatory agencies with jurisdiction over these resources beyond what is being proposed under this CEQA analysis to reduce the impact to less than significant.	

Topic	Environmental Commitment(s)	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	BIO-EC-4: Invasive Plant Species. No invasive plant species listed on the California Invasive Plant Inventory prepared by the California Invasive Plant Council shall be included in project landscaping or revegetation activities.			**BIO-MM-2**: **Updated Rare Plant Surveys.** A qualified biologist shall conduct updated focused rare plant surveys no more than two years prior to construction activities in direct impact area(s) with suitable habitat. Updated focused rare plant surveys shall be conducted by a qualified biologist prior to the commencement of construction and during the appropriate season(s) to identify the presence or absence of special-status plant species, including locations and numbers, within the direct impact area(s) scheduled for construction within two years. The surveys shall cover all special-status plant species with potential to occur within the direct impact area(s) and shall target, at a minimum, the following special-status plant species found to be absent from the direct impact area(s) during baseline biological surveys but with a high potential to occur in the future given the presence of suitable habitat: Nevin's barberry (federally and state listed endangered, California Rare Plant Rank 1B.1); Parish's gooseberry (non-listed, California Rare Plant Rank 1A), and Sonoran maiden fern (non-listed, California Rare Plant Rank 2B.2). The results of the surveys shall be summarized in a rare plant survey report to be submitted to Metropolitan. If, after the completion of the updated rare plant surveys, it is determined that unavoidable impacts to Nevin's barberry and/or other federally and/or state listed plant species would occur as a result of project implementation, then Metropolitan shall implement mitigation measure BIO-MM-3. If it is confirmed that unavoidable impacts to Parish's gooseberry, Sonoran maiden fern, and/or other non-listed, special-status plant species with a California Native Plant Society California Rare Plant Rank of 1 or 2 could occur, then Metropolitan shall implement mitigation measure BIO-MM-4. **BIO-MM-3: Nevin's Barberry Avoidance, Agency Consultation, and Compensatory Mitigation.** If Nevin's Barberry or other federally and/or state listed plant species are identified within the direct impact area(s) and cannot be avoided, Metropolitan shall consult with USFWS and/or CDFW in accordance with the federal and state Endangered Species Acts. If confirmed present within the direct impact area(s) through the implementation of mitigation measure BIO-MM-2, the locations of Nevin's barberry and other federally and/or state listed plant species shall first be avoided where feasible during final project design based on engineering and constructability considerations. Where avoidance is not feasible, Metropolitan shall consult with the USFWS and/or CDFW, as applicable, to obtain the appropriate approvals and permits authorizing impacts and "take" of the species. Metropolitan or the appropriate federal lead agency for the project shall consult with the USFWS for impacts on federally listed species in accordance with Section 7 or Section 10 of the federal Endangered Species Act and with the CDFW for impacts on state listed species in accordance with Section 2080.1 or Section 2081 of the California Endangered Species Act, as applicable. Impacts on federally and/or state listed plants shall be mitigated either through salvage and translocation onto suitable onsite and/or offsite receptor locations as approved in consultation with the USFWS and/or CDFW, or through offsite preservation of habitat demonstrated to support the species, unless otherwise determined in consultation with the USFWS and/or CDFW. If salvage and translocation are required, a qualified biologist shall prepare a Mitigation Plan that identifies, at a minimum, the goals of the mitigation, responsible parties, timing of mitigation, methods of mitigation	

Topic	Environmental Commitment(s)	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
				implementation, maintenance and monitoring requirements, final success criteria, and contingency measures. Mitigation would include, at a minimum, 1:1 replacement of impacted individuals to ensure no net loss. The Mitigation Plan would be submitted to and approved by the USFWS and/or CDFW, as applicable, prior to the initiation of construction for those facilities and components of the project with impacts on the species. Metropolitan shall comply with any additional measures (e.g., avoidance, conservation) incorporated into any permits or authorizations issued by the regulatory agencies with jurisdiction over these resources beyond what is being proposed under this CEQA analysis to reduce the impact to less than significant. **BIO-MM-4: Parish's Gooseberry and Sonoran Maiden Fern Avoidance and Compensatory Mitigation.** If Parish's Gooseberry, Sonoran Maiden Fern, or other non-listed California Rare Plant Rank 1 and 2 species are identified within the direct impact area(s) and cannot be avoided, Metropolitan shall mitigate impacts. If confirmed present within the direct impact area(s) through the implementation of mitigation measure BIO-MM-2, the locations of Parish's gooseberry, Sonoran maiden fern, and other non-listed California Rare Plant Rank 1 and 2 plant species shall first be avoided where feasible during final project design based on engineering and constructability considerations. Where avoidance is not feasible, Metropolitan shall mitigate the impacts either through salvage and translocation within suitable onsite and/or offsite receptor locations, onsite revegetation (i.e., planting and seeding with locally sourced plant material), or offsite preservation of habitat demonstrated to support the species. If salvage and translocation and/or onsite revegetation is required, a qualified biologist shall prepare a Mitigation Plan for the applicable pipeline reach that identifies, at a minimum, the goals of the mitigation, responsible parties, timing of mitigation, methods of mitigation implementation, maintenance and monitoring requirements, final success criteria, and contingency measures. The minimum mitigation ratio would include 1:1 replacement of impacted individuals to ensure no net loss. The Mitigation Plan shall be submitted to and approved by Metropolitan prior to the initiation of construction for those facilities and components of the project with impacts on the species. **BIO-MM-5: Updated Coastal California Gnatcatcher Surveys.** A qualified biologist shall conduct updated protocol-level surveys for coastal California gnatcatcher no more than two years prior to construction activities where suitable habitat occurs within or adjacent to direct impact area(s). A qualified biologist (possessing a valid Endangered Species Act Section 10(a)(1)(A) Recovery Permit) shall conduct updated protocol-level surveys for coastal California gnatcatcher no more than two years prior to the commencement of construction activities to determine the presence/absence of coastal California gnatcatcher. The surveys shall be conducted in accordance with the current USFWS survey protocol within the direct impact area(s), in areas supporting contiguous suitable habitat that occurs within 500 feet of direct impact area(s) (i.e., within suitable habitat that is not separated from direct impact area[s] by existing developments), and where construction is scheduled to occur within two years. In order to inform the quantification of habitat determined to be occupied by nesting/breeding coastal California gnatcatchers, the surveys shall include mapping the location and estimated	

Topic	Environmental Commitment(s)	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
				extent of any coastal California gnatcatcher nests and associated breeding territories found to overlap the direct impact area(s) and contiguous suitable habitat that occurs within 500 feet of direct impact area(s). The results of the survey shall be summarized in a survey report and submitted to the USFWS within 45 days of completion of the surveys pursuant to survey protocol. If coastal California gnatcatchers are found to occur in the direct impact area(s) or within contiguous suitable habitat that occurs within 500 feet of the direct impact area(s), Metropolitan shall implement the avoidance and minimization measures described in mitigation measure BIO-MM-6 to prevent potential indirect and adverse impacts to nesting/breeding individuals. **BIO-MM-6: Coastal California Gnatcatcher Avoidance and Agency Consultation.** If coastal California gnatcatcher occurs in or within 500 feet of direct impact area(s), Metropolitan shall implement measures to avoid or minimize impacts and, if necessary, consult with the USFWS. If, during the updated protocol-level surveys conducted in accordance with BIO-MM-5, coastal California gnatcatcher is found to be nesting/breeding within direct impact area(s), then the following measures shall be implemented: a. Prior to initiation of direct impacts to habitat occupied by nesting/breeding coastal California gnatcatcher, Metropolitan or the project's federal lead agency shall consult with the USFWS in accordance with Section 7 or Section 10 of the federal Endangered Species Act to obtain take coverage for unavoidable impacts. All Terms and Conditions and Conservation Measures prescribed by the USFWS as part of the consultation process shall be adhered to, which shall include at a minimum and, unless otherwise directed by the USFWS, the following avoidance and minimization measures: i. Removal (i.e., vegetation clearing, crushing, trimming) of coastal California gnatcatcher habitat shall be avoided during the coastal California gnatcatcher breeding season (February 15 through August 31) to the extent feasible; ii. If removal of coastal California gnatcatcher habitat must occur during the coastal California gnatcatcher breeding season, Metropolitan shall retain a qualified biologist (possessing a valid Endangered Species Act Section 10(a)(1)(A) Recovery Permit) to conduct pre-construction surveys for the coastal California gnatcatcher to determine whether nesting/breeding coastal California gnatcatchers are currently present within the direct impact area(s). Pre-construction surveys shall include a minimum of three surveys, conducted on separate days, beginning no earlier than seven days prior to commencement of construction activities, with the last survey being conducted within 24 hours prior to initiation of work. If coastal California gnatcatchers are not detected during the pre-construction surveys, construction activities shall be allowed to proceed	

Topic	Environmental Commitment(s)	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
				with no additional measures required, so long as the activities are ongoing and do not stop for more than seven days during the coastal California gnatcatcher breeding season. If construction activities stop for more than seven days during the coastal California gnatcatcher breeding season, Metropolitan shall repeat the pre-construction surveys to confirm the continued absence of nesting/breeding coastal California gnatcatchers; iii. If nesting/breeding coastal California gnatcatchers are found to be present during the pre-construction surveys, the qualified biologist shall record the number of individuals, map the location of coastal California gnatcatcher nests observed, estimate the extent of occupied habitat being used as part of breeding territories, and report these numbers and locations to the USFWS. In consultation with the USFWS, the qualified biologist shall establish an avoidance buffer around the nests. The qualified biologist shall monitor the status of the nests, confirm the extent of occupied habitat being used as part of breeding territories, and adjust the avoidance buffer if necessary. No construction activities shall occur within the avoidance buffer until the qualified biologist has determined that nesting activities have ceased (i.e., nestlings have fledged, or the nest is no longer active), or until after August 31; and iv. Metropolitan shall compensate direct impacts to habitat that is found to be occupied by nesting/breeding coastal California gnatcatchers during pre-construction surveys (as described in mitigation measure BIO-MM-5 and potentially updated during monitoring) through implementation of mitigation measure BIO-MM-7 below. If, during the updated protocol-level surveys conducted in accordance with BIO-MM-5, coastal California gnatcatcher is found to be nesting/breeding outside of direct impact area(s) but within contiguous habitat that occurs within 500 feet of direct impact areas(s) (i.e., within suitable habitat that is not separated from direct impact area(s) by existing developments), then the following measures shall be implemented: a. Prior to initiation of construction activities with the potential to generate noise in excess of 60 A-weighted decibels (dBA) as measured from the location of any coastal California gnatcatcher nests, Metropolitan shall implement the following avoidance and minimization measures to prevent potential indirect and adverse impacts to nesting/breeding individuals:	

