



THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

Metropolitan Climate Action Plan

*Final Program
Environmental
Impact Report*

Volumes 1 & 2



May
2022



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Volume 1



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Table of Contents

FINAL EXECUTIVE SUMMARY	1
ES.1 Introduction.....	1
ES.2 Contents and Organization of Final Program EIR	1
ES.3 Contents and Organization of Final Program EIR	2
ES.4 Proposed Project Description.....	3
ES.4.1 Overview and Scope of the Project	3
ES.4.2 Overview of the Region.....	4
ES.4.3 Project Objectives.....	4
ES.4.4 Project Description.....	4
ES.4.4 Areas of Controversy.....	5
ES.4.4 Summary of Environmental Impacts and Mitigation Measures	6
ES.5 References Cited	19
CHAPTER 1 RESPONSES TO COMMENTS RECEIVED	21
Responses to Comments	21
Topical Response.....	22
CHAPTER 2 CHANGES TO THE DRAFT PEIR.....	97
Introduction	97
Changes to the Draft PEIR	97

Tables

Table ES-1	Summary of Environmental Impacts, Mitigation Measures and Impacts After Mitigation.....	7
Table 1-1	Comments Received on the Draft PEIR	21

Figures

Figure 1-1	SWP's Historic and Projected Annual Emissions.....	23
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FINAL EXECUTIVE SUMMARY

ES.1 Introduction

This Final Program Environmental Impact Report (Final PEIR) has been prepared in accordance with the California Environmental Quality Act (CEQA) (California Public Resources Code, Section 21000 et seq.), as amended. The Metropolitan Water District of Southern California (Metropolitan) is the lead agency for the environmental review of the proposed Climate Action Plan (CAP or proposed program) evaluated herein and has the responsibility for approving the proposed program.

As described in the *State CEQA Guidelines* (14 California Code of Regulations [CCR] 15000 et seq.), public agencies are charged with the duty to avoid or substantially lessen significant environmental effects, with consideration of other conditions, including economic, social, technological, legal, and other benefits. As required by CEQA, this Final PEIR assesses the potentially significant direct and indirect environmental effects of the proposed program, as well as the potentially significant cumulative impacts that could occur from implementation of the proposed program. This Final PEIR is an informational document only, the purpose of which is to identify the significant effects of the proposed program on the environment and to indicate the manner in which those significant effects can be avoided or significantly lessened (including feasible mitigation measures); to identify any significant and unavoidable adverse impacts that cannot be mitigated to below a significant level; and to identify reasonable and feasible alternatives to the proposed program that would avoid or substantially lessen any significant adverse environmental effects associated with the proposed program and achieve the fundamental objectives of the proposed program.

ES.2 Contents and Organization of Final Program EIR

This Final PEIR is prepared pursuant to Sections 15088, 15089, and 15132 of the *State CEQA Guidelines*. The Final PEIR, in compliance with Section 15132 of the *State CEQA Guidelines*, contains the following:

- Final PEIR, Volume 1
 - **Final Executive Summary.** The Final Executive Summary provides the contents and organization of the Final PEIR, a summary of procedural compliance with CEQA, and a brief description of the proposed program.
 - **Chapter 1: Responses to Comments Received.** This chapter includes a list of persons, organizations, and public agencies that provided written comments on the Draft PEIR and Draft CAP during the public review period. This chapter also includes a copy of the comments received during the public review process for the Draft PEIR and Draft CAP, as well as Metropolitan's responses to these written comments. Each comment is assigned a comment number, which corresponds to a response number and response.
 - **Chapter 2: Changes to the Draft PEIR and Draft CAP.** This chapter contains a summary of changes made to the documents since publication of the Draft PEIR and Draft CAP as a result of comments received. Revisions were made to clarify information presented in the Draft PEIR and only minor technical changes or additions have been made to the Draft CAP. These changes and additions to the PEIR and CAP do not raise important new issues related

to significant effects on the environment. Such changes are “insignificant,” as the term is used in Section 15088.5(b) of the *State CEQA Guidelines*. This chapter describes changes that were made and presents textual changes made since public review as signified by strikethrough (~~strikethrough~~) where text is removed, and by underlined text (underline) where text is added for clarification.

- Final PEIR, Volume 2
 - **Chapter 1: Introduction to Final PEIR – Volume 2.**
 - **Chapter 2: Findings of Fact in Support of the Proposed Program and Statement of Overriding Considerations.** This chapter of the Final PEIR provides a summary of the impacts associated with the proposed program and the findings regarding alternatives to the proposed program. This chapter also includes a summary of the general findings, legal effects of the findings, and a summary of the independent review and analysis. Lastly, this chapter includes a Statement of Overriding Considerations, pursuant to *State CEQA Guidelines* Sections 15043 and 15093, which provides the program’s economic, social, or other benefits for choosing to allow the occurrence of significant environmental effects that have not been avoided.
 - **Chapter 3: Mitigation Monitoring and Reporting Program.** This chapter of the Final PEIR provides the mitigation monitoring and reporting program (MMRP) for the proposed program. The MMRP is presented in table format and identifies mitigation measures for the proposed program, the party responsible for implementing the mitigation measures, the timing of implementing the mitigation measures, and the entity responsible for monitoring and reporting compliance with each mitigation measure.

ES.3 Contents and Organization of Final Program EIR

Metropolitan has complied with CEQA and the *State CEQA Guidelines* during preparation of the PEIR for the proposed program. Pursuant to Section 15082 of the *State CEQA Guidelines*, a Notice of Preparation (NOP) and Scoping Meeting was prepared and published by Metropolitan on June 23, 2020 and circulated to local, state, and federal agencies and to members of the public and other interested agencies, organizations, and individuals. The NOP was also sent to the State Clearinghouse at the California Governor’s Office of Planning and Research to solicit participation from state agencies in determining the scope of the Draft PEIR. The State Clearinghouse assigned a state identification number (SCH No. 2020060450) to the Draft PEIR. A virtual scoping meeting was held on July 15, 2020 at 10:00 a.m. to present the proposed program, describe the environmental review process, and provide an opportunity for agency representatives and the public to assist Metropolitan in determining the scope and content of the environmental analysis for the PEIR. Pursuant to Section 15082 of the *State CEQA Guidelines*, recipients of the NOP for the proposed program were requested to provide responses within 30 days of their receipt of the NOP. As such, the review period for the NOP ended on July 22, 2020.

Metropolitan received a total of ten written comment letters from the following parties:

- South Coast Air Quality Management District (SCAQMD)
- Mohave Desert Air Quality Management District (MDAQMD)
- San Joaquin Valley Unified Air Pollution Control District (SJVAPCD)
- Ventura County Air Pollution Control District (VCAPCD)

- Stanislaus County Environmental Review Committee
- Stanislaus County Public Works
- Ventura County Watershed Protection District
- California Highway Patrol (CHP)
- Native American Heritage Commission (NAHC)
- California Department of Fish and Wildlife (CDFW)

All comments received during the NOP public notice period were considered during the preparation of the Draft PEIR. Appendix A of the Draft PEIR includes the NOP and copies of the comment letters received on the NOP.

Pursuant to CEQA and its implementing guidelines, the Draft PEIR and Draft CAP were circulated for a 45-day public review and comment period which began on November 18, 2021 and concluded on January 7, 2022. The Draft PEIR and Draft CAP were distributed to the State Clearinghouse and a Notice of Availability of the Draft PEIR and Draft CAP was distributed to interested parties and agencies. Copies of the Draft PEIR and Draft CAP were made available to the general public for review during normal operating hours at the following location:

The Metropolitan Water District of Southern California
700 North Alameda Street
Los Angeles, California 90012

The Draft PEIR and Draft CAP were also available for review on Metropolitan’s website, and at nine public libraries within the Plan Area for the proposed program.

Volume 1 of this Final PEIR contains the Executive Summary and Chapters 1 and 2, which provide responses to comments received during the public comment period for the Draft PEIR and any changes made to the Draft PEIR. Volume 2, Chapters 2 and 3, of this Final PEIR make detailed findings with respect to the potential effects of the proposed program and refer, where appropriate, to the mitigation measures set forth in this Final PEIR.

The Final PEIR and the administrative record concerning the proposed program provide additional information in support of the Findings of Fact (Volume 2, Chapter 2) herein. The Findings of Fact are hereby incorporated in the Final PEIR in its entirety. Furthermore, the mitigation measures set forth in the Final PEIR and the MMRP are incorporated by reference in the Findings. The MMRP was developed in compliance with California Public Resources Code Section 21081.6 and is contained in Volume 2, Chapter 3, of this Final PEIR.

ES.4 Proposed Project Description

ES.4.1 Overview and Scope of the Project

Metropolitan is proposing a CAP to identify strategies to reduce greenhouse gas (GHG) emissions and achieve the proposed GHG reduction targets. The CAP includes a baseline GHG emissions inventory of Metropolitan’s operations from 1990 through 2020, an emissions forecast through 2045, emissions reduction targets consistent with Senate Bill (SB) 32 and Executive Order B-55-18, actions and policies that Metropolitan could implement to achieve GHG reductions, and an implementation roadmap. The CAP would apply to Metropolitan’s operations within the proposed Plan Area, described in the following section.

ES.4.2 Overview of the Region

The Plan Area consists of the following six counties in Southern California: Los Angeles, Orange, Riverside, San Bernardino, San Diego, and Ventura. Portions of northeastern Imperial County within the Palo Verde Valley, as well as four islands in the Sacramento-San Joaquin River Delta area, are also included in the Plan Area. The Plan Area includes all of Metropolitan's service area and its member agencies' jurisdictions, as well as all areas where Metropolitan owns land or facilities.

The Plan Area spans approximately 38,213 square miles across six ecoregions, including Southern California Mountains and Valley, Southern California Coast, Sonoran Desert, Mojave Desert, Colorado Desert, and California Central Valley (Great Valley) (United States Department of Agriculture 2007). The Plan Area contains a population of approximately 22,176,450 across 202 incorporated cities and unincorporated county regions (California Department of Finance [DOF] 2020; United States Census Bureau 2020). It also includes over 220 miles of Pacific Ocean coastline, ranges in elevation from 234 feet below mean sea level to approximately 11,503 feet above mean sea level, and contains a national park, one national recreation area, all or portions of four national forests, and three United States Census Bureau-designated Metropolitan Statistical Areas.

ES.4.3 Project Objectives

The proposed program is designed to reduce GHG emissions associated with Metropolitan's operations. Specifically, the objectives of the proposed program include the following:

- Identify and quantify emissions associated with Metropolitan operations to prepare a baseline GHG emissions inventory in order to track emissions reduction progress over time
- Adopt an emissions reduction target that is consistent with existing state emissions reduction targets while preparing Metropolitan to meet future state targets
- Identify and quantify specific reduction actions and policies that Metropolitan may implement to achieve the goal of reducing GHG emissions from its construction and operational activities
- Provide a roadmap for future activities to achieve consistency with the CAP and use CEQA streamlining tools for analysis of GHG emissions pursuant to the requirements of *State CEQA Guidelines* Section 15183.5

ES.4.4 Project Description

The proposed program contains the following primary components.

Emissions Inventory

The proposed CAP contains an inventory of Metropolitan's GHG emissions from 1990 to 2020. Due to the geographically disparate nature of Metropolitan's operations, emissions reported in the inventory are based on activities over which Metropolitan has direct operational control. The inventory delineates emissions by Scope, as defined in the Local Governments for Sustainability reporting frameworks and detailed below. The emissions inventory reports Metropolitan's GHG emissions in metric tons of carbon dioxide equivalent (CO₂e).

- **Scope 1 Emissions.** Scope 1 emissions are those associated with direct emissions from sources owned or controlled by Metropolitan. This includes emissions from direct fuel combustion, including natural gas, propane, welding gasses, and gasoline and diesel used to power Metropolitan's vehicle fleet.

- **Scope 2 Emissions.** Scope 2 emissions are those indirect emissions associated with the consumption of Metropolitan’s purchased electricity use. Specifically, emissions generated at power plants that supply electricity for Metropolitan operations. Metropolitan purchases electricity from power generated from within California and from outside of California in the southwestern United States, which includes electricity generated from hydropower at the Hoover Dam. Scope 2 emissions also include transmission and distribution losses that occur as electricity is delivered to Metropolitan facilities.
- **Scope 3 Emissions.** Scope 3 emissions are other indirect emissions that occur as a result of Metropolitan’s operations, including emissions associated with waste generation, water consumption and wastewater generation from Metropolitan-owned buildings, employee commutes, and construction activities.

The proposed CAP also includes an emission forecast through 2045 to account for potential changes in hydrology, climate, climate and air quality regulations, population growth, operations, and future construction projects that may affect Metropolitan’s emissions in the future. Furthermore, the emissions forecast allows for comparison between forecasted GHG emissions and reduction targets to understand the reductions necessary to achieve Metropolitan’s GHG reduction goals.

Reduction Target

The proposed CAP establishes a GHG reduction target aligned with applicable state GHG reduction policies. The CAP considers various reduction levels, target methodologies, and tracking mechanisms to quantify GHG emissions reductions and measure progress towards meeting the established GHG reduction target. Ultimately, the CAP includes a linear per capita target or “Linear Reduction to Carbon Neutral by 2045 – Per Capita Target” with a Carbon Budget tracking mechanism.

GHG Reduction Measures

In order to achieve the proposed CAP’s emissions reduction target, GHG emissions reduction measures would need to be implemented. The CAP includes 39 proposed GHG emissions reduction measures that, if implemented, could help Metropolitan reduce its Scope 1, Scope 2, and Scope 3 emissions. Reduction measures for each Scope are grouped into nine strategies that could be employed at Metropolitan’s various facility types during facility maintenance activities and future expansion and construction activities, as well as policies and projects to explore new technologies and practices to conserve resources. The reduction measures do not include actions taken by Metropolitan to date that have resulted in GHG emissions reductions, such as Metropolitan’s early adoption of solar facilities at several of its treatment plants and Leadership in Energy Efficiency and Design (LEED) certification for several of its facilities. However, the measures may build or expand upon these past actions. Most measures within the nine categories are either administrative (e.g., studies, investigations) in nature or involve replacement of existing infrastructure with newer, more efficient infrastructure at the same location and, therefore, would not have physical impacts to the environment.

ES.4.4 Areas of Controversy

Section 15123(b)(2) of the *State CEQA Guidelines* requires that an EIR identify areas of controversy which are known to the lead agency, including issues raised by other agencies and the public. Areas of controversy associated with the proposed program are made known through comments received during the NOP process, as well as input solicited during public scoping meetings and an understanding of the community issues in the study area.

The comments on the NOP for the draft PEIR for the proposed CAP generally expressed concern over the following issues: alternatives analysis and impacts to biological species and jurisdictional habitats (CDFW), air quality impacts from construction or operation of projects implemented under the proposed program (SJVAPCD, MDAQMD, SCAQMD, and VCAPCD), impacts to tribal cultural resources (NAHC), and watershed management (Ventura County Public Works). Appendix A of the Draft PEIR contains a copy of the NOP and the comment letters received during the NOP scoping period.

ES.4.4 Summary of Environmental Impacts and Mitigation Measures

Table ES-1 includes a brief description of the identified environmental impacts associated with each threshold analyzed in detail in the Draft PEIR, proposed mitigation measures, and the level of significance after mitigation.

Table ES-1 Summary of Environmental Impacts, Mitigation Measures and Impacts After Mitigation

Impact	Mitigation Measure(s)	Significance After Mitigation
Air Quality		
<p>Impact AQ-A. Implementation of the individual projects proposed under the CAP would potentially conflict with or obstruct implementation of the applicable air quality plan due to construction emissions. This impact would be potentially significant.</p>	<p>MM AQ-1 Construction Air Quality Assessment For individual projects to be implemented under the CAP that involve construction activities with an intensity (i.e., size, schedule, equipment, demolition, import/export of soil, architectural coating) greater than the sample project activity, an air quality assessment shall be prepared to evaluate construction emissions in light of the applicable air district thresholds.</p> <p>MM AQ-2 Implement Emission Reduction Measures If construction emissions would exceed any of the applicable thresholds, emission reduction measures shall be implemented to reduce emissions below the thresholds. Measures may include, but would not be limited to:</p> <ul style="list-style-type: none"> • All construction equipment shall be equipped with Tier 4 certified engines or CARB-certified Level 3 diesel particulate filters. All diesel particulate filters shall be kept in working order and maintained in operable condition according to manufacturer’s specifications, as applicable. • Construction equipment with lower horsepower ratings shall be utilized, as applicable and practicable. • Ultra-low-sulfur diesel fuel shall be used for stationary construction equipment, as applicable. • Low-emission on-site stationary equipment shall be used, as applicable. • Alternatively-fueled construction equipment (e.g., renewable diesel, natural gas, electric) shall be utilized instead of diesel-fueled construction equipment, as applicable. • The schedule for soil import and/or export shall be extended to reduce the number of daily haul truck trips, as applicable. • The schedule for the coating/painting phase shall be extended to reduce the square footage coated/painted each day, as applicable. • Architectural coatings with a VOC content of less than 250 grams per liter shall be utilized. 	Significant and unavoidable.
<p>Impact AQ-B. Construction impacts related to criteria air pollutant emissions resulting from implementation of individual projects proposed under the CAP would be potentially significant.</p>	<p>MM AQ-1 and MM AQ-2.</p>	Significant and unavoidable.

Impact	Mitigation Measure(s)	Significance After Mitigation
<p>Impact AQ-C. Neither construction nor operation of individual projects proposed under the CAP would expose sensitive receptors to substantial pollutant concentrations. This impact would be less than significant.</p>	<p>This impact would be less than significant. No mitigation is required.</p>	<p>Less than significant. No mitigation required.</p>
<p>Impact AQ-D. Neither construction nor operation of individual projects implemented under the proposed CAP would result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. This impact would be less than significant.</p>	<p>This impact would be less than significant. No mitigation is required.</p>	<p>Less than significant. No mitigation required.</p>
<p>Biological Resources</p>		
<p>Impact BIO-A. Implementation of individual projects under the proposed CAP would potentially have a substantial adverse effect, either directly or through habitat modifications, on species identified as candidate, sensitive, or other 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. This impact would be potentially significant.</p>	<p>MM BIO-1 Special Status Plant Species Surveys If completion of the project-specific biological resources assessment determines that special status plant species have potential to occur on site, surveys for special status plants shall be completed prior to any vegetation removal, grubbing, or other construction activity of each project activity (including staging and mobilization). The surveys shall be floristic in nature and shall be seasonally timed to coincide with the target species identified in the project activity-specific biological resources assessment. All plant surveys shall be conducted by a qualified biologist no more than one year prior to project implementation (annual grassland habitats may require yearly surveys). Surveys shall be conducted in accordance with current protocols established by the CDFW, USFWS and the local jurisdictions if said protocols exist. If special status plant species are identified, Mitigation Measure BIO-2 shall apply.</p> <p>MM BIO-2 Special Status Plant Species Avoidance, Minimization, and Mitigation If state- or federally-listed special status and/or CRPR 1 and 2 plant species are identified during the project-specific biological assessment, the activity shall be re-designed to avoid impacting these plant species to the maximum extent feasible. If CRPR 3 and 4 species are found, the biologist shall evaluate if they meet criteria to be considered special status, and if so, the same process as identified for CRPR 1 and 2 species shall apply.</p> <p>If special status plant species cannot be avoided and would be impacted by a project activity implemented under the proposed CAP, all impacts shall be mitigated at an appropriate ratio (minimum ratio of 1:1) to fully offset project activity impacts, as determined by a qualified biologist for each species. A restoration plan shall be prepared and implemented, as applicable.</p> <p>MM BIO-3 Endangered/Threatened Animal Species Habitat Assessment and Protocol Surveys If the results of the project-specific biological resources assessment determine suitable habitat may be present for any federally and/or state endangered or threatened animal</p>	<p>Less than significant with mitigation incorporated.</p>

Impact	Mitigation Measure(s)	Significance After Mitigation
	<p>species, habitat assessments and/or protocol surveys shall be completed in accordance with CDFW and/or USFWS/NMFS protocols prior to construction.</p> <p>Alternatively, in lieu of conducting protocol surveys, Metropolitan may choose to assume presence within the activity footprint and proceed with implementing appropriate avoidance measures, consultation, and permitting, as applicable.</p> <p>If the target species are detected during protocol surveys, or protocol surveys are not conducted and presence is assumed based on suitable habitat, Mitigation Measure BIO-4 shall apply.</p> <p>MM BIO-4 Endangered/Threatened Animal Species Avoidance and Mitigation</p> <p>If habitat is occupied or presumed occupied by federal and/or state-listed species and would be impacted by project activities, the project activity shall be redesigned in coordination with a qualified biologist to avoid impacting occupied/presumed occupied habitat to the maximum extent feasible. If occupied or presumed occupied habitat cannot be avoided, Metropolitan shall consult with USFWS, NMFS, and/or CDFW in order to determine the appropriate course of action, which may include a Biological Opinion (BO) or HCP/ITP issued by the USFWS/NMFS (relevant to federally listed species) and/or the ITP issued by the CDFW (relevant to state listed species).</p> <p>If occupied or presumed occupied habitat cannot be avoided, compensatory mitigation shall be provided (minimum ratio of 1:1) to fully offset impacts to habitat prior to the construction. Compensatory mitigation may be provided through purchase of mitigation bank credits, in-lieu fee, or permittee-responsible habitat restoration/establishment/enhancement/preservation. Compensatory mitigation may be combined/nested with special status plant species and sensitive natural community restoration, where applicable. Temporary impact areas shall be restored to similar pre-project conditions.</p> <p>If on and/or off-site habitat restoration/conservation is identified, a Habitat Mitigation and Monitoring Plan (HMMP) shall be prepared to ensure the success of compensatory mitigation sites. The HMMP shall identify long-term site management needs, routine monitoring techniques, and performance standards for determining that the conservation site has met the necessary criteria to function as a suitable mitigation site.</p> <p>MM BIO-5 Endangered/Threatened Species Avoidance and Minimization During Construction</p> <p>The following measures shall be applied to aquatic and terrestrial species, where appropriate. Metropolitan shall select from these measures as appropriate depending on site conditions, the species with potential for occurrence, and the results of the project-specific biological resources assessment (Mitigation Measure BIO-1).</p> <p>Pre-construction surveys for federal and/or state listed species with potential to occur shall be conducted where suitable habitat is present by a qualified biologist not more than 72 hours prior to the start of construction activities. The survey area shall include the proposed disturbance area and all proposed ingress/egress routes, plus a species-specific buffer. If any life stage of federal and/or state listed species is found within the survey area, the</p>	

Impact	Mitigation Measure(s)	Significance After Mitigation
	<p>appropriate measures in the BO or HCP/ITP issued by the USFWS/NMFS (relevant to federally listed species) and/or the ITP issued by the CDFW (relevant to state listed species) shall be implemented; or if such guidance is not in place for the activity, the qualified biologist shall recommend an appropriate course of action, which may include consultation with USFWS, NMFS, and/or CDFW.</p> <ul style="list-style-type: none"> • The activity limits of disturbance shall be flagged. Areas of special biological concern within or adjacent to the limits of disturbance shall have Environmental Sensitive Area fencing installed between said area and the limits of disturbance. • All activities occurring within or adjacent to sensitive habitats that may support federally and/or state endangered/threatened species shall have a qualified biologist present during all initial ground disturbing/vegetation clearing activities. Once initial ground disturbing/vegetation clearing activities have been completed, the biologist shall conduct pre-activity clearance surveys, as needed to ensure protection of endangered/threatened species. • If pumps are used for dewatering activities, all intakes shall be completely screened with wire mesh not larger than five millimeters to prevent animals from entering the pump system. • If at any time during construction of the project activity an endangered/threatened species enters the construction site or otherwise may be impacted by the project activity, all project activities shall cease. At that point, a qualified biologist shall recommend an appropriate course of action, which may include consultation with USFWS, NMFS, and/or CDFW. Alternatively, the appropriate measures shall be implemented in accordance with the BO or HCP/ITP issued by the USFWS (relevant to federal listed species) and/or the ITP issued by the CDFW (relevant to state listed species) and work can then continue as guided by those documents and the agencies, as appropriate. • All trenches, pipes, culverts or similar structures shall be inspected for animals prior to burying, capping, moving, or filling. • Upon completion of the project activity, a qualified biologist shall prepare a final compliance report documenting all compliance activities implemented for the activity, including the pre-construction survey results. <p>MM BIO-6 Non-Listed Special Status Animal Species Avoidance and Minimization</p> <p>Depending on the species identified in the project-specific biological resource assessment , the following applicable measures shall be implemented to reduce the potential for impacts to non-listed special status animal species:</p> <ul style="list-style-type: none"> • Pre-construction clearance surveys shall be conducted by a qualified biologist within 14 days prior to the start of construction (including staging and mobilization). The surveys shall cover the entire disturbance footprint plus a minimum 100-foot buffer and shall identify all special status animal species that may occur on-site. The qualified 	

Impact	Mitigation Measure(s)	Significance After Mitigation
	<p>biologist shall make recommendations for avoidance of non-listed special status species, such as through the use of exclusion fencing, buffer zones, etc.</p> <ul style="list-style-type: none"> • A qualified biologist shall be present during all initial ground disturbing activities, including vegetation removal, to recover special status animal species encountered during construction activities. • Upon completion of the project activity, a qualified biologist shall prepare a final compliance report documenting all compliance activities implemented for the project activity, including the pre-construction survey results. • If special status bat species may be present and impacted by the project activity, within 30 days of the start of construction a qualified biologist shall conduct presence/absence surveys for special status bats where suitable roosting habitat is present. Surveys shall be conducted using acoustic detectors and by searching tree cavities, crevices and other areas where bats may roost. If active bat roosts or colonies are present, the biologist shall evaluate the type of roost to determine the next step. <ul style="list-style-type: none"> ◦ If a maternity colony is present, all construction activities shall be postponed within a 250-foot buffer around the maternity colony until it is determined by a qualified biologist that the young have dispersed. Once it has been determined that the roost is clear of bats, the roost shall be removed immediately. ◦ If a roost is determined by a qualified biologist to be used by a large number of bats (large hibernaculum), alternative roosts, such as bat boxes if appropriate for the species, shall be designed and installed near the project activity site. The number and size of alternative roosts installed will depend on the size of the hibernaculum and shall be determined by a qualified biologist. ◦ If other active roosts are located, exclusion devices shall be installed such as valves, sheeting or flap-style one-way devices that allow bats to exit but not re-enter roosts to discourage bats from occupying the site. 	
<p>Impact BIO-B. Individual projects implemented under the proposed CAP could result in significant impacts to riparian habitats wetlands and/or sensitive natural communities. This impact would be potentially significant.</p> <p>Impact BIO-C. Individual projects implemented under the proposed CAP may result in significant impacts to state or federally protected wetlands. This impact would be potentially significant.</p>	<p>MM BIO-7 Jurisdictional Delineation and Impact Avoidance</p> <p>If the results of the project-specific biological resource assessment Mitigation Measure BIO-1 indicate project activities implemented under the proposed CAP would impact wetlands, drainages, riparian habitats, or other areas that may fall under the jurisdiction of the CDFW, USACE, and/or RWQCB, a qualified biologist shall complete a jurisdictional delineation. The jurisdictional delineation shall determine the extent of the jurisdiction for each of these agencies within the project activity site and shall be conducted in accordance with the requirement set forth by each agency. The results shall be provided in a jurisdictional delineation report submitted to Metropolitan, USACE, RWQCB, and CDFW, as appropriate, for review and approval. The project activity shall be designed to avoid or minimize impacts to jurisdictional areas to the maximum extent feasible.</p> <p>MM BIO-8 Wetlands, Drainages and Riparian Habitat Restoration</p> <p>If impacts to jurisdictional drainages, wetlands, riparian habitat, and sensitive vegetation communities cannot be avoided, impacts shall be mitigated at an appropriate ratio to fully</p>	<p>Less than significant with mitigation incorporated.</p>

Impact	Mitigation Measure(s)	Significance After Mitigation
	<p>offset project-specific impacts (minimum ratio of 1:1). Where feasible, temporarily impacted areas shall be restored to pre-project conditions. An HMMP shall be developed by a qualified biologist and submitted to the agency overseeing the project activity for approval. Alternatively, mitigation shall be accomplished through purchase of credits from an approved mitigation bank or in-lieu fee project.</p> <p>MM BIO-9 Sensitive Natural Community Avoidance and Mitigation</p> <p>If the results of the project-specific biological resource assessment Mitigation Measure BIO-1 indicate project activities implemented under the proposed CAP would impact sensitive natural communities, impacts shall be avoided through final project activity design modifications.</p> <p>If Metropolitan determines sensitive communities cannot be avoided, impacts shall be mitigated on-site or off-site at an appropriate ratio to fully offset project activity impacts (minimum ratio of 1:1). Temporarily impacted areas shall be restored to pre-project conditions. An HMMP shall be developed by a qualified biologist and submitted to the agency overseeing the project activity for approval.</p>	
<p>Impact BIO-D. Neither construction nor operation of individual projects implemented under the proposed CAP would interfere with movement of native resident or migratory fish or wildlife species or established wildlife corridors. This impact would be less than significant.</p>	<p>This impact would be less than significant. No mitigation is required.</p>	<p>Less than significant. No mitigation required.</p>
<p>Impact BIO-E. Neither construction nor operation of individual projects implemented under the proposed CAP would impact protected trees and, as such, would not conflict with local policies or ordinances protecting biological resources. This impact would be less than significant.</p>	<p>This impact would be less than significant. No mitigation is required.</p>	<p>Less than significant. No mitigation required.</p>
<p>Impact BIO-F. Individual projects implemented under the proposed CAP would not conflict with a Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan area. This impact would be less than significant.</p>	<p>This impact would be less than significant. No mitigation is required.</p>	<p>Less than significant. No mitigation required.</p>

Impact	Mitigation Measure(s)	Significance After Mitigation
Cultural Resources		
<p>Impact CUL-A. Individual projects implemented under the proposed CAP would have the potential to cause a substantial adverse change in the significant of a historical resource. This impact would be potentially significant.</p>	<p>MM CUL-1(a) Built Environment Investigation A historic resources evaluation shall be prepared for any future proposed project facilitated by the CAP involving a property which includes buildings, structures, objects, landscape/site plans, or other features that are 45 years of age or older. The evaluation shall be prepared by a qualified architectural historian or historian who meets the Secretary of the Interior’s (SOI) Professional Qualifications Standards (PQS) in architectural history or history. The qualified architectural historian or historian shall conduct an evaluation in accordance with the guidelines and best practices promulgated by the State Office of Historic Preservation to identify any potential historical resources within the proposed project area. The evaluation of the potential resource within its historic context shall be documented. All evaluated properties shall be documented on Department of Parks and Recreation Series 523 Forms. If a property is identified as an eligible historical resource under CEQA, Mitigation Measure CUL-1(b) shall be implemented.</p> <p>MM CUL-1(b) Built Environment Documentation Program If eligible built environment historical resources are identified for a future proposed project implemented under the CAP, efforts shall be made to the extent feasible to ensure that impacts are avoided. If avoidance is not possible, a Built Environment Documentation Program shall be implemented. Measures may include but are not limited to, compliance with the Secretary of the Interior’s Standards for Treatment of Historic Properties and documentation of the historical resource in the form of a Historic American Building Survey (HABS)- report or HABS-Like report. The HABS or HABS-Like report shall comply with the Secretary of the Interior’s Standards for Architectural and Engineering Documentation and shall generally follow the HABS Level III requirements, including digital photographic recordation, detailed historic narrative report, and compilation of historic research. Application of mitigation shall generally be overseen by a qualified architectural historian or historic architect meeting the PQS, unless unnecessary in the circumstances (e.g., preservation in place).</p> <p>MM CUL-3 Previously Unidentified Resources Encountered During Construction In the event that any potentially significant cultural resources are unexpectedly encountered during construction, work will be immediately halted and the discovery shall be protected in place. A 50-foot buffer around the exposed resource shall be established until a qualified cultural resources specialist evaluates the discovery. If the qualified cultural resources specialist determines that the discovery represents a potentially significant cultural resource, including a potential historical resource, additional investigations may be required to mitigate adverse impacts from project implementation. This additional work may include avoidance, testing, and evaluation or data recovery excavation. Work shall be prohibited in the restricted area until Metropolitan provides written authorization.</p>	<p>Significant and unavoidable</p>

Impact	Mitigation Measure(s)	Significance After Mitigation
<p>Impact CUL-B. Individual projects implemented under the proposed CAP may cause a substantial adverse change in the significance of an archaeological resource. This impact would be potentially significant.</p>	<p>MM CUL-2(a) Phase 1 Archaeological Resource Investigation If archaeological resources are identified during project-specific analysis that may be adversely affected by any future proposed project implemented under the CAP, Metropolitan shall retain a qualified archaeologist meeting the Secretary of the Interior standards in archaeology to complete a Phase 1 cultural resources assessment of the site. A Phase 1 cultural resources assessment will include an archaeological pedestrian survey of the site, if feasible, and sufficient background archival research to determine whether subsurface prehistoric or historic remains may be present. Archival research should include a current records search from the appropriate California Historical Resources Information System information center and a Sacred Lands File search conducted with the Native American Heritage Commission. A Phase 1 report or results documentation shall be submitted to Metropolitan prior to any ground disturbing activities. Recommendations contained therein shall be implemented throughout all ground disturbance activities.</p> <p>MM CUL-2(b) Extended Phase 1 Investigation For any projects proposed within 100 feet of a known archaeological site and/or in areas identified as sensitive by the Phase 1 study, an Extended Phase 1 (XPI) study shall be conducted to determine the presence/absence and extent of archaeological resources on the project site. XPI testing should comprise a series of shovel test pits and/or hand augured units and/or mechanical trenching intended to establish the horizontal and vertical boundaries of archaeological site(s) on the project site. No archaeological resources would be collected during the XPI Investigation. If an archaeological site is identified, Mitigation Measure CUL-2I or CUL-2(d) shall be implemented.</p> <p>MM CUL-2(c) Avoidance of Archaeological Resources Identified prehistoric or historic archaeological resources shall be avoided and preserved in place, where feasible. Where avoidance and preservation in place is not feasible, additional measures shall be applied as identified in Mitigation Measure CUL-2(d) through CUL-2(g).</p> <p>MM CUL-2(d) Phase 2 Archaeological Resources Investigation and Evaluation Where preservation is not feasible, each resource shall be evaluated for significance and eligibility for listing in the CRHR through a Phase 2 archaeological resource evaluation. A Phase 2 evaluation shall include any necessary archival research to identify significant historical associations as well as mapping of surface artifacts, collection of functionally or temporally diagnostic tools and debris, and excavation of a sample of the cultural deposit to characterize the nature of the sites, define the artifact and feature contents, determine horizontal boundaries and depth below surface, and retrieve representative samples of artifacts and other remains. A final Phase 2 Testing and Evaluation report shall be submitted to Metropolitan prior to any ground disturbing activities. Recommendations contained therein shall be implemented throughout all ground disturbance activities.</p> <p>MM CUL-2(e) Phase 3 Archaeological Data Recovery Program If an archaeological resource meets the CRHR eligibility and cannot be avoided, Metropolitan shall implement a Phase 3 Archaeological Data Recovery Program, conducted to exhaust the data potential of significant archaeological sites. The Phase 3 Archaeological</p>	<p>Significant and unavoidable.</p>