Topic	Environmental Commitment(s)	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
				i. Construction activities with the potential to generate noise in excess of 60 dBA as measured from the location of any coastal California gnatcatcher nests shall not be initiated during the coastal California gnatcatcher breeding season (February 15 through August 31) to the extent feasible; ii. If construction activities with the potential to generate noise in excess of 60 dBA as measured from the location of any coastal California gnatcatcher nests must be initiated during the coastal California gnatcatcher breeding season, Metropolitan shall retain a qualified biologist (possessing a valid Endangered Species Act Section 10(a)(1)(A) Recovery Permit) to conduct pre-construction surveys to determine whether nesting/breeding coastal California gnatcatchers are currently present within contiguous habitat that occurs within 500 feet of the direct work area(s). Pre-construction surveys shall include a minimum of three surveys, conducted on separate days, beginning no earlier than seven days prior to commencement of construction activities, with the last survey being conducted within 24 hours prior to initiation of work. If coastal California gnatcatchers are not detected during the pre-construction surveys, construction activities shall be allowed to proceed with no additional measures required, so long as the activities are ongoing and do not stop for more than seven days during the coastal California gnatcatcher breeding season. If construction activities stop for more than seven days during the coastal California gnatcatcher breeding season, Metropolitan shall repeat the pre-construction surveys to confirm the continued absence of nesting/breeding coastal California gnatcatchers; iii. If nesting/breeding coastal California gnatcatchers are found to be present during the pre-construction surveys, Metropolitan shall conduct noise monitoring to ensure that construction noise does not exceed 60 dBA as measured from the location of active nests. If necessary, noise attenuation measures (i.e., noise walls, sound blankets, etc.) shall be implemented, and/or construction activities shall be adjusted to ensure that no indirect and adverse impacts to nesting/breeding coastal California gnatcatchers occur. As determined by the qualified biologist, if at any time noise cannot be attenuated or construction activities cannot be adjusted to maintain 60 dBA or less as measured from the location of active nests, the construction activities shall be temporarily halted at the nest locations and an avoidance buffer shall be established by the qualified biologist around the nests until the qualified biologist has determined that nesting activities have ceased (i.e., nestlings have fledged, or the nest is no longer active), or until after August 31; and	

Topic	Environmental Commitment(s)	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
				iv. Indirect and adverse impacts to nesting/breeding coastal California gnatcatchers with the potential to result in take of individuals are not authorized and would require consultation with the USFWS in accordance with BIO-MM-6a above, as applicable. Metropolitan shall comply with any additional measures (e.g., avoidance, conservation) incorporated into any permits or authorizations issued by the regulatory agencies with jurisdiction over these resources beyond what is being proposed under this CEQA analysis to reduce the impact to less than significant. **BIO-MM-7: Compensatory Mitigation for Coastal California Gnatcatcher Habitat.** Direct impacts to occupied coastal California gnatcatcher habitat shall be mitigated in consultation with USFWS in accordance with the federal Endangered Species Act. Direct impacts to occupied coastal California gnatcatcher habitat shall be mitigated at a minimum 1:1 ratio for temporary impacts and a minimum 2:1 ratio for permanent impacts. Mitigation may occur through one or more of the following: onsite and/or offsite habitat creation, restoration, and/or enhancement; acquisition and preservation of onsite and/or offsite lands demonstrated to be occupied by the species; and/or purchase of mitigation credits at an approved mitigation bank. Metropolitan shall comply with any additional measures (e.g., avoidance, conservation) incorporated into any permits or authorizations issued by the regulatory agencies with jurisdiction over these resources beyond what is being proposed under this CEQA analysis to reduce the impact to less than significant. **BIO-MM-8: Updated Least Bell's Vireo Surveys.** A qualified biologist shall conduct updated protocol-level surveys for least Bell's vireo no more than two years prior to construction activities where suitable habitat occurs adjacent to direct impact area(s). A qualified biologist shall conduct updated protocol-level surveys for least Bell's vireo no more than two years prior to the commencement of construction activities to determine the presence/absence of least Bell's vireo where suitable habitat occurs adjacent to the direct impact area(s). The surveys shall be conducted in accordance with the current USFWS survey protocol in areas supporting contiguous suitable habitat that occurs within 500 feet of direct impact area(s) (i.e., within suitable habitat that is not separated from direct impact area[s] by existing developments) and where construction is scheduled to occur within two years. The results of the survey shall be summarized in a survey report and submitted to the USFWS within 45 days of completion of the surveys pursuant to survey protocol. If least Bell's vireos are found within contiguous suitable habitat that occurs within 500 feet of direct impact area(s), Metropolitan shall implement the avoidance and minimization measures described in mitigation measure BIO-MM-9 to prevent potential indirect and adverse impacts to nesting/breeding individuals.	

Topic	Environmental Commitment(s)	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
				BIO-MM-9: Least Bell's Vireo Avoidance. If least Bell's vireo occurs within 500 feet of direct impact area(s), Metropolitan shall implement measures to avoid or minimize impacts. If, during the updated protocol-level surveys, least Bell's vireo is found to be nesting/breeding within contiguous habitat that occurs within 500 feet of direct impact area(s) (i.e., within suitable habitat that is not separated from direct impact area[s] by existing developments), then the following measures shall be implemented: a. Prior to initiation of construction activities with the potential to generate noise in excess of 60 dBA as measured from the location of any least Bell's vireo nests, Metropolitan shall implement the following avoidance and minimization measures to prevent potential indirect and adverse impacts to nesting/breeding individuals: i. Construction activities with the potential to generate noise in excess of 60 dBA as measured from the location of any least Bell's vireo nests shall not be initiated during the least Bell's vireo breeding season (March 15 through September 15) to the extent feasible; ii. If construction activities with the potential to generate noise in excess of 60 dBA as measured from the location of any least Bell's vireo nests must be initiated during the least Bell's vireo breeding season, a qualified biologist shall conduct pre-construction surveys for least Bell's vireo to determine whether nesting/breeding least Bell's vireo are currently present within contiguous habitat that occurs within 500 feet of the direct work areas. Pre-construction surveys shall include a minimum of three surveys, conducted on separate days, beginning no earlier than seven days prior to commencement of construction activities with the last survey being conducted the day immediately prior to initiation of work. If least Bell's vireos are not detected during the pre-construction surveys, construction activities shall be allowed to proceed with no additional measures required, so long as the activities are ongoing and do not stop for more than seven days during the least Bell's vireo breeding season. If construction activities stop for more than seven days during the least Bell's vireo breeding season, Metropolitan shall repeat the pre-construction surveys to confirm the continued absence of nesting/breeding least Bell's vireos;	

Topic	Environmental Commitment(s)	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
				iii. If nesting/breeding least Bell's vireos are found to be present during the pre-construction surveys, Metropolitan shall conduct noise monitoring to ensure that construction noise does not exceed 60 dBA as measured from the location of active nests. If necessary, noise attenuation measures (i.e., noise walls, sound blankets, etc.) shall be implemented and/or construction activities shall be adjusted to ensure that no indirect and adverse impacts to nesting/breeding least Bell's vireos occur. As determined by the qualified biologist, if at any time noise cannot be attenuated or construction activities cannot be adjusted to maintain 60 dBA or less as measured from the location of active nests, the construction activities shall be temporarily halted at the nest locations and an avoidance buffer shall be established by the qualified biologist around the nests until the qualified biologist has determined that nesting activities have ceased (i.e., nestlings have fledged, or the nest is no longer active), or until after September 15; and iv. Indirect and adverse impacts to nesting/breeding least Bell's vireos with the potential to result in take of individuals are not authorized and would require consultation with the USFWS in accordance with Section 7 or Section 10 of the federal Endangered Species Act to obtain take coverage for unavoidable impacts. Metropolitan shall comply with any additional measures (e.g., avoidance, conservation) incorporated into any permits or authorizations issued by the regulatory agencies with jurisdiction over the resources beyond what is being proposed under this CEQA analysis to reduce the impact to less than significant. **BIO-MM-10: Updated Southwestern Willow Flycatcher Surveys.** A qualified biologist shall conduct updated protocol-level surveys for southwestern willow flycatcher no more than two years prior to construction activities where suitable habitat occurs adjacent to direct impact area(s). A qualified biologist (possessing a valid Endangered Species Act Section 10(a)(1)(A) Recovery Permit) shall conduct updated protocol-level surveys for southwestern willow flycatcher no more than two years prior to the commencement of construction activities to determine the presence/absence of southwestern willow flycatcher where suitable habitat occurs adjacent to direct impact area(s). The surveys shall be conducted in accordance with the current USFWS survey protocol in areas supporting contiguous suitable habitat that occurs within 500 feet of direct impact area(s) (i.e., within suitable habitat that is not separated from direct impact area[s] by existing developments) and where construction is scheduled to occur within two years. The results of the survey shall be summarized in a survey report and submitted to the USFWS within 45 days of completion of the surveys pursuant to survey protocol. If southwestern willow flycatchers are found within contiguous suitable habitat that occurs within 500 feet of direct impact area(s), Metropolitan shall implement the avoidance and minimization measures described in mitigation measure BIO-MM-11 to prevent potential indirect and adverse impacts to nesting/breeding individuals.	