Impact	Mitigation Measure(s)	Significance After Mitigation
	<p>Data Recovery Program shall follow a research design prepared by a qualified archaeologist meeting the SOI PQS standards for archaeology and approved by Metropolitan in advance of Phase 3 fieldwork and excavations. The Phase 3 Data Recovery research design will use appropriate archaeological field and laboratory methods consistent with the California Office of Historic Preservation Planning Bulletin 5 (1991), Guidelines for Archaeological Research Design, or the latest edition thereof. The final Phase 3 Data Recovery report shall be submitted to Metropolitan prior to and any ground disturbing activities. Recommendations contained therein shall be incorporated into project design and implemented throughout all ground disturbance activities.</p> <p>MM CUL-2(f) Processing and Curation of Archaeological Materials</p> <p>Archaeological materials collected from the sites during the implementation of Mitigation Measures CUL-2(d) through CUL-2(e) shall be processed and analyzed in the laboratory according to standard archaeological procedures. The age of the materials shall be determined using radiocarbon dating and/or other appropriate procedures; lithic artifacts, faunal remains, and other cultural materials shall be identified and analyzed according to current professional standards. The significance of the sites shall be evaluated according to the criteria of the CRHR. The results of the investigations shall be presented in a technical report following the standards of the California Office of Historic Preservation publication “Archaeological Resource Management Reports: Recommended Content and Format (1990 or latest edition)”. Upon completion of the work, all artifacts, other cultural remains, records, photographs, and other documentation shall be curated an appropriate established curation facility based on the location of the fieldwork and/or repatriated to local Native Americans as appropriate. All fieldwork, analysis, report production, and curation shall be fully funded by Metropolitan.</p> <p>MM CUL-2(g) Cultural Resources Monitoring</p> <p>If recommended by Phase 1 (Mitigation Measure CUL-2(a)), XPI (Mitigation Measure CUL-2(b)), Phase 2 (Mitigation Measure CUL-2(d)), or Phase 3 (Mitigation Measure CUL-2(e)) studies, Metropolitan shall retain a qualified archaeologist to monitor project-related, ground-disturbing activities.</p> <p>MM CUL-3 Previously Unidentified Resources Encountered During Construction</p> <p>MM CUL-3 is described above under Impact CUL-A.</p>	
<p>Impact CUL-C. Individual projects implemented under the proposed CAP would be required to comply with all applicable regulations pertaining to the discovery of human remains. This impact would be less than significant.</p>	<p>This impact would be less than significant. No mitigation is required.</p>	<p>Less than significant. No mitigation required.</p>

Impact	Mitigation Measure(s)	Significance After Mitigation
Noise		
<p>Impact NOI-A. Individual projects implemented under the proposed CAP may result in generation of a substantial temporary or permanent increase in ambient noise levels. This impact would be potentially significant.</p>	<p>MM NOI-1 Locate Excavation Sites Away from Noise-Sensitive Receivers, Where Feasible Construction staging and activities shall be located in areas as far as practicable from sensitive receivers or in areas where receivers can be shielded from construction noise.</p> <p>MM NOI-2(a) Conduct Project-Level Noise Studies for Construction Activities Where Noise-Sensitive Receivers are Present Project-level construction noise studies shall be conducted for project activities that would exceed the screening criteria for a less-than-significant impact, as summarized in Table 30 and Table 32 of the draft PEIR. Such noise studies shall identify the existing ambient noise levels, characterize the nearest sensitive receivers, estimate the noise levels receivers will experience during construction of individual projects, compare estimated noise levels to the local jurisdiction’s noise limits or to the construction noise criteria in the FTA (2018) <i>Transit Noise and Vibration Impact Assessment Manual</i> for those that do not have quantitative construction noise level limits, outline any measures that may be used to reduce noise levels, and determine the amount of noise reduction that would occur with implementation of these measures. If the project-level noise study concludes that noise reduction measures are required, Mitigation Measure NOI-2(b) shall be implemented.</p> <p>MM-NOI-2(b) Implement Noise Reduction Measures If the results of the noise study determine noise reduction measures are required, noise reduction measures shall be implemented. Construction noise reduction measures may include, but would not be limited to, the use of mufflers, sound blankets/barriers, and/or enclosures and scheduling construction activities to minimize simultaneous operation of noise-producing equipment. Construction noise measures shall be implemented to reduce noise levels to FTA (2018) construction noise criteria, as feasible.</p> <p>If the individual projects would be constructed concurrently with development projects located within a 0.5-mile radius of the individual project location, the noise study shall also consider the cumulative impact of construction noise on sensitive receivers. If applicable, construction noise reduction measures shall be implemented to reduce cumulative noise levels to local jurisdiction or FTA (2018) construction noise criteria, as feasible.</p> <p>MM NOI-2(c) Conduct Project-Level Noise Studies for Post-Construction Activities Where Noise Sensitive Receivers are Present Prior to the commencement of construction activities for individual projects that may be implemented under the CAP where sensitive receivers are located within 1,000 feet of the individual project sites, project-level post-construction noise studies shall be conducted. Such noise studies shall identify the ambient noise levels, characterize the nearest sensitive receivers, estimate the noise levels receivers will experience during operation of individual projects during the post-construction period, compare estimated noise levels to the noise level standards of the applicable jurisdiction, outline any measures that may be used to reduce noise levels, and determine the amount of noise reduction that would occur with implementation of these measures. Noise reduction measures may include, but would not be</p>	<p>Significant and unavoidable</p>

Impact	Mitigation Measure(s)	Significance After Mitigation
<p>Impact NOI-B. Construction activities associated with implementation of individual projects under the proposed CAP may result in generation of excessive groundborne vibration or groundborne noise levels, depending on the nature and location of such projects. This impact would be potentially significant.</p>	<p>limited to, alternative site design, alternative orientation of noise sources, and construction of berms and/or barriers. Noise reduction measures shall be implemented to reduce noise levels to the noise level standards of the applicable jurisdiction, as feasible.</p> <p>NOI-3 (a) Locate Excavation Sites Away from Vibration-Sensitive Receivers, Where Feasible</p> <p>Whenever practicable, vibration-generating equipment including bulldozers, loaded trucks, pile drivers/pneumatic post drivers, bore/drill rigs, vibratory rollers, and jackhammers shall operate outside the minimum distances specified in Table 33 of the draft PEIR for historic sites, other structures, and vibration-sensitive receivers during project construction activities. Furthermore, whenever practicable, vibration-generating equipment including bulldozers, loaded trucks, pile drivers/pneumatic post drivers, bore/drill rigs, vibratory rollers, and jackhammers shall not be operated concurrently with vibration-generating equipment associated with cumulative development projects located within 600 feet of project construction sites.</p> <p>NOI-3(b) Conduct Project-Level Vibration Analysis for Construction Activities Where Vibration-Sensitive Receivers are Present</p> <p>If operation of construction equipment outside the specified buffer distances is not practicable, a detailed study of vibration impacts shall be conducted prior to the commencement of construction for that project. Such vibration studies shall characterize the nearest historic sites, structures, and/or sensitive receivers; estimate the vibration levels receivers will experience during construction of individual projects; compare estimated vibration levels to applicable Caltrans (2020) standards for vibration impacts related to structural damage and human annoyance; outline any measures that may be used to reduce vibration levels; and determine the amount of vibration reduction that would occur with implementation of these measures. Vibration reduction measures may include, but would not be limited to, the use of non-vibratory equipment, vibration monitoring, and repair of structural damage. Construction vibration reduction measures shall be implemented to reduce vibration levels to Caltrans (2020) construction vibration thresholds as feasible.</p> <p>If the individual project would be constructed concurrently with cumulative development projects located within a 600-foot radius of the activity location, the vibration study shall also consider the cumulative impact of combined vibration levels at the nearest sensitive receivers by estimating the combined vibration levels receivers will experience during construction of individual projects and cumulative development; compare estimated vibration levels to applicable standards for vibration impacts related to structural damage and human annoyance described in the Caltrans (2020) <i>Transportation and Construction Vibration Guidance Manual</i> (CT-HWANP-RT-20-365.01.01); identify whether the individual project’s contribution to any identified cumulative impact would be cumulatively considerable; outline any measures that may be used to reduce the project’s contribution to combined vibration levels; and determine the amount of vibration reduction that would occur with implementation of these measures. Such measures may include, but are not limited to, the installation of wave barriers, maximization of the distance between vibratory equipment and receivers, restriction of vibration-generating activities to daytime hours, or</p>	<p>Significant and unavoidable</p>

Impact	Mitigation Measure(s)	Significance After Mitigation
	temporary relocation of affected residents Construction vibration reduction measures shall be implemented to reduce cumulative vibration levels to Caltrans construction vibration thresholds as feasible.	
Impact NOI-C. One individual project to be implemented under the proposed CAP is located within the vicinity of a private airstrip or within an airport land use plan. However, projects implemented under the proposed CAP would not expose people residing or working in the area to excessive noise levels. This impact would be less than significant.	This impact would be less than significant. No mitigation is required.	Less than significant. No mitigation required.
Tribal Cultural Resources		
Impact TCR-A. Implementation of projects under the proposed CAP would not cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 5020.1(k), as Native American consultation completed pursuant to Assembly Bill (AB) 52 identified no resources that may be impacted by the proposed project. This impact would be less than significant.	This impact would be less than significant. No mitigation is required.	Less than significant. No mitigation required.
Impact TCR-B. Implementation of projects under the proposed CAP would not cause a substantial adverse change in the significance of a tribal cultural resource determined to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. Native American consultation completed pursuant to AB 52 identified no resources that may be impacted by the proposed project. This impact would be less than significant.	This impact would be less than significant. No mitigation is required.	Less than significant. No mitigation required.

CARB = California Air Resources Board; VOC = volatile organic compounds; CDFW = California Department of Fish and Wildlife; USFWS = United States Fish and Wildlife Service; CRPR = California Rare Plant Rank; NMFS = National Marine Fisheries Service; BO = Biological Opinion; HCP = Habitat Conservation Plans; ITP = Incidental Take Permit; USACE = United States Army Corps of Engineers; RWQCB = Regional Water Quality Control Board; FTA = Federal Transit Administration; SOI = Secretary of the Interior; PQS = Professional Qualifications Standards; HABS = Historic American Building Survey; CRHR = California Register of Historical Resources; HMMP = Habitat Mitigation and Monitoring Plan

ES.5 References Cited

California Department of Finance (DOF). 2020. E-1 Population Estimates for Cities, Counties, and the State. <http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-1/> (accessed January 2022).

Metropolitan. 2021. Climate Action Plan. Draft Program Environmental Impact Report. SCH No. 2020060450. Los Angeles, California: Metropolitan. November 2021

United States Census Bureau. 2020. ACS Demographic and Housing Estimates. https://data.census.gov/cedsci/table?d=ACS%205-Year%20Estimates%20Data%20Profiles&table=DP05&tid=ACSDP5Y2018.DP05&g=0400000US06_1600000US0655422&hidePreview=false&vintage=2018&layer=VT_2018_040_00_PY_D1&cid=DP05_0001E (accessed January 2022).

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CHAPTER 1

RESPONSES TO COMMENTS RECEIVED

Responses to Comments

This section includes comments received during public circulation of the Draft PEIR prepared for the CAP and the draft CAP. This chapter of the Final PEIR includes copies of all comment letters submitted during the 45-day public review period for the Draft PEIR, along with Metropolitan’s responses to comments in accordance with the *State CEQA Guidelines*, Section 15088. Under Section 15088 of the *State CEQA Guidelines*, Metropolitan is required to evaluate and provide written responses to comments received on the Draft PEIR. Metropolitan has also included written responses to comments received on the Draft CAP during the Draft PEIR public review period.

All written comments received have been coded to facilitate identification and tracking. Each comment letter received during the public review period was assigned an identification number, provided in Table 1-1. Each numbered comment letter is the submittal of a single individual, agency, or organization. These comment letters were reviewed and divided into individual comments, with each comment containing a single theme, issue, or concern. Individual comments were bracketed and numbered, and the responses were assigned corresponding numbers (Response 1-1, for example, indicates that the response is for the first issue raised in Comment Letter 1). To aid the readers and commenters, comments have been reproduced in this chapter together with the corresponding responses. Table 1-1 identifies a list of interested parties who submitted comments during the 45-day public review period for the Draft PEIR and Draft CAP, which began on November 18, 2021 and ended on January 7, 2022. It also includes two letters dated January 11 and January 12, 2022, which were submitted to Metropolitan following the closure of the public comment period.

Table 1-1 Comments Received on the Draft PEIR

Letter No. and Commenter	Page No.
Agency	
1 John Brooks, Senior Sustainability Analyst, City of Thousand Oaks	25
2 Theresa Kim, Los Angeles Department of Water and Power (LADWP)	27
3 Abigail Convery, Senior Planner and Biologist, County of Ventura	29
4 Nicole Collazo, Air Quality Specialist, Ventura County Air Pollution Control District	31
5 Frank Wen, Ph.D., Manager, Planning Strategy Department, Southern California Association of Governments (SCAG)	35
6 Erica H. Demkowicz, AICP, Senior Planner, Community Development Department, City of Tustin	40
Organizations	
7 Annelisa Ehret Moe, Water Quality Scientist, Heal the Bay Dr. Katherine Pease, Science and Policy Director, Heal the Bay	42
8 Scott Maloni, Vice President, Project Development, Poseidon Water	56
9 Elizabeth Reid-Wainscoat, Campaigner, Urban Wildlands, Center for Biological Diversity	59
10 Caty Wagner, Southern California Water Organizer, Sierra Club California	78
11 Bruce Reznik, Executive Director, Los Angeles Waterkeeper	84
Individuals	
12 Kristelle Kwak, Resident	88
13 Liz Amsden, Resident	90

To finalize the Draft PEIR for the proposed program, the following responses have been prepared for comments that were received during the public review period. In accordance with the requirements of the *State CEQA Guidelines* Section 15088(b), Metropolitan will provide a written response for comments submitted to each commenter at least 10 days prior to certifying the Final PEIR.

As a general introduction, the PEIR's conclusions on the character and significance level of the program's potential to cause environmental impacts are supported by substantial evidence, which is presented in the Draft PEIR, Draft CAP, and Appendices, and further clarified in this document. Some commenters may disagree with the analyses and conclusions in the Draft PEIR. Consistent with the intent of CEQA, and the *State CEQA Guidelines* for its implementation, this Final PEIR also includes the differing opinions and statements presented by the commenters.

Topical Response

A substantial number of comments received during the public review period for the Draft PEIR pertain directly to the contents of the Draft CAP itself, and do not address the contents or adequacy of the Draft PEIR or the CEQA process. Such comments do not specifically relate to environmental issues analyzed in the Draft PEIR and generally do not warrant changes to the contents or findings of the Draft PEIR. However, because review and adoption of the CAP is occurring as a public process pursuant to *State CEQA Guidelines* Section 15183.5(b)(1)(F), comments received regarding the contents of the CAP are disclosed in this document. This section presents a topical response to comments related to the contents of the CAP where such comments are similarly related and do not otherwise relate to environmental issues analyzed in the Draft PEIR. Responses to specific comment letters may refer the commenter to the Topical Response presented herein.

Topical Response A – State Water Project Emissions

Many of the comments received focused on the total embedded energy of water delivered to Southern California, thus a description of the Department of Water Resources' (DWR's) State Water Project (SWP) deliveries emissions is provided here and a discussion of the embedded energy of Metropolitan's water has been included in Appendix B of the Final CAP. Metropolitan acknowledges that water received from the SWP has GHG emissions associated with the delivery of that water to Southern California. Thus, when more water is received from the SWP, there is a corresponding increase in overall GHG emissions. Metropolitan's CAP is intended to be a comprehensive plan to reduce GHG emissions from Metropolitan's operations. As a result, emission reductions measures are targeted to reduce emissions within Metropolitan's operational control. As described in the CAP, Metropolitan imports water from two sources: the Colorado River Aqueduct (CRA) and through the DWR's SWP. Metropolitan has operational control over water pumped from the Colorado River through the CRA; however, as explained in the CAP, Metropolitan's operational control of imported water from the SWP begins when the water enters Metropolitan's system.

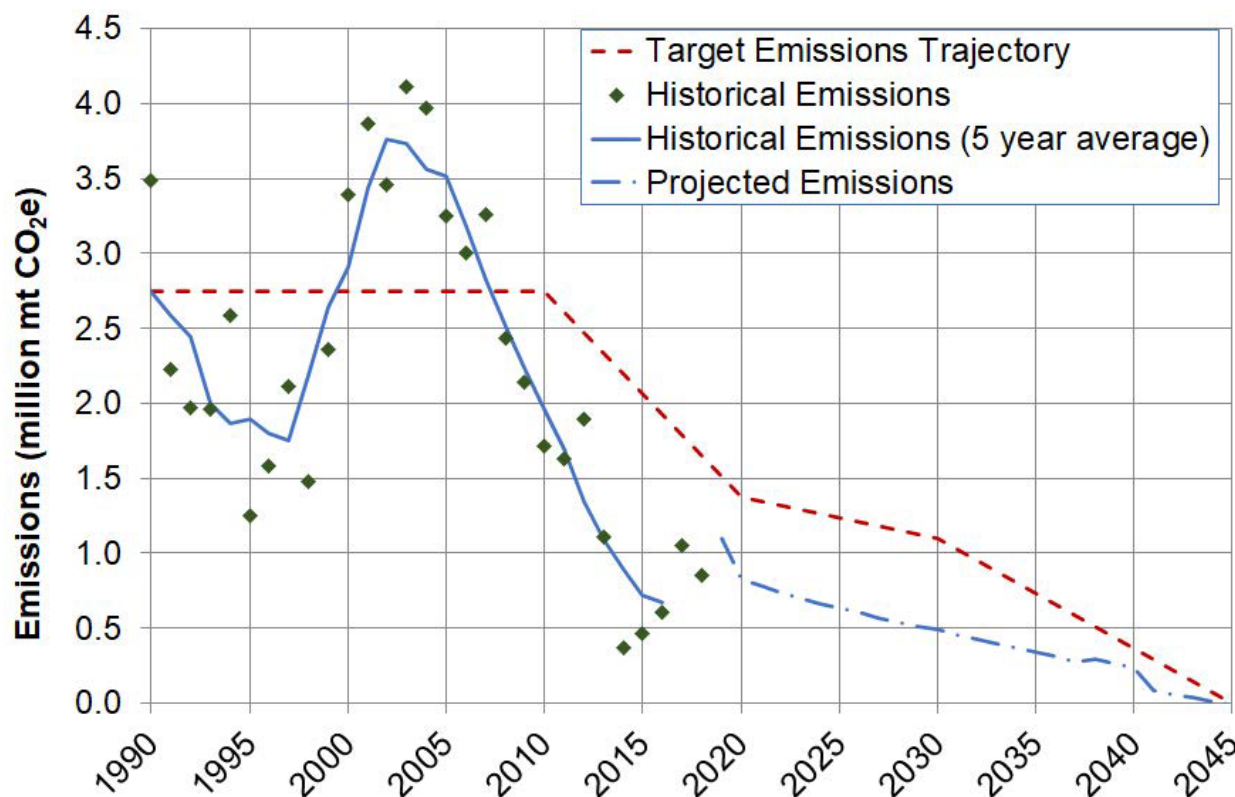
Metropolitan is one of 29 public water agencies that contracts with the DWR for delivery of water from the SWP. The SWP, which provides water supply, recreation, and flood control benefits to California residents, is a multi-purpose water storage and delivery system that extends more than 705 miles, two-thirds the length of California. A collection of canals, pipelines, reservoirs, and hydroelectric power facilities delivers clean water to 27 million Californians, 750,000 acres of farmland, and businesses throughout the state. Getting water to these users requires a large amount of electricity.¹ In fact, the SWP is one of the largest single consumers of electricity in the state, using around 8,000 gigawatt-hours per year. The SWP also generates a large amount of electricity each year at its reservoirs and in-conduit generating stations, about half of all the energy it uses annually. Even

¹ <https://water.ca.gov/Programs/State-Water-Project>

with all of the electricity the SWP uses, it only accounts for approximately 3 percent of statewide electricity use.²

To accomplish the GHG goals set forth by the state, in 2012, DWR developed the Greenhouse Gas Emissions Reduction Plan (2012 Plan) as the first phase of its CAP to guide decision-making related to energy use and GHG emissions. DWR’s CAP is divided into three phases to address mitigation, adaptation, and consistency in its analysis of climate change: Phase I: Greenhouse Gas Reduction Plan; Phase II: Climate Change Analysis Guide; and Phase III: Climate Change Vulnerability Assessment. In its 2012 Plan, DWR committed to regular updates to its plan. In 2020, DWR prepared a Greenhouse Gas Emissions Reduction Plan Update (Update 2020) to review its GHG reductions since the 2012 Plan and to update strategies for further reduction consistent with legislative changes, including the GHG emissions reduction targets established in Senate Bill (SB) 32 (2016), SB 100 (2018), Executive Order B-18-12 (2012), Executive Order B-30-15 (2015), and Executive Order B-55-18 (2018). In addition, since the 2012 Plan was adopted, California’s wholesale electricity market has also seen a significant increase in renewable resources. To reflect this change and to align with industry practice in emission reporting, Update 2020 incorporates updated emission factors to determine emissions from unspecified market resources. DWR has made significant progress in meeting GHG reduction goals through its CAP. The figure below illustrates the decline in emissions from operation of the SWP over time.

Figure 1-1 SWP's Historic and Projected Annual Emissions



² <https://water.ca.gov/Programs/All-Programs/Climate-Change-Program/Climate-Action-Plan>

As DWR manages its GHG emissions over the next 20 years and as the wholesale electricity market continues to increase its renewable resources portfolio to meet the goals of SB 100 (2018), the SWP will become a negligible portion of emissions by 2045 and will not be an emission contributor to Metropolitan's water supply portfolio. Commenters who wish to track SWP GHG emissions to DWR's CAP can visit the following site for more detailed information:

- <https://water.ca.gov/Programs/All-Programs/Climate-Change-Program/Climate-Action-Plan>

Upon adoption of the CAP, work will begin on a customized, award-winning, publicly accessible, web-based CAPDash tool that will track projects implemented and GHG emissions realized from measures detailed in the CAP, provide annual progress reports, and provide the status of the carbon budget. In addition, Metropolitan will work with DWR to include a complete picture of emissions associated with the delivery of imported water to Southern California. Metropolitan's CAPDash tool is expected to be launched early in 2023.

Letter 1

From: [John Brooks](#)
To: [EPT](#)
Subject: CAP
Date: Friday, December 17, 2021 11:02:25 AM

I have reviewed the CAP and did not see a section on Adaptation and Resilience and I did not hear it addressed in the meeting this morning. Is there a separate document that includes this type of information?

I am looking for something that addresses the following types of issues:

- SWP dependent areas – projects to ensure reliable water when the state issues a zero percent allocation.
- Major fires negatively impacting critical watersheds or storage.
- Land subsidence in the central valley effects on the conveyance system
- Impacts of zero snowpack in the Sierras by 2050 on the system.
- Extreme heat and evapotranspiration effects on operations and water availability.

1-1

I thought that the CAP's content was good and that separating the SWP GHG impacts is reasonable. However, for project evaluations and understanding the overall benefits, it would be helpful to have the aggregated GHG number as a comparison.

1-2

Thanks, John

John Brooks
Senior Sustainability Analyst
 Public Works Department
 805.449.2472 | toaks.org/publicworks



Response to Comment Letter 1

COMMENTER: John Brooks, Senior Sustainability Analyst, City of Thousand Oaks Public Works Department

DATE: December 17, 2021

Response 1-1

The commenter notes the CAP does not contain a section on adaptation and resilience and asked if a separate document addresses these concerns. Specifically, the commenter notes that they are looking for a section or document addressing the following:

- SWP dependent areas;
- Major fires negatively impacting critical watersheds or storage;
- Land subsidence in the Central Valley and effects on the conveyance system;
- Impacts of zero snowpack in the Sierras by 2050; and
- Extreme heat and evapotranspiration effects on operations and water availability.

Metropolitan understands the importance of adapting to changing climatic conditions to ensure a reliable supply of water to its service area. Metropolitan's Integrated Resources Plan (IRP) and Urban Water Management Plan (UWMP) focus on water supply reliability and actions that Metropolitan employs to ensure a reliable supply of water during periods of drought, a decrease in snowpack, heat events, and the effects on operational conditions. The CAP complements these two plans by creating a GHG reduction plan. The IRP is currently being updated and will be released in the coming months. Links to both current documents and information about the planning process are provided below.

- <https://www.mwdh2o.com/planning-for-tomorrow/how-we-plan/integrated-resource-plan/>
- <https://www.mwdh2o.com/planning-for-tomorrow/how-we-plan/>

Response 1-2

The commenter adds that separating SWP GHG impacts is reasonable, however for project evaluations and understanding the overall benefits, it would be helpful to have the aggregated GHG number as a comparison.

This comment relates to the contents of the proposed CAP and does not raise concerns regarding the adequacy of the Draft PEIR or the CEQA process; no revisions have been made to the Draft PEIR.

Metropolitan's CAP is a GHG reduction plan aimed at identifying GHG emissions from within its operational control; therefore, emissions were calculated for its own operations including conveyance, treatment and distribution of SWP water from where it enters Metropolitan's system. DWR has its own CAP, which identifies emissions reductions for its operations. While an aggregated number will not be used in the Metropolitan's CAP, Metropolitan understands that having an aggregated emissions factor for the imported water to Southern California is beneficial to better understand the overall emissions related to imported water, therefore a discussion of DWR's emissions is provided in Topical Response A and a detailed discussion of the overall embedded energy of water imported to Southern California has been added to Appendix B of the Final CAP.

Letter 2

From: [Kim, Theresa](#)
To: [EPT](#)
Subject: CAP PEIR
Date: Tuesday, December 28, 2021 12:17:53 PM

To whom this may concern,

The Los Angeles Department of Water and Power’s Water Resources Division recently reviewed the draft MWD Climate Action Plan. The CAP helps to show how Metropolitan will reduce GHG emissions in their operations; however, I have a couple questions. LADWP tracks their carbon emissions related to our operations and purchases and would like to know if MWD will provide their System Average GHG metric to Member Agencies so we can account for Scope 3 emissions related to purchase of water from your company. The other question that we have is regarding Strategy 8. We would like to know more about how the water conservation and local supply program will reduce Scope 3 emissions.

2-1

2-2

Feel free to contact me at (213) 367-1491 to discuss the questions.

Thanks so much,

[Theresa Kim](#)
[Water Resources Division](#)
[Los Angeles Department of Water and Power](#)
[111 N. Hope Street, Room 308](#)
[Los Angeles, CA 90012](#)
[\(213\) 367-1491](#)

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Response to Comment Letter 2

COMMENTER: Theresa Kim, Los Angeles Department of Water and Power (LADWP) Water Resources Division

DATE: December 28, 2021

Response 2-1

The commenter asks if Metropolitan will provide its System Average GHG metric to Member Agencies, such as LADWP, to account for Scope 3 emissions related to purchase of water.

Metropolitan's CAP is a GHG reduction plan aimed at identifying GHG emissions from within its operational control; therefore, emissions were calculated for its own operations including conveyance, treatment and distribution of SWP water from where it enters Metropolitan's system. DWR has its own CAP, which identifies emissions reductions for its operations. While an aggregated number will not be used in the Metropolitan's CAP, Metropolitan understands that having an aggregated emissions factor for the imported water to Southern California is beneficial to better understand the overall emissions related to imported water, therefore a discussion of DWR's emissions is provided in Topical Response A and a detailed discussion of the overall embedded energy of water imported to Southern California has been added to Appendix B of the Final CAP.

The comment relates to the contents of the proposed CAP and does not raise concerns regarding the adequacy of the Draft PEIR or the CEQA process. No changes to the Draft PEIR are warranted in response to this comment.

Response 2-2

The commenter also requests additional information regarding Strategy 8 of the CAP, specifically how the water conservation and local supply program will reduce Scope 3 emissions.

Strategy 8 is a largely supportive measure that includes the implementation of new and continued funding of existing water conservation programs aimed at reducing local water use and thereby indirectly reducing GHG emissions associated with transport and delivery of water. While Strategy 8 measures clearly reduce emissions associated with conveyance and treatment of water, the measures were included under Scope 3 because though Metropolitan can invest in and encourage water conservation efforts, the decision to participate in the programs, such as purchase of low flush toilets, lies outside of Metropolitan's control.

The comment relates to the contents of the proposed CAP and does not raise concerns regarding the adequacy of the Draft PEIR or the CEQA process. No changes to the Draft PEIR or Draft CAP are warranted in response to this comment.

Letter 3



COUNTY of VENTURA

RESOURCE MANAGEMENT AGENCY
DAVE WARD, AICP
Planning Director

DATE: November 29, 2021

TO: Metropolitan Water District of Southern California

FROM: Abigail Convery, Senior Planner and Biologist

SUBJECT: Climate Action Plan and Draft Environmental Impact Report (RMA 20-005-1)

Thank you for the opportunity to comment on the Metropolitan Water District of Southern California’s Climate Action Plan and Draft Environmental Impact Report (EIR) (RMA 20-005-1). The Water District should be commended for developing a Climate Action Plan to achieve carbon neutrality by 2045. Section 2.5 of the Draft EIR lists nine projects that would reduce energy use and/or sequester carbon, but none of these projects are proposed within Ventura County. This comment letter is simply regarding one factual correction to the document, as described below.

Within the Biological Resource section of Draft Environmental Impact Report, Section 4.2.3.3- Local Policies and Adopted/Approved Plans, should acknowledge Locally Important Species which are animal and plant communities designated as significant biological resources to be protected from incompatible land uses and development according to the Ventura County General Plan COS-1 Goal and Policy COS-1.1. The Locally Important Species list available on our website <https://vcrma.org/ventura-county-locally-important-species-list>.

Thank you for the opportunity to comment on the Climate Action Plan and Draft Environmental Impact Report (EIR). Please evaluate Locally Important Species for any discretionary projects that will occur within unincorporated Ventura County. If you have questions regarding the information set forth in this memo, please contact Abigail Convery, at (805) 654-2489 or via email at Abigail.Convery@ventura.org.

3-1

HALL OF ADMINISTRATION #1740
805-654-2481 • FAX 805-654-2509 • 800 South Victoria Avenue, Ventura, CA 93009 • vcrma.org

Response to Comment Letter 3

COMMENTER: Abigail Convery, Senior Planner and Biologist, County of Ventura

DATE: November 29, 2021

Response 3-1

The commenter acknowledges that none of the proposed projects in the Draft PEIR are within Ventura County. Additionally, the commenter suggests that Section 4.2.3.3, *Local Policies and Adopted/Approved Plans*, of the Biological Resources section of the Draft PEIR should acknowledge Locally Important Species, which are animal and plant communities designated as significant biological resources to be protected from incompatible land uses and development according to the Ventura County General Plan COS-1 Goal and Policy COS-1.1.

Section 4.2.3.3, *Local Policies and Adopted/Approved Plans*, of the Draft PEIR, states that local general plans contain elements which address protection of biological resources, including special status species. As described on page 114 of the Draft PEIR, Metropolitan would comply with any applicable local policies or ordinances protecting biological resources. While the exact location of all projects that may be implemented under the proposed program are not known at this time, the commenter's statement that there are currently no proposed project sites in Ventura County is correct.

Letter 4



Ventura County
Air Pollution
Control District

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www.vcapcd.org

Dr. Laki Tisopulos, P.E.
Air Pollution Control Officer

**VENTURA COUNTY
AIR POLLUTION CONTROL DISTRICT**
Memorandum

TO: Malinda Stalvey, Senior Environmental Specialist DATE: January 4, 2022
FROM: Nicole Collazo, Air Quality Specialist, Planning Division *NC*
SUBJECT: Public Comment for the Metropolitan Water District of Southern California
Climate Action Plan (CAP) and Draft Environmental Impact Report (DEIR)
(RMA 20-005-1)

Air Pollution Control District (APCD) staff have reviewed the subject CAP and DEIR for the project referenced above (project). The Lead Agency for the project is the Metropolitan Water District of Southern California (Metropolitan), which has jurisdiction over portions of Los Angeles, Riverside, Orange, San Bernardino, San Diego, and Ventura counties.. APCD as a Commenting Agency has the following comments about the draft CAP and EIR as it pertains to air quality and/or greenhouse gas environmental impact sections.

GENERAL COMMENTS

Draft Climate Action Plan

Item 1, Page 5.27-5.28. DC-1 and DC-2 have conflicting deadlines. DC-1 intends to establish a schedule to replace all natural gas equipment in Metropolitan’s buildings to electric by 2025, yet DC-2 states natural gas from the same sources (Metropolitans’ buildings, etc.) will be reduced by 50% by 2030. DC-2 then goes on to say some natural gas-fired equipment will be replaced as it ends its lifetime, and that may be after the intended replacement deadline of 2025, and even 2030.

Item 2, Page 5.34 As part of Measure FL-4 Phase 1’s ZEV/EV Feasibility Study, it is encouraged to factor in costs and commitment to apply to applicable air district’s incentive grants program(s), which include funding the cost of EV infrastructure installations. For more information regarding the VCAPCD’s Incentive Programs, please visit http://www.vcapcd.org/grant_programs.htm .

Item 3, Page 5.37. The implementation year for Measure AF-2 is 2021, which has already passed. If not implemented yet, it is recommended the year be changed to reflect the measure’s current status, and concurrently AF-3 as it depends on the 2021 Pilot Study referenced in Measure AF-2.

Item 4, Page 5.4. Scope 1 Strategy 1 states “natural gas-powered equipment can be electrified over time as the equipment reaches the end of its useful life”. This strategy is not proactive and in line with the goal of a climate action plan, as the end life of some equipment may exceed 2025, 2030,

4-1

4-2

4-3

4-4

and perhaps 2045 in some cases, depending on when the equipment was purchased. Consider rewording this strategy or stating all natural gas equipment will be replaced by a concrete date.

4-4

Item 5, Table 6-1. The implementation year for several strategies are past due (2021 for DC-2, E-5, EC-2, EC-5, WC-3). Consider updating these implementation years unless already begun in 2021.

4-5

Draft Environmental Impact Report

Item 1, Page 101. We recommend adding the statement “and make assessment available to the applicable air district for review” in the last sentence of Mitigation Measure AQ-1.

4-6

Item 2, Page 101. We recommend adding the statement “unless a lower VOC is required from applicable air district prior to mitigation.” in the last sentence of Mitigation Measure AQ-2. For example, the current VOC limit for VCAPCD is 50 g/L for general coatings.

4-7

Thank you for the opportunity to comment on the project’s draft CAP and EIR. You may reach me at nicole@vcapcd.org should you have any questions.

Response to Comment Letter 4

COMMENTER: Nicole Collazo, Air Quality Specialist, Ventura County Air Pollution Control District

DATE: January 4, 2022

Response 4-1

The commenter states the Air Pollution Control District has reviewed the CAP and the Draft PEIR and notes that on pages 5.27 and 5.28 of the CAP, measures DC-1 and DC-2 have conflicting deadlines.

The comment relates to the contents of the proposed CAP and does not raise concerns regarding the adequacy of the Draft PEIR or the CEQA process. Metropolitan is committed to reducing its natural gas consumption. Measure DC-1 ensures that an analysis of natural gas consuming equipment is completed no later than 2025. The analysis will include cost-effective replacement options, a budget, and an established replacement schedule. Measure DC-1 is a complementary, supportive measure that is critical to the success of the quantifiable Measure DC-2 which includes a commitment to reduce Metropolitan's natural gas emissions by 50 percent by 2030.

Response 4-2

The commenter references page 5.34 of the CAP, specifically measure FL-4 Phase 1's ZEV/EV Feasibility Study and encourages Metropolitan to factor in costs and commitment to apply to applicable air district's incentive grants program(s). Additionally, the commenter provided information on their EV infrastructure incentive programs on their website.

The comment relates to the contents of the proposed CAP and does not raise concerns regarding the adequacy of the Draft PEIR or the CEQA process. Metropolitan initiated a comprehensive ZEV/EV Feasibility Study in January 2022 and anticipates a completion date by January 2023. The Scope of Work includes a study of available vehicle options, preliminary infrastructure design plans, and identification of government grant and local agency incentive programs to ensure a cost-effective transition to ZEV/EV technology(s).

Response 4-3

The commenter notes the implementation year for measure AF-2 is listed in the CAP as 2021. If not implemented yet, the commenter recommends the year be changed to reflect the measure's current status. The commenter recommends measure AF-3 be updated accordingly, as it is dependent on the study referenced in AF-2.

The comment relates to the contents of the proposed CAP and does not raise concerns regarding the adequacy of the Draft PEIR or the CEQA process. A renewable diesel use pilot project for on-road and off-road vehicles was implemented in late 2021. Results from this pilot project will be used to determine the feasibility of implementing the interim measure of transitioning 100 percent of Metropolitan's diesel fuel use to renewable diesel. This strategy will be employed to reduce diesel emissions until such time that Metropolitan transitions its fleet to ZEV/EV as described in Strategy 2 – Zero-Emission Fleet.

Response 4-4

The commenter recommends rewording Scope 1, Strategy 1 in the CAP, or stating that all natural gas equipment will be replaced by an established date.

The comment relates to the contents of the proposed CAP and does not raise concerns regarding the adequacy of the Draft PEIR or the CEQA process. While electrification is an important step in decarbonization of natural gas equipment, not all natural gas consuming equipment can be electrified at this time. Metropolitan has committed to replacing 100 percent of its natural gas consuming equipment by 2045. For further discussion on the replacement of natural gas equipment, please see Response 4-1.

Response 4-5

The commenter recommends updating the implementation years that are past due unless already begun in 2021 for CAP measures DC-2, E-5, EC-2, EC-5, and WC-3.