Topic	Environmental Commitment(s)	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
				BIO-MM-11: Southwestern Willow Flycatcher Avoidance. If southwestern willow flycatcher occurs within 500 feet of direct impact area(s), Metropolitan shall implement measures to avoid or minimize impacts. If, during the updated protocol-level surveys, southwestern willow flycatcher is found to be nesting/breeding within contiguous habitat that occurs within 500 feet of direct impact area(s) (i.e., within suitable habitat that is not separated from direct impact area[s] by existing developments), then the following measures shall be implemented: a. Prior to the initiation of construction activities with the potential to generate noise in excess of 60 dBA as measured from the location of any southwestern willow flycatcher nests, Metropolitan shall implement the following avoidance and minimization measures to prevent potential indirect and adverse impacts to nesting/breeding individuals: i. Construction activities with the potential to generate noise in excess of 60 dBA as measured from the location of any southwestern willow flycatcher nests shall not be initiated during the southwestern willow flycatcher breeding season (May 1 to September 1) to the extent feasible; ii. If construction activities with the potential to generate noise in excess of 60 dBA as measured from the location of any southwestern willow flycatcher nests must be initiated during the southwestern willow flycatcher breeding season, a qualified biologist shall conduct pre-construction surveys for southwestern willow flycatcher to determine whether nesting/breeding southwestern willow flycatchers are currently present within contiguous habitat that occurs within 500 feet of the direct work areas. Pre-construction surveys shall include a minimum of three surveys, conducted on separate days, beginning no earlier than seven days prior to commencement of construction activities with the last survey being conducted within 24 hours prior to initiation of work. If southwestern willow flycatchers are not detected during the pre-construction surveys, construction activities shall be allowed to proceed with no additional measures required, so long as the activities are ongoing and do not stop for more than seven days during the southwestern willow flycatcher breeding season. If construction activities stop for more than seven days during the southwestern willow flycatcher breeding season, Metropolitan shall repeat the pre-construction surveys to confirm the continued absence of nesting/breeding southwestern willow flycatchers;	

Topic	Environmental Commitment(s)	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
				iii. If nesting/breeding southwestern willow flycatchers are found to be present during the pre-construction surveys, Metropolitan shall conduct noise monitoring to ensure that construction noise does not exceed 60 dBA as measured from the location of active nests. If necessary, noise attenuation measures (i.e., noise walls, sound blankets, etc.) shall be implemented and/or construction activities shall be adjusted to ensure that no indirect and adverse impacts to nesting/breeding southwestern willow flycatchers occur. As determined by the qualified biologist, if at any time noise cannot be attenuated or construction activities cannot be adjusted to maintain 60 dBA or less as measured from the location of active nests, the construction activities shall be temporarily halted at the nest locations and an avoidance buffer shall be established by the qualified biologist around the nests until the qualified biologist has determined that nesting activities have ceased (i.e., nestlings have fledged, or the nest is no longer active), or until after September 1; and iv. Indirect and adverse impacts to nesting/breeding southwestern willow flycatchers with the potential to result in take of individuals are not authorized and would require consultation with the USFWS in accordance with Section 7 or Section 10 of the federal Endangered Species Act to obtain take coverage for unavoidable impacts. Metropolitan shall comply with any additional measures (e.g., avoidance, conservation) incorporated into any permits or authorizations issued by the regulatory agencies with jurisdiction over these resources beyond what is being proposed under this CEQA analysis to reduce the impact to less than significant. **BIO-MM-12: Updated Burrowing Owl Surveys.** A qualified biologist shall conduct updated protocol-level surveys for burrowing owl the year prior to construction activities where suitable habitat occurs within or adjacent to the direct impact area(s). A qualified biologist shall conduct protocol-level surveys for burrowing owl the year prior to the commencement of construction activities to determine the presence/absence of burrowing owl within or adjacent to direct impact area(s). The surveys shall be conducted in accordance with current guidelines detailed in the CDFW's 2012 Staff Report on Burrowing Owl Mitigation, or subsequently adopted guidelines, for suitable burrowing owl habitat that occurs within the direct impact area(s) and areas within 500 feet that are contiguous with the direct impact area(s) (i.e., the areas are not separated from the direct impact area[s] by developed lands or other habitat that is not suitable for burrowing owl) where construction is scheduled to occur within one year and where an adverse direct or indirect impact could occur to the species as a result construction activities, as determined by the qualified biologist. The results of the survey shall be summarized in a survey report and submitted to Metropolitan prior to the initiation of construction.	

Topic	Environmental Commitment(s)	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
				BIO-MM-13: Burrowing Owl Avoidance and Agency Consultation: If active burrowing owl burrows are found to occur in or within 500 feet of direct impact area(s), Metropolitan shall consult with CDFW and implement measures to avoid or minimize impacts. If, during updated protocol-level surveys, burrowing owl and/or occupied burrowing owl burrows are found to occur within 500 feet of direct impact area(s) (i.e., within suitable habitat not separated from direct impact area[s] by existing developments), then the following measures shall be implemented unless otherwise superseded by updated burrowing owl guidelines adopted by CDFW or measures contained in an incidental take permit (ITP) issued by CDFW: a. Prior to construction, Metropolitan shall retain a qualified biologist to conduct pre-construction surveys for burrowing owl in suitable burrowing owl habitat that occurs within the direct impact area(s) and areas within 500 feet that are contiguous with the direct impact areas (i.e., the areas are not separated from the direct impact area[s] by developed lands or other habitat that is not suitable for burrowing owl) where an adverse direct or indirect impact could occur to the species as a result of construction activities, as determined by the qualified biologist. The pre-construction surveys shall include at least two surveys conducted at least seven days apart, with the first survey occurring no more than 14 days prior to initiating construction activities that might result in a direct or indirect impact to burrowing owl and the second survey occurring no more than 48 hours prior to initiating construction activities that might result in a direct or indirect impact to burrowing owl. The surveys shall be conducted using the methods described in the 2012 CDFW Staff Report on Burrowing Owl Mitigation or subsequently adopted guidelines. If no burrowing owls or occupied burrows are detected during the pre-construction surveys, construction activities shall be allowed to proceed with no additional measures required. If burrowing owls and/or occupied burrowing owl burrows are detected during the pre-construction surveys, then the following additional measures shall be implemented. b. If burrowing owls and/or occupied burrowing owl burrows are detected during the pre-construction surveys, the results of the survey, including a Burrow Complex Map, shall be summarized in a survey report and submitted to Metropolitan and CDFW prior to initiating construction activities within 500 feet of burrowing owl locations and/or occupied burrowing owl burrows. The Burrow Complex Map shall show the locations of all burrowing owl sightings, burrowing owl burrow complex(es), and atypical burrows (i.e., culverts, buckled concrete, etc.), and shall label if the sightings were identified as potential burrows, occupied burrows, satellite burrows, areas of concentrated burrows, and/or burrowing owl sign. If a lapse in construction activities occurs for 14 days or longer within 500 feet of burrowing owl sightings or occupied burrows, Metropolitan shall contact the CDFW to determine if updated pre-construction surveys and an updated Burrow Complex Map are required prior to reinitiating construction activities with potential to disturb burrowing owls;	

Topic	Environmental Commitment(s)	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
				c. Construction activities with the potential to result in direct or indirect adverse impacts on burrowing owls shall be avoided within approximately 500 feet of burrowing owls and/or occupied burrowing owl burrows during any time of the year to the extent feasible; d. If construction activities with the potential to result in direct or indirect adverse impacts on burrowing owl cannot be avoided within 500 feet of burrowing owls and/or occupied burrows while burrowing owls are present at any time of the year, the following avoidance measures shall be implemented: i. During the burrowing owl breeding season (February 1 to August 31), an avoidance buffer of approximately 500 feet shall be established around all active burrowing owl nesting, roosting, and satellite burrows or the entire burrow complex. The avoidance buffer shall be delineated using stakes, flags, and/or rope or cord. The method of marking the buffer shall be adjusted if corvids, raptors, or other predators are observed perching on marking materials. The avoidance buffer shall be delineated with different materials than those used to delineate the limits of work. All materials used for delineation of the buffer shall be removed and properly disposed of following completion of construction activities, or when burrowing owls are no longer present and/or using the burrow(s). The distance of the avoidance buffer may be reduced where natural (hills, trees) or artificial (buildings, walls) barriers separate the location of construction activities from the active burrowing owl burrows. The final distance of the avoidance buffer shall be at the discretion of a qualified biologist. ii. During the burrowing owl non-breeding season (September 1 to January 31), an avoidance buffer of approximately 165 feet shall be established around all active burrowing owl wintering or roosting burrows or the entire burrow complex. The buffer shall be delineated using stakes, flags, and/or rope or cord. The method of marking the avoidance buffer shall be adjusted if corvids, raptors, or other predators are observed perching on marking materials. The avoidance buffer shall be delineated with different materials than those used to delineate the limits of work. All materials used for delineation of the buffer shall be removed and properly disposed of following completion of construction activities, or when burrowing owls are no longer present and/or using the burrow(s). The distance of the avoidance buffer may be reduced where natural (hills, trees) or artificial (buildings, walls) barriers separate the location of construction activities from the active burrowing owl burrows. The final distance of the avoidance buffer shall be at the discretion of a qualified biologist.	

Topic	Environmental Commitment(s)	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
				e. If occupied and/or potentially suitable burrowing owl burrows occur within the direct impact area(s) and cannot be avoided by construction activities, the following measures shall be implemented: i. Construction activities shall avoid direct physical impacts to active burrowing owl nesting, roosting, and satellite burrows or the entire burrow complex during the burrowing owl breeding season (February 1 to August 31), or until a qualified biologist determined that nesting activities have ceased (i.e., nestlings have fully fledged, are feeding independently, and are no longer dependent on the nesting burrow). ii. Burrowing owl exclusion and excavation of potentially suitable burrowing owl burrows present within the direct impact area(s) may be conducted with approval of the CDFW once the burrow or burrow complex has been determined to be inactive, during the burrowing owl non-breeding season (September 1 to January 31), or if conducted during the burrowing owl breeding season (February 1 to August 31), only after the nestlings have fully fledged, are feeding independently, and are no longer dependent on the nesting burrow. Methods of burrow exclusion and excavation shall be determined in consultation with CDFW and may include such methods as: burrow monitoring to confirm status; burrow inspection through the use of camera scoping, trail camera, or alternative methods approved by CDFW; installation of one-way doors at the entrance of burrows to allow burrowing owl and other wildlife to vacate the burrows unharmed; or collapsing of vacated burrows. If direct or indirect adverse impacts cannot be avoided during the review period for burrowing owl as a candidate state endangered species or if burrowing owl is listed as a state endangered species, then Metropolitan shall implement the additional measures below in compliance with the California Endangered Species Act. If the candidate state endangered listing is removed for the burrowing owl and the species does not become listed as a state endangered species, then the additional measures below for the California Endangered Species Act compliance would no longer be required. f. Prior to the initiation of construction activities that could result in direct or indirect adverse impacts on burrowing owl, Metropolitan shall consult with CDFW in accordance with the California Endangered Species Act. If take of burrowing owl is expected, no construction activities with the potential to result in direct or indirect adverse impacts on burrowing owl shall occur until CDFW has authorized such take through an incidental take permit (ITP), as applicable. Metropolitan shall implement any required avoidance, minimization, and mitigation measures prescribed in the ITP, as applicable, beyond what is being proposed under this CEQA analysis to reduce the impact to less than significant.	

Topic	Environmental Commitment(s)	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
				g. Prior to the initiation of construction activities that could result in direct physical impacts to active burrowing owl burrows and nest sites (i.e., destruction of burrows determined to be occupied by wintering, roosting, or nesting burrowing owl), a qualified biologist approved by CDFW shall be retained to help facilitate avoidance and minimization actions during project construction to ensure that burrowing owls are not harmed. The qualified biologist, in coordination with CDFW, shall assist with the implementation of measures to prevent direct take of burrowing owl individuals during construction. The CDFW-approved measures for ensuring the burrows do not support an active nest and individual owls are not entrapped within burrows that occur within the approved construction work areas shall include, at a minimum: burrowing monitoring to confirm nesting status; burrow inspection through the use of camera scoping, trail camera, or alternative methods approved by CDFW; installation of one-way doors at the entrance of burrows to allow burrowing owl and other wildlife to vacate the burrows unharmed; collapsing of vacated burrows; inspection, removal, and/or concealment of pipes, debris/rock piles, and other areas that could attract burrowing owl onto the approved construction work areas; monitoring construction activities; and weekly reporting to CDFW. **BIO-MM-14: Compensatory Mitigation for Burrowing Owls.** Direct impacts to burrowing owl nest sites shall be mitigated in consultation with CDFW in accordance with the California Endangered Species Act. Permanent direct impacts to active burrowing owl nest sites shall be offset through compensatory mitigation which may include, but is not limited to, onsite and/or offsite preservation of burrowing owl habitat demonstrated to support, at a minimum, the number of active burrowing owl nest sites impacted by construction. Lands to be conserved as mitigation for direct impacts shall include: (1) sufficient acreage to support the number of burrowing owl individuals impacted, including adequate territory size and foraging habitat, with fossorial mammals (e.g., California ground squirrel) present; (2) permanent protection through a conservation easement or similar protective instrument for the purpose of conserving burrowing owl habitat and prohibiting activities incompatible with burrowing owl use; (3) preparation and implementation of a Mitigation Land Management Plan to address long-term ecological sustainability and maintenance of the site for burrowing owls; and (4) funding for the long-term maintenance and management of the mitigation land through the establishment of a long-term funding mechanism, such as an endowment. Metropolitan shall comply with any additional measures (e.g., avoidance, conservation) incorporated into any permits or authorizations issued by the regulatory agencies with jurisdiction over these resources beyond what is being proposed under this CEQA analysis to reduce the impact to less than significant. **BIO-MM-15: Updated Bat Habitat Assessment and Bat Surveys.** A qualified biologist shall conduct an updated bat habitat assessment and focused bat surveys no more than two years prior to construction activities where suitable habitat occurs within or adjacent to direct impact area(s).	

Topic	Environmental Commitment(s)	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
				A qualified biologist with experience conducting bat surveys and acoustic monitoring shall conduct an updated habitat assessment and focused bat surveys no more than two years prior to commencement of construction activities to determine whether special-status bat species are currently present within and adjacent to direct impact area(s) and where construction is scheduled to occur within two years. The biologist shall conduct an updated habitat assessment to identify where potential daytime, nighttime, wintering, and hibernation roost sites occur in and within 100 feet of direct impact area(s). Potential roost sites shall be surveyed with the use of acoustic monitoring to identify roosting bats and any maternity roosts. The results of the survey shall be summarized in a survey report and submitted to Metropolitan prior to the initiation of construction. **BIO-MM-16: Bat Roost Avoidance or Exclusion.** If suitable bat roosting habitat is identified in or within 100 feet of direct impact area(s), Metropolitan shall implement the following measures to avoid or minimize impacts to roosting bats. If, during the updated bat habitat assessment, suitable bat roosting habitat is identified in or within 100 feet of direct impact area(s), a qualified biologist shall conduct pre-construction surveys for roosting bats in and within 100 feet of the direct impact area(s) no more than three days (72 hours) prior to trimming or removal of mature trees or initiation of ground-disturbing construction activities. The survey shall include both a daytime and nighttime component, including an evening emergence survey, and shall be conducted with the use of acoustic recognition technology to maximize the detection of bats. If bats are not detected during the pre-construction survey, construction activities shall be allowed to proceed, and no additional measures would be necessary. If bats are detected during the pre-construction surveys, the following measures shall be implemented. a. If bats are detected and determined to be roosting in or within 100 feet of the direct impact area(s) during the bat maternity season (April 15 through August 15), the following avoidance measure shall be implemented: i. A qualified biologist shall flag the active roost site and construction activities within 100 feet of the roost site shall be temporarily halted until after the maternity season (August 16), or until the qualified biologist has determined any young present are self-sufficiently volant (able to fly). b. If bats are detected and determined to be roosting in or within 100 feet of the direct impact area(s) outside of the bat maternity season (August 16 through April 14), the following avoidance measure shall be implemented: **i.** A qualified biologist shall flag the active roost site and construction activities within 50 feet of the roost site shall be temporarily halted until bats are no longer determined to be roosting, as determined by the qualified biologist.	

Topic	Environmental Commitment(s)	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
				c. If an adequate avoidance buffer cannot be provided between an active roost site and required construction activities, then exclusion of roost sites, where feasible, may be conducted with approval of the CDFW. Methods of roost exclusion shall be determined in consultation with CDFW and may include such methods as covering the roost entrance/exit with a bat valve (a flap that allows bat to exit but not reenter) using materials such as mesh, plastic sheeting, or tubes, as prescribed by CDFW. **BIO-MM-17: Updated Crotch's Bumble Bee Surveys.** If Crotch's bumble bee remains a candidate species or its status becomes elevated to a listed species under the California Endangered Species Act, a qualified biologist shall conduct updated protocol-level surveys for Crotch's bumble bee no more than two years prior to construction activities where suitable habitat occurs in direct impact area(s). If the candidate state endangered listing is removed for Crotch's bumble bee and the species does not become listed as a state threatened or endangered species, then this measure and the additional measures below for CESA compliance (BIO-MM-18 and BIO-MM-19) would no longer be required. If Crotch's bumble bee remains a candidate species or its status becomes elevated to a listed species under the California Endangered Species Act, a qualified biologist shall conduct protocol-level surveys for Crotch's bumble bee no more than two years prior to the commencement of construction activities in areas supporting suitable habitat to determine the presence/absence of Crotch's bumble bee in direct impact area(s) where construction may occur within two years. The surveys shall be conducted in accordance with current CDFW guidelines as detailed in the CDFW's Survey Considerations for California Endangered Species Act Candidate Bumble Bee Species, dated June 6, 2023 (currently the USFWS's protocol for the rusty patched bumble bee dated, April 12, 2019), or subsequently adopted guidelines. The results of the survey shall be summarized in a survey report and submitted to Metropolitan prior to initiation of construction activities. If Crotch's bumble bee is found to occur and has potential to be directly or indirectly adversely affected by construction, Metropolitan shall implement the avoidance and minimization measures described in mitigation measure BIO-MM-18. **BIO-MM-18: Crotch's Bumble Bee Avoidance and Agency Consultation.** If Crotch's bumble bee remains a candidate species or its status becomes elevated to a listed species under the California Endangered Species Act, and the species is found to occur within the direct impact area(s), Metropolitan shall consult with the CDFW and implement measures to avoid or minimize impacts.	

Topic	Environmental Commitment(s)	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
				If Crotch's bumble bee remains a state candidate species for listing or is listed as threatened or endangered under the California Endangered Species Act and is found to occur within the direct impact area(s) during the updated protocol-level surveys, then the following measures shall be implemented: a. Prior to initiation of direct impacts to Crotch's bumble bee suitable habitat, Metropolitan shall consult with the CDFW regarding potential effects to the species and, if required by CDFW, obtain take authorization through the issuance of an ITP under Section 2081(b) of the California Fish and Game Code for unavoidable impacts. Metropolitan shall comply with any additional measures (e.g., avoidance, conservation) incorporated into any permits or authorizations issued by the regulatory agencies with jurisdiction over this resource beyond what is being proposed under this CEQA analysis to reduce the impact to less than significant. Unless otherwise directed by the CDFW, the following measures shall be implemented: i. Removal (i.e., vegetation clearing, crushing, trimming) of Crotch's bumble bee suitable habitat shall be avoided during the species' flight season (February 1 through October 31) to the extent feasible; ii. If construction activities must occur during the flight season, a qualified biologist shall conduct a pre-construction survey for Crotch's bumble bee queens, gynes, and colonies. The survey shall be conducted no more than 14 days prior to construction during suitable weather conditions in accordance with CDFW's requirements. If the pre-construction survey is negative, no further assessment shall be required, and construction activities shall be allowed to proceed; iii. If an active Crotch's bumble bee nest site is detected, an appropriate avoidance buffer shall be established by the qualified biologist. Construction activities shall avoid any active nest sites until a qualified biologist has verified that the nesting colony is no longer active; and iv. If Crotch's bumble bee is detected but no active nest sites are found, a qualified biological monitor shall be present during vegetation removal activities that are scheduled to occur during the queen flight period (February through March), colony active period (March through September), and/or gyne flight period (September through October). If Crotch's bumble bee is observed within the direct impact area during construction activities, the biological monitor shall immediately stop work activities within the area until the bumble bee freely moves away from the work area.	