The comment relates to the contents of the proposed CAP and does not raise concerns regarding the adequacy of the Draft PEIR or the CEQA process. All the measures identified are already being implemented. Therefore, the implementation schedule is correct.

Response 4-6

The commenter recommends adding the statement, “and make assessment available to the applicable air district for review,” in the last sentence of Mitigation Measure AQ-1 on page 101 of the Draft PEIR.

Mitigation Measure AQ-1, as described on page 101 of the Draft PEIR, requires preparation of a project-specific construction air quality assessment for individual projects to be implemented under the CAP that involve construction activities with an intensity (i.e., size, schedule, equipment, demolition, import/export of soil, architectural coating) greater than the sample program activity described in Section 4.1, *Air Quality*, of the Draft PEIR. Future projects implemented under the CAP would be required to undergo the appropriate level of project-specific environmental review, during such time any applicable project-specific air quality analyses would be available as part of the public record during project approval. At such time, applicable air districts with jurisdiction over individual project sites would have the opportunity to review and/or comment on any project-specific construction air quality assessments. Because this would occur through the CEQA-required process, no changes to the mitigation measure are warranted.

Response 4-7

The commenter suggests adding the statement, “unless a lower [volatile organic compound] VOC is required from applicable air district prior to mitigation,” in the last sentence of Mitigation Measure AQ-2, since the current VOC limit for VCAPCD is 50 grams per liter (g/L) for general coatings.

Section 4.1, *Air Quality*, of the Draft PEIR acknowledges that air districts promulgate their own rules with respect to VOC content limits for architectural coatings, which may be lower than 250 g/L. The list of emissions reduction measures described in Mitigation Measure AQ-2 is intended to be representative of the type of measures that may be included to reduce emissions from individual projects and is not an exhaustive list. Furthermore, as noted in footnote 20 on page 90 of the Draft PEIR, all contractors would be required to comply with applicable air district rules regarding VOC content limits for architectural coatings, which may be more stringent than 250 g/L depending on the air district and type of coating. Because compliance with the applicable air district’s required VOC content limit constitutes regulatory compliance, no changes to the mitigation measure are warranted.

Letter 5



SOUTHERN CALIFORNIA
ASSOCIATION OF GOVERNMENTS
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January 6, 2022

Ms. Malinda Stalvey, Senior Environmental Specialist
The Metropolitan Water District of Southern California, Environmental Planning Section
P.O. Box 54153
Los Angeles, California 90054-0153
Phone: (213) 217-5545
E-mail: EP@mwdh2o.com

**RE: SCAG Comments on the Draft Program Environmental Impact Report for the
Metropolitan Water District of Southern California Climate Action Plan (CAP) [SCAG NO.
IGR10524]**

Dear Ms. Stalvey,

Thank you for submitting the Notice of Availability of the Draft Program Environmental Impact Report for the Metropolitan Water District of Southern California Climate Action Plan (CAP) ("proposed project") to the Southern California Association of Governments (SCAG) for review and comment. The proposed project is a Climate Adaption Plan that establishes an inventory of historical and current greenhouse gas (GHG) emissions and outlines a strategy for reducing GHG emissions associated with future construction, operation, and maintenance activities by 40 percent below 1990 levels by year 2030.

Based on SCAG staff's review, the proposed project does not reference the most recently adopted 2020 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS or Connect SoCal). SCAG staff comments are detailed in the attachment to this letter.

When available, please send the Final Program Environmental Impact Report to IGR@scag.ca.gov. If you have any questions regarding the attached comments, please contact the Intergovernmental Review (IGR) Program, attn.: Anita Au, Senior Regional Planner, at (213) 236-1874 or IGR@scag.ca.gov. Thank you.

5-1

Sincerely,

Frank Wen, Ph.D.
Manager, Planning Strategy Department

January 6, 2022
Ms. Stalvey

SCAG No. IGR10524
Page 2

**COMMENTS ON THE NOTICE OF AVAILABILITY OF A
DRAFT PROGRAM ENVIRONMENTAL IMPACT REPORT FOR
METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA CLIMATE ACTION PLAN (CAP)
[SCAG NO. IGR10524]**

SUMMARY

Pursuant to Senate Bill (SB) 375, SCAG is the designated Regional Transportation Planning Agency under state law and is responsible for preparation of the Regional Transportation Plan (RTP) including the Sustainable Communities Strategy (SCS). SCAG’s feedback is intended to assist local jurisdictions and project proponents to implement projects that have the potential to contribute to attainment of Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) goals and align with RTP/SCS policies.

5-1

Based on SCAG staff review, the proposed project generally supports the applicable goals of the 2020 Connect SoCal, and the analysis in the Draft Program Environmental Impact Report is based on the growth forecasts adopted as part of the 2020 Connect SoCal.

CONNECT SOCIAL GOALS

The SCAG Regional Council fully adopted [Connect SoCal](#) in September 2020. Connect SoCal, also known as the 2020 – 2045 RTP/SCS, builds upon and expands land use and transportation strategies established over several planning cycles to increase mobility options and achieve a more sustainable growth pattern. The long-range visioning plan balances future mobility and housing needs with goals for the environment, the regional economy, social equity and environmental justice, and public health. The goals included in Connect SoCal may be pertinent to the proposed project. These goals are meant to provide guidance for considering the proposed project. Among the relevant goals of Connect SoCal are the following:

5-2

SCAG CONNECT SOCIAL GOALS	
Goal #1:	<i>Encourage regional economic prosperity and global competitiveness</i>
Goal #2:	<i>Improve mobility, accessibility, reliability and travel safety for people and goods</i>
Goal #3:	<i>Enhance the preservation, security, and resilience of the regional transportation system</i>
Goal #4:	<i>Increase person and goods movement and travel choices within the transportation system</i>
Goal #5:	<i>Reduce greenhouse gas emissions and improve air quality</i>
Goal #6:	<i>Support healthy and equitable communities</i>
Goal #7:	<i>Adapt to a changing climate and support an integrated regional development pattern and transportation network</i>
Goal #8:	<i>Leverage new transportation technologies and data-driven solutions that result in more efficient travel</i>
Goal #9:	<i>Encourage development of diverse housing types in areas that are supported by multiple transportation options</i>
Goal #10:	<i>Promote conservation of natural and agricultural lands and restoration of habitats</i>

January 6, 2022
Ms. Stalvey

SCAG No. IGR10524
Page 3

Connect SoCal Strategies

To achieve the goals of Connect SoCal, a wide range of land use and transportation strategies are included in the accompanying twenty (20) technical reports. To view Connect SoCal and the accompanying technical reports, please visit the [Connect SoCal webpage](#). Connect SoCal builds upon the progress from previous RTP/SCS cycles and continues to focus on integrated, coordinated, and balanced planning for land use and transportation that helps the SCAG region strive towards a more sustainable region, while meeting statutory requirements pertinent to RTP/SCSs. These strategies within the regional context are provided as guidance for lead agencies such as local jurisdictions when the proposed project is under consideration.

SCAG Staff Comments

SCAG staff recommends that you review 2020 Connect SoCal and consider its adopted goals and policies when finalizing the proposed project.

SCAG staff would like to call your attention to resources available from SCAG’s [Regional Climate Adaptation Framework](#) including the [Southern California Climate Adaptation Planning Guide](#), [Communication and Outreach Toolkit](#), [Library of Model Policies](#), and [SB 379 Compliance Curriculum for Local Jurisdictions](#).

5-2

DEMOGRAPHICS AND GROWTH FORECASTS

A key, formative step in projecting future population, households, and employment through 2045 for Connect SoCal was the generation of a forecast of regional and county level growth in collaboration with expert demographers and economists on Southern California. From there, jurisdictional level forecasts were ground-truthed by subregions and local agencies, which helped SCAG identify opportunities and barriers to future development. This forecast helps the region understand, in a very general sense, where we are expected to grow, and allows SCAG to focus attention on areas that are experiencing change and may have increased transportation needs. After a year-long engagement effort with all 197 jurisdictions one-on-one, 82 percent of SCAG’s 197 jurisdictions provided feedback on the forecast of future growth for Connect SoCal. SCAG also sought feedback on potential sustainable growth strategies from a broad range of stakeholder groups – including local jurisdictions, county transportation commissions, other partner agencies, industry groups, community-based organizations, and the general public. Connect SoCal utilizes a bottom-up approach in that total projected growth for each jurisdiction reflects feedback received from jurisdiction staff, including city managers, community development/planning directors, and local staff. Growth at the neighborhood level (i.e., transportation analysis zone (TAZ) reflects entitled projects and adheres to current general and specific plan maximum densities as conveyed by jurisdictions (except in cases where entitled projects and development agreements exceed these capacities as calculated by SCAG). Neighborhood level growth projections also feature strategies that help to reduce greenhouse gas emissions (GHG) from automobiles and light trucks to achieve Southern California’s GHG reduction target, approved by the California Air Resources Board (CARB) in accordance with state planning law. Connect SoCal’s Forecasted Development Pattern is utilized for long range modeling purposes and does not supersede actions taken by elected bodies on future development, including entitlements and development agreements. SCAG does not have the authority to implement the plan -- neither through decisions about what type of development is built where, nor what transportation projects are ultimately built, as Connect SoCal is adopted at the jurisdictional level. Achieving a sustained regional outcome depends upon informed and intentional local action. To access jurisdictional level growth estimates and forecasts for years 2016 and 2045, please refer to the [Connect SoCal Demographics and Growth Forecast Technical Report](#). The growth forecasts for the region and applicable jurisdictions are below.

5-3

January 6, 2022
Ms. Stalvey

SCAG No. IGR10524
Page 4

	Adopted SCAG Region Wide Forecasts			
	Year 2020	Year 2030	Year 2035	Year 2045
Population	19,517,731	20,821,171	21,443,006	22,503,899
Households	6,333,458	6,902,821	7,170,110	7,633,451
Employment	8,695,427	9,303,627	9,566,384	10,048,822

5-3

SCAG Staff Comments

SCAG staff recommends including a reference to the population, housing, and employment trends and forecasts of the most recently adopted SCAG 2020 Connect SoCal Regional Growth Forecasts.

MITIGATION

SCAG Staff Comments

SCAG staff recommends that you review the [Final Program Environmental Impact Report \(Final PEIR\)](#) for Connect SoCal for guidance, as appropriate. SCAG’s Regional Council certified the PEIR and adopted the associated Findings of Fact and a Statement of Overriding Considerations (FOF/SOC) and Mitigation Monitoring and Reporting Program (MMRP) on May 7, 2020 and also adopted a PEIR Addendum and amended the MMRP on September 3, 2020 (please see the [PEIR webpage](#) and scroll to the bottom of the page for the PEIR Addendum). The PEIR includes a list of project-level performance standards-based mitigation measures that may be considered for adoption and implementation by lead, responsible, or trustee agencies in the region, as applicable and feasible. Project-level mitigation measures are within responsibility, authority, and/or jurisdiction of project-implementing agency or other public agency serving as lead agency under CEQA in subsequent project- and site- specific design, CEQA review, and decision-making processes, to meet the performance standards for each of the CEQA resource categories.

5-4

Response to Comment Letter 5

COMMENTER: Frank Wen, Ph.D., Manager, Planning Strategy Department, Southern California Association of Governments (SCAG)

DATE: January 6, 2022

Response 5-1

The commenter states the proposed CAP does not reference the most recently adopted 2020 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS or 2020 Connect SoCal). However, the commenter adds the proposed program does generally support the applicable goals of 2020 Connect SoCal, and the analysis in the Draft PEIR is based on the growth forecasts adopted as part of 2020 Connect SoCal.

The comment relates to the contents of the proposed CAP and does not raise concerns regarding the adequacy of the Draft PEIR or the CEQA process. As acknowledged by the commenter, the analysis in the Draft PEIR is based on growth forecasts adopted as part of 2020 Connect SoCal. For more information on the growth forecasts employed in the Draft PEIR analysis, refer to Chapter 3, *Environmental Setting*, of the Draft PEIR. No changes to the Draft PEIR are warranted in response to this comment.

Response 5-2

The commenter provides information regarding SCAG's 2020 Connect SoCal adopted in September 2020. The commenter describes 2020 Connect SoCal's goals and recommends that 2020 Connect SoCal be reviewed, and its goals and policies be considered when finalizing the proposed program.

This comment is acknowledged and does not raise concerns pertaining to the adequacy of the Draft PEIR or the CEQA process. As described in the draft CAP, the CAP complements Metropolitan's other long-range planning efforts. As appropriate, other plans and programs intended to reduce GHG emissions at a regional scale have been reviewed in support of the CAP. No further response is required.

Response 5-3

The commenter provides information regarding SCAG's demographics and growth forecasts. The comment recommends including a reference to the population, housing, and employment trends and forecasts of the most recently adopted SCAG 2020 Connect SoCal Regional Growth Forecasts.

As acknowledged by the commenter, the analysis contained in the Draft PEIR is based on growth forecasts adopted as part of 2020 Connect SoCal. These growth forecasts are presented in Table 6 on page 60 of the Draft PEIR. No changes to the Draft PEIR are warranted in response to this comment.

Response 5-4

The commenter recommends the Final PEIR for 2020 Connect SoCal be reviewed for guidance related to mitigation measures.

Metropolitan appreciates this recommendation. Various program-level environmental documents, including the Final PEIR for 2020 Connect SoCal, were reviewed to inform the approach to analysis and mitigation for the Draft PEIR. No changes to the Draft PEIR are warranted in response to this comment.

Letter 6

From: [Demkowicz, Erica](#)
To: [EPT](#)
Cc: [Reekstin, Scott](#); [Huitron, Irma](#)
Subject: RE; CAP PEIR Scoping - MWD - CITY OF TUSTIN RESPONSE
Date: Thursday, January 6, 2022 9:35:27 AM

Good Morning,

The City of Tustin has reviewed the Notice of Availability and PEIR for MWD’s Climate Action Plan (CAP) and does not have any comments.

6-1

Regards,

Erica H. Demkowicz, AICP
Senior Planner
City of Tustin
Community Development Department
300 Centennial Way
Tustin, CA 92780
(714) 573-3127
edemkowicz@tustinca.org

Response to Comment Letter 6

COMMENTER: Erica H. Demkowicz, AICP, Senior Planner, Community Development Department, City of Tustin

DATE: January 6, 2022

Response 6-1

The comment states the Notice of Availability and Draft PEIR for the CAP were reviewed by the City of Tustin and the City does not have any comments.

This comment is acknowledged and does not raise concerns pertaining to the adequacy of the Draft PEIR, draft CAP, or the CEQA process. Therefore, no further response is required.

Letter 7



Heal the Bay

1444 9th Street ph. 310-451-1500
 Santa Monica, CA 90401 fax 310-496-1902

info@healthebay.org
www.healthebay.org

January 6, 2022

Ms. Malinda Stalvey, Senior Environmental Specialist
 The Metropolitan Water District of Southern California
 Environmental Planning Section
 P.O. Box 54153
 Los Angeles, CA 90054-0153

Sent via email to: EP@mwdh2o.com

RE: NOTICE OF AVAILABILITY – DRAFT CLIMATE ACTION PLAN, AND CLIMATE ACTION PLAN DRAFT PROGRAMMATIC ENVIRONMENTAL IMPACT REPORT

To Ms. Stalvey:

Heal the Bay is a non-profit environmental organization with over 35 years of experience and 15,000 members dedicated to making the coastal waters and watersheds of Greater Los Angeles safe, healthy, and clean. We would first like to recognize that we are on Indigenous land. The main office of Heal the Bay in Santa Monica is located on Tongva, Chumash, and Kizh land.¹ We acknowledge and respect Tongva, Chumash, and Kizh elders past, present, and emerging. Heal the Bay respectfully submits the following comments in response to the Metropolitan Water District (MWD) Draft Climate Action Plan (CAP) and CAP Draft Programmatic Environmental Impact Report (PEIR).

We would first like to acknowledge and commend MWD for creating this CAP and including interim goals to ensure achievement of carbon neutrality by 2045, as required by the State of California. We would also like to recognize the significant decrease in greenhouse gasses (GHGs) already achieved by MWD through actions such as conservation programs, groundwater recovery programs, and divesting in coal. However, the climate crisis is a huge challenge that we can – and must – overcome. Bearing that in mind, we must all recognize that we can no longer pursue unsustainable practices. With limited time and resources to achieve global climate reduction requirements, and with the health of our communities and ecosystem on the line, we must focus efforts on the latest science and the best practices available, offering the most benefit. We offer the following comments to bolster the MWD CAP, and to ensure successful implementation moving forward.

- The MWD CAP must address the larger context of the climate crisis and its myriad impacts to properly assess the most effective path forward.
- GHG reduction targets and land management practices should be based on the latest science and best management practices available.
- MWD should focus strategy efforts on the most sustainable approaches and invest in multi-benefit projects that utilize vegetated nature-based solutions.
- MWD must strive for transparency throughout the process of assessing implementation, reporting on progress, and updating the CAP every 5 years or earlier if necessary.
- MWD should pursue project level EIRs for individual projects proposed in the CAP to better understand the impacts of the project, to fully investigate alternatives, and to ensure public participation in project development and review through the CEQA process.

These comments are discussed in further detail below.

7-1

¹ Native Land Digital. 2021. Our home on native land. Available at: <https://native-land.ca/>



Heal the Bay

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The MWD CAP must address the larger context of the climate crisis and its myriad impacts to properly assess the most effective path forward.

Explain additional climate planning that has been completed by MWD.

The climate crisis is about much more than GHG emissions. We appreciate that wildfires are addressed in this CAP, but other impacts such as sea level rise (which will affect not only our coastline but also inland areas with the myriad impacts of seawater intrusion), are not. Please include in Section 2.0 "Scientific Context and Climate Change Impacts" a full discussion of the myriad impacts of the climate crisis, and include references to other MWD planning documents, when applicable, where additional associated climate planning has been completed.

7-2

Provide an overview of the State Water Project and associated GHG emissions.

We request that MWD include in their CAP an overview of the State Water project and its associated GHG emission, as outlined in the California Department of Water Resources Climate Action Plan. We understand not wanting to double count these emissions, but it would be helpful to understand the bigger picture if there was information on what percentage of MWD emissions are from the State Water Project, and how that might change if MWD could reduce its need to import water by sourcing more water locally.

7-3

We also request that MWD include a new section in the CAP to recognize the importance of a healthy Bay Delta to climate resilience on a larger scale, considering how heavily MWD currently relies on the import of water from the Delta, and the impacts that water transportation can have on this important ecological area.

Make additional small edits for clarification.

We also offer a minor edit to Page 1.19 of the MWD CAP to recognize that the local environmental responses to climate fluctuations have been variable throughout California's history, on a geologic time scale, but that the 2011-2014 drought is the hottest and driest period in recorded history.

7-4

"This period includes the hottest and driest period in **California recorded history for California...**"

GHG reduction targets and land management practices should be based on the latest science and best management practices available.

Adjust the current interim goal (to exceed 40% below 1990 emissions by 2030) to align with the Intergovernmental Panel on Climate Change recommendation to achieve 49% below 2017 emissions by 2030.

The Paris Agreement recognizes that we must remain under a 1.5°C rise in average global temperature in order to avoid an ecological tipping point that makes it more difficult to sustain healthy natural systems. The latest report from the Intergovernmental Panel on Climate Change (IPCC) states that it is still possible to remain under this 1.5°C tipping point, but that it will require immediate action to reduce emissions by 49% below 2017 levels by 2030 and to achieve carbon neutrality by 2050 through a combination of reducing emissions and sequestering carbon.

7-5

The MWD CAP recognizes the California State requirements to achieve 40% below 1990 emissions by 2030. We appreciate that MWD has set their own goal to exceed this 40% reduction requirement by 2030 in order to ensure that carbon neutrality can be achieved by 2045, pursuant to Executive Order B-55-18. We encourage MWD to make this goal more specific, and in line with the best available science, by maintaining the final goal to achieve carbon neutrality by 2045, and including an interim goal to achieve a 49% reduction below 2017 levels by 2030.



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Update the definitions of low, average, and high emissions scenarios based on increases in local water supplies such as stormwater capture.

We urge MWD to update the definition of low, average, and high emissions scenarios (based on projections around the average rainfall year and therefore how much imported water is necessary) to reflect projected improvements in local stormwater capture as an additional source of local water supply. Between investments from water agencies (such as MWD), local funding through the Safe, Clean Water Program (SCWP), as well as available state and federal funding, the potential is enormous for stormwater capture to fulfill a high percentage of Southern California’s water needs, thus reducing the need for imported water and providing additional opportunities to reduce GHG emissions. We encourage MWD to work with other local agencies and municipalities, such as the Los Angeles County Department of Public Works, to identify potential for collaboration and for increasing local water supply.

7-6

Land management practices should pursue multiple benefits and be conducted in consultation with local and Indigenous expertise.

The language used focuses on the threat wildfire poses to the workers on site and the MWD owned buildings. MWD should instead make it clear that these wildfire prevention measures are needed to preserve human life on and off MWD property, protect public health and quality of life from impacts to air quality and water quality, and to protect lands surrounding MWD property. We also recommend that MWD work with local and Indigenous experts to properly manage MWD owned land. MWD should also make sure that traffic control plans for wildfire emergencies are heavily scrutinized, as wildfires continue to increase in intensity. In addition to identifying wildfire hazard zones, MWD should also take into account sensitive ecosystems and habitat areas that could be impacted by wildfire. If operations will increase the wildfire risk to a significant natural area, MWD should take extra precautions. MWD also states that some jurisdictions have more stringent wildfire restrictions than others. We urge MWD to follow the most stringent regulations at all developments, regardless of jurisdiction, except where necessary to protect local ecological health (e.g. not removing more vegetation than is necessary, etc.). This approach will be most protective of human life, local ecosystems, and MWD facilities.

7-7

We also recommend that MWD utilize vegetated nature-based solutions to the extent feasible on all projects moving forward, again conducted in consultation with local and Indigenous experts. Examples of GHG reduction efforts in the CAP include conservation of natural lands, which is important; however, MWD cannot use existing natural space to offset future emissions in order to achieve carbon neutrality by 2045. New natural space must be created or restored in order to generate the sequestration necessary to offset any continued emissions, and there are opportunities for creating new natural spaces within the scope of MWD planned projects. For example, road construction will be necessary to lay piping for the Regional Recycled Water Project, and that construction can include replacing existing roads with Living Streets.² MWD could even pursue local funding through Measures W and M to cover any additional costs, and the myriad benefits would far surpass the limited co-benefits currently identified in the MWD CAP. An added benefit to this approach of using vegetated nature-based solutions is that healthy soils with healthy vegetation and microbial ecosystems can actually hold more water, increasing our capacity for natural water storage, as well.

7-8

² Climate Resolve, GreenLA Coalition, and Heal the Bay. “Living Streets Economic Feasibility Study Final Report.” Available at: <https://healthebay.org/sites/default/files/pdf/factsheets/Final%20Living%20Streets%20Working%20Economic%20Feasibility%20Final%20Print%20Version%2022616.pdf>



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MWD should focus strategy efforts on the most sustainable approaches and invest in multi-benefit projects that utilize vegetated nature-based solutions.

7-9

We generally support the goals for GHG emissions reduction and the plans to achieve reduction outlined in Strategies 1-6 of the MWD CAP. We appreciate ways in which MWD has taken responsibility for emissions that fall within their operational control down to very fine details and even including planned contracted construction work. However, one major oversight is consideration of GHG emission associated with the manufacturing of supplies used by MWD or its contractors such as the production of asphalt for repaving.

MWD should remove all reference to "Low Carbon Electricity" from Strategy 4, and instead focus entirely on renewable carbon-free sources of electricity.

7-10

We do have some concerns regarding Strategy 4: Utilize Low-Carbon and Carbon-Free Electricity. There is a definition in the CAP for carbon-free electricity ("electricity produced by a resource that generates no carbon emissions") with a few examples given as renewable energy (such as photovoltaic, nuclear, and large hydroelectric sources). MWD should include clarifying language to explain their definition of Carbon-Free Electricity that "generates no carbon emissions" refers to the power generation itself, and not to include emissions from, for example, construction of associated power generating or storage facilities. We further urge MWD to modify this definition to include only renewable energy and to prioritize renewable energy sources with fewer negative environmental impacts. For instance, nuclear and large hydroelectric sources for energy should be deprioritized given the known environmental issues with nuclear waste disposal and impacts to riparian ecology and anadromous fish from dams. In particular, we do not support the creation of new dams for energy (or water) needs. Additionally, MWD should remove any reference to "Low-Carbon" from Strategy 4 and focus on renewable carbon-free energy sources. At a minimum, MWD must clearly define "Low-Carbon Electricity" within the context of this CAP.

MWD must support movement towards a circular economy as part of Strategy 7.

7-11

We support the Phase 1 measure of zero landfilled waste, as these GHG emissions from waste are not insignificant, as well as the prioritization of these measures into the short-term Phase 1 strategies. However, zero landfilled waste is not attainable with continued widespread use of non-recyclable or non-compostable products, most notably many types of single-use plastic such as polystyrene. Therefore, to achieve this goal, MWD must also support strategies that phase these products out of the consumer market chain and support movement towards a circular economy.

As a fossil fuel product, emissions from plastics are a serious contribution to overall GHG emissions throughout the entire lifecycle of the material and is on trend to "account for 20% of total oil consumption and 15% of the global annual carbon budget by 2050 (this is the budget that must be adhered to in order to achieve the internationally accepted goal to remain below a 2°C increase in global warming)."³ We suggest that MWD support municipalities such as the Los Angeles City Council in developing and passing policies, many of which are already in motion, that reduce not only the disposal of GHG emitting plastics into landfill, but truly phase out non-recyclable and non-compostable options and support reuse and refill to truly reduce waste from the source and achieve zero net waste.

³ World Economic Forum. 2016. "The New Plastic Economy: Rethinking the Future of Plastic." Available at: https://www3.weforum.org/docs/WEF_The_New_Plastics_Economy.pdf



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We are supportive of Strategy 8, though we encourage MWD to invest further in stormwater capture, and incorporate vegetated nature-based solutions into all projects moving forward.

We support expanding MWD education programs, as well as the continuation of water efficiency programs. We encourage MWD to also expand all successful water efficiency programs to the extent possible to ensure accessibility.

We also support the turf removal program. However, we do request that MWD include a clear definition for “water efficient landscapes” to not include impermeable surfaces and to prioritize landscapes utilizing climatically appropriate native plant species. We also encourage MWD to expand any incentives associated with this program and to pursue the option for a funding program to provide access for low-income households or historically under-resourced communities.

We most certainly support funding for stormwater projects, but this can no longer be considered a pilot project. The water supply benefits of stormwater capture are well known and documented, as reported by LA for a New Economy in 2018⁴ and the Pacific Institute in 2020.⁵ The successful passage of Measure W and creation of the Safe, Clean Water program in 2018 provides further evidence, and also provides the potential for additional project funding which could be leveraged with existing MWD resources to create multi-benefit stormwater capture projects. Examples of the types of projects that MWD is pursuing provided in the CAP are spreading basins, dry wells, and infiltration galleries. However, the ecosystem health co-benefit claimed for these types of projects are limited, at best. As discussed above, multi-benefit projects using vegetated nature-based solutions are the best way to achieve ecosystem health benefits and can offer immense return on investment costs through other co-benefits, as well. This can also make these kinds of projects more competitive for securing additional funding.

Similarly, we also support the Regional Recycled Water Project. Increased use of recycled wastewater is another smart water practice that Heal the Bay supports. However, there are opportunities to utilize vegetated nature-based solutions (e.g. implementing Living Streets during necessary road construction for setting new pipelines) that MWD is not yet pursuing. In fact, the pumping stations required for this project will significantly increase energy demand, and carbon sequestration will be necessary to offset that demand. Living Streets is one way to increase local carbon sequestration.

MWD should prioritize natural carbon sequestration, and not rely too heavily on engineered solutions for carbon capture and storage.

MWD should focus efforts on continuing restoration and protection of natural spaces and on creation of new natural space through the implementation of vegetated nature-based solutions within projects moving forward. Engineered solutions for carbon capture and storage do not provide the myriad co-benefits that vegetated nature-based solutions offer. Therefore, MWD should not rely too heavily on future technological advances in these kinds of engineered solutions.

Additionally, we do support regenerative agriculture practices, and encourage MWD to conduct this work in coordination with local and tribal land management experts. Particularly for strategy



⁴ Los Angeles for a New Economy. 2018. “Liquid Assets: How stormwater infrastructure builds Resilience, Health, Jobs, and Equity.” Available at: http://laane.org/wp-content/uploads/2018/03/LAANE_Liquid-Assets_Stormwater-Report.pdf

⁵ The Pacific Institute. 2020. “Economic Evaluation of Stormwater Capture and Its Multiple Benefits in California.” Available at: <https://pacinst.org/publication/economic-evaluation-of-stormwater/>



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CS-3 for soil carbon sequestration, MWD should collaborate with groups such as the Marin Carbon Project to maximize soil carbon sequestration on all MWD owned land.⁶

MWD must strive for transparency throughout the process of monitoring implementation, reporting on progress, and updating the CAP every 5 years or earlier if necessary.

We appreciate that MWD has opted to define specific reduction targets in this CAP, and support the carbon budget approach to measure progress towards meeting its GHG reduction goals. We understand that the Climate Working Group will provide updates on CAP implementation progress and status of the carbon budget to the Board of Directors on an annual basis, and that this process will also include updates on Metropolitan’s CAPDash and monitoring software, which will be used to provide transparent and regular updates for stakeholders. To ensure full transparency, please include in the CAP a detailed list of information that will be shared through the CAPDash website to ensure that the public will have access to all the necessary information to assess progress.

7-16

One piece of information that should be disclosed through the CAPDash website is a clear statement of whether or not MWD is on track to achieving both the interim 2030 reduction goal and the final 2045 carbon neutrality goal, with supporting evidence to back the statement up. This will not only provide transparency to the public for the implementation process, but also allow for public engagement if it does become necessary to update the CAP prior to the designated 5-year interval. Please also include in the first annual report a determination of whether or not WMD met the 2020 projected target necessary to achieving carbon neutrality by 2045, as outlined in Figure 4-1 of the MWD CAP.

7-17

In addition to transparency through the CAPDash website, MWD should begin immediate outreach and engagement on the next 5-year update to engage local communities, as well as the environmental community at large, early and often in the update process.

7-18

MWD should pursue project level EIRs for individual projects proposed in the CAP to better understand the impacts of the project, to fully investigate alternatives, and to ensure public participation in project development and review through the CEQA process.

It is unclear why a PEIR is necessary at this time rather than approving the MWD CAP now, moving forward with implementation, and conducting project level EIRs as necessary. The PEIR recognizes one of the main issues still to be addressed: how to address impacts from individual projects under the proposed CAP. The PEIR states that it serves as a first-tier CEQA document that will support second-tier CEQA documents for individual projects to be implemented under the proposed CAP. It also states that the projected significant and unavoidable impacts in the resource categories of air quality, cultural resources, and noise may change once individual project details are known and project-level analysis occurs. Therefore, it is still unclear what level of environmental investigation will be required for any given project proposed in the CAP, particularly since projects outlined in the CAP have yet to be approved by the MWD Board. For example, how will the impacts of larger scale infrastructure projects (like those on the scale of the Regional Recycled Water Project) be addressed? Some specific examples would be helpful.

7-19

MWD must also revisit the alternatives section of the draft PEIR. This is another area where the PEIR will be insufficient and a project level EIR would be more appropriate. The only alternatives explored are an alternate location (rejected due to restrictions around MWD owned properties), alternative methods (rejected without much detail because other methods would also result in similar construction related impacts), and no project (which would result in having to face the broader implications of the climate crisis). However, this alternatives section does not explore the full breadth of approaches that MWD could pursue, including the recommendations provided in this letter.

⁶ Marin Carbon Project. 2018. <https://www.marincarbonproject.org/>



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Thank you for the opportunity to comment on the Draft Climate Action Plan and associated Draft Programmatic Environmental Impact Report. We believe that the Climate Action Plan, with the recommendations provided above, has the potential to contribute significantly to global GHG reduction goals, and serve as an example of good climate practice. MWD states in the CAP that it can be used by the 26 member agencies when considering local policies and programs. We encourage MWD to work collaboratively with these 26 member agencies now, and consider providing requirements or incentives where feasible to include member agencies in these plans and in achieving similar goals. In this way, the MWD CAP can have broader implications even beyond those that fall under operational control.

7-20

We look forward to continuing our collaborative work with the Metropolitan Water District in order to ensure a sustainable, affordable, and accessible water future for Southern California. If you have any questions concerning this comment letter, please contact Annelisa Moe via e-mail at amoe@healthebay.org, or by telephone at (310) 451-1500 X115.

Sincerely,

Annelisa Ehret Moe
Water Quality Scientist
Heal the Bay

Dr. Katherine Pease
Science and Policy Director
Heal the Bay

Response to Comment Letter 7

COMMENTER: Annelisa Ehret Moe, Water Quality Scientist, Heal the Bay
Dr. Katherine Pease, Science and Policy Director, Heal the Bay

DATE: January 6, 2022

Response 7-1

The commenter provides background on Heal the Bay and commends Metropolitan for creating the CAP. The commenter then offers a bulleted list of comments that are addressed in greater detail in the remainder of the letter.

This comment is acknowledged and does not raise concerns pertaining to the adequacy of the Draft PEIR or the CEQA process. Responses to more detailed comments included in this comment letter are provided below.

Response 7-2

The commenter recommends adding information on additional climate planning that has been completed by Metropolitan as well as a full discussion of all impacts associated with the climate crisis in Section 2.0, *Scientific Context and Climate Change Impacts*, of the CAP.

The comment relates to the contents of the proposed CAP and does not raise concerns regarding the adequacy of the Draft PEIR or the CEQA process. Section 2.2 of the proposed CAP provides a detailed discussion of climate impacts that affect Metropolitan's operations including sea-level rise, reduced snowpack in the Sierra Nevada and the Rocky Mountains, increased threat from wildfires, and extreme heat events. Metropolitan's CAP is a greenhouse gas reduction plan and does not address resource adequacy or adaptation efforts. Impacts associated with the climate crisis are also addressed in Metropolitan's UWMP and IRP, which are incorporated by reference in the CAP. No changes to the Draft PEIR or Draft CAP are warranted as a result of this comment.

Response 7-3

The commenter recommends providing an overview of the SWP and associated GHG emissions as outlined in the DWR CAP. The comment also requests that Metropolitan include a new section in the CAP to recognize the importance of a healthy Bay Delta to climate resilience on a larger scale.

The comment relates to the contents of the proposed CAP and does not raise concerns regarding the adequacy of the Draft PEIR or the CEQA process. While Metropolitan recognizes that a healthy Bay Delta ecosystem is important for climate resilience, it is beyond the scope of the Draft CAP. Metropolitan's CAP is a GHG reduction plan aimed at identifying GHG emissions from within its operational control, therefore emissions were calculated for its own operations including conveyance, treatment and distribution of SWP water from where it enters Metropolitan's system. DWR has its own CAP, which identifies emissions reductions for its operations. While an aggregated number will not be used in the Metropolitan's CAP, Metropolitan understands that having an aggregated emissions factor for the imported water to Southern California is beneficial to better understand the overall emissions related to imported water, therefore a discussion of DWR's emissions is provided in Topical Response A and a detailed discussion of the overall embedded energy of water imported to Southern California has been added to Appendix B of the Final CAP. No changes to the Draft PEIR are warranted as a result of this comment.

Response 7-4

The commenter recommends the following edits to Page 1.19 of the CAP to recognize that the local environmental responses to climate fluctuations have been variable throughout California's history: "This period includes the hottest and driest period in California recorded history for California...."

The comment relates to the contents of the proposed CAP and does not raise concerns regarding the adequacy of the Draft PEIR or the CEQA process. Metropolitan agrees with the recommended edits. The CAP has been updated accordingly.

Response 7-5

The commenter recommends adjusting the current interim goal stated in the CAP (to exceed 40 percent below 1990 emissions by 2030) to align with the Intergovernmental Panel on Climate Change (IPCC) recommendation to achieve 19 percent below 2017 emissions by 2030.