Topic	Environmental Commitment(s)	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
				BIO-MM-19: Compensatory Mitigation for Crotch's Bumble Bee. Direct impacts to Crotch's bumble bee occupied habitat shall be mitigated in consultation with the CDFW in accordance with the California Endangered Species Act. Direct impacts to Crotch's bumble bee occupied habitat shall be mitigated at a minimum 1:1 ratio. Mitigation may occur through one or more of the following: onsite and/or offsite habitat creation, restoration, and/or enhancement; acquisition and preservation of onsite and/or offsite lands demonstrated to be occupied by the species; and/or purchase of mitigation credits at an approved mitigation bank. Metropolitan shall comply with any additional measures (e.g., avoidance, conservation) incorporated into any permits or authorizations issued by the regulatory agencies with jurisdiction over this resource beyond what is being proposed under this CEQA analysis to reduce the impact to less than significant. **BIO-MM-20: Biological Monitoring Program.** A biological monitoring program shall be implemented to ensure compliance with Pure Water's mitigation measures and to avoid or minimize impacts to sensitive biological resources. A qualified biologist shall monitor vegetation removal and construction activities within or adjacent to sensitive biological resources including riparian habitat, sensitive natural communities, jurisdictional waters and wetlands, and areas where special-status plant and animal species have potential to occur. The biologist shall conduct full-time monitoring during vegetation removal activities and periodic monitoring during all other ground-disturbing activities that occur within or adjacent to sensitive biological resource areas. The biologist shall have the authority to temporarily halt vegetation removal and construction activities and make recommendations to help ensure impact minimization, compliance with the relevant provisions of all environmental permits and regulations, and that work does not take place outside of approved work areas. The qualified biologist shall document all monitoring activities and, at a minimum, send monthly compliance monitoring reports to Metropolitan. In the event that the biologist encounters a non-compliance action, the biologist shall notify Metropolitan's construction manager immediately, and corrective measures shall be implemented, which may require coordination with the USFWS, U.S. Army Corps of Engineers (USACE), CDFW, and/or Regional Water Quality Control Board (Regional Board), as applicable and in accordance with project approvals and permits. **BIO-MM-21: Restoration of Temporary Impact Areas.** Areas of native vegetation that are temporarily disturbed by construction shall be restored to pre-construction conditions. Direct impact area(s) supporting native vegetation that are temporarily impacted by construction shall be restored to pre-construction conditions, including revegetation with a native plant palette, following completion of construction.	

Topic	Environmental Commitment(s)	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
Sensitive Habitats	**GM-EC-1: Environmental Awareness Training.** **BIO-EC-1: Temporary Construction Fencing.** **BIO-EC-4: Invasive Plant Species.**	Pure Water would have the potential to result in a substantial adverse effect on riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.	Potentially Significant	**BIO-MM-1: Riparian Vegetation Monitoring Plan and Water Deliveries Mitigation.** **BIO-MM-20**: **Biological Monitoring Program.** **BIO-MM-21: Restoration of Temporary Impact Areas**. **BIO-MM-22: Compensatory Mitigation for Sensitive Natural Communities.** *Impacts to sensitive natural communities shall be mitigated at ratios and as described below.* Impacts to alluvial fan sage scrub shall be mitigated at a minimum 1:1 ratio for temporary impacts and a 2:1 ratio for permanent impacts. Mitigation could occur through one or more of the following: onsite and/or offsite habitat creation, restoration, and/or enhancement; acquisition and preservation of onsite and/or offsite land demonstrated to support the habitat; and/or purchase of mitigation credits at an approved mitigation bank. Metropolitan shall comply with any additional measures (e.g., avoidance, conservation) incorporated into any permits or authorizations issued by the regulatory agencies with jurisdiction over these resources beyond what is being proposed under this CEQA analysis to reduce the impact to less than significant.	Less than Significant
Wetlands and Jurisdictional Aquatic Resources	**BIO-EC-1: Temporary Construction Fencing.** **HYD-EC-1: Construction General Permit Storm Water Pollution Prevention Plan.** The contractor shall obtain coverage under the Construction General Permit (CGP) and comply with applicable requirements of the CGP, including, but not limited to, preparation and implementation of site-specific SWPPPs in accordance with the requirements of the State Water Resources Control Board, the CGP, and the Construction BMP [Best Management Practices] Online Handbook developed by California Storm Water Quality Association. The SWPPP shall identify Best Management Practices to eliminate/reduce non-storm water discharges to storm systems and other waters of the U.S., prevent construction pollutants from contacting storm water, limit erosion and sediment transport, and manage erosion and pollutants onsite.	Pure Water would have the potential for a substantial adverse effect on state or federally protected jurisdictional aquatic resources.	Potentially Significant	**BIO-MM-1: Riparian Vegetation Monitoring Plan and Water Deliveries Mitigation.** **BIO-MM-20**: **Biological Monitoring Program.** **BIO-MM-21: Restoration of Temporary Impact Areas**. **BIO-MM-23**: **Compensatory Mitigation for U.S. Army Corps of Engineers Jurisdictional Aquatic Resources.** *Impacts to USACE non-wetland waters of the U.S. shall be mitigated as described, subject to approval.* Impacts to USACE non-wetland waters of the U.S. shall be mitigated at a minimum 1:1 ratio, subject to approval by the USACE during the permitting process, through one or a combination of the following: onsite and/or offsite establishment, re-establishment, rehabilitation, and/or enhancement of waters of the U.S.; and/or offsite purchase of waters of the U.S. credits at an approved mitigation bank or other location deemed acceptable by the USACE. Impacts to non-wetland waters of the U.S. would require a Clean Water Act Section 404 Nationwide Permit prior to impacts. Metropolitan shall comply with any additional measures (e.g., avoidance, conservation) incorporated into any permits or authorizations issued by the regulatory agencies with jurisdiction over these resources beyond what is being proposed under this CEQA analysis to reduce the impact to less than significant. **BIO-MM-24**: **Compensatory Mitigation for Regional Water Quality Control Board Jurisdictional Aquatic Resources.** *Impacts to Regional Board non-wetland waters of the State shall be mitigated at a ratio and as described below, subject to approval.* Impacts to Regional Board non-wetland waters of the State shall be mitigated at a minimum 1:1 ratio, subject to approval by the Los Angeles Regional Water Quality	Less than Significant

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				Control Board (Los Angeles Regional Board) during the permitting process, through one or a combination of the following: onsite and/or offsite establishment, re-establishment, rehabilitation, and/or enhancement of waters of the State; and/or offsite purchase of waters of the State credits at an approved mitigation bank or other location deemed acceptable by the Los Angeles Regional Board. Impacts to waters of the State would require a Clean Water Act Section 401 Water Quality Certification, Waste Discharge Requirement permit, or waiver prior to impacts. Metropolitan shall comply with any additional measures (e.g., avoidance, conservation) incorporated into any permits or authorizations issued by the regulatory agencies with jurisdiction over these resources beyond what is being proposed under this CEQA analysis to reduce the impact to less than significant. **BIO-MM-25**: **Compensatory Mitigation for California Department of Fish and Wildlife Jurisdictional Aquatic Resources.** *Impacts to CDFW unvegetated streambed shall be mitigated at a ratio and as described below, subject to approval.* Impacts to CDFW unvegetated streambed shall be mitigated at a minimum 1:1 ratio, subject to approval by the CDFW during the permitting process, through one or a combination of the following: onsite and/or offsite establishment, re-establishment, rehabilitation, and/or enhancement of streambed; and/or offsite purchase of stream credits at an approved mitigation bank, or other location deemed acceptable by the CDFW. Impacts to CDFW streambed would require notification to the CDFW in accordance with California Fish and Game Code Section 1602 prior to impacts. Metropolitan shall comply with any additional measures (e.g., avoidance, conservation) incorporated into any permits or authorizations issued by the regulatory agencies with jurisdiction over these resources beyond what is being proposed under this CEQA analysis to reduce the impact to less than significant.	
Wildlife Movement	**BIO-EC-2: Nesting Bird and Raptor Avoidance.** **BIO-EC-3: Nighttime Lighting.**	Pure Water would not 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.	Less than Significant	No mitigation is required.	
Local Policies	**BIO-EC-5: Protected Tree Avoidance and Mitigation.** Metropolitan shall conduct a pre-construction survey prior to impacting any trees that may be protected by County of Los Angeles or city ordinances or policies. The survey shall be completed by a biologist, arborist, and/or landscape architect with knowledge of tree identification. For any specimen that is regulated by an applicable local ordinance or policy, the surveyor shall note the species, its diameter at breast height, its location within the direct impact area, and the municipal boundaries within which it is located. Metropolitan shall adhere to the applicable tree trimming and removal requirements and procedures, including any required permits and compensatory tree replacement, as outlined by the County or city.	Pure Water would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.	Less than Significant	No mitigation is required.	

Topic	Environmental Commitment(s)	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
Conservation Planning	No applicable environmental commitments.	Pure Water is not located within the boundaries of an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional, or state habitat conservation plan, and therefore would not conflict with the provisions of any regional or local HCPs or NCCP.	No Impact	No mitigation is required.	
5.3 Cultural Resources					
Historical Resources	**GM-EC-1: Environmental Awareness Training.**	Pure Water would have the potential to affect both currently identified historical resources and historical resources that have not yet been identified, which could cause a substantial adverse change in the significance of such resources.	Potentially Significant	**CUL-MM-1: Qualified Archaeologist and Architectural Historian.** Metropolitan shall retain a qualified archaeologist meeting professional standards as defined by the Secretary of the Interior to oversee all aspects of archaeological resource monitoring and treatment as the designated Project Archaeologist. Metropolitan shall also retain a qualified architectural historian meeting professional standards as defined by the Secretary of the Interior to oversee all aspects of built environment resource monitoring and treatment. **CUL-MM-2: Resource Eligibility Determination.** Resources that have not been formally evaluated for significance and that may be disturbed during construction shall be assessed for National Register of Historic Places (NRHP) and California Register of Historical Resources (CRHR) eligibility. Evaluation for NRHP and CRHR eligibility includes documentation on a State Department of Parks and Recreation form by a qualified archaeologist or architectural historian, as applicable. If found eligible, additional measures, such as Historic American Engineering Record documentation and a data recovery at the archaeological sites shall be implemented in accordance with CUL-MM-3. Any resource considered eligible for NRHP and CRHR listing shall be considered significant. **CUL-MM-3: Cultural Resources Monitoring and Treatment.** The Project Archaeologist, in conjunction with Metropolitan, shall implement cultural resource monitoring and treatment tailored to Pure Water. Cultural resource monitoring and treatment shall address the disposition plans for any cultural material (e.g., cultural features and artifacts) inadvertently discovered during construction activities. Cultural resource monitoring and treatment shall include archaeological monitoring for ground-disturbing activities in areas of moderate to high sensitivity for the presence of buried cultural resources, testing to evaluate the significance of archaeological resources inadvertently discovered, and specific resource-type treatment. Components for archaeological monitoring and treatment are specified below: Archaeological monitoring shall be implemented under the direction of the Project Archaeologist to monitor all ground-disturbing activities, including clearing/grubbing, excavation, and trenching activities, in areas designated as moderate to highly sensitive for buried cultural resources. In areas that are found to be subject to past disturbance to the degree that cultural deposits would not be anticipated or due to soil/geological age, monitoring would be reduced or halted. Archaeological monitoring is not required for areas designated as low sensitivity. Should an inadvertent discovery of an archaeological resource occur during construction, Metropolitan's Project Archaeologist shall develop an archaeological	Significant and Unavoidable

Topic	Environmental Commitment(s)	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
				testing plan to assess the inadvertent discovery for significance and, if applicable, prepare and implement a treatment plan. If the potentially significant cultural resource is also determined to be a Tribal Cultural Resource (TCR), the procedures in TCR-MM-3 shall be followed. The testing plan shall describe the methods to be used to evaluate the inadvertent find and shall comply with CUL-MM-2. The treatment plan developed for any significant resource may include one or more of the following: avoidance and preservation; protection such as capping; data recovery; analysis; interpretation; curation; documentation; reparation, rehabilitation, or restoration of the affected environment; methods and protocols for all treatment efforts and the disposition of artifacts; and/or the implementation of off-site mitigation. Upon completing archaeological testing or other treatment activities, the Project Archaeologist shall prepare a technical report to document the results. The technical report shall include the methods and procedures utilized for testing and/or treatment efforts, document the disposition of artifacts, and record all resources on the appropriate California Department of Parks and Recreation forms. The Project Archaeologist shall submit all project-related reports and California Department of Parks and Recreation forms to the appropriate Information Center via the California Historical Resources Information System. Should built environment resources be encountered that have not been previously evaluated, including resources that have reached eligible age for listing on the NRHP or CRHR during the life of the program, the measures specified in CUL-MM-2 shall be implemented. If found eligible, impacts to these resources would be considered significant, and appropriate measures, such as Historic American Engineering Record documentation and/or appropriate treatment measures as determined by a qualified architectural historian, shall be implemented. **CUL-MM-4: Resource Discovery Protocol.** If an archaeological resource is encountered during construction activities, the contractor shall not disturb the resource and shall immediately cease all work within 100 feet of the discovery, notify Metropolitan's construction manager, and protect the discovery area, as directed by the construction manager. The Project Archaeologist shall assess the significance of the discovery per CUL-MM-2 and CUL-MM-3, and the Metropolitan construction manager, in consultation with the Project Archaeologist, shall designate an area surrounding the discovery as restricted. The contractor shall not enter or work in the restricted area until treatment of the discovery is complete and the construction manager provides authorization.	
Archaeological Resources	**GM-EC-1: Environmental Awareness Training.**	Pure Water would have the potential to affect both currently identified archaeological resources and archaeological resources that have not yet been identified, which could cause a substantial adverse change in the significance of such resources.	Potentially Significant	**CUL-MM-1: Qualified Archaeologist and Architectural Historian.** **CUL-MM-2: Resource Eligibility Determination.** **CUL-MM-3: Cultural Resources Monitoring and Treatment.** **CUL-MM-4: Resource Discovery Protocol.**	Significant and Unavoidable

Topic	Environmental Commitment(s)	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
Human Remains	**GM-EC-1: Environmental Awareness Training.**	Pure Water's ground-disturbing activities could have the potential to disturb human remains; however, through compliance with California Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98, impacts to human remains would be less than significant.	Less than Significant	No mitigation is required.	Less than Significant
5.4 Energy					
Energy Consumption	**AQ-EC-1: Diesel Engine Idling**. **GHG-EC-1: Onsite Renewable Energy.** Metropolitan shall install photovoltaic solar panels with a total power rating of at least 1.5 megawatts at the Joint Treatment Site. **GHG-EC-2: Electric Vehicle Charging.** Metropolitan shall install 100 Level 2 electric vehicle chargers at the Joint Treatment Site. **GHG-EC-3**: **Energy Recovery.** Metropolitan shall install inter-stage pumps in the reverse osmosis system to reduce energy use. Metropolitan shall also install Energy Recovery Devices on the concentrate pumping systems to recover energy.	Pure Water would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation.	Less than Significant	No mitigation is required.	Less than Significant
Conflict with Energy Plans	**AQ-EC-1: Diesel Engine Idling**. **GHG-EC-1: Onsite Renewable Energy.** **GHG-EC-2: Electric Vehicle Charging.** **GHG-EC-3**: **Energy Recovery.**	Pure Water would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.	No Impact	No mitigation is required.	No impact
5.5 Geology and Soils					
Seismic Hazards	**GEO-EC-1: Conduct Site-specific Geotechnical Investigations.** Site-specific geotechnical investigations shall be completed for each component of Pure Water prior to final design and construction. These investigations shall identify site-specific criteria related to considerations such as grading, excavation, fill, and structure/facility design. Applicable results and recommendations from the geotechnical investigations shall be incorporated into the construction documents to address identified potential geologic and soil hazards, including: (1) seismic hazards such as ground rupture, ground acceleration (ground shaking), liquefaction (and related issues such as dynamic settlement and lateral spreading), and landslides/slope instability; and (2) non-seismic hazards, including instability of manufactured slopes, subsidence, compressible soils, expansive or corrosive soils, and trench/excavation instability. The final design and construction documents shall also encompass applicable standard design and construction practices from established regulatory/industry sources including the California Building Code, International Building Code, California Geological Survey, Greenbook Standard Specifications for Public Works Construction, as well as Metropolitan standards.	Pure Water would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: (1) rupture of a known earthquake fault; (2) strong seismic ground shaking; (3) seismic-related ground failure, including liquefaction, or (4) landslides.	Less than Significant	No mitigation is required.	Less than Significant

Topic	Environmental Commitment(s)	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
Erosion and Loss of Topsoil	**HYD-EC-1: Construction General Permit Storm Water Pollution Prevention Plan.** The contractor shall obtain coverage under the Construction General Permit (CGP) and comply with its conditions, including preparation and implementation of site-specific Stormwater Pollution Prevention Plans (SWPPPs) in accordance with the requirements of the State Water Resources Control Board, CGP, and Construction BMP [Best Management Practices] Online Handbook developed by California Storm Water Quality Association. These SWPPPs shall identify BMPs to eliminate/reduce non-storm water discharges to storm systems and other waters of the U.S., prevent construction pollutants from contacting storm water, limit erosion and sediment transport, and manage erosion and pollutants onsite.	Pure Water would not result in substantial soil erosion or the loss of topsoil.	Less than Significant	No mitigation is required.	Less than Significant
Geologic Instability	**GEO-EC-1: Conduct Site-specific Geotechnical Investigations.**	Pure Water would not be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the program, and potentially result in onsite or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse.	Less than Significant	No mitigation is required.	Less than Significant
Expansive Soil	**GEO-EC-1: Conduct Site-specific Geotechnical Investigations.**	Pure Water would not create substantial direct or indirect risks to life or property due to the presence of expansive soil.	Less than Significant	No mitigation is required.	Less than Significant
Soils Incapable of Adequately Supporting Use of Septic Tanks or Alternative Wastewater Disposal Systems	No applicable environmental commitments.	Pure Water would not involve the use of septic tanks or alternative wastewater disposal systems.	No Impact	No mitigation is required.	No Impact
Paleontological Resource or Site or Unique Geologic Feature	**GM-EC-1: Environmental Awareness Training.**	Pure Water would involve ground-disturbing activities in geologic formations with high paleontological potential, which could result in the destruction of unique paleontological resources.	Potentially Significant	**PAL-MM-1: Paleontological Monitoring and Management Plan.** Metropolitan shall retain a qualified paleontologist meeting professional standards as defined by Murphey et al. (2019) to oversee all aspects of paleontological monitoring and management as the designated Project Paleontologist. The Project Paleontologist, in conjunction with Metropolitan, shall develop and oversee the implementation of a Paleontological Monitoring and Management Plan (PMMP) tailored to Pure Water. The PMMP shall require full-time paleontological monitoring of the duration of earthwork and ground-disturbing activities into undisturbed geologic units with high paleontological potential by a paleontological monitor meeting standards as defined by Murphey et al. (2019). In addition, the PMMP shall require that spot checking be conducted during ground-disturbing activities impacting geologic units with low paleontological potential at the surface to determine if older, more sensitive sediments could be impacted at depth and if additional monitoring is required. Testing of sediment samples for microvertebrate fossils where appropriate shall be included in the PMMP. The PMMP shall also address requirements for worker training; steps to follow in the event of a fossil discovery, whether by a paleontological monitor or by a member of the construction staff; assessment and treatment requirements for fossils, including curation, if fossils assessed as unique are encountered; and requirements for final reporting.	Less than Significant

Topic	Environmental Commitment(s)	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
				PAL-MM-2: Paleontological Resource Discovery. The paleontological monitor shall conduct monitoring in accordance with the approved PMMP. If a paleontological resource is encountered, the contractor shall immediately cease all work within 50 feet of the discovery, notify Metropolitan's Construction Manager, and protect the discovery area, as directed by the construction manager. The Project Paleontologist shall decide on the validity of the discovery and work with the Construction Manager to designate an area surrounding the discovery as a restricted area. The Contractor shall not enter or work in the restricted area until the Construction Manager provides written authorization. If the Project Paleontologist assesses the paleontological resource as unique, it shall be collected and curated in an accredited repository along with all necessary associated data as detailed in the PMMP.	
5.6 Greenhouse Gas Emissions					
GHG Emissions	**GHG-EC-1: Onsite Renewable Energy.** **GHG-EC-2: Electric Vehicle Charging.** **GHG-EC-3**: **Energy Recovery.** **GHG-EC-4: Biogenic Carbon Supplement.** Metropolitan shall add a biogenic carbon supplement, such as glycerin-based MicroC-2000 manufactured by Environmental Operating Solutions, Inc., to support both denitrification and biological phosphorus removal at the Advanced Water Purification (AWP) Facility.	Pure Water would not generate greenhouse gas (GHG) emissions, either directly or indirectly, that may have a significant impact on the environment.	Less than Significant	No mitigation is required.	Less than Significant
Conflict with GHG Reduction Plan	**GHG-EC-1: Onsite Renewable Energy.** **GHG-EC-2: Electric Vehicle Charging.** **GHG-EC-3**: **Energy Recovery.** **GHG-EC-4: Biogenic Carbon Supplement.**	Pure Water would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.	No Impact	No mitigation is required.	No Impact
5.7 Hazards and Hazardous Materials					
Transport, Use, Disposal, or Accidental Release of Hazardous Materials	**HAZ-EC-1: Hazardous Materials Business Plan and Spill Prevention, Control, and Countermeasure Plan.** Metropolitan shall prepare a Hazardous Materials Business Plan (HMBP) in accordance with the requirements of California Health and Safety Code, Division 20, Chapter 6.95 for operation of facilities that use and store potentially hazardous chemicals. The HMBP shall include an inventory of hazardous materials stored onsite, storage and containment methods, an emergency response plan, and an employee training program. The HMBP shall be submitted to the appropriate unified program agency for review and approval, as applicable. In addition, a Spill Prevention, Control, and Countermeasure (SPCC) Plan shall be required if any sites will store more than a total of 1,320 gallons of petroleum in aboveground containers or in containers having a storage capacity of at least 55 gallons, in accordance with the requirements of the Aboveground Petroleum Storage Act.	Pure Water would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Pure Water would not 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. Pure Water would have the potential to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school; however, through implementation of an environmental	Less than Significant	No mitigation is required.	Less than Significant