The comment relates to the contents of the proposed CAP and does not raise concerns regarding the adequacy of the Draft PEIR or the CEQA process. Metropolitan was unable to locate any reference for 19 percent below 2017 emissions. However, the IPCC states that, "Global net human-caused emissions of carbon dioxide (CO₂) would need to fall by about 45 percent from 2010 levels by 2030, reaching 'net zero' around 2050. This means that any remaining emissions would need to be balanced by removing CO₂ from the air."³ However, this number is not specific to California where GHG emissions have already fallen to below 1990 levels while global emissions have increased during this time. According to the International Energy Agency (IEA), global emissions increased from 20.5 GT to 31.5 GT globally (65 percent) between 1990 and 2017. Metropolitan emissions decreased by nearly 70 percent during this same time period.⁴ Metropolitan is already in line with and exceeding the IPCC targets by charting a linear course to carbon neutrality by 2045. By meeting the goals set forth in the CAP, consistent with the California legislation, Metropolitan will meet or exceed the IPCC recommendations. No changes to the Draft PEIR or Draft CAP are warranted as a result of this comment.

Response 7-6

The commenter recommends updating the definitions of low, average, and high emissions scenarios in the CAP based on increases in local water supplies such as stormwater capture.

The comment relates to the contents of the proposed CAP and does not raise concerns regarding the adequacy of the Draft PEIR or the CEQA process. Metropolitan agrees that stormwater capture is a key action to increase local water and decrease emissions. However, the projections are based on Metropolitan's current demand forecasts and the UWMP. Potential reductions due to stormwater management are covered under Strategy 8 of the GHG reduction measures. No changes to the Draft PEIR or Draft CAP are warranted as a result of this comment.

Response 7-7

The commenter recommends land management practices pursue multiple benefits and be conducted in consultation with local and indigenous expertise. Specifically, the commenter suggests Metropolitan should clarify wildfire prevention measures are needed to preserve human life on and off-Metropolitan property, protect public health and quality of life from impacts to air quality and water quality, and protect lands surrounding Metropolitan property. The commenter adds traffic control plans for wildfire emergencies should be heavily scrutinized and Metropolitan should follow

³ <https://www.ipcc.ch/2018/10/08/summary-for-policymakers-of-ipcc-special-report-on-global-warming-of-1-5c-approved-by-governments/>

⁴ <https://www.iea.org/reports/global-energy-review-2021/co2-emissions>

the most stringent wildfire restrictions regardless of the jurisdiction in which activities under the proposed program would occur.

Wildfire impacts associated with implementation of the CAP are discussed in Section 5.15, *Wildfire*, of the Draft PEIR. Impacts are assessed pursuant to Appendix G of the *State CEQA Guidelines*, which state a significant wildfire impact would occur if implementation of the proposed program would, within or near a State Responsibility Area (SRA) or Very High Fire Hazard Severity Zone (FHSZ):

- Substantially impair an adopted emergency response plan or emergency evacuation plan; or
- Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire; or
- Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment; or
- Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.

The Draft PEIR describes the various fire prevention regulations with which Metropolitan must comply for all potential projects implemented under the CAP, including, but not limited to, California Public Resources Code Section 4442 (mandated use of spark arrestors), Sections 4427 and 4431 (standards for construction activities on days with high fire danger), and Section 4428 (required fire suppression equipment for contractors during high fire danger periods). Furthermore, the Draft PEIR describes applicable provisions of the California Fire Code with which Metropolitan would comply and acknowledges some jurisdictions have amended the California Fire Code to adopt more stringent fire-reduction measures. As such, Metropolitan would be required to comply with all applicable regulatory fire prevention measures.

Furthermore, as described on page 180 of the Draft PEIR, individual projects implemented under the CAP would generally occur within existing Metropolitan facilities and, therefore, are unlikely to interfere with an adopted emergency response plan. If temporary lane or roadway closures are required, contractors would be required to prepare a traffic control plan pursuant to the local and/or state traffic authority's requirements. To confirm adherence to these requirements, such plans would undergo review by the applicable local and/or state traffic authority to confirm adequate emergency access in the event of a wildfire emergency.

Given the discussion above, no changes to the Draft PEIR are warranted in response to this comment.

Response 7-8

The commenter recommends Metropolitan utilize vegetated nature-based solutions to the extent feasible on all projects moving forward, conducted in consultation with local and indigenous experts. The commenter specifically adds Metropolitan cannot use existing natural space to offset future emissions to achieve carbon neutrality, and new natural space must be created or restored.

The comment relates to the contents of the proposed CAP and does not raise concerns regarding the adequacy of the Draft PEIR or the CEQA process. Metropolitan has prioritized actions with multiple co-benefits and will coordinate with applicable stakeholders to implement these measures. Metropolitan understands that existing carbon sequestration benefits cannot mitigate new emissions, but enhancements in existing carbon sequestration can. Therefore, measure CS-3 calls for Metropolitan to establish baseline sequestration levels so that enhancements to this baseline can be

accurately quantified. No changes to the Draft PEIR or Draft CAP are warranted as a result of this comment.

Response 7-9

The commenter recommends Metropolitan focus strategy efforts on the most sustainable approaches and invest in multi-benefit projects that utilize vegetated nature-based solutions. The commenter recommends consideration of GHG emissions associated with the manufacturing of supplies used by Metropolitan or its contractors such as the production of asphalt for repaving.

The comment relates to the contents of the proposed CAP and does not raise concerns regarding the adequacy of the Draft PEIR or the CEQA process.

As discussed in Response 7-8, Metropolitan will continue to prioritize actions with multiple co-benefits such as nature-based solutions. Metropolitan will consider including life cycle emissions in future iterations of the CAP. This CAP is intended to align with the state of California's GHG reduction targets and the state does not currently incorporate consumptive based emissions. Therefore, Metropolitan will continue to use the state recommended protocols for its CAP and inventories. No changes to the Draft PEIR or Draft CAP are warranted as a result of this comment.

Response 7-10

The commenter recommends Metropolitan remove all reference to "Low Carbon Electricity" from Strategy 4 in the CAP, and instead focus entirely on renewable carbon-free sources.

The comment relates to the contents of the proposed CAP and does not raise concerns regarding the adequacy of the Draft PEIR or the CEQA process. The use of the term "low carbon electricity" refers to the incremental decarbonization of electricity for Metropolitan facilities. For example, Metropolitan is not currently able to purchase 100 percent carbon free electricity for all of its facilities, but options may exist to shift the load towards a higher renewable/carbon free percentage. To become entirely carbon-free will require a multi-pronged approach that will include battery energy storage, development of additional green energy resources and the implementation of efficiency measures such as those outlined in Strategy 5.0, for instance. These measures will ensure Metropolitan will continue to meet its GHG reduction goals. No changes to the Draft PEIR or Draft CAP are warranted as a result of this comment.

Response 7-11

The commenter recommends Metropolitan support movement towards a circular economy as part of Strategy 7 in the CAP. Specifically, the commenter supports the Phase 1 measure of zero landfilled waste, but states it is not attainable with continued widespread use of non-recyclable or non-compostable products.

The comment relates to the contents of the proposed CAP and does not raise concerns regarding the adequacy of the Draft PEIR or the CEQA process. Metropolitan will identify opportunities to achieve zero waste through the implementation of Strategy 7, which not only reduces landfill waste but includes a measure to implement a sustainable procurement policy to reduce or eliminate the use of non-recyclable or non-compostable products. No changes to the Draft PEIR or Draft CAP are warranted as a result of this comment.

Response 7-12

The commenter supports Strategy 8 and encourages Metropolitan to invest further in stormwater capture and incorporate vegetated nature-based solutions into all projects moving forward.

Specifically, the commenter recommends addition of a clear definition for “water efficient landscapes” to not include impermeable surfaces and prioritizing landscapes using climatically appropriate native plant species.

The comment relates to the contents of the proposed CAP and does not raise concerns regarding the adequacy of the Draft PEIR or the CEQA process. Metropolitan agrees that stormwater capture is a key component of Metropolitan's water supply and can reduce emissions. Metropolitan currently invests in stormwater recharge and direct use projects through the stormwater pilot program, a study that evaluates the water supply benefit of stormwater capture projects. Based on the results of the study, Metropolitan will include specific stormwater capture projects in future updates to the CAP. No changes to the Draft PEIR or Draft CAP are warranted as a result of this comment.

Response 7-13

The commenter supports funding for stormwater projects but adds these can no longer be considered pilot projects. The commenter adds projects considered in the CAP, such as spreading basins, dry wells, and infiltration galleries, have limited ecosystem health co-benefits and nature-based multi-benefit projects should be prioritized.

The comment relates to the contents of the proposed CAP and does not raise concerns regarding the adequacy of the Draft PEIR or the CEQA process. Metropolitan agrees that stormwater capture is a key component of Metropolitan's water supply and can reduce emissions. Metropolitan currently invests in stormwater recharge and direct use projects through a stormwater pilot program. This pilot study evaluates the water supply benefit of stormwater capture projects. Although Metropolitan's primary focus in local resource development is water supply, Metropolitan acknowledges that there may be opportunities to partner with other entities to achieve mutually beneficial goals. No changes to the Draft PEIR or Draft CAP are warranted as a result of this comment.

Response 7-14

The commenter supports the Regional Recycled Water Project (RRWP) but notes there are opportunities to use vegetated nature-based solutions that Metropolitan is not currently pursuing.

This comment is acknowledged and does not raise concerns regarding the adequacy of the Draft PEIR or the CEQA process. One of the purposes of the RRWP is to reduce discharges to the ocean from the Los Angeles County Sanitation Districts' Joint Water Pollution Control Plant by maximizing reuse to meet demands for groundwater replenishment, non-potable industrial needs, and raw water augmentation. However, opportunities to utilize vegetated nature-based solutions will be reviewed on a project-by-project basis and will be considered for future projects at Metropolitan. No changes to the Draft PEIR or Draft CAP are warranted as a result of this comment.

Response 7-15

The commenter recommends Metropolitan prioritize natural carbon sequestration, and not rely too heavily on engineered solutions for carbon capture and storage. The commenter also supports regenerative agriculture practices, such as CAP measure CS-3, and encourages Metropolitan to conduct this work in coordination with local and tribal land management experts.

The comment relates to the contents of the proposed CAP and does not raise concerns regarding the adequacy of the Draft PEIR or the CEQA process. Metropolitan appreciates the support of natural carbon sequestration and regenerative agriculture practices. Though a carbon capture and storage measure was included in the CAP, Metropolitan is prioritizing natural carbon sequestration due to its multiple co-benefits and is the only carbon sequestration approach being considered at this time. No changes to the Draft PEIR or Draft CAP are warranted as a result of this comment.

Response 7-16

The commenter recommends Metropolitan strive for transparency throughout the process of monitoring implementation, reporting on progress, and updating the CAP every five years or earlier if necessary. Specifically, the commenter requests that the CAP include a detailed list of information that will be shared through the CAPDash website and to ensure the public will have access to all the necessary information to assess progress.

The comment relates to the contents of the proposed CAP and does not raise concerns regarding the adequacy of the Draft PEIR or the CEQA process. Metropolitan agrees that transparency throughout the implementation and reporting phase is critical to the success of the CAP. Upon adoption of the CAP, work will begin on a customized, award-winning, web-based CAPDash tool that will track projects implemented, GHG emissions realized from measures detailed in the CAP, provide annual progress reports, and provide the status of the carbon budget. Should the CAPDash tool not have all the information necessary to assess Metropolitan's progress towards meeting its stated goals, Metropolitan will work with interested parties to ensure the appropriate level of data will be included to facilitate assessment of Metropolitan's progress. Outreach for the 5-year CAP update will begin when the CAP update begins. No changes to the Draft PEIR or Draft CAP are warranted as a result of this comment.

Response 7-17

The commenter requests a clear statement of whether Metropolitan is on track to achieving both the interim 2030 goal and the final 2045 carbon neutrality goal be included on the CAPDash website. The commenter adds a determination of whether Metropolitan met the 2020 projected target (as outlined in Figure 4-1 of the CAP) should be added to the first annual report.

This comment is acknowledged. Progress towards Metropolitan's goals will be included in annual progress reports. As shown in Figure 4-6 of the CAP, Metropolitan used 53 percent of their allocated carbon budget for the years 2005 to 2020. This means that Metropolitan exceeded their 2020 target (which exceeds the state target) by 47 percent. As detailed in the CAP and in Response 7-16, Metropolitan's progress will be through CAPDash, a publicly-accessible web-based tracking tool. The comment does not raise concerns regarding the adequacy of the Draft PEIR or the CEQA process. No changes to the Draft PEIR or Draft CAP are warranted in response to this comment.

Response 7-18

The commenter recommends Metropolitan begin immediate outreach and engagement on the next five-year update to engage local communities, as well as the environmental community at large.

This comment is acknowledged and the suggestion will be considered by Metropolitan. The comment does not raise concerns regarding the adequacy of the Draft PEIR, the adequacy of the CAP, or the CEQA process. No changes to the Draft PEIR or Draft CAP are warranted in response to this comment.

Response 7-19

This comment recommends Metropolitan pursue project-level EIRs for individual projects proposed in the CAP to better understand the impacts of the project, to fully investigate alternatives, and to ensure public participation in project development and review through the CEQA process.

The Draft PEIR provides a program-level analysis of potential environmental impacts associated with implementation of the CAP. As described in Chapter 4, *Environmental Impact Analysis*, the lack of project-specific details, such as the location of construction sites and proposed construction methods, limits the ability of this PEIR to determine the severity of impacts of specific project-level activities

covered by the CAP. As such, supplemental environmental analysis for individual projects to be implemented under the CAP would be required when project-specific details are known and projects are further defined. Individual projects would undergo the appropriate level of project-specific environmental review, including the appropriate level of analysis and public review pursuant to CEQA, prior to approval.

Response 7-20

This comment concludes the comment letter and thanks Metropolitan for the opportunity to comment on the Draft CAP and associated Draft PEIR. The commenter encourages Metropolitan to work collaboratively with its 26 member agencies now and consider providing requirements or incentives where feasible to include member agencies in these plans and in achieving similar goals.

The comment is acknowledged. Metropolitan has already begun collaboration with its member agencies on the CAP and supports their development of similar goals. The comment does not raise concerns regarding the adequacy of the Draft PEIR, the Draft CAP, or the CEQA process. No changes to the Draft PEIR or Draft CAP are warranted in response to this comment.

Letter 8



January 6, 2022

Ms. Malinda Stalvey, Senior Environmental Specialist
The Metropolitan Water District of Southern California
Environmental Planning Section
P.O. Box 54153
Los Angeles, CA 90054-0153
Office: (213) 217-5545
Email: EP@mwdh2o.com

RE: COMMENT LETTER RELATED TO THE NOTICE OF AVAILABILITY OF THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA DRAFT CLIMATE ACTION PLAN

Dear Chairwoman Gray and Members of the Metropolitan Board of Directors:

Poseidon Water LLC (Poseidon) would like to commend Metropolitan staff for its excellent work and effort on the draft Climate Action Plan. Poseidon believes this document offers a robust, well-defined pathway for Metropolitan to achieve lower GHG emissions and eventual carbon neutrality.

Poseidon is the developer of both the Carlsbad Desalination Plant (began operating in 2015) and the Huntington Beach Desalination Project (expected to begin construction by 2023). Both seawater desalination facilities are located in Metropolitan's service territory in Southern California and are designed to produce approximately 50 million gallons of potable water per day on average.

Poseidon has made zero carbon emission guarantees associated with both projects, including the proposed Huntington Beach Desalination Project, which will be 100% carbon neutral through the purchase of renewable electricity and carbon offsets. While the process of seawater desalination requires a certain minimum amount of electricity (comparable on a volumetric basis to the amount of electricity required to import water from Northern California to Southern California through the State Water Project), the proposed reverse osmosis technology coupled with state-of-the-art energy recovery devices results in a highly efficient treatment process. The reverse osmosis seawater desalination process itself does not have any direct GHG emissions (Scope 1 emissions).

New projects such as the Huntington Beach Desalination Project help increase local supplies and reduce Southern California's reliance on imported water to meet expected future demands. The Huntington Beach Desalination Project should be included as a part of Metropolitan's Climate Action Plan (CAP) because of its extraordinary commitment to 100% carbon neutrality. The Project offers a near-term opportunity to directly replace imported water supplies from the State Water Project and/or Colorado River Aqueduct with carbon neutral local water supplies. This is consistent with Metropolitan's CAP Strategy 4 (Utilize Low-Carbon and Carbon-Free Electricity), Strategy 5 (Improve Energy Efficiency), and Strategy 8 (Increase Water Conservation and Local Water Supplies).

Metropolitan's Phase 1 Emission Reduction Measure (E-3) states: "In markets where available, Metropolitan will switch its retail accounts to green tariff options offered by power providers by 2025 to reduce the Scope 2 GHG emissions associated with retail electricity use." Not all market areas offer viable green tariff options or community choice aggregation programs, therefore new water supply projects implemented between now and 2045 should be prioritized in geographic areas where they do have access to 100% renewable power options. In addition to green tariff options in Orange County offered by Southern

8-1

8-2

1 See Metropolitan letters dates October 2, 2017, and June 13, 2019, to the Santa Ana Regional Water Quality Control Board



California Edison, the Orange County Power Authority is one such community choice aggregation program that could offer a 100% renewable power option for the Huntington Beach Desalination Project.

Poseidon appreciates the opportunity to comment on Metropolitan's draft Climate Action Plan and encourages the District to consider including the proposed Huntington Beach Desalination Facility in its Climate Action Plan as a Phase 1 Emission Reduction Measure. Poseidon would be happy to provide additional information about the Project to Metropolitan staff as necessary to support this inclusion.



8-2

Sincerely,

A handwritten signature in black ink that reads "Scott Maloni".

Scott Maloni
Vice President, Project Development
Poseidon Water

cc: Orange County Water District General Manager Michael R. Markus
Brian Probolsky, Chief Executive Office, Orange County Power Authority

Response to Comment Letter 8

COMMENTER: Scott Maloni, Vice President, Project Development, Poseidon Water

DATE: January 6, 2022

Response 8-1

This comment provides information about how Poseidon Water LLC is the developer of both the Carlsbad Desalination Plant and the Huntington Beach Desalination Project. The comment adds these facilities are located in Metropolitan's service territory and the reverse osmosis seawater desalination process Poseidon uses does not have any direct GHG emissions (Scope 1 emissions).

The comment is acknowledged and does not raise concerns regarding the adequacy of the Draft PEIR, Draft CAP, or the CEQA process. No changes to the Draft PEIR or Draft CAP are warranted in response to this comment.

Response 8-2

This comment encourages Metropolitan to consider including the proposed Huntington Beach Desalination Facility in its CAP as a Phase 1 Emission Reduction Measure, as it offers a near-term opportunity to directly replace imported water supplies from the SWP/Colorado River Aqueduct with carbon neutral local water supplies.

The development of low carbon/carbon free local water resources is in line with Metropolitan's CAP and the impacts of new water supplies will be reflected in future Metropolitan GHG emission inventories. The comment relates to the contents of the proposed CAP and does not raise concerns regarding the adequacy of the Draft PEIR or the CEQA process. No changes to the Draft PEIR or Draft CAP are warranted in response to this comment.

Letter 9



CENTER for BIOLOGICAL DIVERSITY

Because life is good.

January 7, 2022

Sent via email

Ms. Malinda Stalvey
Senior Environmental Specialist
The Metropolitan Water District of Southern California
Environmental Planning Section
P.O. Box 54153
Los Angeles, California 90054-0153
EP@mwdh2o.com

Re: Comments on Public Review Draft of Metropolitan Water District of Southern California’s Climate Action Plan and Draft Environmental Impact Report

Dear Metropolitan Water District of Southern California:

The Center for Biological Diversity (“Center”) submits the following comments on the Metropolitan Water District (“MWD”) of Southern California’s Climate Action Plan (“Draft CAP”) and Draft Environmental Impact Report (“DEIR”). While the Draft CAP includes some laudable goals, it suffers from a lack of specificity on tracking and implementation measures that would ensure significant reductions in regional greenhouse gas (“GHG”) emissions. In addition, the DEIR does not accurately assess and mitigate impacts to hydrology, sensitive species and wildlife connectivity. We strongly urge MWD to incorporate more specific tracking methods and numeric targets for all measures listed in the plan as well as better account for impacts to native ecosystems in the EIR.

9-1

The Center is a non-profit, public interest environmental organization dedicated to the protection of native species and their habitats through science, policy, and environmental law. The Center has over 1.7 million members and online activists throughout California and the United States. The Center has worked for many years to protect imperiled plants and wildlife, open space, air and water quality, and overall quality of life for people in Southern California.

I. Climate Change Is an Urgent and Existential Concern.

Recent science has made clear that human-caused climate change is causing widespread harms to human society and natural systems, and climate change threats are becoming increasingly dangerous. In its 2018 *Special Report on Global Warming of 1.5°C*, the Intergovernmental Panel on Climate Change (“IPCC”)—the leading international scientific body for the assessment of climate change—describes the devastating harms that would occur at 2°C

9-2

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BiologicalDiversity.org

warming. The report highlights the necessity of limiting warming to 1.5°C to avoid catastrophic impacts to people and life on Earth (IPCC 2018). The report also provides overwhelming evidence that climate hazards are more urgent and more severe than previously thought, and that aggressive reductions in emissions within the next decade are essential to avoid the most devastating climate change harms.

The impacts of climate change are already being felt by humans and wildlife. Thousands of studies conducted by researchers around the world have documented changes in surface, atmospheric, and oceanic temperatures; melting glaciers; diminishing snow cover; shrinking sea ice; rising sea levels; ocean acidification; and increasing atmospheric water vapor (USGCRP 2017). In California, climate change will transform our climate, resulting in impacts including, but not limited to, increased temperatures and wildfires and a reduction in snowpack and precipitation levels and water availability.

9-2

II. MWD Has a Responsibility to Reduce GHG Emissions.

California gives local authorities like MWD significant responsibility over land use and planning decisions within their jurisdictions. But with that responsibility comes a corresponding obligation to account for the negative environmental impacts of those decisions—especially when it comes to controlling GHG emissions. As the California Air Resources Board (“CARB”) explains:

[L]ocal governments and agencies are critical leaders in reducing emissions through actions that reduce demand for electricity, transportation fuels, and natural gas, and improved natural and working lands management. . . . Over the last 60 years, development patterns have led to sprawling suburban neighborhoods, a vast highway system, growth in automobile ownership, and under-prioritization of infrastructure for public transit and active transportation. Local decisions about these policies today can establish a more sustainable built environment for the future.

9-3

(CARB 2017.) Thus, MWD must take seriously its obligation to do its utmost to ensure that it is reducing GHG emissions and contributing to the state’s achievement of its emissions reduction targets.

III. The Draft CAP’s GHG Emissions Inventory Is Incomplete and the Forecasts Don’t Account for Climate Change.

The Draft CAP emissions inventory is improperly narrow in scope. This leads to a gross mischaracterization within the emissions forecast analysis, as evident by the stated assumption that the State Water Project (“SWP”) has significantly less associated emissions as compared to water sourced from the Colorado River because it “does not require substantial, additional pumping due to the use of gravity to transport the water once it enters Metropolitan’s operational control” (Draft CAP 3.15). This statistic is given a footnote that explains that water from the SWP does have associated emissions not captured by Metropolitan that are detailed in the Department of Water Resources CAP” (Draft CAP 3.15).

9-4

This very type of exclusion led to a judge invalidating Sonoma County’s CAP in 2019, after the judge determined that it failed to account for all of the County’s emissions by excluding transboundary emissions.¹

9-4

Additionally, the Draft CAP uses data from previous years to determine the low, average and high GHG emissions forecasts (Draft CAP 3.16). However, scientific models predict that climate change has increased drought risk in California (Diffenbaugh et al., 2015). Thus, using historical data from non-drought years to influence the low and average GHG emissions scenarios directly contradicts the best available scientific knowledge on future climate scenarios. Instead, it should be assumed that drought conditions will continue and therefore the low, average and high **GHG emission forecasts should be recalculated using our most recent drought data as the assumed baseline.**

9-5

IV. The Draft CAP’s Tracking Methods are Flawed

Using a carbon budget instead of clear linear targets will prevent early detection of delayed progress. The Draft CAP itself admits that in the high emission scenario, “Metropolitan will deplete its carbon budget by 2033” (Draft CAP 4.13). This would mean that in 2030, MWD could claim that it was still within budget, knowing full well that in 3 years it will exceed the total carbon budget set for 2005-2045. This tracking method, by its own admission, does not ensure that MWD meets its stated goal of carbon neutrality by 2045. Instead, **MWD should rely on the per capita GHG emissions analysis** as well as the overall GHG emissions reported to determine progress towards goals. This will ensure that interventions can be made in a timelier manner if the trajectory of reductions is lagging.

9-6

V. The Draft CAP’s Reduction Strategies and Measures Are Non-Binding And Unenforceable.

The Draft CAP states that “Metropolitan Water District of Southern California (Metropolitan) has developed a Climate Action Plan (CAP) or greenhouse gas (GHG) reduction plan that meets the requirements of Section 15183.5 of the California Environmental Quality Act (CEQA) Guidelines, which provides the *opportunity for tiering and streamlining CEQA review and mitigation of project-level GHG emissions*” (Draft CAP 1). The legal requirements of a climate action plan must specify measures or a group of measures, including performance standards, that substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the specified emissions level. Therefore, the Final CAP, and any such plan prepared pursuant to CEQA Guidelines 15183.5, must meet the requirements for all first-tier environmental review documents and thus must impose enforceable requirements and measures with defined performance standards.²

9-7

Unfortunately, many of the Draft CAP’s reduction measures are largely non-binding and generally lack performance standards. Notably, the words “promote,” “study” or “whenever

¹ The court also held that the CAP’s GHG reduction measures were not clearly defined or enforceable, which is also an issue with the Draft CAP here.

² Specifically, CEQA Guidelines section 15183.5(b)(1)(D) states that measures should have “performance standards” which demonstrate they will achieve the planned reductions on a project by project basis.

feasible” occur many times in the sections describing the Draft CAP’s implementation measures. These measures are legally inadequate and cannot be considered mitigation under CEQA and applicable case law. (*Lincoln Place Tenants Assn. v. City of Los Angeles* (2007) 155 Cal.App.4th 425, 445 [“A ‘mitigation measure’ is a suggestion or change that would reduce or minimize significant adverse impacts on the environment caused by the project as proposed”]); *Preserve Wild Santee v. City of Santee* (2012) 210 CA 4th 260, 281 [mitigation measures that are so undefined that their effectiveness is impossible to determine are legally inadequate].) The California Attorney General has also expressly disapproved such an approach for measures upon which an agency relies:

Can a lead agency rely on policies and measures that simply “encourage” GHG efficiency and emissions reductions?

9-7

No. Mitigation measures must be “fully enforceable.” *Adequate mitigation does not, for example, merely “encourage” or “support” carpools and transit options, green building practices, and development in urban centers.* While a menu of hortatory GHG policies is positive, it does not count as adequate mitigation because there is no certainty that the policies will be implemented.

(CA Attorney General 2009.) The California Attorney General further states that programmatic plans to reduce GHG emissions pursuant to CEQA Guidelines section 15183.5 must “[i]dentify a set of specific, enforceable measures that, collectively, will achieve the emissions targets....” (CA Attorney General 2019.)

In *Sierra Club v. County of San Diego* (2014) 231 Cal.App.4th 1152, the Fourth District Court of Appeal criticized the County of San Diego for including measures in its CAP that were not backed up by a firm commitment by the County that they would be implemented. The Court noted that many of the measures in the CAP “are not currently funded,” such that the County of San Diego could not rely upon such unfunded programs to meet GHG reductions. (*Id.* At 1168-1169.) The *Sierra Club* opinion also questioned whether people would actually participate in various programs outlined in the CAP, given that the record contained no evidence of such participation. (*Id.* At 1170.) Here, the Draft CAP suffers from similar defects – there is no evidence of funding for many of the various programs set forth in the Final CAP, nor evidence in the record that people or industry will actually participate in the voluntary programs described in the Draft CAP.

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Accordingly, although the Draft CAP’s reduction measures may generally be worthwhile objectives for MWD to pursue, the Draft CAP fails as a CEQA compliance tool because it relies upon non-binding measures that lack performance standards.

VI. Increasing Wastewater Recycling Programs to Reduce Reliance on Imported Water Should Be a Central Goal in the Draft CAP (MEASURE WC-6 – PHASE 2).

The Center is happy to see water conservation and recycling as a stated measure in the Draft CAP, however we are concerned that it currently does not have any specific goals associated with the listed metric of “acre-feet of water generated” (Draft CAP 5.71). The Draft CAP claims to currently be studying the potential of localized water, but a UCLA study already

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concluded that there is the potential for Los Angeles County to be 100% reliant on local water.³ While some of the specifics on implementation may still need to be assessed, setting long-term goals that state the intent to transition to a large majority of local water across MWD’s service area would help ensure that the energy associated with transport of imported water was greatly reduced. This would also align the Draft CAP with regional goals outlined in the OurCounty Sustainability Plan that aims to get LA County to 80% of local water by 2045.⁴

9-9

VII. Strategy 9 Should Only Include Natural Carbon Sequestration Solutions, not Industrial Carbon Capture and Storage.

While the Center commends MWD for incorporating “carbon sequestration on natural and working lands (e.g., rangeland, forests, woodlands, wetlands and coastal areas, grasslands, shrubland, farmland, riparian areas, and urban green space),” the Center is concerned that these natural methods are bundled with industrial carbon capture and storage methods (Draft CAP 5.6). Investing in the preservation, ecological health and restoration of our natural areas as a form of carbon sequestration can and should be a component of all climate action plans. However, the ecological and economic impact cannot be adequately assessed without knowing what methods will be used. The strategy’s only metric is to “conduct a carbon capture reconnaissance and general assessment that evaluates technological, scientific, economic, and regulatory dimensions relevant to potential carbon capture and storage on Metropolitan properties” (Draft CAP 5.73).

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The science is clear. Protecting, enhancing, and restoring forests and natural habitat is an internationally recognized strategy that has the potential to help solve the climate crisis. Natural habitats, including in particular forests, absorb billions of tons of carbon dioxide (CO2) annually and preservation efforts have the potential to alter the trajectory of climate change (Dybala et al., 2019).

MWD must commit to land preservation and native habitat restoration as a central component of this CAP instead of merely studying the potential of both natural and industrial carbon storage strategies.

VIII. The Draft CAP Fails to Identify Funding Sources for Implementation Measures.

As noted above, in *Sierra Club v. County of San Diego* (2014) 231 Cal.App.4th 1152, the Court of Appeal determined that measures in a CAP were insufficient when they were not adequately funded. (*Id.* At 1168-1169.) Here, the various “actions” in the Draft CAP acknowledge that funding will be required, but often fail to include a specific estimate of how much a measure may cost, or identify an available source of funding. Specifically, in the Implementation and Monitoring Section, the Draft CAP states “the Climate Working Group will identify policies and projects for implementation, work with relevant departments to draft and review required projects or policies, present the items to Metropolitan management to *identify funding* and obtain approval, and track implementation metrics” (Draft CAP 6.4). This omission

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³ Mika, K., Gallo, E., Read, L., Edgley, R., Truong, K., Hogue, T., ... & Gold, M. (2017). LA sustainable water project: Los Angeles river watershed. <https://escholarship.org/uc/item/42m433ps>

⁴ LA County Sustainability Office. “OurCounty Sustainability Plan.” August 2020. <https://ourcountyla.lacounty.gov/wp-content/uploads/2019/07/OurCounty-Final-Plan.pdf>

calls into question whether many of the programs outlined in the Draft CAP will ever be implemented. Thus, all measures need an estimated cost and the funding source must be clearly identified.

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IX. The DEIR needs to better assess and mitigate the impacts to hydrology, sensitive species and wildlife movement.

A. The DEIR’s conclusion of “less than significant impacts” to wildlife movement does not reflect the best available science.

Climate change is increasing stress on species and ecosystems, causing changes in distribution, phenology, physiology, vital rates, genetics, ecosystem structure and processes, and increasing species extinction risk (Warren et al., 2011). A 2016 analysis found that climate-related local extinctions are already widespread and have occurred in hundreds of species, including almost half of the 976 species surveyed (Wiens, 2016). A separate study estimated that nearly half of terrestrial non-flying threatened mammals and nearly one-quarter of threatened birds may have already been negatively impacted by climate change in at least part of their distribution (Pacifci et al., 2017). A 2016 meta-analysis reported that climate change is already impacting 82 percent of key ecological processes that form the foundation of healthy ecosystems and on which humans depend for basic needs (Scheffers et al., 2016). Genes are changing, species’ physiology and physical features such as body size are changing, species are moving to try to keep pace with suitable climate space, species are shifting their timing of breeding and migration, and entire ecosystems are under stress (Cahill et al., 2012; Chen et al., 2011; Maclean & Wilson, 2011; Parmesan, 2006; Parmesan & Yohe, 2003; Root et al., 2003; Warren et al., 2011).

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The DEIR must analyze Draft CAP’s potential impacts to riparian corridors. Riparian ecosystems have long been recognized as biodiversity hotspots performing important ecological functions in a transition zone between freshwater systems and upland habitats. Many species that rely on these aquatic habitats also rely on the adjacent upland habitats (e.g., riparian areas along streams, and grassland habitat adjacent to wetlands). In fact, 60% of amphibian species, 16% of reptiles, 34% of birds and 12% of mammals in the Pacific Coast ecoregion depend on riparian-stream systems for survival (Kelsey and West 1998). Many other species, including mountain lions and bobcats, often use riparian areas and natural ridgelines as migration corridors or foraging habitat (Dickson et al, 2005; Hilty & Merenlender, 2004; Jennings & Lewison, 2013; Jennings & Zeller, 2017). Additionally, fish rely on healthy upland areas to influence suitable spawning habitat (Lohse et al. 2008), and agricultural encroachment on these habitats and over-aggressive removal of riparian areas have been identified as a major driver of declines in freshwater and anadromous fish (e.g., Stillwater Sciences 2002; Lohse et al. 2008; Moyle et al. 2011). Therefore, buffers that allow for connectivity between the aquatic resource and upland habitat is vital for many species to persist.

It is estimated that 90-95% of historic riparian habitat in the state has been lost (Bowler, 1989; Riparian Habitat Joint Venture, 2009). Using 2002 land cover data from CalFire, the Riparian Habitat Joint Venture estimated that riparian vegetation makes up less than 0.5% of California’s total land area at about 360,000 acres (Riparian Habitat Joint Venture, 2004). This is

alarming because riparian habitats perform a number of biological and physical functions that benefit wildlife, plants, and humans, and loss of what little is left will have severe, harmful impacts on special-status species, overall biodiversity, and ecosystem function. California cannot afford to lose more riparian corridors.

A literature review found that recommended buffers for wildlife often far exceeded 100 meters (~325 feet), well beyond the largest buffers implemented in practice (Robins, 2002). For example, Kilgo et al. (1998) recommend more than 1,600 feet of riparian buffer to sustain bird diversity. In addition, amphibians, which are considered environmental health indicators, have been found to migrate over 1,000 feet between aquatic and terrestrial habitats through multiple life stages (Cushman, 2006; Fellers & Kleeman, 2007; Semlitsch & Bodie, 2003; Trenham & Shaffer, 2005). Accommodating the more long-range dispersers is vital for continued survival of species populations and/or recolonization following a local extinction (Cushman, 2006; Semlitsch & Bodie, 2003). In addition, more extensive buffers provide resiliency in the face of climate change-driven alterations to these habitats, which will cause shifts in species ranges and distributions (Cushman et al., 2013; Heller & Zavaleta, 2009; Warren et al., 2011). This emphasizes the need for sizeable riparian and upland buffers around streams and wetlands in and adjacent to any project included in the RTP/SCS, as well as connectivity corridors between heterogeneous habitats. Again, the EIR must adequately assess and mitigate impacts to local, regional, and global wildlife movement and habitat connectivity.

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It is widely recognized that the continuing fragmentation of habitat by humans threatens biodiversity and diminishes our (humans, plants, and animals) ability to adapt to climate change. In a report for the International Union for Conservation of Nature (IUCN), world-renowned scientists from around the world stated that “[s]cience overwhelmingly shows that interconnected protected areas and other areas for biological diversity conservation are much more effective than disconnected areas in human-dominated systems, especially in the face of climate change” and “[i]t is imperative that the world moves toward a coherent global approach for ecological connectivity conservation, and begins to measure and monitor the effectiveness of efforts to protect connectivity and thereby achieve functional ecological networks” (J. Hilty et al., 2020).

Given the potential for projects associated with the Draft CAP to fragment and destroy important habitat, including riparian areas, the Center urges MWD to avoid further fragmentation and degradation of existing, intact, heterogeneous habitats and incorporate clear and enforceable wildlife connectivity mitigation measures that address the needs of target species into the Draft CAP and EIR. Unfortunately, as currently written, it appears that the DEIR does not include such measures. The EIR should encourage the involvement of wildlife connectivity experts from CDFW and other agencies, organizations, academic institutions, communities, and local groups starting at the initial planning stage of development and transportation projects so that habitat connectivity can be strategically integrated into project design and appropriately considered in the project budget. The EIR should require that water infrastructure projects assess current wildlife use and include adequate adjustments to future projects to enhance wildlife’s ability to use or navigate through such projects in order to reduce impacts to species.

B. The DEIR should include a habitat replacement ratio of 3:1 onsite or 5:1 offsite and ensure funding in perpetuity.

Mitigation Measure BIO-4, BIO-8 and BIO-9 all only call for a minimum 1:1 mitigation ratio for restoration, preservation, or creation of designated critical habitat, which is grossly insufficient. Avoidance of impacts to sensitive habitats and designated critical habitat should be prioritized, after which in-kind mitigation should be a minimum of 3:1 given that critical habitat is designated for threatened and endangered species that are on a trajectory towards extinction without protective action and are already struggling to survive in the long-term, and 5:1 for off-site restoration or habitat creation with continued monitoring, adaptive management strategies, and well-defined success criteria, to be funded in perpetuity.

9-13

Life on Earth is experiencing a sixth mass extinction, with species disappearing at a rate of more than 1,000 times greater than the background extinction rate. Habitat loss and fragmentation are the primary drivers of the extinction crisis.⁵ As the world confronts multiple crises, it has to take an intersectional approach to creating and implementing solutions. If climate action plans only exacerbate the global extinction crisis, they should not be considered a solution to the climate crisis.

Additionally, conservation of nature is a listed strategy in the Draft CAP because of the known carbon sequestration ability of natural lands (Draft CAP 5.73). Therefore, any other project associated with the DRAFT CAP that would deplete our remaining natural lands, adequate habitat replacement ratios must be implemented as mitigation to ensure the net impact of that project is positive.

C. The DEIR’s conclusion of “less than significant impacts” to hydrology and water quality does not reflect the best available science.

The DEIR claims that “individual projects implemented under the proposed CAP would generally be located at existing, developed Metropolitan facilities” and that “as such, these projects would not result in substantial changes to drainage patterns resulting in siltation, erosion, runoff, or flooding” (DEIR 170). This assumption that new projects won’t impact the hydrology because they will exist on already developed Metropolitan facilities does not account for the impacts associated with changes in how those facilities operate. If a new project increases the amount of water that is extracted, the associated water body will be impacted.

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Waterbodies throughout the world are impacted by hydrologic alterations. MWD’s past and current operations have significantly reshaped California and Colorado’s hydrology. One example is the San Francisco Bay Delta, that has changed considerably as a result of anthropogenic drivers (Hutton et al., 2017). Particularly the construction of the State Water Project (SWP) and the Central Valley Project (CVP) with their network of dams, pump stations, and aqueducts for water storage and transport to other parts of the state, construction of dams,

⁵ United Nations. Nature’s Dangerous Decline ‘Unprecedented’; Species Extinction Rates ‘Accelerating.’ Published 2019. <https://www.un.org/sustainabledevelopment/blog/2019/05/nature-decline-unprecedented-report/>

expansion of irrigated agriculture, and growth in population have all influenced the Delta hydrology (Hutton et al., 2017).

The DEIR’s claim that no future project associated with the Draft CAP will have a significant impact on the hydrology or water quality is a gross oversight, especially because of the lack of clarity within the existing document on specific measures and projects that will be implemented. Whether there is investment in more imported water, which will impact Northern California hydrology (Hutton et al., 2017), or investment in localized water recycling, stream flow and therefore hydrology will be impacted.⁶ The EIR must account for these impacts and set a standard of mitigation measures for each type of project that could be potentially implemented to ensure the DRAFT CAP does not cause more environmental harm than it solves.

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X. Conclusion

Thank you for the opportunity to submit comments on the Draft CAP and associated DEIR. The Center strongly supports many of the goals of the Draft CAP. But these goals are not supported by clear, enforceable, and funded policies. In addition, the DEIR does not accurately reflect the scientifically documented impacts of MWD’s projects on ecosystems. The Center urges MWD to revise the CAP to provide more specific metrics and the associated EIR to better assess and mitigate the impacts to sensitive wildlife and wildlife movement.

9-15

Please do not hesitate to contact us if you would like to meet to further discuss these issues.

Sincerely,



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⁶ Mika, K., Gallo, E., Read, L., Edgley, R., Truong, K., Hogue, T., ... & Gold, M. (2017). LA sustainable water project: Los Angeles river watershed. <https://escholarship.org/uc/item/42m433ps>

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(attached via OneDrive link)

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Space.

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Response to Comment Letter 9

COMMENTER: Elizabeth Reid-Wainscoat, Campaigner, Urban Wildlands, Center for Biological Diversity

DATE: January 7, 2022

Response 9-1

The commenter provides information about the Center for Biological Diversity and summarizes the main themes of the comment letter, specifically the opinion that the Draft CAP suffers from a lack of specificity on tracking and implementation measures that would ensure significant reductions in regional greenhouse gas emissions and that the Draft PEIR does not accurately assess and mitigate impacts to hydrology, sensitive species, and wildlife connectivity.

This comment is acknowledged and specific responses to the commenter's concerns are provided in the responses below.

Response 9-2

The commenter provides information describing how climate change is an urgent and existential concern. The commenter states that, in California, climate change will transform the climate, resulting in impacts including, but not limited to, increased temperatures and wildfires and a reduction in snowpack and precipitation levels and water availability.

The comment is acknowledged. Background on climate change and its impacts is included in Chapter 2, *Project Description*, of the Draft PEIR and in Chapter 2.2 *Climate Change Impacts*, of the Draft CAP. The comment does not raise concerns regarding the adequacy of the Draft PEIR, the Draft CAP, or the CEQA process. No changes to the Draft PEIR or Draft CAP are warranted in response to this comment.

Response 9-3

The commenter states the opinion Metropolitan has a responsibility to ensure that it is reducing GHG emissions and contributing to the state's achievement of its emissions reduction targets.

The comment is acknowledged. Metropolitan's CAP addresses its fair share of GHG emissions using operational controls consistent with state targets and methodologies to reduce emissions. The comment does not raise concerns regarding the adequacy of the Draft PEIR, the Draft CAP, or the CEQA process. No changes to the Draft PEIR or CAP are warranted in response to this comment.

Response 9-4

The commenter states the opinion the Draft CAP's GHG Emissions Inventory is improperly narrow in scope, and the forecasts do not account for climate change. Specifically, the commenter suggests the characterization and exclusion of SWP emissions and their being accounted for in the California DWR CAP is the type of exclusion that led to invalidation of Sonoma County's CAP in 2019, stating that it fails to account for transboundary emissions.

Metropolitan recognizes that there are transboundary emissions associated with water provided by DWR's SWP. However, unlike the emissions in the Sonoma County CAP, these emissions are currently being accounted for and managed by DWRs, which has its own Greenhouse Gas Emissions Reduction Plan that includes a complete emissions inventory, identifies measures to reduce emissions, and has a monitoring and reporting program to ensure progress towards meeting its adopted targets which are in line with state targets. As discussed in Metropolitan's CAP, these emissions also fall outside of Metropolitan's operational control. Furthermore, Metropolitan will

continue to work with DWR to align efforts, where applicable. While aggregated emissions are not used in the Metropolitan's CAP, Metropolitan understands that having an aggregated emissions factor for the imported water to Southern California is beneficial to better understand the overall emissions related to imported water, therefore a discussion of DWR's emissions is provided in Topical Response A and a detailed discussion of the overall embedded energy of water imported to Southern California has been added to Appendix B of the Final CAP.

The comment does not raise concerns regarding the adequacy of the Draft PEIR or the CEQA process. No changes to the Draft PEIR are warranted in response to this comment.

Response 9-5

The commenter suggests an alternate way to calculate GHG emissions forecasts and provides information describing how GHG emission forecasts could be recalculated to assume drought conditions will continue.

Metropolitan recognizes that forecasts are an estimate of a likely outcome based on the available information at the time of the analysis. The Metropolitan CAP forecast uses past data to estimate emissions per acre foot only and demand projections consistent with the 2020 UWMP. Historic Metropolitan data includes years with nearly 100 percent CRA pumping which provides a worst-case scenario for Metropolitan emissions. This paired with increased demand, as forecasted by the UWMP, provides the "high" estimate used in the Metropolitan CAP. This is expected to be a worst-case scenario. Metropolitan has committed to performing annual GHG inventories and five-year updates to the CAP to ensure it stays on track to meet its GHG reduction goals. The five-year updates to the CAP will also include a new forecast to ensure that the most recent data is included for future forecasts ensuring that Metropolitan captures any changing climatic conditions that would affect its ability to reliability reduce its GHG emissions.

The comment does not raise concerns regarding the adequacy of the Draft PEIR or the CEQA process. No changes to the Draft PEIR or Draft CAP are warranted in response to this comment.

Response 9-6

The commenter states the opinion the Draft CAP's tracking methods are flawed and suggests Metropolitan rely on the per capita GHG emissions analysis, as well as the overall GHG emissions reported, to determine progress towards goals.

As stated in Chapter 4.3, *Metropolitan's GHG Emissions Reduction Targets*, Metropolitan will pursue a linear per capita GHG emissions reduction pathway to meet its GHG reduction goals. The carbon budget is an appropriate, conservative, and more accurate methodology to track a GHG emissions for a jurisdiction that has variable emissions over time. Using this approach, Metropolitan will track and account for 100 percent of its total GHG emissions between 2005 and its interim target in 2030 as well as its long-term goal of carbon neutrality by 2045. Without the carbon budget, Metropolitan could theoretically emit a very high amount of GHG emissions for every year up to 2030 and then have a low emissions year in 2030 and "meet its target". With the carbon budget approach, GHG emissions are accounted for annually, which allows Metropolitan to monitor the success of its programs and pivot, if necessary, to meet its interim 2030 goal, as well as its long-term goal of carbon neutrality by 2045. Additionally, Metropolitan's is utilizing CAPDash, a web-based tracking tool, to track and report its GHG emissions. Metropolitan will track its mass emissions, per capita emissions, and the carbon budget to ensure it is meeting its established targets.

The comment relates to the contents of the proposed CAP and does not raise concerns regarding the adequacy of the Draft PEIR or the CEQA process. No changes to the Draft PEIR or Draft CAP are warranted in response to this comment.

Response 9-7

The commenter suggests the Draft CAP's reduction strategies and measures are non-binding and unenforceable. The commenter suggests a lead agency cannot rely on policies and measures that simply "encourage" GHG efficiency and emissions reductions as mitigation measures, citing *State CEQA Guidelines* Section 15183.5.

Metropolitan completed an emissions forecast used to estimate the emissions reductions necessary to achieve carbon neutrality by 2045 under three potential scenarios. Metropolitan's CAP includes two types of measures: quantifiable measures and supportive measures. Every quantifiable measure included in the CAP has an implementation date and specific action and assumptions that were used to calculate the associated GHG reductions. The specific calculations are identified in Appendix C. As shown in the CAP, Metropolitan will meet its established GHG reduction goal using the identified, quantifiable measures in the CAP for all modelled scenarios. While the CAP also has supportive measures, such as conducting studies or encouraging behaviors, no GHG reductions are applied or expected for these supportive measures. They do, however, provide an important foundation for the development of future quantitative measures.

In addition, as described in detail in Section 5.0 of the CAP, *Metropolitan's GHG Emissions Reduction Strategy*, the CAP includes specific strategies that, when implemented, can achieve carbon neutrality by 2045 and satisfy the requirements of *State CEQA Guidelines* Section 15183.5(b)(1)(D). Furthermore, *State CEQA Guidelines* Section 15183.5 does not require that all measures in a qualified GHG reduction plan be binding and enforceable. Rather, for future projects which may tier their GHG impact analyses from the CAP, Section 15183.5(b)(2) states:

An environmental document that relies on a greenhouse gas reduction plan for a cumulative impacts analysis must identify those requirements specified in the plan that apply to the project and, if those requirements are not otherwise binding and enforceable, incorporate those requirements as mitigation measures applicable to the project.

Future projects which may tier their GHG impact analyses from the CAP would be required to evaluate consistency with the qualified CAP. If applicable measures of the CAP are not by themselves binding and enforceable, such measures may be incorporated as mitigation measures in future project-specific environmental review documents, consistent with the *State CEQA Guidelines*. This does not preclude the CAP from serving as a qualified GHG reduction plan pursuant to *State CEQA Guidelines* Section 15183.5. Given the discussion above, no changes to the Draft PEIR or Draft CAP are warranted in response to this comment.

Response 9-8

The commenter suggests there is no evidence of funding for many of the various programs set forth in the Draft CAP, nor evidence in the record that people or industry will actually participate in the voluntary programs described in the Draft CAP. This comment also states the opinion the Draft CAP fails as a CEQA compliance tool because it relies upon non-binding measures that lack performance standards.

State CEQA Guidelines Section 15183.5 does not require evidence of funding for programs in order for a CAP to serve as a qualified GHG reduction plan for tiering and streamlining of GHG impact analyses. Rather, the *State CEQA Guidelines* require performance standards for measures or groups of measures that, if implemented on a project-by-project basis, would collectively achieve the specified emissions level. Section 5.0, *Metropolitan's GHG Emissions Reduction Strategy*, of the CAP outlines all CAP measures intended to achieve carbon neutrality by 2045 and includes target metrics for each measure, consistent with this requirement. As discussed in Response 9-7, though supportive measures such as conducting studies or encouraging behaviors do not have specific GHG reductions tied to

their them, they do, however, provide an important foundation for the development of future quantitative measures. Given the discussion above, no changes to the Draft PEIR or Draft CAP are warranted in response to this comment.

Response 9-9

The commenter suggests increasing wastewater recycling programs to reduce reliance on imported water should be a central goal in the Draft CAP. The commenter opines that currently, the Draft CAP does not have any specific goals associated with the listed metric of “acre-feet of water generated” (CAP page 5.71).

Metropolitan’s CAP is a comprehensive document that identifies GHG reduction measures to reduce its GHG emissions associated with all emissions sectors. Metropolitan’s many conservation programs are intended to reduce water consumption while its energy sustainability programs target greener energy for water deliveries. The RRWP reference on page 5.13 is one such measure intended to reduce reliance on imported water supplies, however this Program is still in the planning phase. As such, it was listed as a Phase 2 measure (2030-2045). As more data becomes available, future iterations of the CAP will identify specific goals for the listed metric of acre-feet of water generated. Taken together, this balanced approach will ensure that Southern California has a reliable supply of water into the future.

The comment relates to the contents of the proposed CAP and does not raise concerns regarding the adequacy of the Draft PEIR or the CEQA process. No changes to either the Draft PEIR or CAP are warranted in response to this comment.

Response 9-10

The commenter suggests that Strategy 9 of the CAP should only include natural carbon sequestration solutions, not industrial carbon capture and storage. The commenter further recommends Metropolitan commit to land preservation and native habitat restoration as a central component of the CAP instead of merely studying the potential of both natural and industrial carbon storage strategies.

Metropolitan agrees that natural carbon sequestration methods on natural and working lands are a key strategy in fighting climate change and provide many co-benefits. As discussed in the CAP, Metropolitan will use the information from the studies to develop quantifiable carbon sequestration programs in future CAP updates.

The comment relates to the contents of the proposed CAP and does not raise concerns regarding the adequacy of the Draft PEIR or the CEQA process. No changes to the Draft PEIR or CAP are warranted in response to this comment.

Response 9-11

The commenter states the Draft CAP does not identify funding sources for implementation measures. The commenter adds the Implementation and Monitoring Section of the CAP states, “the Climate Working Group will identify policies and projects for implementation, work with relevant departments to draft and review required projects or policies, present items to Metropolitan management to identify funding and obtain approval, and track implementation metrics,” and opines the omission of funding calls into question whether many programs outlined in the CAP will ever be implemented.

Metropolitan has funding available to maintain, update, and enhance its operations. The process of allocating funds includes biennial budgeting through the capital improvement program (CIP) budget cycle. Metropolitan will also be able to augment the CIP budgets with additional grants and other incentive programs. Many of the actions included in the CAP are cost comparable to baseline

operations and even provide long-term savings. Refer also to Response 9-8, above, regarding identification of funding sources for implementation of CAP measures.

The comment relates to the contents of the proposed CAP and does not raise concerns regarding the adequacy of the Draft PEIR or the CEQA process.

Response 9-12

The commenter recommends the Draft PEIR better assess and mitigate the impacts to hydrology, sensitive species and wildlife movement. Specifically, the commenter questions the Draft PEIR's conclusion of "less than significant impacts" to wildlife movement and states that the Draft PEIR must analyze the proposed program's potential impacts to riparian corridors. The commenter cites literature on the importance and ongoing fragmentation of such corridors and encourages Metropolitan to incorporate clear, enforceable wildlife connectivity mitigation measures that address the needs of target species.

As discussed on page 113 of the Draft PEIR under Threshold BIO-D, proposed projects would generally occur within urbanized areas at or near existing Metropolitan facilities. These facilities are fenced and developed and therefore, implementation of program activities proposed under the CAP would not impede wildlife movement. It is anticipated that project activities in both the Palo Verde and the Bay Delta regions would be small in nature and would avoid impeding or interfering with wildlife movement. Additionally, there is sufficient adjacent habitat in these areas to facilitate wildlife movement such that development in these areas would not isolate wildlife from adjacent movement corridors and would not substantially interfere with wildlife movement. As such, impacts to wildlife movement would be less than significant and no mitigation would be required.

Impacts to riparian corridors are also discussed under Threshold BIO-B and BIO-C. As noted on page 113 of the Draft PEIR, projects would be designed and located to avoid or minimize impacts to riparian and wetland habitat to the extent feasible. Additionally, if, during project-level analysis, it is determined that construction or operation of any covered activity would result in significant impacts to riparian habitats, sensitive natural communities, or state or federally protected wetlands, implementation of MM BIO-7 (Jurisdictional Delineation and Impact Avoidance), MM BIO-8 (Wetlands, Drainages and Riparian Habitat Restoration), and MM BIO-9 (Sensitive Natural Community Avoidance and Mitigation) would reduce these impacts to a less than significant level. Given the discussion above, no changes to the Draft PEIR are warranted in response to this comment.

Response 9-13

The commenter recommends the Draft PEIR, specifically Mitigation Measures BIO-4, BIO-8, and BIO-9, include a habitat replacement ratio of 3:1 on-site or 5:1 off-site and ensure funding in perpetuity. Additionally, the commenter adds that since conservation of nature is a listed strategy in the Draft CAP, any other project associated with the CAP that would deplete remaining natural lands should incorporate adequate habitat replacement ratios to ensure the net impact of the project is positive.

Mitigation Measures BIO-4, BIO-8 and BIO-9 require a minimum mitigation ratio of 1:1 and do not prohibit implementation of higher mitigation ratios for individual projects. The minimum ratio of 1:1 is intended to ensure impacts are mitigated such that the project would have a net neutral impact and thus, impacts would not rise to the level of significance under CEQA. If an individual project implemented under the CAP would result in impacts that require mitigation, the mitigation ratio will be determined through consultation with the appropriate regulatory agencies during the permitting process as outlined in the mitigation measures. Given the discussion above, no changes to the Draft PEIR are warranted in response to this comment.

Response 9-14

The commenter states the opinion the Draft PEIR's conclusion of "less than significant impacts" to hydrology and water quality does not reflect the best available science. Specifically, the commenter notes that though projects under the CAP would be implemented on Metropolitan facilities, the Draft PEIR does not account for the impacts associated with changes in how those facilities operate (e.g., increasing the amount of water extracted). The comment suggests the Draft PEIR's claim that no future project associated with the Draft CAP will have a significant impact on the hydrology or water quality is an oversight, especially because of the lack of clarity within the existing document on specific measures and projects that will be implemented.

Impacts related to hydrology and water quality are analyzed in Section 5.7, *Hydrology and Water Quality*, of the Draft PEIR. Potential impacts to this resource area are analyzed relative to the criteria outlined in Appendix G of the *State CEQA Guidelines*. Improvements to Metropolitan facilities that may occur under the CAP generally include infrastructure/pump efficiency improvements (e.g., CAP measures EE-4a through EE-4d) or energy efficiency improvements, such as construction of battery energy storage system (BESS) facilities pursuant to CAP measure E-4. Such improvements are intended to improve the energy efficiency with which Metropolitan facilities operate and would not alter the amount of water extracted in the Plan Area. As stated on page 171 of the Draft PEIR, the CAP does not involve any projects that would directly or indirectly increase water demand. On the contrary, the proposed CAP includes various measures under Strategy 8, *Increase Water Conservation and Local Water Supply*, intended to reduce water demand and, by extension, water extraction.

The nature of individual projects envisioned under the CAP presently would not result in significant impacts to hydrology and water quality. As described on page 50 of the Draft PEIR, the CAP includes CAP measure WC-6, which involves implementing advanced technology systems to increase Metropolitan-owned recycled and groundwater recovery systems to maintain local water supply. This measure may include pursuing projects like the proposed RRWP. However, as discussed in the Draft PEIR, the RRWP is currently being considered by Metropolitan and is not a Board-approved project. While emissions associated with implementation of the RRWP are accounted for in the CAP, the RRWP would be subject to its own CEQA analysis, during which time project-specific impacts to hydrology and water quality would be analyzed at a project-level. Given the discussion above, no changes to the Draft PEIR are warranted in response to this comment.

Response 9-15

The commenter summarizes their previous comments by recommending Metropolitan revise the CAP to provide more specific metrics and the associated Draft PEIR to better assess and mitigate the impacts to sensitive wildlife and wildlife movement.

This general comment is acknowledged, and the individual comments raised by the commenter have been addressed in greater detail in the preceding responses.

Letter 10



January 11, 2022

Adel Hagekhalil
 General Manager
 & Malinda Stalvey
 Environmental Planning Section
 Metropolitan Water District of Southern California
 P.O. Box 54153
 Los Angeles, CA 90054-0153

Re: Voluntary Agreements

Dear General Manager Hagekhalil and Ms. Stalvey:

We hope this letter finds you well in the New Year and we appreciate the extension you gave us to submit these comments. We are writing to provide you with some feedback and concerns on MWD’s Climate Action Plan (CAP).

10-1

SWP GHG Emissions

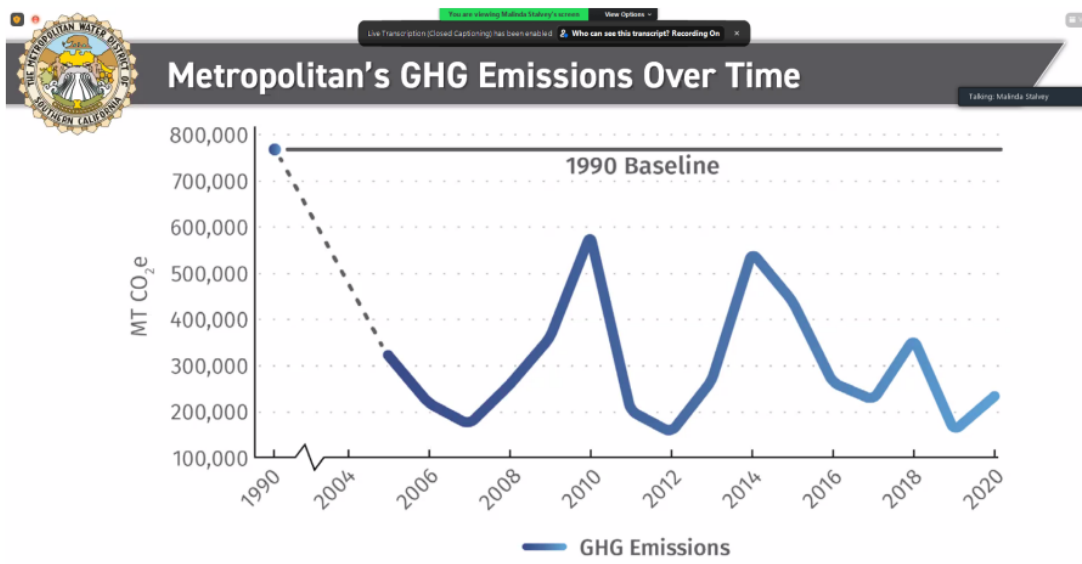
We will not focus so heavily on the energy and greenhouse gases (GHG) components of the CAP, but we have a few comments regarding the State Water Project (SWP). We understand that MWD does not plan to count the GHG from the SWP because they are counted by the State, but MWD should include these numbers in its reports for several reasons:

1. MWD must have an accurate understanding of their energy use when weighing the pros and cons of SWP-related projects such as the Delta Conveyance project, Sites Reservoir, and operations and maintenance needs, especially given the state’s and MWD’s goal of carbon neutrality. Board members, and the public alike, must have a more complete picture when making decisions on such expensive and controversial projects.
2. The cost of energy used in the SWP, especially given the effects of subsidence on the California Aqueduct, are passed along to ratepayers, and presenting the full scope to ratepayers is part of the transparency and openness of the new general manager’s tenure.

10-2

10-3

909 12th Street, Suite 202, Sacramento, CA 95814
 (916) 557-1100 • Fax (916) 557-9669 • www.sierraclubcalifornia.org



The graph above depicts MWD’s GHG emissions over time. But this image is misleading. The increases are seen due to a reliance on the Colorado River during drought years, and the reductions are during years when MWD relied more heavily on the SWP, but the choice to not include SWP energy gives the appearance that MWD was not using as much energy in these years. Such a depiction can make MWD’s local projects seem less appealing to board members when comparing their energy use to imported water projects with these misleading figures. Local supply and reuse projects are critical to the long-term sustainability of water in Southern California.

10-4

Carbon Neutrality

MWD has a goal of carbon neutrality by 2045, but the Delta Conveyance project is estimated to be online in 2040 if it were built. Meeting the 2045 goal would likely be very difficult to meet with such an energy-intensive project, which seems to be a motivation not to include SWP energy outputs in the CAP calculations, which is misleading for the CAP Project and renders the PEIR inadequate, if not incomplete.

10-5

Carbon Capture and Sequestration

The CAP says that MWD is planning to both “investigate and implement” carbon capture and sequestration. We caution against committing to implementation before fully investigating the risks of the process to Delta (or Kern County) communities and working with them to understand the consequences. Carbon wells need over 100 years of monitoring. At this point in time, the risks of improper carbon capture and storage can lead to slow carbonic acid leaks, and it is impossible to detect where the leaks will appear in groundwater, which can lead to geysers forming in communities and under homes.

10-6

Commendable Goals

We are pleased to see the following goals:

- Increase water conservation and local water supply
- Expand water conservation educational workshops

10-7

- Provide funding and monitoring of local stormwater recharge and reuse projects
- Reduced natural gas emissions by 50% by 2030 and 100% by 2045
- Update annually new MWD buildings with all-electric construction and retrofitting
- Achieve zero waste by 2045
- Incentivize more sustainable commutes by 2045
- Improve efficiency and using carbon-free electricity by 30% by 2030 and 50% by 2045
- Move to near-zero and zero emission vehicle fleets by 2030 and 2045
- Reduce landfill waste by 67% by 2030 and 100% by 2045

10-7

Components Missing from the CAP

There are several topics that we would like to see included in the CAP-PEIR. The plan does not include alternative solutions (e.g., solar panels on all MWD properties by 2035 for shading and generation), the PEIR says only that there will not be a do-nothing plan. There are no mentions of unintended consequences and risks of harm to the environment or communities. These components should be included in the CAP to better understand the holistic value of MWD’s efforts to limit its carbon output.

10-8

If you have further questions, please do not hesitate to reach out. Thank you for your consideration.

Sincerely,

Caty Wagner
Southern California Water Organizer
Sierra Club California

Response to Comment Letter 10

COMMENTER: Katy Wagner, Southern California Water Organizer, Sierra Club California

DATE: January 11, 2022

Response 10-1

The commenter understands Metropolitan does not plan to count the GHG emissions from the SWP because they are counted by the state but suggests Metropolitan include these numbers in its report.

The comment relates to the contents of the proposed CAP and does not raise concerns regarding the adequacy of the Draft PEIR or the CEQA process. Metropolitan's CAP is a GHG reduction plan aimed at reducing GHG emissions from sources within its operational control, therefore emissions were calculated for its own operations including conveyance, treatment and distribution of SWP water from where it enters Metropolitan's system. DWR has its own CAP, which identifies emissions reductions for its operations. While an aggregated number will not be used in the Metropolitan's CAP, Metropolitan understands that having an aggregated emissions factor for the imported water to Southern California is beneficial to better understand the overall emissions related to imported water, therefore a discussion of DWR's emissions is provided in Topical Response A and a detailed discussion of the overall embedded energy of water imported to Southern California has been added to Appendix B of the Final CAP. No changes to the Draft PEIR are warranted in response to this comment.

Response 10-2

The commenter recommends Metropolitan include SWP emissions in its CAP in order to have an accurate understanding of its energy use when discussing pros and cons of the projects related to the SWP, such as the Delta Conveyance project, Sites Reservoir, and operations and maintenance needs.

The comment relates to the contents of the proposed CAP and does not raise concerns regarding the adequacy of the Draft PEIR or the CEQA process. As discussed in Response 10-1, Metropolitan has included a discussion of DWR's emissions in Topical Response A and a detailed discussion of the overall embedded energy of water imported to Southern California has been added to Appendix B of the Final CAP. However, Metropolitan does not own or operate the SWP, therefore a discussion about the pros and cons of SWP related projects has not been included.

Response 10-3

The commenter notes energy costs associated with the SWP are passed to ratepayers and presenting the full scope to ratepayers is part of the transparency and openness of the new general manager's tenure.

As discussed in Response 10-1, Metropolitan has included a discussion of DWR's emissions in Topical Response A and a detailed discussion of the overall embedded energy of water imported to Southern California has been added to Appendix B of the Final CAP. A discussion of the energy costs associated with the SWP, which is outside of the operational control of Metropolitan, is outside the scope of the CAP. No changes to the Draft PEIR or Draft CAP are warranted in response to this comment.

Response 10-4

The commenter suggests the graphical depiction of Metropolitan's GHG emissions over time is misleading, as the choice not to include SWP energy emissions gives the appearance that Metropolitan was not using as much energy in years when it depended more heavily on SWP water.

The comment relates to the contents of the proposed CAP and does not raise concerns regarding the adequacy of the Draft PEIR or the CEQA process. Metropolitan's CAP includes a complete emissions inventory of its operations. The SWP is not within Metropolitan's operational control and emissions associated with operation and maintenance of the SWP are covered under the DWR's CAP. However, Metropolitan has included a discussion of DWR's emissions in Topical Response A and a detailed discussion of the overall embedded energy of water imported to Southern California has been added to Appendix B of the Final CAP. No changes to the Draft PEIR are warranted in response to this comment.

Response 10-5

The commenter expresses concern regarding Metropolitan's ability to meet the 2045 carbon neutrality goal, since the Delta Conveyance project is estimated to be operational in 2040. The comment states the opinion that meeting the 2045 goal would be difficult with such an energy-intensive project. The commenter further opines this seems to be a motivation not to include SWP energy outputs in the CAP calculations and renders the PEIR inadequate, if not incomplete.

The commenter states the opinion that the exclusion of SWP energy from CAP calculations renders the Draft PEIR inadequate or incomplete but does not raise a significant environmental issue indicating why the document is inadequate or incomplete. The proposed Delta Conveyance Project would be owned, operated, and funded by the DWR and is not a proposed project or activity that would be covered under Metropolitan's CAP and, therefore, is not analyzed in the Draft PEIR. The Draft PEIR analyzes and discloses potential environmental impacts associated with implementation of the CAP as it is described in Chapter 2, *Project Description*, of the Draft PEIR. No changes to the Draft PEIR are warranted in response to this comment.

Response 10-6

The commenter cautions against committing to implementation of carbon capture and sequestration before fully investigating the risks of the process to Delta or Kern County communities and recommends working with these communities to understand the consequences of improper carbon capture and storage.

CAP measure CS-3 involves developing pilot projects to enhance carbon sequestration on Metropolitan-owned properties within the Sacramento-San Joaquin River Delta, as described on page 51 of the Draft PEIR. No such projects are proposed in Kern County. As noted on page 51 of the Draft PEIR, any such projects, if deemed feasible, would comply with existing laws and regulations pertaining to carbon capture and sequestration. Furthermore, as stated on page 51 of the Draft PEIR, such projects would be aligned with the CARB's Approved Carbon Capture and Sequestration Protocol, which includes monitoring and oversight requirements to avoid impacts to public health, natural resources, or the environment. Individual projects to be implemented under the CAP would undergo the appropriate level of project-specific environmental review, including compliance with all applicable noticing and review requirements pursuant to CEQA. No changes to the Draft PEIR are warranted in response to this comment.

Response 10-7

The commenter commends specific goals included in the CAP.

This comment is acknowledged. No changes to the Draft PEIR or Draft CAP are warranted in response to this comment.

Response 10-8

The commenter states the CAP and Draft PEIR do not include alternative solutions, such as solar panels on all Metropolitan properties by 2035 for shading and generation and does not address unintended consequences and risks of harm to the environment or communities.

As stated in *State CEQA Guidelines* Section 15126.6(a):

An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation...The lead agency is responsible for selecting a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives.

A range of potentially feasible alternatives to the proposed program, including alternatives considered but rejected, are described in Chapter 7, *Alternatives*, of the Draft PEIR. As explained on page 191 of the Draft PEIR, while the commenter may suggest various GHG reduction measures that may be pursued, funded, or supported to a greater degree, Metropolitan has proposed a CAP that based on its assessment of local conditions, regulatory requirements, and feasibility, provides a full spectrum of GHG reduction measures at levels that can be feasibly achieved and quantified based upon the information and technology available today. The potential environmental impacts associated with the CEQA-required “No Program Alternative” are also described in this chapter. While the “No Program Alternative” may not avoid all significant and unavoidable impacts identified for the proposed program, Chapter 7, *Alternatives*, concludes it would result in similar but reduced impacts to resource areas where the proposed program would result in significant and unavoidable impacts, specifically air quality, cultural resources, and noise. As such, the Draft PEIR considers a range of potentially feasible alternatives intended to address one or more potentially significant impacts. The commenter does not provide any evidence the alternatives considered in the Draft PEIR are inadequate nor any evidence the alternative suggested by the commenter would address any of the potential significant impacts identified in the Draft PEIR.

The commenter suggests the CAP and Draft PEIR do not address unintended consequences and risks of harm to the environment or communities but does not provide any evidence or information regarding potential unintended consequences or risks of harm that could occur as a result of program implementation. The Draft PEIR analyzes and discloses potential environmental impacts associated with implementation of the CAP as it is currently written and as it is described in Chapter 2, *Project Description*, of the Draft PEIR. No changes to the Draft PEIR are warranted in response to this comment.

Letter 11



January 12, 2022

Ms. Malinda Stalvey, Senior Environmental Specialist
The Metropolitan Water District of Southern California
Environmental Planning Section
P.O. Box 54153
Los Angeles, CA 90054-0153
Sent via email to: EP@mwdh2o.com

RE: DRAFT CLIMATE ACTION PLAN

To Ms. Stalvey:

On behalf of Los Angeles Waterkeeper, a nonprofit environmental watchdog that fights for the health of the region's waterways, and for sustainable, equitable and climate-friendly water supplies, I am writing to provide the following comments on The Metropolitan Water District of Southern California's (MWD's) Draft Climate Action Plan (CAP).

First, we commend MWD for taking the initiative to develop a Climate Action Plan and committing to carbon neutrality by 2045, as required by the State of California. We also appreciate MWD's acknowledgement of its role in mitigating the climate crisis. The conveyance, treatment, and distribution of water is energy-intensive, and it is critical that MWD, as the nation's largest water wholesaler, address the water-energy-climate nexus head on. MWD is poised to lead water agencies nationwide, and we believe the following recommendations will move MWD closer to the agency's ambitious and necessary commitments.

11-1

That said, MWD must address the State Water Project in its CAP. MWD's Energy Sustainability Plan includes the agency's net energy use and costs, which are dominated by pumping imported water through the State Water Project (SWP) and Colorado River Aqueduct (CRA) systems. Between 2013 and 2018, the SWP constituted 54% of MWD's overall electricity requirements and 75% of its electricity costs on average. In comparison, the CRA constituted 44% of MWD's overall electricity requirements and 18% of its electricity costs during the same time period.1 Despite this, the Draft Climate Action Plan fails to include the SWP's GHG emissions, potential actions to mitigate those emissions and measures to protect the Delta from climate impacts.