Topic	Environmental Commitment(s)	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
		commitment and compliance with regulations, potentially significant impacts to schools would be avoided.			
Hazardous Materials Sites	**HAZ-EC-2: Site-Specific Safety Plan.** Metropolitan or its contractors shall prepare a Site-Specific Safety Plan (SSSP) addressing the potential for discovery of unidentified underground storage tanks, hazardous materials, petroleum hydrocarbons, or hazardous or solid wastes encountered during construction and demolition activities. The SSSP shall also address underground storage tank decommissioning, field screening and materials testing methods, contaminant management requirements, and health and safety requirements in compliance with applicable U.S. Environmental Protection Agency (USEPA), Los Angeles Regional Water Quality Control Board (Los Angeles Regional Board), Department of Toxic Substances Control (DTSC), and local guidelines. The SSSP shall be prepared prior to the start of work and shall be implemented during all construction activities. All hazardous or solid wastes and debris encountered or generated during construction and demolition activities shall be handled in accordance with the SSSP and all applicable federal, state, and local laws and regulations. **HAZ-EC-3: Hazardous Materials Management Plan**. The SSSP described in HAZ-EC-2 shall include a Hazardous Materials Management Plan for appropriate handling of potentially contaminated soil to be implemented during all phases of construction. Workers shall be trained to identify and recognize potentially hazardous materials (e.g., visual evidence of staining or discoloration). If hazardous materials are found or an unknown material is encountered that could potentially be hazardous, the Contractor shall stop work on the area immediately and notify appropriate safety representatives. Furthermore, excavated soil within the vicinity of properties identified as Recognized Environmental Conditions and Controlled Recognized Environmental Condition in this report shall be monitored (i.e., utilizing a four-gas meter) in accordance with South Coast Air Quality Management District (SCAQMD) Rules 1166 and 1466 related to soils contaminated with volatile organic compounds or toxic contaminants, and for explosiveness and other gases typically monitored during excavations. If the monitoring procedures indicate that soil is potentially contaminated, the SSSP shall be implemented and shall include procedures for segregation, sampling, and chemical analysis of the soil. These procedures shall follow USEPA and DTSC regulations for handling contaminated soil as well as the Los Angeles Regional Board-approved Soil Management Plan for the former Fletcher Oil and Refining Company site within the Joint Treatment Site. As	Pure Water would be located on sites that are included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5; however, through implementation of environmental commitments and compliance with regulations, Pure Water would not create a significant hazard to the public or the environment.	Less than Significant	No mitigation is required.	Less than Significant

Topic	Environmental Commitment(s)	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	required by regulations in place at the time of construction, contaminated soil shall be profiled for disposal and shall be transported to an appropriate hazardous or non-hazardous waste or recycling facility licensed to accept and treat the type of waste indicated by the profiling process. If these processes generate contaminated groundwater that must be disposed of outside of the dewatering/National Pollution Discharge Elimination System process, the groundwater shall be profiled, manifested, hauled, and disposed of in accordance with USEPA and Los Angeles Regional Board regulations in place at the time of construction. **HAZ-EC-4: Utility Location Survey.** A survey shall be conducted during design of the proposed facilities to identify the location of other pipelines, utilities, and other infrastructure that may be encountered during construction. The location of such facilities shall be shown on the design plans to facilitate coordination with owners and/or avoidance during construction. In addition, a subsurface geophysical survey shall be conducted prior to excavation activities to confirm the location of existing pipelines, utilities, and other infrastructure or the absence of these facilities. **HAZ-EC-5: Demolition Evaluations.** Prior to construction activities, Metropolitan or its contractors shall conduct an evaluation of the structures to be demolished to evaluate the presence of asbestos-containing materials, lead-based paint, and/or polychlorinated biphenyls-containing materials in accordance with applicable USEPA and SCAQMD rules and regulations. Remediation shall be implemented in accordance with all applicable federal, state, and local laws and regulations.				
Airport Hazards	No applicable environmental commitments.	Pure Water would not result in a safety hazard or excessive noise for people residing or working in the Pure Water area.	Less than Significant	No mitigation is required.	Less than Significant
Emergency Response and Evacuation	**TRA-EC-1: Traffic Control Plan/Traffic Management Plan.** Metropolitan or its contractors shall prepare and implement a Traffic Control Plan and/or a Traffic Management Plan for each component of Pure Water constructed within public right-of-way to manage traffic flow during construction, reduce potential interference with local emergency response plans, reduce potential traffic safety hazards, and ensure adequate access for emergency responders as required by the local jurisdiction. Development and implementation of these plans shall be coordinated with local agencies with jurisdiction over affected roadways. Traffic control measures, including scheduling of major truck trips and deliveries to avoid peak traffic hours as feasible, installing warning and detour signs (as needed), drafting lane closure procedures, and placing traffic cones to guide drivers indicating	Pure Water would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.	Less than Significant	No mitigation is required.	Less than Significant

Topic	Environmental Commitment(s)	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	potential road hazards or detours (as needed) shall be implemented. Other potential traffic control measures include the provision of safe detour routes for pedestrians if sidewalks are to be closed and temporary changes to traffic signal phases and timings, if needed. Metropolitan shall provide oversight of the construction contractor(s) to ensure that these plans are implemented during construction. Traffic control measures shall be consistent with the California Manual of Uniform Traffic Control Devices and the Work Area Traffic Control Handbook. In addition, Metropolitan shall coordinate with local police and fire departments to ensure their awareness of construction activities and provide detour routes for emergency vehicles and to develop a process for responding to and tracking issues pertaining to construction activity.				
Wildland Fires	No applicable environmental commitments.	Pure Water would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.	Less than Significant	No mitigation is required.	Less than Significant
5.8 Hydrology and Water Quality					
Water Quality and Sustainable Groundwater Management	**HAZ-EC-1: Hazardous Materials Business Plan and Spill Prevention, Control, and Countermeasure Plan.** **HAZ-EC-2: Site-Specific Safety Plan.** **HAZ-EC-3: Hazardous Materials Management Plan.** **HYD-EC-1: Construction General Permit Storm Water Pollution Prevention Plan.** **HYD-EC-2: Industrial General Permit Storm Water Pollution Prevention Plan.** If required, Metropolitan shall obtain coverage under the Industrial General Permit (IGP) for the Advanced Water Purification Facility (AWP Facility) and comply with its conditions, including preparation and implementation of a site-specific industrial Stormwater Pollution Prevention Plan (SWPPP). This SWPPP would identify the specific sources of pollutants associated with the AWP Facility, if any, and describe those Best Management Practices that would be implemented to prevent unauthorized non-stormwater runoff. If required, this SWPPP also would: (1) establish action levels and effluent limitations for any non-stormwater discharges occurring at the AWP Facility; (2) identify response actions to be taken if such levels and limitations are exceeded; and (3) impose certain monitoring and reporting requirements.	Pure Water would not violate water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality. Pure Water would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.	Less than Significant	No mitigation is required.	Less than Significant

Topic	Environmental Commitment(s)	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
Groundwater Supplies and Recharge	No applicable environmental commitments.	Pure Water would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that it may impede sustainable groundwater management of the basin.	Less than Significant	No mitigation is required.	Less than Significant
Drainage Patterns	**HYD-EC-1: Construction General Permit Storm Water Pollution Prevention Plan.** **HYD-EC-2: Industrial General Permit Storm Water Pollution Prevention Plan.**	Pure Water would not 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: (1) result in substantial erosion or siltation onsite or offsite; (2) substantially increase the rate or amount of surface runoff in a manner which would result in flooding onsite or offsite; (3) 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; or (4) Impede or redirect flood flows.	Less than Significant	No mitigation is required.	Less than Significant
Flood Hazards	**HYD-EC-1: Construction General Permit Storm Water Pollution Prevention Plan.**	Pure Water would not risk release of pollutants due to project inundation in a flood hazard, tsunami, or seiche zone.	Less than Significant	No mitigation is required.	Less than Significant
5.9 Land Use and Planning					
Physically Divide an Established Community	No applicable environmental commitments.	Pure Water would not physically divide an established community.	Less than Significant	No mitigation is required.	Less than Significant
Conflict with Land Use Plans	All Environmental Commitments (ECs) identified for Pure Water are relevant to land use plans, policies, and/or regulations adopted for the purpose of avoiding or mitigating an environmental effect.	Pure Water would not cause a significant environmental impact due to a conflict with a land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.	Less than Significant	No mitigation is required.	Less than Significant
5.10 Noise					
Increase in Ambient Noise	**NOI-EC-1: Construction Equipment Proper Working Order.** Construction equipment shall be kept in proper working order for the duration of the construction activities. **NOI-EC-2: Construction Equipment Mufflers and Silencers**. The Contractor shall equip all construction equipment, fixed and mobile, including internal combustion engines, with properly operating and maintained noise mufflers and intake silencers, consistent with the manufacturers' standards.	Pure Water would have the potential to result in the generation of substantial temporary and permanent increases in ambient noise levels in excess of applicable standards.	Potentially Significant	**NOI-MM-1: Noise Control Plan.** A Noise Control Plan(s) shall be prepared to reduce noise at noise-sensitive land uses (NSLUs) from Pure Water's construction. The plan(s) shall be prepared by the contractor and approved by Metropolitan in coordination with applicable local jurisdictions prior to initiation of construction activities. The plan(s) shall include noise control measures to achieve the following standards established for Pure Water, to the extent feasible, and allow for completion of Pure Water in light of necessary work methods and the physical constraints of available work areas: • Noise levels shall be assessed at NSLU structures closest to construction activity. • Short-term construction is defined as construction lasting a total of nine days or fewer at a given location. Long-term construction is defined as work lasting a total of 10 days or more at a given location. • Short-term daytime construction noise shall not exceed 75 time-averaged A-weighed decibels (dBA L_{EQ}; 12-hour).	Significant and Unavoidable (Construction Only)