11-2

While we understand the desire to not double count GHG emissions already assessed through the California Department of Water Resources' Climate Action Plan, MWD cannot ignore its role in the SWP in its own CAP. MWD is the largest SWP contractor and is responsible for the largest share of operational costs, including energy costs. MWD also has an outsized role in the planning and implementation of projects within the SWP due to its majority share. Moreover, asking the public to try to piece together various climate action plans to understand the impacts of MWD's policies, programs and projects does not rise to the level of transparency to which I know this agency aspires. MWD has a responsibility to its member agencies, ratepayers and the general public to address the SWP's climate

1 Metropolitan Water District of Southern California (July 2020), Energy Sustainability Plan, Executive Summary, p. i.

vulnerabilities and impacts in its CAP as well as in its decision-making on management, operations, construction, and funding related to the SWP.

By excluding SWP operations from the CAP, MWD fails to look at its system holistically. Admittedly, CRP emissions increase during drought years when SWP allocations are decreased. The inverse is also true, but not accounted for in MWD’s GHG calculations or management decisions. Thus, emissions will appear artificially low when maximizing imports from the SWP. As the CAP acknowledges, GHG reporting protocols generally require an organization to limit its GHG accounting to within its operational boundaries. However, considering MWD’s influence over SWP operations, MWD staff must account for the energy use and emissions associated with its operations even if solely in a qualitative manner.

11-2

MWD should develop a climate resilience and adaptation plan. Many of MWD’s strategies to mitigate its GHG emissions are significant, especially the divestment from coal and its own installation of renewable energy at its facilities. However, MWD must also fully address the immediate impacts of climate change, assess the whole system’s climate vulnerabilities (including physical infrastructure and social vulnerabilities) and develop a proactive climate adaptation plan that builds resilience into the system. This plan should address all operations over which MWD has significant influence, including the SWP. And through coordination with the State, MWD can reduce the impacts of unpredictable precipitation and drought, and design infrastructure and ecosystem restoration that protects communities and wildlife.

11-3

MWD should consider deeper emissions cuts in the near term. The latest Intergovernmental Panel on Climate Change (IPCC) report warns the climate is changing faster than expected and climate scientists agree that the faster we act, the less severe the consequences. MWD should consider additional near-term actions to accelerate its emissions reductions by 2030. Specifically, MWD should include a commitment of utilizing 100% renewable energy for all its operations and should assess potential methane emissions from its facilities, including reservoirs.

11-4

LA Waterkeeper supports MWD’s shift towards a *One Water* approach that fully incorporates and addresses the water-energy-climate nexus. As MWD looks to pull together its climate action, resilience and *One Water* planning, the connection between water and climate must be at the core of its work.

Thank you for the opportunity to comment on the Draft Climate Action Plan. Please do not hesitate to reach out to me at bruce@lawaterkeeper.org or 619-851-9997 with any questions and for further discussion of these recommendations. LA Waterkeeper looks forward to being an ally and resource as MWD pursues the critically important *One Water* approach that prioritizes resilience and equity.

Sincerely,



Bruce Reznik
Executive Director

Response to Comment Letter 11

COMMENTER: Bruce Reznik, Executive Director, Los Angeles Waterkeeper

DATE: January 12, 2022

Response 11-1

The commenter provides background on Los Angeles Waterkeeper and commends Metropolitan for creating the CAP.

This comment is acknowledged. No changes to the Draft PEIR or Draft CAP are warranted in response to this comment.

Response 11-2

The commenter recommends Metropolitan address the SWP in its CAP. The commenter understands not wanting to double-count GHG emissions considered by the state but suggests that Metropolitan should account for the energy use and emissions associated with SWP operations, even if solely in a qualitative manner. As currently presented, the commenter states the opinion that emissions appear artificially low when maximizing imports from the SWP.

Metropolitan's CAP is a GHG reduction plan aimed at identifying GHG emissions from within its operational control; therefore, emissions were calculated for its own operations including conveyance, treatment and distribution of SWP water from where it enters Metropolitan's system. DWR has its own CAP, which identifies emissions reductions for its operations. While an aggregated number will not be used in the Metropolitan's CAP, Metropolitan understands that having an aggregated emissions factor for the imported water to Southern California is beneficial to better understand the overall emissions related to imported water, therefore a discussion of DWR's emissions is provided in Topical Response A and a detailed discussion of the overall embedded energy of water imported to Southern California has been added to Appendix B of the Final CAP.

The comment relates to the contents of the proposed CAP and does not raise concerns regarding the adequacy of the Draft PEIR or the CEQA process. No changes to the Draft PEIR are warranted in response to this comment.

Response 11-3

The commenter recommends Metropolitan develop a climate resilience and adaptation plan. Specifically, the commenter suggests the plan should address all operations over which Metropolitan has significant influence, including the SWP.

As described in Response 1-1, Metropolitan's IRP and UWMP address climate resilience and adaptation by focusing on water supply reliability and how Metropolitan ensures a reliable supply of water during periods of drought and changing climatic conditions. The CAP complements these two plans by creating a GHG reduction plan. The IRP is currently being updated and will be released in the coming months. The following links include both current documents and information about the planning process:

- <https://www.mwdh2o.com/planning-for-tomorrow/how-we-plan/integrated-resource-plan/>
- <https://www.mwdh2o.com/planning-for-tomorrow/how-we-plan/>

The comment relates to the contents of the proposed CAP and does not raise concerns regarding the adequacy of the Draft PEIR or the CEQA process. No changes to the Draft PEIR or Draft CAP are warranted in response to this comment.

Response 11-4

The commenter recommends Metropolitan consider deeper emissions cuts in the near term. Specifically, the commenter suggests Metropolitan include a commitment of utilizing 100 percent renewable energy for all its operations and should assess potential methane emissions from its facilities, including reservoirs. Finally, the commenter supports Metropolitan's shift toward a One Water approach that fully incorporates and addresses the water-energy-climate nexus.

Metropolitan supports the transition for 100 percent renewable energy for all its operations but must balance the need for a reliable water delivery system and the cost of transitioning to 100 percent renewable energy to its ratepayers. At this time, neither the retail nor the wholesale market is capable of providing a reliable source of 100 percent renewable energy.⁵ As described in CAP Strategies 4 and 5, Metropolitan has developed a comprehensive plan to transition to 100 percent renewable energy including evaluating operations that can be shifted to lower emissions periods, installation of Battery Energy Storage Systems (BESS) to capture energy during periods of low grid emissions and discharging when renewable energy is not produced, transitioning one of our facilities from energy supplied by the retail market to available hydropower currently sold to the wholesale market, and investigating the feasibility of installing additional solar and large scale battery storage systems, to name a few. Additionally, as the state begins to realize the benefits of SB 100, which calls for 100 percent of electric retail sales to come from renewable energy in California by 2045, Metropolitan's operations will benefit from the investments in renewable and zero-carbon resources.

Currently, there is no accepted protocol for measuring and verifying annual methane emissions from lakes and reservoirs. Current approaches for estimating GHG emissions from reservoirs do not account for carbon sequestration in reservoir sediments and do not account for the complete carbon cycle in reservoirs including carbon inflows, stocks, and outflows. Additionally, current approaches do not recognize a difference between a natural lake system fed by rivers and runoff rather than pass through terminal reservoirs that are fed by aqueducts and pipelines and typically discharge into water conveyance systems or groundwater recharge basins. As protocols are developed, Metropolitan will include this analysis in its emissions calculations.

The comment relates to the contents of the proposed CAP and does not raise concerns regarding the adequacy of the Draft PEIR or the CEQA process. No changes to the Draft PEIR or Draft CAP are warranted in response to this comment.

⁵ <http://www.caiso.com/Pages/default.aspx>

Letter 12

From: kris kwak <rubydog2@hotmail.com>
Sent: Sunday, November 21, 2021 6:21 PM
To: Stalvey, Malinda K <mstalvey@mwdh2o.com>
Subject: Draft CAP - SCH No 2020060450

We received letter concerning the above draft.
We live in Granada Hills and have view of DWP water treatment plant.
Will the above draft affect us?
Appear the 2 proposed sites are Sacramento and San Diego.
Will DWP expand their water treatment plant in the future.

|
12-1
|

Thank You
Kristelle

[Get Outlook for Android](#)

Response to Comment Letter 12

COMMENTER: Kristelle Kwak, Resident

DATE: November 21, 2021

Response 12-1

The commenter requests clarification regarding whether the proposed program will affect them, as residents of Granada Hills with a view of an existing water treatment plant in the area. The commenter asks if there are plans to expand the water treatment plant in the future.

As described in Section 2.5, *Description of Covered Projects with Potential for Physical Impacts*, of the Draft PEIR, Metropolitan's Joseph Jensen (Jensen) Water Treatment Plant (WTP) in Granada Hills, California is considered as a proposed site for a BESS facility, pursuant to CAP measure E-4. Activities associated with CAP measure E-4, are described on page 46 of the Draft PEIR, and Figure 10 of the Draft PEIR shows the proposed locations for BESS facilities at the Jensen WTP. As shown in Figure 10, proposed locations would be located within the existing footprint of the Jensen WTP; no expansion of the Jensen WTP is proposed as part of implementation of the CAP.

The Draft PEIR identifies significant and unavoidable impacts with respect to air quality, cultural resources, and noise. For all other environmental issue areas, implementation of the CAP would result in no impact, less than significant impacts, or less than significant impacts with incorporation of mitigation measures. This comment does not raise concerns regarding the adequacy of the Draft PEIR or the CEQA process, and no changes to the Draft PEIR or Draft CAP are warranted in response to this comment.

Letter 13

From: [Liz Amsden](#)
To: [EPT](#)
Subject: CAP PEIR
Date: Saturday, January 1, 2022 9:35:16 AM

To whom it may concern:

Some thoughts on the Metropolitan Water District’s proposed Climate Action Plan.

Which is a good start on a complex and vexing problem. A lot of thought has gone into it but I read a certain amount of constraint between the lines, limitations set by expectations and by data points that feel dated

13-1

Scope 3 addresses carbon sequestration as one of the routes to be pursued. This has been contemplated a number of times over the past decades and seems to fade into obscurity every time. What is the time and cost involved compared to benefit? Does it even come close to offsetting the current carbon being released from the poles and the Himalayas due to ongoing global warming?

I do support your commitment to water conservation and investing in local water supplies. However, what is the MWD doing to protect the people’s rights to the water commons - what falls from the sky and flows through our rivers and fills our lakes?

13-2

That is water that should be conserved for all uses, drinking water, fishes, eco-habitats rebuilding water tables. Water is a human right and should not be auctioned off to feed the greed of multinationals such as Nestles or to irrigate crops which are patently unsuitable for the semi-desert valleys of California, or even to maintain senior water rights.

What is being done to prevent evaporation of water in the aqueducts feeding into SoCal? What is being done to stop contamination by Big Ag and Big Oil/fracking? What is being done to reduce the salinity of the water to ensure downstream users don’t receive toxic chemicals?

13-3

How are you rectifying the cowboy approach of the dam-builders in the American west that have forever destroyed its river systems?

13-4

To that extent, I request you look at the following issues in reformulating and implementing your Plan:

- The need to preserve or return ecosystems to their states prior to the damming of the western rivers and draining of the aquifers and river systems – both the State Water Project and the Colorado River Aqueduct and the various backroom deals related thereto;
- Why is the MWD still supporting the current iteration of the Twin Tunnels Project which is NOT needed by LA County and charges LA County households huge amounts for the benefit Central Valley agribusinesses who care little for the land and more about the tax savings of their use of antiquated anti-environmental incentives?
- There are many conservation options that are not being pursued because they do not suit the political aspirations of those in power and the profiteers who enable them – how will the

13-5

13-6

13-7

- MWD address this?
- In drought year of 2014 with water use strongly regulated, Los Angeles saw significant cut-backs that were then abandoned in favor of keeping the LADWP from having to increase unit charges to cover its fixed costs – what can you do to re-implement and enforce these measures without creating economic hardship? 13-8
 - Yes, the per unit charge will have to be raised – hopefully with households reducing use so their net expense remains within reason - but why should MWD customers pay for the Central Valley’s poor husbandry? 13-9
 - Has the MWD and other agencies discussed leveraging their power to revamp the existing water rights mish-mash into a system that will be more flexible and fairer for all in years to come? 13-10
 - California doesn’t ‘owe’ luxury foodstuffs and alfalfa to any state or country; its agricultural sector needs to come to terms with the fact that most of the state is semi-desert with limited water resources that are difficult to replenish and should adjust their crops and methods accordingly – cutting pesticides, moving to less harmful fertilizing methods, installing drip irrigation systems used in Israel rather than continuing to spray precious water into the air where it does not even reach the ground let alone the roots of the plants, etc. 13-11
 - Again, the water rights regulations need to be redone to reflect reality and the future of the state, not to preserve deeded water amounts
 - High water-demand plants should be relegated to greenhouse cultivation
 - Indoor vertical farming (closed-system greenhouses) can operate year round, recycle water and use little if any pesticides and chemical fertilizers, both of which are contaminating our groundwater and drinking water supplies
 - With the experience of the pandemic years, look at how much of your work can now be done by telecommuting to reduce emissions, reduce stress, reduce traffic, and how that can be increased in the future 13-12
 - Co-office use will reduce costs at all levels including carbon footprints
 - Consider what existing spaces can be converted to affordable housing, small business incubators, recycling facilities, and bringing the manufacture of necessary goods back to the United States 13-13
 - Cover the canals to reduce evaporation and generate solar power 13-14
 - Stop the Delta project, the most recent iteration of the Twin Tunnels scheme which would not only be an ecological disaster with a disproportional cost falling on Los Angeles households but primarily subsidize Central Valley agribusinesses that care little for the land and more about personal profit margins and tax benefits, planting high water-demand crops and use inefficient irrigation to maintain their primary water rights 13-15
 - How do we repair and care for California’s multiple ecological systems; even if we conserve every drop, it doesn’t mean that fish will have enough free water to breed- destruction of one species can impact many others and severely impact various economic systems throughout the state
 - How are you addressing chemicals getting into our aquifers from your construction projects as well as from fracking, BigAg run-off, adjacent landfills (i.e. Scholl Canyon), runoff pollution, salt/alkalinity build-up, etc.? 13-16
 - Divide electricity into coal, oil and hydro which need to be phased out as soon as possible and the land restored to prior health be it 10 or 100 years ago, from tidal, solar and wind provided these are established and maintained in an ecologically sound and sustainable manner
 - Seriously investigate desalinization but NOT in the way that it is currently being pursued in California which is incredibly destructive of marine habitat and uses ridiculous amounts of carbon energy to producer - investigate Perth’s tidal desalination plant and possible Melbourne’s (both in Australia) 13-17
 - BTW, hydro is now considered to be WORSE than other carbon fuels as the dams bury trees

- and vegetation that decomposes in addition to the carbon-cost for building and maintaining the infrastructure
- Biodiesel is not more sustainable – there is the cost to create it and the cost to move it and the carbon cost from burning ANY fuel
- Bridge / transitional energy sources having no purpose in this discussion because of all the infrastructure required to build infrastructure to create them, retool equipment to use them and find an aftermarket to capture or dispose of their byproducts, all of which then encourages people to go on using them to justify their initial cost

13-17

The impact of climate change for such a complex entity as the MWD is a multi-tiered challenge and deserves careful assessment and even more careful implementation of policies to ensure that it actually achieves objectives beneficial to all its stakeholders and not just those with the most power or the loudest voices.

13-18

The MWD must address the interrelated ecological issues as well as current and future stakeholder needs.

Extreme caution must be taken to avoid short term profiteering and pretty metrics at the expense of long term restoration needed to repair over a century of mismanagement and safeguard future sustainability.

These are just a few thoughts.

Sincerely

Liz Amsden
Los Angeles, CA 90042
(323) 254-0590

Response to Comment Letter 13

COMMENTER: Liz Amsden, Resident

DATE: January 1, 2022

Response 13-1

The commenter states the opinion the CAP is a good start on a complex problem but inquires about the time and cost of carbon sequestration and whether these measures come close to offsetting current carbon being released from the poles and the Himalayas due to ongoing global warming.

This comment is acknowledged. The CAP is intended to reduce GHG emissions associated with Metropolitan's operations. Metropolitan would complete a full cost/benefit analysis before implementing carbon sequestration measures. Carbon sequestration provides a significant opportunity to reduce emissions associated with Metropolitan's operations while providing co-benefits of habitat restoration and protecting the natural environment. Emissions outside Metropolitan's operational control, such as DWR's SWP, are outside the scope of the CAP. The comment does not raise concerns regarding the adequacy of the Draft PEIR or the CEQA process. No changes to the Draft PEIR or Draft CAP are warranted in response to this comment.

Response 13-2

The commenter supports commitment to water conservation and investing in local water supplies, but asks what Metropolitan is doing to protect people's rights to water commons.

The commenter's support of water conservation and investing in local water supplies is acknowledged. Metropolitan's core mission is 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. The proposed CAP is intended to reduce GHG emissions associated with Metropolitan's operations; therefore, the document supports Metropolitan's core mission of providing a reliable water supply in an environmentally responsible way. The comment does not raise concerns regarding the adequacy of the Draft PEIR or the CEQA process. No changes to the Draft PEIR are warranted in response to this comment.

Response 13-3

The commenter asks what is being done to prevent evaporation of water in the aqueducts serving Southern California, as well as what is being done to stop contamination of water due to agricultural practices, oil production, increasing salinity for downstream users.

While there are no projects identified in the proposed CAP that specifically address the evaporation of water in the aqueducts or contamination of water, Metropolitan continually evaluates ways to improve water efficiency and protect water quality. The comment does not raise concerns with the adequacy of the Draft PEIR or the CEQA process, nor does the comment identify concerns with the analysis in the CAP or the GHG reduction measures identified to reduce emissions. No changes to the Draft PEIR or Draft CAP are warranted in response to this comment.

Response 13-4

The commenter asks how Metropolitan is rectifying the historical approach of constructing dams in the American west in ways that have destroyed river systems.

The comment is acknowledged. Metropolitan's mission is to provide a safe and reliable supply of water to Southern California. Metropolitan is continually evaluating its operations to ensure it is providing water in an environmentally and economically responsible way. The comment does not

raise concerns with the adequacy of the Draft PEIR or the CEQA process, nor does the comment identify concerns with the analysis in the CAP or the GHG reduction measures identified to reduce emissions. No changes to the Draft PEIR or Draft CAP are warranted in response to this comment.

Response 13-5

The commenter suggests the CAP consider the need to preserve or return ecosystems to their states prior to the damming of the western rivers and draining of the aquifers and river systems.

The comment is acknowledged. Please refer to Response 13-4.

Response 13-6

The commenter suggests the CAP consider why Metropolitan supports the current iteration of the Twin Tunnels Project, adding the opinion the project is not needed by Los Angeles County and charges County households for the benefit of Central Valley agri-businesses.

The comment is acknowledged. Please refer to Response 13-4.

Response 13-7

The commenter suggests the CAP consider how Metropolitan will address conservation options that the commenter believes are not being pursued because they do not suit the political aspirations of those in power and the profiteers who enable them.

The comment is acknowledged. No specific examples of conservation options that should have been considered by Metropolitan are offered by the commenter. Please refer to Response 13-4.

Response 13-8

The commenter suggests the CAP consider re-implementing and enforcing 2014 water use regulations that realized significant cutbacks without creating economic hardship.

Regulatory water restrictions such as those imposed by the State Water Board in 2014 are the result of an Executive Order issued by the Governor declaring a State of Emergency. Metropolitan does not have the authority to impose water use regulations. Metropolitan recognizes that water conservation is key to ensuring a reliable supply of water to its service area. Water conservation measures are included as part of Strategy 8 of the proposed CAP. The comment does not raise concerns regarding the adequacy of the Draft PEIR or the CEQA process. No changes to the Draft PEIR or Draft CAP are warranted in response to this comment.

Response 13-9

The commenter suggests the CAP consider why Metropolitan customers should pay for the Central Valley's poor husbandry.

The comment is acknowledged. Please refer to Response 13-4.

Response 13-10

The commenter suggests the CAP consider revamping the existing water rights mish-mash into a system that will be more flexible and fairer for all in years to come.

The comment is acknowledged. Please refer to Response 13-4.

Response 13-11

The commenter suggests the CAP consider reforms to the state's agricultural system, including cutting pesticides, moving to less harmful fertilizing methods, installing drip irrigation systems, etc. The commenter further requests the CAP consider relegating high water-demand plants to greenhouse cultivation and supports indoor vertical farming.

The comment is acknowledged. Please refer to Response 13-4.

Response 13-12

The commenter suggests the CAP consider the benefits of telecommuting and co-office use.

Strategy 6 of the CAP addresses the issue of telecommuting and incentivizing more sustainable commutes. Specifically, Measure EC-5 of the proposed CAP would allow for 50 percent of employees located at Metropolitan's headquarters to telecommute or use flexible schedules through 2030 to reduce travel time, vehicle miles traveled, and GHG emissions. This comment does not raise concerns regarding the adequacy of the Draft PEIR or the CEQA process. No changes to the Draft PEIR or Draft CAP are warranted in response to this comment.

Response 13-13

The commenter suggests the CAP consider what existing spaces can be converted to affordable housing, small business incubators, recycling facilities, and bringing the manufacturing of necessary goods back to the United States.

The comment is acknowledged. Please refer to Response 13-4.

Response 13-14

The commenter suggests the CAP consider covering canals to reduce evaporation and generate solar power.

This comment is acknowledged. Please refer to Response 13-4.

Response 13-15

The commenter opposes the Delta (Twin Tunnels) Project and suggests the CAP consider how to repair and care for California's multiple ecological systems.

The comment is acknowledged. Please refer to Response 13-4.

Response 13-16

The commenter asks how Metropolitan repairs and care for California's multiple ecological systems, especially ensuring enough free water for fish to breed.

The comment is acknowledged. Please refer to Response 13-4.

Response 13-17

The commenter suggests the CAP consider aquifer contamination from Metropolitan's construction projects, as well as from agricultural practices, landfills, runoff pollution, and salinity.

Impacts to hydrology and water quality associated with implementation of the proposed CAP, including potential degradation of groundwater quality, are addressed in Section 5.7, *Hydrology and Water Quality*, of the Draft PEIR. As discussed in that section, construction-related impacts to water

quality are determined to be less than significant with adherence to best management practices required in Metropolitan's standard construction specifications and regulatory compliance, including coverage under the statewide Construction General Permit. The commenter provides no evidence that construction of any project to be implemented under the proposed CAP would result in aquifer contamination such that this impact would be potentially significant.

Impacts to hydrology and water quality associated with agricultural practices, landfills, and salinity are beyond the scope of the proposed CAP, which is intended to reduce GHG emissions associated with Metropolitan's operations. As such, these issues are not discussed further in the Draft PEIR. Given the discussion above, no changes to the Draft PEIR or Draft CAP are warranted in response to this comment.

Response 13-17

The commenter suggests the CAP consider the benefits and liabilities of various energy sources. Specifically, the commenter states the opinion coal, oil, and hydroelectric sources should be phased out as soon as possible, that Metropolitan should consider less-destructive or energy-intensive desalination processes and questions the sustainability of biodiesel.

Metropolitan appreciates the comment. Metropolitan has already divested itself from the use of coal and plans to electrify its operations completely by 2045. Measures included in Strategies 4 and 5 will ensure increased energy efficiency and a transition to 100 percent carbon free electricity by 2045. While Metropolitan plans to shift its fleet to zero emission vehicles as outlined in Strategy 2: Zero Emission Fleet, the limited availability of electric medium- and heavy-duty vehicles, will require the use of carbon-based fuel sources during the transition to zero emissions vehicles. Using alternative fuels like biodiesel or biogas, which can be used interchangeably in traditional diesel-powered engines are short-term measures that can be implemented to reduce emissions from conventional diesel fuel during the transition to a decarbonized Metropolitan fleet. The comment does not raise concerns regarding the adequacy of the Draft PEIR or the CEQA process. No changes to the Draft PEIR or Draft CAP are warranted in response to this comment.

Response 13-18

The commenter suggests Metropolitan address the interrelated ecological issues as well as current and future stakeholder needs.

The comment is acknowledged. Please refer to Response 13-4.

CHAPTER 2

CHANGES TO THE DRAFT PEIR

Introduction

As provided in Section 15088(d) of the *State CEQA Guidelines* (14 California Code of Regulations 15000 et seq.), responses to comments may take the form of a revision to a draft EIR or may be a separate section in the Final EIR. This section complies with the latter and provides changes to the Draft PEIR presented in strikethrough text (~~strikethrough~~) signifying deletions and underlined text (underline) signifying additions. These notations are meant to provide clarification, corrections, or minor revisions as needed as a result of public comments or because of changes in the proposed program since the release of the Draft PEIR, as required by Section 15132 of the *State CEQA Guidelines*. None of the corrections and additions constitutes significant new information or substantial project changes requiring recirculation as defined by Section 15088.5 of the *State CEQA Guidelines*.

Changes to the Draft PEIR

Changes to the Draft PEIR are provided in this section. Page numbers correspond to the Draft PEIR. After the location or locations of the changes (by page number), a brief explanation of the nature of the change is provided, followed by the text from the Draft PEIR with changes shown in ~~strikethrough~~/underline.

Page 8 and Page 116

Mitigation Measure BIO-5 has been revised to remove an erroneous reference to Mitigation Measure BIO-1. This change does not alter the meaning or intent of the mitigation measure and does not result in a change to the impact findings of the Draft PEIR. The following change has been made in in Table 1 of Section ES.6, *Summary of Impacts and Mitigation Measures*, and in Section 4.2.5.2, *Mitigation Measures*, of the Draft PEIR.

MM BIO-5 Endangered/Threatened Species Avoidance and Minimization During Construction. The following measures shall be applied to aquatic and terrestrial species, where appropriate. Metropolitan shall select from these measures as appropriate depending on site conditions, the species with potential for occurrence, and the results of the project-specific biological resources assessment (~~Mitigation Measure BIO-1~~).

Pre-construction surveys for federal and/or state listed species with potential to occur shall be conducted where suitable habitat is present by a qualified biologist not more than 72 hours prior to the start of construction activities. The survey area shall include the proposed disturbance area and all proposed ingress/egress routes, plus a species-specific buffer. If any life stage of federal and/or state listed species is found within the survey area, the appropriate measures in the BO or HCP/ITP issued by the USFWS/NMFS (relevant to federally listed species) and/or the ITP issued by the CDFW (relevant to state listed species) shall be implemented; or if such guidance is not in place for the activity, the qualified biologist shall recommend an appropriate

course of action, which may include consultation with USFWS, NMFS, and/or CDFW.

The activity limits of disturbance shall be flagged. Areas of special biological concern within or adjacent to the limits of disturbance shall have Environmental Sensitive Area fencing installed between said area and the limits of disturbance.

All activities occurring within or adjacent to sensitive habitats that may support federally and/or state endangered/threatened species shall have a qualified biologist present during all initial ground disturbing/vegetation clearing activities. Once initial ground disturbing/vegetation clearing activities have been completed, the biologist shall conduct pre-activity clearance surveys, as needed to ensure protection of endangered/threatened species.

If pumps are used for dewatering activities, all intakes shall be completely screened with wire mesh not larger than five millimeters to prevent animals from entering the pump system.

If at any time during construction of the project activity an endangered/threatened species enters the construction site or otherwise may be impacted by the project activity, all project activities shall cease. At that point, a qualified biologist shall recommend an appropriate course of action, which may include consultation with USFWS, NMFS, and/or CDFW. Alternatively, the appropriate measures shall be implemented in accordance with the BO or HCP/ITP issued by the USFWS (relevant to federal listed species) and/or the ITP issued by the CDFW (relevant to state listed species) and work can then continue as guided by those documents and the agencies, as appropriate.

All trenches, pipes, culverts or similar structures shall be inspected for animals prior to burying, capping, moving, or filling.

Upon completion of the project activity, a qualified biologist shall prepare a final compliance report documenting all compliance activities implemented for the activity, including the pre-construction survey results.

Page 10 and Page 117

Mitigation Measure BIO-7 has been revised to remove an erroneous reference to Mitigation Measure BIO-1. This change does not alter the meaning or intent of the mitigation measure and does not result in a change to the impact findings of the Draft PEIR. The following change has been made in in Table 1 of Section ES.6, *Summary of Impacts and Mitigation Measures*, and in Section 4.2.5.2, *Mitigation Measures*, of the Draft PEIR.

MM BIO-7 **Jurisdictional Delineation and Impact Avoidance.** If the results of the project-specific biological resource assessment ~~Mitigation Measure BIO-1~~ indicate project activities implemented under the proposed CAP would impact wetlands, drainages, riparian habitats, or other areas that may fall under the jurisdiction of the CDFW, USACE, and/or RWQCB, a qualified biologist shall complete a jurisdictional delineation. The jurisdictional delineation shall determine the extent of the jurisdiction for each of these agencies within the project activity site and shall be conducted in accordance with the requirement set forth by each agency. The results shall be provided in a jurisdictional delineation report submitted to Metropolitan, USACE, RWQCB, and CDFW, as appropriate, for review and approval. The project activity shall be designed to avoid or minimize impacts to jurisdictional areas to the maximum extent feasible.

Page 11 and Page 118

Mitigation Measure BIO-9 has been revised to remove an erroneous reference to Mitigation Measure BIO-1. This change does not alter the meaning or intent of the mitigation measure and does not result in a change to the impact findings of the Draft PEIR. The following change has been made in in Table 1 of Section ES.6, *Summary of Impacts and Mitigation Measures*, and in Section 4.2.5.2, *Mitigation Measures*, of the Draft PEIR.

MM BIO-9 Sensitive Natural Community Avoidance and Mitigation. If the results of the project-specific biological resource assessment ~~Mitigation Measure BIO-1~~ indicate project activities implemented under the proposed CAP would impact sensitive natural communities, impacts shall be avoided through final project activity design modifications.

If Metropolitan determines sensitive communities cannot be avoided, impacts shall be mitigated on-site or off-site at an appropriate ratio to fully offset project activity impacts (minimum ratio of 1:1). Temporarily impacted areas shall be restored to pre-project conditions. An HMMP shall be developed by a qualified biologist and submitted to the agency overseeing the project activity for approval.

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*THE METROPOLITAN WATER DISTRICT
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THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

Metropolitan Climate Action Plan

*Final Program
Environmental
Impact Report*

Volume 2



May
2022

Table of Contents

CHAPTER 1	INTRODUCTION TO FINAL PROGRAM EIR – VOLUME 2	1
1.1	Introduction.....	1
1.2	Contents and Organization of Final PEIR	1
1.3	California Environmental Quality Act Review.....	2
1.4	Proposed Program Description	3
1.4.1	Overview and Scope of the Program	3
1.4.2	Overview of the Region.....	4
1.4.3	Program Objectives	4
1.4.4	Program Description.....	4
1.4.5	Areas of Controversy.....	5
1.4.6	Summary of Environmental Impacts and Mitigation Measures	6
1.5	References Cited	19
CHAPTER 2	FINDINGS OF FACT IN SUPPORT OF THE PROPOSED PROGRAM	20
2.1	Findings on Significant Impacts of the Proposed Program.....	20
2.1.1	Impacts Related to Air Quality.....	21
2.1.2	Impacts Related to Biological Resources.....	22
2.1.3	Impacts Related to Cultural Resources	27
2.1.4	Impacts Related to Noise	31
2.2	General Findings	34
2.3	Legal Effects of Findings.....	34
2.4	Statement of Overriding Considerations.....	35
2.4.1	Significant and Unavoidable Impacts	35
2.4.2	Substantial Benefits of the Program	36
2.5	Independent Review and Analysis	38
CHAPTER 3	MITIGATION AND MONITORING PROGRAM.....	39
3.1	Mitigation Monitoring and Reporting Program	39

Tables

Table 1	Summary of Environmental Impacts, Mitigation Measures and Impacts After Mitigation	7
Table 2	Mitigation Monitoring and Reporting Program.....	40

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CHAPTER 1

INTRODUCTION TO FINAL PROGRAM EIR – VOLUME 2

1.1 Introduction

This Final Program Environmental Impact Report (Final PEIR) has been prepared in accordance with the California Environmental Quality Act (CEQA) (California Public Resources Code, Section 21000 et seq.), as amended. The Metropolitan Water District of Southern California (Metropolitan) is the lead agency for the environmental review of the proposed Climate Action Plan (CAP or proposed program) evaluated herein and has the responsibility for approving the proposed program.

As described in the *State CEQA Guidelines* (14 California Code of Regulations [CCR] 15000 et seq.), public agencies are charged with the duty to avoid or substantially lessen significant environmental effects, with consideration of other conditions, including economic, social, technological, legal, and other benefits. As required by CEQA, this Final PEIR assesses the potentially significant direct and indirect environmental effects of the proposed program, as well as the potentially significant cumulative impacts that could occur from implementation of the proposed program. This Final PEIR is an informational document only, the purpose of which is to identify the significant effects of the proposed program on the environment and to indicate the manner in which those significant effects can be avoided or significantly lessened (including feasible mitigation measures); to identify any significant and unavoidable adverse impacts that cannot be mitigated to below a significant level; and to identify reasonable and feasible alternatives to the proposed program that would avoid or substantially lessen any significant adverse environmental effects associated with the proposed program and achieve the fundamental objectives of the proposed program.

1.2 Contents and Organization of Final PEIR

This Final PEIR is prepared pursuant to Sections 15088, 15089, and 15132 of the *State CEQA Guidelines*. The Final PEIR, in compliance with Section 15132 of the *State CEQA Guidelines*, contains the following:

- Final PEIR, Volume 1
 - **Final Executive Summary.** The Final Executive Summary provides the contents and organization of the Final PEIR, a summary of procedural compliance with CEQA, and a brief description of the proposed program.
 - **Chapter 1: Responses to Comments Received.** This chapter includes a list of persons, organizations, and public agencies that provided written comments on the Draft PEIR and Draft CAP during the public review period. This chapter also includes a copy of the comments received during the public review process for the Draft PEIR and Draft CAP, as well as Metropolitan’s responses to these written comments. Each comment is assigned a comment number, which corresponds to a response number and response.
 - **Chapter 2: Changes to the Draft PEIR and Draft CAP.** This chapter contains a summary of changes made to the documents since publication of the Draft PEIR and Draft CAP as a result of comments received. Revisions were made to clarify information presented in the Draft PEIR and only minor technical changes or additions have been made to the Draft CAP.

These changes and additions to the PEIR and CAP do not raise important new issues related to significant effects on the environment. Such changes are “insignificant,” as the term is used in Section 15088.5(b) of the *State CEQA Guidelines*. This chapter describes changes that were made and presents textual changes made since public review as signified by strikethrough (~~strikethrough~~) where text is removed, and by underlined text (underline) where text is added for clarification.

- Final PEIR, Volume 2
 - **Chapter 1: Introduction to Final PEIR – Volume 2.**
 - **Chapter 2: Findings of Fact in Support of the Proposed Program and Statement of Overriding Considerations.** This chapter of the Final PEIR provides a summary of the impacts associated with the proposed program and the findings regarding alternatives to the proposed program. This chapter also includes a summary of the general findings, legal effects of the findings, and a summary of the independent review and analysis. Lastly, this chapter includes a Statement of Overriding Considerations, pursuant to *State CEQA Guidelines* Sections 15043 and 15093, which requires the lead agency’s decision-making body to balance, as applicable, the program’s economic, social, or other benefits, including region-wide or statewide environmental benefits, against the occurrence of significant environmental effects that have not been avoided when determining whether to approve the program.
 - **Chapter 3: Mitigation Monitoring and Reporting Program.** This chapter of the Final PEIR provides the mitigation monitoring and reporting program (MMRP) for the proposed program. The MMRP is presented in table format and identifies mitigation measures for the proposed program, the party responsible for implementing the mitigation measures, the timing of implementing the mitigation measures, and the entity responsible for monitoring and reporting compliance with each mitigation measure.

1.3 California Environmental Quality Act Review

Metropolitan has complied with CEQA and the *State CEQA Guidelines* during preparation of the PEIR for the proposed program. Pursuant to Section 15082 of the *State CEQA Guidelines*, a Notice of Preparation (NOP) and Scoping Meeting was prepared and published by Metropolitan on June 23, 2020 and circulated to local, state, and federal agencies and to members of the public and other interested agencies, organizations, and individuals. The NOP was also sent to the State Clearinghouse at the California Governor’s Office of Planning and Research to solicit participation from state agencies in determining the scope of the Draft PEIR. The State Clearinghouse assigned a state identification number (SCH No. 2020060450) to the Draft PEIR. A virtual scoping meeting was held on July 15, 2020 at 10:00 a.m. to present the proposed program, describe the environmental review process, and provide an opportunity for agency representatives and the public to assist Metropolitan in determining the scope and content of the environmental analysis for the PEIR. Pursuant to Section 15082 of the *State CEQA Guidelines*, recipients of the NOP for the proposed program were requested to provide responses within 30 days of their receipt of the NOP. As such, the review period for the NOP ended on July 22, 2020.