Topic	Environmental Commitment(s)	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
				• Long-term daytime construction noise shall not exceed 60 dBA L_{EQ} (12-hour). • Short-term nighttime construction noise shall not exceed 60 dBA L_{EQ} (12-hour). • Long-term nighttime construction noise shall not exceed 50 dBA L_{EQ} (12 hour). • Ambient noise measurements shall be taken prior to construction. • Construction shall not exceed ambient noise levels of a given construction area by 5 dBA L_{EQ} (12-hour). Noise control measures in the Noise Control Plan could include, but are not limited to, the following: • Providing barriers at least two feet higher than equipment's exhaust pipes and engines to block the line-of-sight between construction activities and nearby NSLUs. Barriers shall be solid and constructed of materials such as masonry, wood, plastic, fiberglass, steel, acoustic blankets or a combination of those materials, with no pronounced cracks or gaps through or below the barrier. • Increasing setback distances between equipment and NSLUs. • Physically shielding stationary noise-generating equipment, such as generators and compressors, from direct line-of-sight to NSLUs. • Using electrical power to run air compressors and similar power tools, in lieu of gas or diesel-powered compressors. • Reducing construction hours within a given 12-hour period. • Scheduling deliveries during daytime hours. • Using noise-producing signals, including horns, whistles, alarms, public address systems, and bells for safety warning purposes only. • Locating designated worker gathering areas and parking areas away from NSLUs. When measured noise levels at the NSLU structures are shown to exceed the above-specified noise levels, additional noise control measures or improvements to noise control measures already in place may be implemented in an effort to achieve the applicable noise standards, to the extent feasible. Noise monitoring shall be performed again to record the achieved level of noise reduction. **NOI-MM-2: Joint Treatment Site Operational Noise Reduction.** Final design for the Joint Treatment Site facilities shall incorporate noise attenuation such that exterior noise levels from operation of the Joint Treatment Site, in combination with existing daytime and nighttime ambient noise levels, do not exceed existing ambient noise levels at the nearest commercial and residential receptors. Daytime is defined as the period between 7:00 a.m. and 10:00 p.m. Nighttime is defined as the period between 10:00 p.m. and 7:00 a.m. A qualified acoustical specialist shall review facility design plans prior to construction to ensure noise reduction measures would achieve compliance with applicable noise standards. If necessary, additional noise attenuation measures, such as higher Sound Transmission Class [STC] enclosures, repositioning of equipment, or an enhanced noise barrier (e.g., concrete enclosures), may be recommended by the acoustical specialist to ensure adequate noise attenuation. Once operation of facilities is	Less than Significant

Topic	Environmental Commitment(s)	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
				initiated, noise measurements shall be taken by a qualified acoustical specialist to verify that noise levels generated from facilities comply with applicable noise standards. If noise levels exceed applicable noise standards, additional noise attenuation measures shall be implemented as necessary to achieve the applicable thresholds. **NOI-MM-3: Operational Facility Noise Reduction.** Final design for permanent, aboveground facilities that include operational equipment (excluding the Joint Treatment Site) shall incorporate noise attenuation such that exterior noise levels from each facility to nearby receptors would not exceed the noise limits of the applicable jurisdiction(s). A qualified acoustical specialist shall review facility design plans prior to construction to ensure noise reduction measures would achieve compliance with applicable noise standards. If necessary, additional noise attenuation measures such as higher STC enclosures, repositioning of equipment, or an enhanced noise barrier (e.g., fences, walls, or full enclosure of the facility/equipment), may be recommended by the acoustical specialist to ensure adequate noise attenuation. Once operation of facilities is initiated, noise measurements shall be taken by a qualified acoustical specialist to verify that noise levels generated from facilities comply with applicable noise standards. If noise levels exceed applicable noise standards, additional noise attenuation measures shall be implemented as necessary to achieve the applicable thresholds.	Less than Significant
Vibration	No applicable environmental commitments.	Pure Water would have the potential to result in the generation of excessive groundborne vibration or groundborne noise levels during construction.	Potentially Significant	**NOI-MM-4: Vibratory Roller Vibration Limits.** Vibratory rollers shall not be located within 45 feet of a vibration-sensitive receptor to ensure vibration levels of 0.1 inch per second peak particle velocity (PPV) for human annoyance are not exceeded. Vibratory rollers shall also be located a minimum of 18 feet from a structure that is susceptible to vibration damage to ensure vibration levels of 0.3 PPV are not exceeded. Alternative equipment, such as the use of a plate compactor, handheld compactor, or tamping rammer, would be required within 45 feet of a vibration-sensitive receptor and/or 18 feet from a structure that is susceptible to damage from vibration to reduce vibration impacts. **NOI-MM-5: Tunnel Boring Machine Vibration Limits.** To ensure tunnel boring machines and microtunnel boring machines do not exceed vibration levels of 0.1 inch per second PPV for human annoyance and 0.3 inch per second PPV for a structure that is susceptible to vibration damage, vibration monitoring during construction and/or a site-specific vibration analysis prior to construction shall be required. The site-specific analysis shall identify the vibration potential of the boring activities, soil composition, and distance to receptors and recommend attenuation measures or alternative techniques, such as reducing cutter head torque, thrust, and boring speed, if necessary. **NOI-MM-6: Pile Driving Construction Vibration Limits.** To ensure pile driving does not exceed vibration levels of 0.1 inch per second PPV for human annoyance and 0.3 inch per second PPV for a structure that is susceptible to vibration damage, vibration monitoring during construction and/or a site-specific vibration analysis prior to construction shall be required within 130 feet of a vibration-sensitive receptor	Less than Significant

Topic	Environmental Commitment(s)	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
				and/or within 50 feet of older structures. The site-specific analysis shall identify the vibration potential of the pile driving activities, soil composition, and distance to receptors and recommend attenuation measures or alternative techniques, such as jetting, predrilling, pile cushioning, and use of nonimpact drivers, if necessary.	
Aircraft Noise	No applicable environmental commitments.	Pure Water would not expose people residing or working in the program area to excessive aircraft noise.	Less than Significant	No mitigation is required.	Less than Significant
5.11 Transportation					
Conflict with Program, Plan, Ordinance, or Policy	**TRA-EC-1: Traffic Control Plan/Traffic Management Plan.**	Pure Water would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.	Less than Significant	No mitigation is required.	Less than Significant
Vehicle Miles Traveled	No applicable environmental commitments.	Pure Water would not conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b).	Less than Significant	No mitigation is required.	Less than Significant
Traffic Hazards	**TRA-EC-1: Traffic Control Plan/Traffic Management Plan.**	Pure Water would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).	Less than Significant	No mitigation is required.	Less than Significant
Emergency Access	**TRA-EC-1: Traffic Control Plan/Traffic Management Plan.**	Pure Water would not result in inadequate emergency access.	Less than Significant	No mitigation is required.	Less than Significant
5.12 Tribal Cultural Resources					
Tribal Cultural Resources	**GM-EC-1: Environmental Awareness Training.**	Pure Water would have the potential to cause a substantial adverse change in the significance of tribal cultural resources.	Potentially Significant	**CUL-MM-2: Resource Eligibility Determination.** **CUL-MM-3: Cultural Resources Monitoring and Treatment.** **CUL-MM-4: Resource Discovery Protocol.** **TCR-MM-1: Minimization of Impacts to Tribal Cultural Resources.** Metropolitan shall construct Pure Water in a manner that avoids or minimizes physical disturbance of TCRs identified in Appendix K to the extent feasible. Efforts have been made during planning of Pure Water to identify locations where construction activities have the potential to damage known TCRs. Metropolitan shall conduct pre-construction surveys to verify their presence and/or extent and coordinate with the Gabrieleño Band of Mission Indians-Kizh Nation to modify Pure Water construction activities to avoid physically disturbing these resources to the extent feasible. If complete avoidance is not feasible, Metropolitan shall work with the construction contractor to minimize physical disturbance to the TCR(s). **TCR-MM-2: Tribal Monitor.** Metropolitan shall retain a Native American (Tribal) Monitor from or approved by the Gabrieleño Band of Mission Indians-Kizh Nation to monitor construction-related ground-disturbing activities. Tribal monitoring shall occur where ground-disturbing activities would encounter Holocene-age soils (soils present at the time of known human occupation of Southern California). Tribal monitoring shall not occur in areas that are documented as imported fill material or within soils determined to be older than known human occupation of Southern California. The Tribal Monitor shall complete daily monitoring logs that will describe	Significant and Unavoidable

Topic	Environmental Commitment(s)	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
				the relevant ground-disturbing activities, the type of construction activities performed, locations of ground-disturbing activities, soil types, cultural-related materials encountered, and any other facts, conditions, materials, or discoveries of significance to the Tribe and provide the logs to Metropolitan. Monitor logs shall identify and describe any discovered TCRs, including but not limited to, Native American cultural and historical artifacts, remains, places of significance, etc., as well as any discovered Native American (ancestral) human remains and burial goods. **TCR-MM-3: Unanticipated Discovery of Tribal Cultural Resources.** Should an inadvertent discovery of a TCR occur during construction, the contractor shall not disturb the resource and shall immediately cease all work within 100 feet of the discovery, notify Metropolitan's construction manager, and protect the discovery area, as directed by the construction manager. The tribal monitor and Project Archaeologist shall assess the significance of the discovery, and the Metropolitan construction manager shall designate an area surrounding the discovery as a restricted area. The Gabrieleño Band of Mission Indians-Kizh Nation shall be immediately notified to recover and obtain any inadvertently discovered TCRs. The Contractor shall not enter or work in the restricted area until treatment or recovery of the TCR is complete and the construction manager provides authorization.	