Metropolitan received a total of ten written comment letters on the NOP from the following parties:

- South Coast Air Quality Management District (SCAQMD)
- Mohave Desert Air Quality Management District (MDAQMD)
- San Joaquin Valley Unified Air Pollution Control District (SJVAPCD)
- Ventura County Air Pollution Control District (VCAPCD)

- Stanislaus County Environmental Review Committee
- Stanislaus County Public Works
- Ventura County Watershed Protection District
- California Highway Patrol (CHP)
- Native American Heritage Commission (NAHC)
- California Department of Fish and Wildlife (CDFW)

All comments received during the NOP public notice period were considered during the preparation of the Draft PEIR. Appendix A of the Draft PEIR includes the NOP and copies of the comment letters received on the NOP.

Pursuant to CEQA and its implementing guidelines, the Draft PEIR was circulated for a 45-day public review and comment period which began on November 18, 2021 and concluded on January 7, 2022. The Draft PEIR was distributed to the State Clearinghouse and a Notice of Availability of the Draft PEIR was distributed to interested parties and agencies. Copies of the Draft PEIR were made available to the general public for review during normal operating hours at the following location:

The Metropolitan Water District of Southern California
700 North Alameda Street
Los Angeles, California 90012

The Draft PEIR was also available for review on Metropolitan’s website, and at nine public libraries within the Plan Area for the proposed program.

Volume 1 of this Final PEIR contains the Executive Summary and Chapters 1 and 2, which provide responses to comments received during the public comment period for the Draft PEIR and any changes made to the Draft PEIR. Volume 2, Chapters 2 and 3, of this Final PEIR make detailed findings with respect to the potential effects of the proposed program and refer, where appropriate, to the mitigation measures set forth in this Final PEIR.

The Final PEIR and the administrative record concerning the proposed program provide additional information in support of the Findings of Fact (Volume 2, Chapter 2) herein. The Findings of Fact are hereby incorporated in the Final PEIR in its entirety. Furthermore, the mitigation measures set forth in the Final PEIR and the MMRP are incorporated by reference in the Findings. The MMRP was developed in compliance with California Public Resources Code Section 21081.6 and is contained in Volume 2, Chapter 3, of this Final PEIR.

1.4 Proposed Program Description

1.4.1 Overview and Scope of the Program

Metropolitan is proposing a CAP to identify strategies to reduce greenhouse gas (GHG) emissions and achieve the proposed GHG reduction targets. The CAP includes a baseline GHG emissions inventory of Metropolitan’s operations from 1990 through 2020, an emissions forecast through 2045, emissions reduction targets consistent with Senate Bill (SB) 32 and Executive Order B-55-18, actions and policies that Metropolitan could implement to achieve GHG reductions, and an implementation roadmap. The CAP would apply to Metropolitan’s operations within the proposed Plan Area, described in the following section.

1.4.2 Overview of the Region

The Plan Area consists of the following six counties in Southern California: Los Angeles, Orange, Riverside, San Bernardino, San Diego, and Ventura. Portions of northeastern Imperial County within the Palo Verde Valley, as well as four islands in the Sacramento-San Joaquin River Delta area, are also included in the Plan Area. The Plan Area includes all of Metropolitan's service area and its member agencies' jurisdictions, as well as all areas where Metropolitan owns land or facilities.

The Plan Area spans approximately 38,213 square miles across six ecoregions, including Southern California Mountains and Valley, Southern California Coast, Sonoran Desert, Mojave Desert, Colorado Desert, and California Central Valley (Great Valley) (United States Department of Agriculture 2007). The Plan Area contains a population of approximately 22,176,450 across 202 incorporated cities and unincorporated county regions (California Department of Finance [DOF] 2020; United States Census Bureau 2020). It also includes over 220 miles of Pacific Ocean coastline, ranges in elevation from 234 feet below mean sea level to approximately 11,503 feet above mean sea level, and contains a national park, one national recreation area, all or portions of four national forests, and three United States Census Bureau-designated Metropolitan Statistical Areas.

1.4.3 Program Objectives

The proposed program is designed to reduce GHG emissions associated with Metropolitan's operations. Specifically, the objectives of the proposed program include the following:

- Identify and quantify emissions associated with Metropolitan operations to prepare a baseline GHG emissions inventory in order to track emissions reduction progress over time
- Adopt an emissions reduction target that is consistent with existing state emissions reduction targets while preparing Metropolitan to meet future state targets
- Identify and quantify specific reduction actions and policies that Metropolitan may implement to achieve the goal of reducing GHG emissions from its construction and operational activities
- Provide a roadmap for future activities to achieve consistency with the CAP and use CEQA streamlining tools for analysis of GHG emissions pursuant to the requirements of *State CEQA Guidelines* Section 15183.5

1.4.4 Program Description

The proposed program contains the following primary components.

1.4.4.1 Emissions Inventory

The proposed CAP contains an inventory of Metropolitan's GHG emissions from 1990 to 2020. Due to the geographically disparate nature of Metropolitan's operations, emissions reported in the inventory are based on activities over which Metropolitan has direct operational control. The inventory delineates emissions by Scope, as defined in the Local Governments for Sustainability reporting frameworks and detailed below. The emissions inventory reports Metropolitan's GHG emissions in metric tons of carbon dioxide equivalent (CO₂e).

- **Scope 1 Emissions.** Scope 1 emissions are those associated with direct emissions from sources owned or controlled by Metropolitan. This includes emissions from direct fuel combustion, including natural gas, propane, welding gasses, and gasoline and diesel used to power Metropolitan's vehicle fleet.

- **Scope 2 Emissions.** Scope 2 emissions are those indirect emissions associated with the consumption of Metropolitan’s purchased electricity use. Specifically, emissions generated at power plants that supply electricity for Metropolitan operations. Metropolitan purchases electricity from power generated from within California and from outside of California in the southwestern United States, which includes electricity generated from hydropower at the Hoover Dam. Scope 2 emissions also include transmission and distribution losses that occur as electricity is delivered to Metropolitan facilities.
- **Scope 3 Emissions.** Scope 3 emissions are other indirect emissions that occur as a result of Metropolitan’s operations, including emissions associated with waste generation, water consumption and wastewater generation from Metropolitan-owned buildings, employee commutes, and construction activities.

The proposed CAP also includes an emissions forecast through 2045 to account for potential changes in hydrology, climate, climate and air quality regulations, population growth, operations, and future construction projects that may affect Metropolitan’s emissions in the future. Furthermore, the emissions forecast allows for comparison between forecasted GHG emissions and reduction targets to understand the reductions necessary to achieve Metropolitan’s GHG reduction goals.

1.4.4.2 Reduction Target

The proposed CAP establishes a GHG reduction target aligned with applicable state GHG reduction policies. The CAP considers various reduction levels, target methodologies, and tracking mechanisms to quantify GHG emissions reductions and measure progress towards meeting the established GHG reduction target. Ultimately, the CAP includes a linear per capita target or “Linear Reduction to Carbon Neutral by 2045 – Per Capita Target” with a Carbon Budget tracking mechanism.

1.4.4.3 GHG Reduction Measures

In order to achieve the proposed CAP’s emissions reduction target, GHG emissions reduction measures would need to be implemented. The CAP includes 39 proposed GHG emissions reduction measures that, if implemented, could help Metropolitan reduce its Scope 1, Scope 2, and Scope 3 emissions. Reduction measures for each Scope are grouped into nine strategies that could be employed at Metropolitan’s various facility types during facility maintenance activities and future expansion and construction activities, as well as policies and projects to explore new technologies and practices to conserve resources. The reduction measures do not include actions taken by Metropolitan to date that have resulted in GHG emissions reductions, such as Metropolitan’s early adoption of solar facilities at several of its treatment plants and Leadership in Energy Efficiency and Design (LEED) certification for several of its facilities. However, the measures may build or expand upon these past actions. Most measures within the nine categories are either administrative (e.g., studies, investigations) in nature or involve replacement of existing infrastructure with newer, more efficient infrastructure at the same location and, therefore, would not have physical impacts to the environment.

1.4.5 Areas of Controversy

Section 15123(b)(2) of the *State CEQA Guidelines* requires that an EIR identify areas of controversy which are known to the lead agency, including issues raised by other agencies and the public. Areas of controversy associated with the proposed program are made known through comments received during

the NOP process, as well as input solicited during public scoping meetings and an understanding of the community issues in the study area.

The comments on the NOP for the draft PEIR for the proposed CAP generally expressed concern over the following issues: alternatives analysis and impacts to biological species and jurisdictional habitats (CDFW), air quality impacts from construction or operation of projects implemented under the proposed program (SJVAPCD, MDAQMD, SCAQMD, and VCAPCD), impacts to tribal cultural resources (NAHC), and watershed management (Ventura County Public Works). Appendix A of the Draft PEIR contains a copy of the NOP and the comment letters received during the NOP scoping period.

1.4.6 Summary of Environmental Impacts and Mitigation Measures

Table 1 includes a brief description of the identified environmental impacts associated with each threshold analyzed in detail in the draft PEIR, proposed mitigation measures, and the level of significance after mitigation.

Table 1 Summary of Environmental Impacts, Mitigation Measures and Impacts After Mitigation

Impact	Mitigation Measure(s)	Significance After Mitigation
Air Quality		
<p>Impact AQ-A. Implementation of the individual projects proposed under the CAP would potentially conflict with or obstruct implementation of the applicable air quality plan due to construction emissions. This impact would be potentially significant.</p>	<p>MM AQ-1 Construction Air Quality Assessment For individual projects to be implemented under the CAP that involve construction activities with an intensity (i.e., size, schedule, equipment, demolition, import/export of soil, architectural coating) greater than the sample project activity, an air quality assessment shall be prepared to evaluate construction emissions in light of the applicable air district thresholds.</p> <p>MM AQ-2 Implement Emission Reduction Measures If construction emissions would exceed any of the applicable thresholds, emission reduction measures shall be implemented to reduce emissions below the thresholds. Measures may include, but would not be limited to:</p> <ul style="list-style-type: none"> • All construction equipment shall be equipped with Tier 4 certified engines or CARB-certified Level 3 diesel particulate filters. All diesel particulate filters shall be kept in working order and maintained in operable condition according to manufacturer’s specifications, as applicable. • Construction equipment with lower horsepower ratings shall be utilized, as applicable and practicable. • Ultra-low-sulfur diesel fuel shall be used for stationary construction equipment, as applicable. • Low-emission on-site stationary equipment shall be used, as applicable. • Alternatively-fueled construction equipment (e.g., renewable diesel, natural gas, electric) shall be utilized instead of diesel-fueled construction equipment, as applicable. • The schedule for soil import and/or export shall be extended to reduce the number of daily haul truck trips, as applicable. • The schedule for the coating/painting phase shall be extended to reduce the square footage coated/painted each day, as applicable. • Architectural coatings with a VOC content of less than 250 grams per liter shall be utilized. 	<p>Significant and unavoidable.</p>

Impact	Mitigation Measure(s)	Significance After Mitigation
Impact AQ-B. Construction impacts related to criteria air pollutant emissions resulting from implementation of individual projects proposed under the CAP would be potentially significant.	MM AQ-1 and MM AQ-2.	Significant and unavoidable.
Impact AQ-C. Neither construction nor operation of individual projects proposed under the CAP would expose sensitive receptors to substantial pollutant concentrations. This impact would be less than significant.	This impact would be less than significant. No mitigation is required.	Less than significant. No mitigation required.
Impact AQ-D. Neither construction nor operation of individual projects implemented under the proposed CAP would result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. This impact would be less than significant.	This impact would be less than significant. No mitigation is required.	Less than significant. No mitigation required.
Biological Resources		
Impact BIO-A. Implementation of individual projects under the proposed CAP would potentially have a substantial adverse effect, either directly or through habitat modifications, on species identified as candidate, sensitive, or other 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. This impact would be potentially significant.	<p data-bbox="688 764 1182 789">MM BIO-1 Special Status Plant Species Surveys</p> <p data-bbox="688 797 1570 1068">If completion of the project-specific biological resources assessment determines that special status plant species have potential to occur on site, surveys for special status plants shall be completed prior to any vegetation removal, grubbing, or other construction activity of each project activity (including staging and mobilization). The surveys shall be floristic in nature and shall be seasonally timed to coincide with the target species identified in the project activity-specific biological resources assessment. All plant surveys shall be conducted by a qualified biologist no more than one year prior to project implementation (annual grassland habitats may require yearly surveys). Surveys shall be conducted in accordance with current protocols established by the CDFW, USFWS and the local jurisdictions if said protocols exist. If special status plant species are identified, Mitigation Measure BIO-2 shall apply.</p> <p data-bbox="688 1076 1524 1101">MM BIO-2 Special Status Plant Species Avoidance, Minimization, and Mitigation</p> <p data-bbox="688 1109 1570 1243">If state- or federally-listed special status and/or CRPR 1 and 2 plant species are identified during the project-specific biological assessment, the activity shall be re-designed to avoid impacting these plant species to the maximum extent feasible. If CRPR 3 and 4 species are found, the biologist shall evaluate if they meet criteria to be considered special status, and if so, the same process as identified for CRPR 1 and 2 species shall apply.</p> <p data-bbox="688 1252 1570 1386">If special status plant species cannot be avoided and would be impacted by a project activity implemented under the proposed CAP, all impacts shall be mitigated at an appropriate ratio (minimum ratio of 1:1) to fully offset project activity impacts, as determined by a qualified biologist for each species. A restoration plan shall be prepared and implemented, as applicable.</p>	Less than significant with mitigation incorporated.

Impact	Mitigation Measure(s)	Significance After Mitigation
	<p>MM BIO-3 Endangered/Threatened Animal Species Habitat Assessment and Protocol Surveys</p> <p>If the results of the project-specific biological resources assessment determine suitable habitat may be present for any federally and/or state endangered or threatened animal species, habitat assessments and/or protocol surveys shall be completed in accordance with CDFW and/or USFWS/NMFS protocols prior to construction.</p> <p>Alternatively, in lieu of conducting protocol surveys, Metropolitan may choose to assume presence within the activity footprint and proceed with implementing appropriate avoidance measures, consultation, and permitting, as applicable.</p> <p>If the target species are detected during protocol surveys, or protocol surveys are not conducted and presence is assumed based on suitable habitat, Mitigation Measure BIO-4 shall apply.</p> <p>MM BIO-4 Endangered/Threatened Animal Species Avoidance and Mitigation</p> <p>If habitat is occupied or presumed occupied by federal and/or state-listed species and would be impacted by project activities, the project activity shall be redesigned in coordination with a qualified biologist to avoid impacting occupied/presumed occupied habitat to the maximum extent feasible. If occupied or presumed occupied habitat cannot be avoided, Metropolitan shall consult with USFWS, NMFS, and/or CDFW in order to determine the appropriate course of action, which may include a Biological Opinion (BO) or HCP/ITP issued by the USFWS/NMFS (relevant to federally listed species) and/or the ITP issued by the CDFW (relevant to state listed species).</p> <p>If occupied or presumed occupied habitat cannot be avoided, compensatory mitigation shall be provided (minimum ratio of 1:1) to fully offset impacts to habitat prior to the construction. Compensatory mitigation may be provided through purchase of mitigation bank credits, in-lieu fee, or permittee-responsible habitat restoration/establishment/enhancement/preservation. Compensatory mitigation may be combined/nested with special status plant species and sensitive natural community restoration, where applicable. Temporary impact areas shall be restored to similar pre-project conditions.</p> <p>If on and/or off-site habitat restoration/conservation is identified, a Habitat Mitigation and Monitoring Plan (HMMP) shall be prepared to ensure the success of compensatory mitigation sites. The HMMP shall identify long-term site management needs, routine monitoring techniques, and performance standards for determining that the conservation site has met the necessary criteria to function as a suitable mitigation site.</p> <p>MM BIO-5 Endangered/Threatened Species Avoidance and Minimization During Construction</p> <p>The following measures shall be applied to aquatic and terrestrial species, where appropriate. Metropolitan shall select from these measures as appropriate depending on site conditions, the species with potential for occurrence, and the results of the project-specific biological resources assessment (Mitigation Measure BIO-1).</p>	

Impact	Mitigation Measure(s)	Significance After Mitigation
	<p>Pre-construction surveys for federal and/or state listed species with potential to occur shall be conducted where suitable habitat is present by a qualified biologist not more than 72 hours prior to the start of construction activities. The survey area shall include the proposed disturbance area and all proposed ingress/egress routes, plus a species-specific buffer. If any life stage of federal and/or state listed species is found within the survey area, the appropriate measures in the BO or HCP/ITP issued by the USFWS/NMFS (relevant to federally listed species) and/or the ITP issued by the CDFW (relevant to state listed species) shall be implemented; or if such guidance is not in place for the activity, the qualified biologist shall recommend an appropriate course of action, which may include consultation with USFWS, NMFS, and/or CDFW.</p> <ul style="list-style-type: none"> • The activity limits of disturbance shall be flagged. Areas of special biological concern within or adjacent to the limits of disturbance shall have Environmental Sensitive Area fencing installed between said area and the limits of disturbance. • All activities occurring within or adjacent to sensitive habitats that may support federally and/or state endangered/threatened species shall have a qualified biologist present during all initial ground disturbing/vegetation clearing activities. Once initial ground disturbing/vegetation clearing activities have been completed, the biologist shall conduct pre-activity clearance surveys, as needed to ensure protection of endangered/threatened species. • If pumps are used for dewatering activities, all intakes shall be completely screened with wire mesh not larger than five millimeters to prevent animals from entering the pump system. • If at any time during construction of the project activity an endangered/threatened species enters the construction site or otherwise may be impacted by the project activity, all project activities shall cease. At that point, a qualified biologist shall recommend an appropriate course of action, which may include consultation with USFWS, NMFS, and/or CDFW. Alternatively, the appropriate measures shall be implemented in accordance with the BO or HCP/ITP issued by the USFWS (relevant to federal listed species) and/or the ITP issued by the CDFW (relevant to state listed species) and work can then continue as guided by those documents and the agencies, as appropriate. • All trenches, pipes, culverts or similar structures shall be inspected for animals prior to burying, capping, moving, or filling. • Upon completion of the project activity, a qualified biologist shall prepare a final compliance report documenting all compliance activities implemented for the activity, including the pre-construction survey results. <p>MM BIO-6 Non-Listed Special Status Animal Species Avoidance and Minimization Depending on the species identified in the project-specific biological resource assessment , the following applicable measures shall be implemented to reduce the potential for impacts to non-listed special status animal species:</p>	

Impact	Mitigation Measure(s)	Significance After Mitigation
	<ul style="list-style-type: none"> • Pre-construction clearance surveys shall be conducted by a qualified biologist within 14 days prior to the start of construction (including staging and mobilization). The surveys shall cover the entire disturbance footprint plus a minimum 100-foot buffer and shall identify all special status animal species that may occur on-site. The qualified biologist shall make recommendations for avoidance of non-listed special status species, such as through the use of exclusion fencing, buffer zones, etc. • A qualified biologist shall be present during all initial ground disturbing activities, including vegetation removal, to recover special status animal species encountered during construction activities. • Upon completion of the project activity, a qualified biologist shall prepare a final compliance report documenting all compliance activities implemented for the project activity, including the pre-construction survey results. • If special status bat species may be present and impacted by the project activity, within 30 days of the start of construction a qualified biologist shall conduct presence/absence surveys for special status bats where suitable roosting habitat is present. Surveys shall be conducted using acoustic detectors and by searching tree cavities, crevices and other areas where bats may roost. If active bat roosts or colonies are present, the biologist shall evaluate the type of roost to determine the next step. <ul style="list-style-type: none"> ◦ If a maternity colony is present, all construction activities shall be postponed within a 250-foot buffer around the maternity colony until it is determined by a qualified biologist that the young have dispersed. Once it has been determined that the roost is clear of bats, the roost shall be removed immediately. ◦ If a roost is determined by a qualified biologist to be used by a large number of bats (large hibernaculum), alternative roosts, such as bat boxes if appropriate for the species, shall be designed and installed near the project activity site. The number and size of alternative roosts installed will depend on the size of the hibernaculum and shall be determined by a qualified biologist. ◦ If other active roosts are located, exclusion devices shall be installed such as valves, sheeting or flap-style one-way devices that allow bats to exit but not re-enter roosts to discourage bats from occupying the site. 	
<p>Impact BIO-B. Individual projects implemented under the proposed CAP could result in significant impacts to riparian habitats wetlands and/or sensitive natural communities. This impact would be potentially significant.</p> <p>Impact BIO-C. Individual projects implemented under the proposed CAP may result in significant impacts to state or federally protected wetlands. This impact would be potentially significant.</p>	<p>MM BIO-7 Jurisdictional Delineation and Impact Avoidance</p> <p>If the results of the project-specific biological resource assessment indicate project activities implemented under the proposed CAP would impact wetlands, drainages, riparian habitats, or other areas that may fall under the jurisdiction of the CDFW, USACE, and/or RWQCB, a qualified biologist shall complete a jurisdictional delineation. The jurisdictional delineation shall determine the extent of the jurisdiction for each of these agencies within the project activity site and shall be conducted in accordance with the requirement set forth by each agency. The results shall be provided in a jurisdictional delineation report submitted to Metropolitan, USACE, RWQCB, and CDFW,</p>	<p>Less than significant with mitigation incorporated.</p>

Impact	Mitigation Measure(s)	Significance After Mitigation
	<p>as appropriate, for review and approval. The project activity shall be designed to avoid or minimize impacts to jurisdictional areas to the maximum extent feasible.</p> <p>MM BIO-8 Wetlands, Drainages and Riparian Habitat Restoration If impacts to jurisdictional drainages, wetlands, riparian habitat, and sensitive vegetation communities cannot be avoided, impacts shall be mitigated at an appropriate ratio to fully offset project-specific impacts (minimum ratio of 1:1). Where feasible, temporarily impacted areas shall be restored to pre-project conditions. An HMMP shall be developed by a qualified biologist and submitted to the agency overseeing the project activity for approval. Alternatively, mitigation shall be accomplished through purchase of credits from an approved mitigation bank or in-lieu fee project.</p> <p>MM BIO-9 Sensitive Natural Community Avoidance and Mitigation If the results of the project-specific biological resource assessment Mitigation Measure BIO-1 indicate project activities implemented under the proposed CAP would impact sensitive natural communities, impacts shall be avoided through final project activity design modifications.</p> <p>If Metropolitan determines sensitive communities cannot be avoided, impacts shall be mitigated on-site or off-site at an appropriate ratio to fully offset project activity impacts (minimum ratio of 1:1). Temporarily impacted areas shall be restored to pre-project conditions. An HMMP shall be developed by a qualified biologist and submitted to the agency overseeing the project activity for approval.</p>	
<p>Impact BIO-D. Neither construction nor operation of individual projects implemented under the proposed CAP would interfere with movement of native resident or migratory fish or wildlife species or established wildlife corridors. This impact would be less than significant.</p>	<p>This impact would be less than significant. No mitigation is required.</p>	<p>Less than significant. No mitigation required.</p>
<p>Impact BIO-E. Neither construction nor operation of individual projects implemented under the proposed CAP would impact protected trees and, as such, would not conflict with local policies or ordinances protecting biological resources. This impact would be less than significant.</p>	<p>This impact would be less than significant. No mitigation is required.</p>	<p>Less than significant. No mitigation required.</p>

Impact	Mitigation Measure(s)	Significance After Mitigation
<p>Impact BIO-F. Individual projects implemented under the proposed CAP would not conflict with a Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan area. This impact would be less than significant.</p>	<p>This impact would be less than significant. No mitigation is required.</p>	<p>Less than significant. No mitigation required.</p>
<p>Cultural Resources</p>		
<p>Impact CUL-A. Individual projects implemented under the proposed CAP would have the potential to cause a substantial adverse change in the significant of a historical resource. This impact would be potentially significant.</p>	<p>MM CUL-1(a) Built Environment Investigation A historic resources evaluation shall be prepared for any future proposed project facilitated by the CAP involving a property which includes buildings, structures, objects, landscape/site plans, or other features that are 45 years of age or older. The evaluation shall be prepared by a qualified architectural historian or historian who meets the Secretary of the Interior’s (SOI) Professional Qualifications Standards (PQS) in architectural history or history. The qualified architectural historian or historian shall conduct an evaluation in accordance with the guidelines and best practices promulgated by the State Office of Historic Preservation to identify any potential historical resources within the proposed project area. The evaluation of the potential resource within its historic context shall be documented. All evaluated properties shall be documented on Department of Parks and Recreation Series 523 Forms. If a property is identified as an eligible historical resource under CEQA, Mitigation Measure CUL-1(b) shall be implemented.</p> <p>MM CUL-1(b) Built Environment Documentation Program If eligible built environment historical resources are identified for a future proposed project implemented under the CAP, efforts shall be made to the extent feasible to ensure that impacts are avoided. If avoidance is not possible, a Built Environment Documentation Program shall be implemented. Measures may include but are not limited to, compliance with the Secretary of the Interior’s Standards for Treatment of Historic Properties and documentation of the historical resource in the form of a Historic American Building Survey (HABS)- report or HABS-Like report. The HABS or HABS-Like report shall comply with the Secretary of the Interior’s Standards for Architectural and Engineering Documentation and shall generally follow the HABS Level III requirements, including digital photographic recordation, detailed historic narrative report, and compilation of historic research. Application of mitigation shall generally be overseen by a qualified architectural historian or historic architect meeting the PQS, unless unnecessary in the circumstances (e.g., preservation in place).</p> <p>MM CUL-3 Previously Unidentified Resources Encountered During Construction In the event that any potentially significant cultural resources are unexpectedly encountered during construction, work will be immediately halted and the discovery shall be protected in place. A 50-foot buffer around the exposed resource shall be established until a qualified cultural resources specialist evaluates the discovery. If the qualified cultural resources specialist determines that the discovery represents a potentially significant cultural resource,</p>	<p>Significant and unavoidable</p>

Impact	Mitigation Measure(s)	Significance After Mitigation
<p>Impact CUL-B. Individual projects implemented under the proposed CAP may cause a substantial adverse change in the significance of an archaeological resource. This impact would be potentially significant.</p>	<p>including a potential historical resource, additional investigations may be required to mitigate adverse impacts from project implementation. This additional work may include avoidance, testing, and evaluation or data recovery excavation. Work shall be prohibited in the restricted area until Metropolitan provides written authorization.</p>	
	<p>MM CUL-2(a) Phase 1 Archaeological Resource Investigation If archaeological resources are identified during project-specific analysis that may be adversely affected by any future proposed project implemented under the CAP, Metropolitan shall retain a qualified archaeologist meeting the Secretary of the Interior standards in archaeology to complete a Phase 1 cultural resources assessment of the site. A Phase 1 cultural resources assessment will include an archaeological pedestrian survey of the site, if feasible, and sufficient background archival research to determine whether subsurface prehistoric or historic remains may be present. Archival research should include a current records search from the appropriate California Historical Resources Information System information center and a Sacred Lands File search conducted with the Native American Heritage Commission. A Phase 1 report or results documentation shall be submitted to Metropolitan prior to any ground disturbing activities. Recommendations contained therein shall be implemented throughout all ground disturbance activities.</p> <p>MM CUL-2(b) Extended Phase 1 Investigation For any projects proposed within 100 feet of a known archaeological site and/or in areas identified as sensitive by the Phase 1 study, an Extended Phase 1 (XPI) study shall be conducted to determine the presence/absence and extent of archaeological resources on the project site. XPI testing should comprise a series of shovel test pits and/or hand augured units and/or mechanical trenching intended to establish the horizontal and vertical boundaries of archaeological site(s) on the project site. No archaeological resources would be collected during the XPI Investigation. If an archaeological site is identified, Mitigation Measure CUL-2I or CUL-2(d) shall be implemented.</p> <p>MM CUL-2(c) Avoidance of Archaeological Resources Identified prehistoric or historic archaeological resources shall be avoided and preserved in place, where feasible. Where avoidance and preservation in place is not feasible, additional measures shall be applied as identified in Mitigation Measure CUL-2(d) through CUL-2(g).</p> <p>MM CUL-2(d) Phase 2 Archaeological Resources Investigation and Evaluation Where preservation is not feasible, each resource shall be evaluated for significance and eligibility for listing in the CRHR through a Phase 2 archaeological resource evaluation. A Phase 2 evaluation shall include any necessary archival research to identify significant historical associations as well as mapping of surface artifacts, collection of functionally or temporally diagnostic tools and debris, and excavation of a sample of the cultural deposit to characterize the nature of the sites, define the artifact and feature contents, determine horizontal boundaries and depth below surface, and retrieve representative samples of artifacts and other remains. A final Phase 2 Testing and Evaluation report shall be submitted to Metropolitan prior to any ground disturbing activities. Recommendations contained therein shall be implemented throughout all ground disturbance activities.</p>	<p>Significant and unavoidable.</p>

Impact	Mitigation Measure(s)	Significance After Mitigation
	<p>MM CUL-2(e) Phase 3 Archaeological Data Recovery Program If an archaeological resource meets the CRHR eligibility and cannot be avoided, Metropolitan shall implement a Phase 3 Archaeological Data Recovery Program, conducted to exhaust the data potential of significant archaeological sites. The Phase 3 Archaeological Data Recovery Program shall follow a research design prepared by a qualified archaeologist meeting the SOI PQS standards for archaeology and approved by Metropolitan in advance of Phase 3 fieldwork and excavations. The Phase 3 Data Recovery research design will use appropriate archaeological field and laboratory methods consistent with the California Office of Historic Preservation Planning Bulletin 5 (1991), Guidelines for Archaeological Research Design, or the latest edition thereof. The final Phase 3 Data Recovery report shall be submitted to Metropolitan prior to and any ground disturbing activities. Recommendations contained therein shall be incorporated into project design and implemented throughout all ground disturbance activities.</p> <p>MM CUL-2(f) Processing and Curation of Archaeological Materials Archaeological materials collected from the sites during the implementation of Mitigation Measures CUL-2(d) through CUL-2(e) shall be processed and analyzed in the laboratory according to standard archaeological procedures. The age of the materials shall be determined using radiocarbon dating and/or other appropriate procedures; lithic artifacts, faunal remains, and other cultural materials shall be identified and analyzed according to current professional standards. The significance of the sites shall be evaluated according to the criteria of the CRHR. The results of the investigations shall be presented in a technical report following the standards of the California Office of Historic Preservation publication “Archaeological Resource Management Reports: Recommended Content and Format (1990 or latest edition)”. Upon completion of the work, all artifacts, other cultural remains, records, photographs, and other documentation shall be curated an appropriate established curation facility based on the location of the fieldwork and/or repatriated to local Native Americans as appropriate. All fieldwork, analysis, report production, and curation shall be fully funded by Metropolitan.</p> <p>MM CUL-2(g) Cultural Resources Monitoring If recommended by Phase 1 (Mitigation Measure CUL-2(a)), XPI (Mitigation Measure CUL-2(b)), Phase 2 (Mitigation Measure CUL-2(d)), or Phase 3 (Mitigation Measure CUL-2(e)) studies, Metropolitan shall retain a qualified archaeologist to monitor project-related, ground-disturbing activities.</p> <p>MM CUL-3 Previously Unidentified Resources Encountered During Construction MM CUL-3 is described above under Impact CUL-A.</p>	
<p>Impact CUL-C. Individual projects implemented under the proposed CAP would be required to comply with all applicable regulations pertaining to the discovery of human remains. This impact would be less than significant.</p>	<p>This impact would be less than significant. No mitigation is required.</p>	<p>Less than significant. No mitigation required.</p>

Impact	Mitigation Measure(s)	Significance After Mitigation
Noise		
<p>Impact NOI-A. Individual projects implemented under the proposed CAP may result in generation of a substantial temporary or permanent increase in ambient noise levels. This impact would be potentially significant.</p>	<p>MM NOI-1 Locate Excavation Sites Away from Noise-Sensitive Receivers, Where Feasible Construction staging and activities shall be located in areas as far as practicable from sensitive receivers or in areas where receivers can be shielded from construction noise.</p> <p>MM NOI-2(a) Conduct Project-Level Noise Studies for Construction Activities Where Noise-Sensitive Receivers are Present Project-level construction noise studies shall be conducted for project activities that would exceed the screening criteria for a less-than-significant impact, as summarized in Table 30 and Table 32 of the draft PEIR. Such noise studies shall identify the existing ambient noise levels, characterize the nearest sensitive receivers, estimate the noise levels receivers will experience during construction of individual projects, compare estimated noise levels to the local jurisdiction’s noise limits or to the construction noise criteria in the FTA (2018) <i>Transit Noise and Vibration Impact Assessment Manual</i> for those that do not have quantitative construction noise level limits, outline any measures that may be used to reduce noise levels, and determine the amount of noise reduction that would occur with implementation of these measures. If the project-level noise study concludes that noise reduction measures are required, Mitigation Measure NOI-2(b) shall be implemented.</p> <p>MM-NOI-2(b) Implement Noise Reduction Measures If the results of the noise study determine noise reduction measures are required, noise reduction measures shall be implemented. Construction noise reduction measures may include, but would not be limited to, the use of mufflers, sound blankets/barriers, and/or enclosures and scheduling construction activities to minimize simultaneous operation of noise-producing equipment. Construction noise measures shall be implemented to reduce noise levels to FTA (2018) construction noise criteria, as feasible.</p> <p>If the individual projects would be constructed concurrently with development projects located within a 0.5-mile radius of the individual project location, the noise study shall also consider the cumulative impact of construction noise on sensitive receivers. If applicable, construction noise reduction measures shall be implemented to reduce cumulative noise levels to local jurisdiction or FTA (2018) construction noise criteria, as feasible.</p> <p>MM NOI-2(c) Conduct Project-Level Noise Studies for Post-Construction Activities Where Noise Sensitive Receivers are Present Prior to the commencement of construction activities for individual projects that may be implemented under the CAP where sensitive receivers are located within 1,000 feet of the individual project sites, project-level post-construction noise studies shall be conducted. Such noise studies shall identify the ambient noise levels, characterize the nearest sensitive receivers, estimate the noise levels receivers will experience during operation of individual projects during the post-construction period, compare estimated noise levels to the noise level standards of the applicable jurisdiction, outline any measures that may be used to reduce noise levels, and determine the amount of noise reduction that would occur with implementation of these measures. Noise reduction measures may include, but would not be</p>	<p>Significant and unavoidable</p>

Impact	Mitigation Measure(s)	Significance After Mitigation
<p>Impact NOI-B. Construction activities associated with implementation of individual projects under the proposed CAP may result in generation of excessive groundborne vibration or groundborne noise levels, depending on the nature and location of such projects. This impact would be potentially significant.</p>	<p>limited to, alternative site design, alternative orientation of noise sources, and construction of berms and/or barriers. Noise reduction measures shall be implemented to reduce noise levels to the noise level standards of the applicable jurisdiction, as feasible.</p> <p>NOI-3 (a) Locate Excavation Sites Away from Vibration-Sensitive Receivers, Where Feasible</p> <p>Whenever practicable, vibration-generating equipment including bulldozers, loaded trucks, pile drivers/pneumatic post drivers, bore/drill rigs, vibratory rollers, and jackhammers shall operate outside the minimum distances specified in Table 33 of the draft PEIR for historic sites, other structures, and vibration-sensitive receivers during project construction activities. Furthermore, whenever practicable, vibration-generating equipment including bulldozers, loaded trucks, pile drivers/pneumatic post drivers, bore/drill rigs, vibratory rollers, and jackhammers shall not be operated concurrently with vibration-generating equipment associated with cumulative development projects located within 600 feet of project construction sites.</p> <p>NOI-3(b) Conduct Project-Level Vibration Analysis for Construction Activities Where Vibration-Sensitive Receivers are Present</p> <p>If operation of construction equipment outside the specified buffer distances is not practicable, a detailed study of vibration impacts shall be conducted prior to the commencement of construction for that project. Such vibration studies shall characterize the nearest historic sites, structures, and/or sensitive receivers; estimate the vibration levels receivers will experience during construction of individual projects; compare estimated vibration levels to applicable Caltrans (2020) standards for vibration impacts related to structural damage and human annoyance; outline any measures that may be used to reduce vibration levels; and determine the amount of vibration reduction that would occur with implementation of these measures. Vibration reduction measures may include, but would not be limited to, the use of non-vibratory equipment, vibration monitoring, and repair of structural damage. Construction vibration reduction measures shall be implemented to reduce vibration levels to Caltrans (2020) construction vibration thresholds as feasible.</p> <p>If the individual project would be constructed concurrently with cumulative development projects located within a 600-foot radius of the activity location, the vibration study shall also consider the cumulative impact of combined vibration levels at the nearest sensitive receivers by estimating the combined vibration levels receivers will experience during construction of individual projects and cumulative development; compare estimated vibration levels to applicable standards for vibration impacts related to structural damage and human annoyance described in the Caltrans (2020) <i>Transportation and Construction Vibration Guidance Manual</i> (CT-HWANP-RT-20-365.01.01); identify whether the individual project’s contribution to any identified cumulative impact would be cumulatively considerable; outline any measures that may be used to reduce the project’s contribution to combined vibration levels; and determine the amount of vibration reduction that would occur with implementation of these measures. Such measures may include, but are not limited to, the installation of wave barriers, maximization of the distance between vibratory equipment and receivers, restriction of vibration-generating activities to daytime hours, or</p>	<p>Significant and unavoidable</p>

Impact	Mitigation Measure(s)	Significance After Mitigation
	temporary relocation of affected residents Construction vibration reduction measures shall be implemented to reduce cumulative vibration levels to Caltrans construction vibration thresholds as feasible.	
Impact NOI-C. One individual project to be implemented under the proposed CAP is located within the vicinity of a private airstrip or within an airport land use plan. However, projects implemented under the proposed CAP would not expose people residing or working in the area to excessive noise levels. This impact would be less than significant.	This impact would be less than significant. No mitigation is required.	Less than significant. No mitigation required.
Tribal Cultural Resources		
Impact TCR-A. Implementation of projects under the proposed CAP would not cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 5020.1(k), as Native American consultation completed pursuant to Assembly Bill (AB) 52 identified no resources that may be impacted by the proposed project. This impact would be less than significant.	This impact would be less than significant. No mitigation is required.	Less than significant. No mitigation required.
Impact TCR-B. Implementation of projects under the proposed CAP would not cause a substantial adverse change in the significance of a tribal cultural resource determined to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. Native American consultation completed pursuant to AB 52 identified no resources that may be impacted by the proposed project. This impact would be less than significant.	This impact would be less than significant. No mitigation is required.	Less than significant. No mitigation required.

CARB = California Air Resources Board; VOC = volatile organic compounds; CDFW = California Department of Fish and Wildlife; USFWS = United States Fish and Wildlife Service; CRPR = California Rare Plant Rank; NMFS = National Marine Fisheries Service; BO = Biological Opinion; HCP = Habitat Conservation Plans; ITP = Incidental Take Permit; USACE = United States Army Corps of Engineers; RWQCB = Regional Water Quality Control Board; FTA = Federal Transit Administration; SOI = Secretary of the Interior; PQS = Professional Qualifications Standards; HABS = Historic American Building Survey; CRHR = California Register of Historical Resources; HMMP = Habitat Mitigation and Monitoring Plan

1.5 References Cited

- California Department of Finance (DOF). 2020. E-1 Population Estimates for Cities, Counties, and the State. <http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-1/> (accessed January 2022).
- Metropolitan. 2021. Climate Action Plan. *Draft Program Environmental Impact Report*. SCH No. 2020060450. Los Angeles, California: Metropolitan. November 2021
- United States Census Bureau. 2020. ACS Demographic and Housing Estimates. https://data.census.gov/cedsci/table?d=ACS%205-Year%20Estimates%20Data%20Profiles&table=DP05&tid=ACSDP5Y2018.DP05&g=0400000US06_1600000US0655422&hidePreview=false&vintage=2018&layer=VT_2018_040_00_PY_D1&cid=DP05_0001E (accessed January 2022).
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CHAPTER 2

FINDINGS OF FACT IN SUPPORT OF THE PROPOSED PROGRAM

2.1 Findings on Significant Impacts of the Proposed Program

CEQA requires the lead agency, Metropolitan, to make written findings when deciding to approve a project for which an EIR was certified (California Public Resources Code, Section 21081).

Specifically, Section 15091 of the *State CEQA Guidelines* states that:

- a) No public agency shall approve or carry out a project for which an EIR has been certified which identifies one or more significant environmental effects of the project unless the public agency makes one or more written findings for each of those significant effects, accompanied by a brief explanation of the rationale for each finding. The possible findings are:
 - (1) Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR.
 - (2) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.
 - (3) Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the final EIR.
- b) The findings required by subsection (a) shall be supported by substantial evidence in the record.

Section 15092(b) of the *State CEQA Guidelines* further stipulates that a public agency shall not decide to approve or carry out a project for which an EIR was prepared unless either:

- (1) The project as approved will not have a significant effect on the environment, or
- (2) The agency has:
 - (A) Eliminated or substantially lessened all significant effects on the environment where feasible as shown in findings under Section 15091, and
 - (B) Determined that any remaining significant effects on the environment found to be unavoidable under Section 15091 are acceptable due to overriding concerns as described in Section 15093.

The PEIR prepared for the proposed program identifies certain significant impacts that may occur as a result of the implementation of the proposed program, either alone or on a cumulative basis in conjunction with other past, present, and reasonably foreseeable projects and programs. Metropolitan is the lead agency with respect to the proposed program pursuant to *State CEQA Guidelines* Section 15367. As the lead agency, Metropolitan is required by CEQA to make findings with respect to each significant effect of the proposed program. The following sections make detailed findings with respect to the potential effects of the proposed program and refer, where appropriate, to the mitigation measures set forth in the Final PEIR.

The Final PEIR and the administrative record concerning the proposed program provide additional facts in support of the findings herein. Changes to the Draft PEIR are shown in ~~strikeout~~/underline of this Final PEIR. Furthermore, the mitigation measures set forth in the Final PEIR and the MMRP are incorporated by reference in these findings. The MMRP was developed in compliance with California Public Resources Code Section 21081.6.

2.1.1 Impacts Related to Air Quality

2.1.1.1 Potentially Significant Impacts Related to Air Quality

As discussed in Section 4.1, *Air Quality*, of the PEIR, implementation of individual projects under the proposed CAP would emit air pollutants stemming from the use of construction equipment (primarily diesel-powered), haul and materials vehicle trips, and fugitive dust. Implementation of the individual projects proposed under the CAP would potentially conflict with or obstruct implementation of the applicable air quality plan or result in a cumulatively considerable net increase of criteria pollutants for which the region is in non-attainment under an applicable federal or state air quality standard due to construction emissions that may exceed applicable thresholds of regional air districts. Implementation of Mitigation Measures (MM) AQ-1 and AQ-2 would reduce combined emissions of criteria pollutants during construction of specific individual projects that may be implemented under the proposed CAP; however, it is not possible to determine whether impacts would be reduced to less-than-significant levels because the magnitude of construction emissions is not known. Therefore, implementation of MM AQ-1 through MM AQ-2 may reduce this impact, but this impact would remain significant and unavoidable.

Neither construction nor operation of individual projects proposed under the proposed program would expose sensitive receptors to substantial pollutant concentrations; impacts related to these factors would be less than significant. Furthermore, neither construction nor operation of individual projects implemented under the proposed program would result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. This impact would be less than significant.

As discussed above, impacts to air quality from the proposed program as a whole would be cumulatively considerable due to the potential for construction of individual projects implemented under the CAP to exceed applicable emissions thresholds of regional air districts.

2.1.1.2 Mitigation

MM AQ-1 Construction Air Quality Assessment. For individual projects to be implemented under the CAP that involve construction activities with an intensity (i.e., size, schedule, equipment, demolition, import/export of soil, architectural coating) greater than the sample project activity, an air quality assessment shall be prepared to evaluate construction emissions in light of the applicable air district thresholds.

MM AQ-2 Implement Emission Reduction Measures. If construction emissions would exceed any of the applicable thresholds, emission reduction measures shall be implemented to reduce emissions below the thresholds. Measures may include, but would not be limited to:

- All construction equipment shall be equipped with Tier 4 certified engines or CARB-certified Level 3 diesel particulate filters. All diesel particulate filters shall be kept in working order and maintained in operable condition according to manufacturer's specifications, as applicable.

- Construction equipment with lower horsepower ratings shall be utilized, as applicable and practicable.
- Ultra-low-sulfur diesel fuel shall be used for stationary construction equipment, as applicable.
- Low-emission on-site stationary equipment shall be used, as applicable.
- Alternatively-fueled construction equipment (e.g., renewable diesel, natural gas, electric) shall be utilized instead of diesel-fueled construction equipment, as applicable.
- The schedule for soil import and/or export shall be extended to reduce the number of daily haul truck trips, as applicable.
- The schedule for the coating/painting phase shall be extended to reduce the square footage coated/painted each day, as applicable.
- Architectural coatings with a VOC content of less than 250 grams per liter shall be utilized.

2.1.1.3 Findings per State CEQA Guidelines

Consistent with *State CEQA Guidelines* Section 15126.4(a)(1), feasible measures that can minimize significant adverse impacts were developed for the potentially significant impacts described above. The feasible measures are listed above as MM AQ-1 and MM AQ-2. Metropolitan finds that the above mitigation measures are feasible, are adopted, and will substantially reduce the potential air quality impacts. Nonetheless, the impacts would not be reduced to a less-than-significant level. Specific economic, legal, social, technological, or other considerations make mitigation measures or alternatives that would reduce air quality impacts to a less-than-significant level infeasible.

2.1.1.4 Facts in Support of Findings Related to Air Quality

Implementation of MM AQ-1 and MM AQ-2 would reduce potentially significant impacts related to air quality, but due to unknowns with respect to implementation of individual projects under the proposed program, it is possible such impacts may not be reduced to a less-than-significant level. There would be significant and unavoidable impacts related to air quality after implementation of these mitigation measures.

2.1.2 Impacts Related to Biological Resources

2.1.2.1 Potentially Significant Impacts Related to Biological Resources

As discussed in Section 4.2, *Biological Resources*, of the PEIR, implementation of individual projects under the proposed CAP would potentially have a substantial adverse effect, either directly or through habitat modifications, on species identified as candidate, sensitive, or other special status species in local or regional plans, policies, or regulations, or by CDFW or the U.S. Fish and Wildlife Service. Vegetation clearing, excavation, materials storage, traffic, and other activities could remove habitat, result in impacts on runoff and/or water quality, potentially affecting habitat; air quality impacts (dust, exhaust) could affect adjacent habitat; and construction-related traffic could introduce hazardous materials into habitats. Implementation of Mitigation Measure MM BIO-1 through MM

BIO-6 would reduce this impact to a less-than-significant level. Migratory birds, including most birds that nest in the Plan Area, are protected by the federal Migratory Bird Treaty Act, which forbids most forms of harm to birds, including to their active nests. In addition, California Fish and Game Code (CFGF) Section 3503 makes it unlawful to destroy nests or eggs of any bird. Compliance with the CFGF and MBTA would ensure that impacts to migratory birds would be less than significant.

Individual projects implemented under the proposed CAP could result in significant impacts to riparian habitats and/or sensitive natural communities, or state or federally protected wetlands. Due to the programmatic nature of the proposed CAP, the specific details of individual project activities are unknown at this time, so specific project-level analysis cannot be conducted. However, potential impacts to riparian/wetland habitats could include, but are not limited to, vegetation clearing and excavation resulting in removal of habitat or runoff and/or water quality impacts; excavation, ground clearing, and use of unpaved roads resulting in air quality impacts to adjacent habitats; or equipment and construction personnel introducing hazardous materials into habitats. The level of impact would need to be determined at the project level when specific details are known about each project proposed under the CAP. Nevertheless, projects implemented under the CAP would be designed and located to avoid or minimize impacts to riparian/wetland habitats to the extent feasible. Furthermore, implementation of MM BIO-7 through MM BIO-9 would reduce these impacts to less-than-significant levels.

Neither construction nor operation of individual projects implemented under the proposed CAP would interfere with movement of native resident or migratory fish or wildlife species or established wildlife corridors. In addition, neither construction nor operation of individual projects implemented under the proposed CAP would impact protected trees and, as such, would not conflict with local policies or ordinances protecting biological resources. Such impacts would be less than significant.

Individual projects implemented under the proposed CAP would not conflict with a Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan area. This impact would be less than significant.

Depending on the specific location of individual projects to be implemented under the CAP, it is possible that cumulative development in the Plan Area, coupled with implementation of the proposed program, would result in a potentially significant cumulative impact to biological resources. However, projects to be implemented under the proposed program are relatively small, and implementation of MM BIO-1 through MM BIO-9 would reduce project-level impacts to biological resources to a less-than-significant level. Therefore, cumulative impacts are considered less than significant with mitigation incorporated.

2.1.2.2 Mitigation

MM BIO-1 Special Status Plant Species Surveys. If completion of the project-specific biological resources assessment determines that special status plant species have potential to occur on site, surveys for special status plants shall be completed prior to any vegetation removal, grubbing, or other construction activity of each project activity (including staging and mobilization). The surveys shall be floristic in nature and shall be seasonally timed to coincide with the target species identified in the project activity-specific biological resources assessment. All plant surveys shall be conducted by a qualified biologist no more than one year prior to project implementation (annual grassland habitats may require yearly surveys). Surveys shall be conducted in accordance with current protocols established by the CDFW, USFWS and the local jurisdictions if said protocols exist. If special status plant species are identified, Mitigation Measure BIO-2 shall apply.

MM BIO-2 Special Status Plant Species Avoidance, Minimization, and Mitigation. If state- or federally-listed special status and/or CRPR 1 and 2 plant species are identified during the project-specific biological assessment, the activity shall be re-designed to avoid impacting these plant species to the maximum extent feasible. If CRPR 3 and 4 species are found, the biologist shall evaluate if they meet criteria to be considered special status, and if so, the same process as identified for CRPR 1 and 2 species shall apply.

If special status plant species cannot be avoided and would be impacted by a project activity implemented under the proposed CAP, all impacts shall be mitigated at an appropriate ratio (minimum ratio of 1:1) to fully offset project activity impacts, as determined by a qualified biologist for each species. A restoration plan shall be prepared and implemented, as applicable.

MM BIO-3 Endangered/Threatened Animal Species Habitat Assessment and Protocol Surveys. If the results of the project-specific biological resources assessment determine suitable habitat may be present for any federally and/or state endangered or threatened animal species, habitat assessments and/or protocol surveys shall be completed in accordance with CDFW and/or USFWS/NMFS protocols prior to construction.

Alternatively, in lieu of conducting protocol surveys, Metropolitan may choose to assume presence within the activity footprint and proceed with implementing appropriate avoidance measures, consultation, and permitting, as applicable. If the target species are detected during protocol surveys, or protocol surveys are not conducted and presence is assumed based on suitable habitat, Mitigation Measure BIO-4 shall apply.

MM BIO-4 Endangered/Threatened Animal Species Avoidance and Mitigation. If habitat is occupied or presumed occupied by federal and/or state-listed species and would be impacted by project activities, the project activity shall be redesigned in coordination with a qualified biologist to avoid impacting occupied/presumed occupied habitat to the maximum extent feasible. If occupied or presumed occupied habitat cannot be avoided, Metropolitan shall consult with USFWS, NMFS, and/or CDFW in order to determine the appropriate course of action, which may include a Biological Opinion (BO) or HCP/ITP issued by the USFWS/NMFS (relevant to federally listed species) and/or the ITP issued by the CDFW (relevant to state listed species).

If occupied or presumed occupied habitat cannot be avoided, compensatory mitigation shall be provided (minimum ratio of 1:1) to fully offset impacts to habitat prior to the construction. Compensatory mitigation may be provided through purchase of mitigation bank credits, in-lieu fee, or permittee-responsible habitat restoration/establishment/enhancement/preservation. Compensatory mitigation may be combined/nested with special status plant species and sensitive natural community restoration, where applicable. Temporary impact areas shall be restored to similar pre-project conditions.

If on and/or off-site habitat restoration/conservation is identified, a Habitat Mitigation and Monitoring Plan (HMMP) shall be prepared to ensure the success of compensatory mitigation sites. The HMMP shall identify long-term site management needs, routine monitoring techniques, and performance standards for determining that the conservation site has met the necessary criteria to function as a suitable mitigation site.

MM BIO-5 Endangered/Threatened Species Avoidance and Minimization During Construction. The following measures shall be applied to aquatic and terrestrial species, where appropriate. Metropolitan shall select from these measures as appropriate depending on site conditions, the species with potential for occurrence, and the results of the project-specific biological resources assessment (~~Mitigation Measure BIO-1~~).

Pre-construction surveys for federal and/or state listed species with potential to occur shall be conducted where suitable habitat is present by a qualified biologist not more than 72 hours prior to the start of construction activities. The survey area shall include the proposed disturbance area and all proposed ingress/egress routes, plus a species-specific buffer. If any life stage of federal and/or state listed species is found within the survey area, the appropriate measures in the BO or HCP/ITP issued by the USFWS/NMFS (relevant to federally listed species) and/or the ITP issued by the CDFW (relevant to state listed species) shall be implemented; or if such guidance is not in place for the activity, the qualified biologist shall recommend an appropriate course of action, which may include consultation with USFWS, NMFS, and/or CDFW.

- The activity limits of disturbance shall be flagged. Areas of special biological concern within or adjacent to the limits of disturbance shall have Environmental Sensitive Area fencing installed between said area and the limits of disturbance.
- All activities occurring within or adjacent to sensitive habitats that may support federally and/or state endangered/threatened species shall have a qualified biologist present during all initial ground disturbing/vegetation clearing activities. Once initial ground disturbing/vegetation clearing activities have been completed, the biologist shall conduct pre-activity clearance surveys, as needed to ensure protection of endangered/threatened species.
- If pumps are used for dewatering activities, all intakes shall be completely screened with wire mesh not larger than five millimeters to prevent animals from entering the pump system.
- If at any time during construction of the project activity an endangered/threatened species enters the construction site or otherwise may be impacted by the project activity, all project activities shall cease. At that point, a qualified biologist shall recommend an appropriate course of action, which may include consultation with USFWS, NMFS, and/or CDFW. Alternatively, the appropriate measures shall be implemented in accordance with the BO or HCP/ITP issued by the USFWS (relevant to federal listed species) and/or the ITP issued by the CDFW (relevant to state listed species) and work can then continue as guided by those documents and the agencies, as appropriate.
- All trenches, pipes, culverts or similar structures shall be inspected for animals prior to burying, capping, moving, or filling.
- Upon completion of the project activity, a qualified biologist shall prepare a final compliance report documenting all compliance activities implemented for the activity, including the pre-construction survey results.

MM BIO-6 Non-Listed Special Status Animal Species Avoidance and Minimization. Depending on the species identified in the project-specific biological resource assessment, the following applicable measures shall be implemented to reduce the potential for impacts to non-listed special status animal species:

- Pre-construction clearance surveys shall be conducted by a qualified biologist within 14 days prior to the start of construction (including staging and mobilization). The surveys shall cover the entire disturbance footprint plus a minimum 100-foot buffer and shall identify all special status animal species that may occur on-site. The qualified biologist shall make recommendations for avoidance of non-listed special status species, such as through the use of exclusion fencing, buffer zones, etc.
- A qualified biologist shall be present during all initial ground disturbing activities, including vegetation removal, to recover special status animal species encountered during construction activities.
- Upon completion of the project activity, a qualified biologist shall prepare a final compliance report documenting all compliance activities implemented for the project activity, including the pre-construction survey results.
- If special status bat species may be present and impacted by the project activity, within 30 days of the start of construction a qualified biologist shall conduct presence/absence surveys for special status bats where suitable roosting habitat is present. Surveys shall be conducted using acoustic detectors and by searching tree cavities, crevices and other areas where bats may roost. If active bat roosts or colonies are present, the biologist shall evaluate the type of roost to determine the next step.
 - If a maternity colony is present, all construction activities shall be postponed within a 250-foot buffer around the maternity colony until it is determined by a qualified biologist that the young have dispersed. Once it has been determined that the roost is clear of bats, the roost shall be removed immediately.
 - If a roost is determined by a qualified biologist to be used by a large number of bats (large hibernaculum), alternative roosts, such as bat boxes if appropriate for the species, shall be designed and installed near the project activity site. The number and size of alternative roosts installed will depend on the size of the hibernaculum and shall be determined by a qualified biologist.
 - If other active roosts are located, exclusion devices shall be installed such as valves, sheeting or flap-style one-way devices that allow bats to exit but not re-enter roosts to discourage bats from occupying the site.

MM BIO-7 **Jurisdictional Delineation and Impact Avoidance.** If the results of the project-specific biological resource assessment ~~Mitigation Measure BIO-1~~ indicate project activities implemented under the proposed CAP would impact wetlands, drainages, riparian habitats, or other areas that may fall under the jurisdiction of the CDFW, USACE, and/or RWQCB, a qualified biologist shall complete a jurisdictional delineation. The jurisdictional delineation shall determine the extent of the jurisdiction for each of these agencies within the project activity site and shall be conducted in accordance with the requirement set forth by each agency. The results shall be provided in a jurisdictional delineation report submitted to Metropolitan, USACE, RWQCB, and CDFW, as appropriate, for review and approval. The project activity shall be designed to avoid or minimize impacts to jurisdictional areas to the maximum extent feasible.

MM BIO-8 Wetlands, Drainages and Riparian Habitat Restoration. If impacts to jurisdictional drainages, wetlands, riparian habitat, and sensitive vegetation communities cannot be avoided, impacts shall be mitigated at an appropriate ratio to fully offset project-specific impacts (minimum ratio of 1:1). Where feasible, temporarily impacted areas shall be restored to pre-project conditions. An HMMP shall be developed by a qualified biologist and submitted to the agency overseeing the project activity for approval. Alternatively, mitigation shall be accomplished through purchase of credits from an approved mitigation bank or in-lieu fee project.

MM BIO-9 Sensitive Natural Community Avoidance and Mitigation. If the results of the project-specific biological resource assessment ~~Mitigation Measure BIO-1~~ indicate project activities implemented under the proposed CAP would impact sensitive natural communities, impacts shall be avoided through final project activity design modifications.

If Metropolitan determines sensitive communities cannot be avoided, impacts shall be mitigated on-site or off-site at an appropriate ratio to fully offset project activity impacts (minimum ratio of 1:1). Temporarily impacted areas shall be restored to pre-project conditions. An HMMP shall be developed by a qualified biologist and submitted to the agency overseeing the project activity for approval.

2.1.2.3 Findings per State CEQA Guidelines

Consistent with *State CEQA Guidelines* Section 15126.4(a)(1), feasible measures that can minimize significant adverse impacts were developed for the potentially significant impacts described above. The feasible measures are listed above as MM BIO-1 through MM BIO-9. Metropolitan finds that the above mitigation measures are feasible, are adopted, and will substantially reduce the potential biological resource impacts such that they would be less than significant with mitigation incorporated.

2.1.2.4 Facts in Support of Findings Related to Biological Resources

Implementation of Mitigation Measures MM BIO-1 through MM BIO-9 would reduce potentially significant impacts related to biological resources such that they would be less than significant with mitigation incorporated.

2.1.3 Impacts Related to Cultural Resources

2.1.3.1 Potentially Significant Impacts Related to Cultural Resources

As discussed in Section 4.3, *Cultural Resources*, of the PEIR, individual projects implemented under the proposed CAP would have the potential to cause a substantial adverse change in the significance of an historical resource. Specifically, alteration of buildings and facilities and the removal or addition of infrastructure that may be necessary components of construction associated with GHG reduction measures could impact historical resources. Implementation of MM CUL-1 and MM CUL-3 may reduce this impact; however, this impact would remain significant and unavoidable.

Effects on archaeological resources can only be determined once a specific project footprint has been identified because the effects are highly dependent on both the individual project site conditions and the characteristics of the proposed ground-disturbing activity. If, during project-level analysis, it is determined that construction or operation of any covered activity would result in significant impacts

to archaeological resources, MM CUL-2 and MM CUL-3 have been included to reduce impacts to archaeological resources to the extent feasible. However, this impact would remain significant and unavoidable.

Human remains could be inadvertently unearthed during ground-disturbing activities. In the event of an unanticipated discovery of human remains during construction of individual projects proposed under the CAP, existing regulations outlined in the state of California Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98 would require notification of the County Coroner and determination of origin. With adherence to existing regulations, impacts to human remains would be less than significant.

Cumulative development in the Plan Area could disturb areas that may potentially contain historical and archaeological resources. The potential for impacts from projects under the proposed program is generally site-specific and depends on the location and nature of each project. As discussed above, individual projects implemented under the proposed program have the potential to result in impacts to historical and archaeological resources. While mitigation would reduce impacts to the degree feasible, such impacts may remain significant and unavoidable. Therefore, the potential for cumulative impacts to cultural resources is significant, and the proposed program's contribution to such impacts would be cumulatively considerable.

2.1.3.2 Mitigation

MM CUL-1(a) Built Environment Investigation. A historic resources evaluation shall be prepared for any future proposed project facilitated by the CAP involving a property which includes buildings, structures, objects, landscape/site plans, or other features that are 45 years of age or older. The evaluation shall be prepared by a qualified architectural historian or historian who meets the Secretary of the Interior's (SOI) Professional Qualifications Standards (PQS) in architectural history or history. The qualified architectural historian or historian shall conduct an evaluation in accordance with the guidelines and best practices promulgated by the State Office of Historic Preservation to identify any potential historical resources within the proposed project area. The evaluation of the potential resource within its historic context shall be documented. All evaluated properties shall be documented on Department of Parks and Recreation Series 523 Forms. If a property is identified as an eligible historical resource under CEQA, Mitigation Measure CUL-1(b) shall be implemented.

MM CUL-1(b) Built Environment Documentation Program. If eligible built environment historical resources are identified for a future proposed project implemented under the CAP, efforts shall be made to the extent feasible to ensure that impacts are avoided. If avoidance is not possible, a Built Environment Documentation Program shall be implemented. Measures may include but are not limited to, compliance with the Secretary of the Interior's Standards for Treatment of Historic Properties and documentation of the historical resource in the form of a Historic American Building Survey (HABS)- report or HABS-Like report. The HABS or HABS-Like report shall comply with the Secretary of the Interior's Standards for Architectural and Engineering Documentation and shall generally follow the HABS Level III requirements, including digital photographic recordation, detailed historic narrative report, and compilation of historic research. Application of mitigation shall generally be overseen by a qualified architectural historian or historic architect meeting the PQS, unless unnecessary in the circumstances (e.g., preservation in place).

- MM CUL-2(a) Phase 1 Archaeological Resource Investigation.** If archaeological resources are identified during project-specific analysis that may be adversely affected by any future proposed project implemented under the CAP, Metropolitan shall retain a qualified archaeologist meeting the Secretary of the Interior standards in archaeology to complete a Phase 1 cultural resources assessment of the site. A Phase 1 cultural resources assessment will include an archaeological pedestrian survey of the site, if feasible, and sufficient background archival research to determine whether subsurface prehistoric or historic remains may be present. Archival research should include a current records search from the appropriate California Historical Resources Information System information center and a Sacred Lands File search conducted with the Native American Heritage Commission. A Phase 1 report or results documentation shall be submitted to Metropolitan prior to any ground disturbing activities. Recommendations contained therein shall be implemented throughout all ground disturbance activities.
- MM CUL-2(b) Extended Phase 1 Investigation.** For any projects proposed within 100 feet of a known archaeological site and/or in areas identified as sensitive by the Phase 1 study, an Extended Phase 1 (XPI) study shall be conducted to determine the presence/absence and extent of archaeological resources on the project site. XPI testing should comprise a series of shovel test pits and/or hand augured units and/or mechanical trenching intended to establish the horizontal and vertical boundaries of archaeological site(s) on the project site. No archaeological resources would be collected during the XPI Investigation. If an archaeological site is identified, Mitigation Measure CUL-2(c) or CUL-2(d) shall be implemented.
- MM CUL-2(c) Avoidance of Archaeological Resources.** Identified prehistoric or historic archaeological resources shall be avoided and preserved in place, where feasible. Where avoidance and preservation in place is not feasible, additional measures shall be applied as identified in Mitigation Measure CUL-2(d) through CUL-2(g).
- MM CUL-2(d) Phase 2 Archaeological Resources Investigation and Evaluation.** Where preservation is not feasible, each resource shall be evaluated for significance and eligibility for listing in the CRHR through a Phase 2 archaeological resource evaluation. A Phase 2 evaluation shall include any necessary archival research to identify significant historical associations as well as mapping of surface artifacts, collection of functionally or temporally diagnostic tools and debris, and excavation of a sample of the cultural deposit to characterize the nature of the sites, define the artifact and feature contents, determine horizontal boundaries and depth below surface, and retrieve representative samples of artifacts and other remains. A final Phase 2 Testing and Evaluation report shall be submitted to Metropolitan prior to any ground disturbing activities. Recommendations contained therein shall be implemented throughout all ground disturbance activities.
- MM CUL-2(e) Phase 3 Archaeological Data Recovery Program.** If an archaeological resource meets the CRHR eligibility and cannot be avoided, Metropolitan shall implement a Phase 3 Archaeological Data Recovery Program, conducted to exhaust the data potential of significant archaeological sites. The Phase 3 Archaeological Data Recovery Program shall follow a research design prepared by a qualified archaeologist meeting the SOI PQS standards for archaeology and approved by Metropolitan in advance of Phase 3 fieldwork and excavations. The Phase 3 Data Recovery research design will use appropriate archaeological field and laboratory methods consistent with the California Office of Historic Preservation Planning Bulletin 5 (1991), Guidelines for Archaeological Research Design, or the latest

edition thereof. The final Phase 3 Data Recovery report shall be submitted to Metropolitan prior to and any ground disturbing activities. Recommendations contained therein shall be incorporated into project design and implemented throughout all ground disturbance activities.

- MM CUL-2(f) Processing and Curation of Archaeological Materials.** Archaeological materials collected from the sites during the implementation of Mitigation Measures CUL-2(d) through CUL-2(e) shall be processed and analyzed in the laboratory according to standard archaeological procedures. The age of the materials shall be determined using radiocarbon dating and/or other appropriate procedures; lithic artifacts, faunal remains, and other cultural materials shall be identified and analyzed according to current professional standards. The significance of the sites shall be evaluated according to the criteria of the CRHR. The results of the investigations shall be presented in a technical report following the standards of the California Office of Historic Preservation publication “Archaeological Resource Management Reports: Recommended Content and Format (1990 or latest edition)”. Upon completion of the work, all artifacts, other cultural remains, records, photographs, and other documentation shall be curated an appropriate established curation facility based on the location of the fieldwork and/or repatriated to local Native Americans as appropriate. All fieldwork, analysis, report production, and curation shall be fully funded by Metropolitan.
- MM CUL-2(g) Cultural Resources Monitoring.** If recommended by Phase 1 (Mitigation Measure CUL-2(a)), XPI (Mitigation Measure CUL-2(b)), Phase 2 (Mitigation Measure CUL-2(d)), or Phase 3 (Mitigation Measure CUL-2(e)) studies, Metropolitan shall retain a qualified archaeologist to monitor project-related, ground-disturbing activities.
- MM CUL-3 Previously Unidentified Resources Encountered During Construction.** In the event that any potentially significant cultural resources are unexpectedly encountered during construction, work will be immediately halted and the discovery shall be protected in place. A 50-foot buffer around the exposed resource shall be established until a qualified cultural resources specialist evaluates the discovery. If the qualified cultural resources specialist determines that the discovery represents a potentially significant cultural resource, including a potential historical resource, additional investigations may be required to mitigate adverse impacts from project implementation. This additional work may include avoidance, testing, and evaluation or data recovery excavation. Work shall be prohibited in the restricted area until Metropolitan provides written authorization.

2.1.3.3 Findings per State CEQA Guidelines

Consistent with *State CEQA Guidelines* Section 15126.4(a)(1), feasible measures that can minimize significant adverse impacts were developed for the potentially significant impacts described above. The feasible measures are listed above as MM CUL-1 through MM CUL-3. Metropolitan finds that the above mitigation measures are feasible, are adopted, and will substantially reduce the potential cultural resource impacts. Nonetheless, the impacts would not be reduced to a less-than-significant level. Specific economic, legal, social, technological, or other considerations make mitigation measures or alternatives that would reduce cultural resource impacts to a less than significant level infeasible.

2.1.3.4 Facts in Support of Findings Related to Cultural Resources

Implementation of MM CUL-1 through MM CUL-3 would reduce potentially significant project impacts related to cultural resources, but due to unknowns with respect to implementation of individual projects under the proposed program, it is possible such impacts may not be reduced to a less-than-significant level. There would be significant and unavoidable impacts related to cultural resources after implementation of these mitigation measures.

2.1.4 Impacts Related to Noise

2.1.4.1 Potentially Significant Impacts Related to Noise

As discussed in Section 4.3, *Noise*, of the PEIR, noise levels during construction of individual projects under the CAP, would temporarily increase ambient noise levels in the vicinity of the construction sites due to the operation of construction equipment. The severity of the noise impacts from construction activities would vary depending upon the number and type of equipment utilized for each phase and the proximity to residential, commercial, and industrial receiving land uses. Therefore, impacts would be potentially significant and would be analyzed at the project-level. MM NOI-1 and MM NOI-2 would reduce impacts, but because specific information regarding individual project construction equipment, schedule, and location is not known at this time, construction noise impacts may remain significant and unavoidable. Generally, individual projects implemented under the CAP would not result in new on-site operational noise sources, with the exception of proposed battery energy storage system (BESS) facilities proposed under CAP measure E-4, which may include cooling fans and transformers with the potential to generate continuous noise during operation. The severity of post-construction noise impacts would vary depending on the type and intensity of the individual project, its proximity to sensitive receivers, and the relevant local noise standards. Implementation of MM NOI-2 would reduce potential post-construction noise impacts, but such impacts may remain significant and unavoidable.

Construction activities associated with the proposed program would potentially require the use of equipment that may generate substantial levels of vibration, such as bulldozers, loaded trucks, pile drivers/pneumatic post drivers, bore/drill rigs, vibratory rollers, and jackhammers. The severity of construction groundborne vibration impacts would vary depending on the type of equipment used for each construction activity, the nature of the nearest structures and sensitive receivers, and the proximity of such structures/receivers to construction activities. MM NOI-3 would reduce potential construction vibration impacts, but such impacts may remain significant and unavoidable. Individual projects implemented under the CAP would result in no post-construction groundborne vibration impacts, and less than significant construction and post-construction impacts with respect to aircraft noise.

As described above, individual projects implemented under the proposed program may result in significant and unavoidable noise impacts. If concurrent construction activities occur in close proximity to proposed program activities, combined construction noise would have the potential to impact the same sensitive receivers and result in cumulative construction noise and vibration levels that exceed the applicable thresholds of significance. Therefore, cumulative noise impacts would be significant and unavoidable, and the CAP's contribution to such impacts would be cumulatively considerable.

2.1.4.2 Mitigation

- MM NOI-1 Locate Excavation Sites Away from Noise-Sensitive Receivers, Where Feasible.** Construction staging and activities shall be located in areas as far as practicable from sensitive receivers or in areas where receivers can be shielded from construction noise.
- MM NOI-2(a) Conduct Project-Level Noise Studies for Construction Activities Where Noise-Sensitive Receivers are Present.** Project-level construction noise studies shall be conducted for project activities that would exceed the screening criteria for a less-than-significant impact, as summarized in Table 30 and Table 32 of the draft PEIR. Such noise studies shall identify the existing ambient noise levels, characterize the nearest sensitive receivers, estimate the noise levels receivers will experience during construction of individual projects, compare estimated noise levels to the local jurisdiction's noise limits or to the construction noise criteria in the FTA (2018) Transit Noise and Vibration Impact Assessment Manual for those that do not have quantitative construction noise level limits, outline any measures that may be used to reduce noise levels, and determine the amount of noise reduction that would occur with implementation of these measures. If the project-level noise study concludes that noise reduction measures are required, Mitigation Measure NOI-2(b) shall be implemented.
- MM-NOI-2(b) Implement Noise Reduction Measures.** If the results of the noise study determine noise reduction measures are required, noise reduction measures shall be implemented. Construction noise reduction measures may include, but would not be limited to, the use of mufflers, sound blankets/barriers, and/or enclosures and scheduling construction activities to minimize simultaneous operation of noise-producing equipment. Construction noise measures shall be implemented to reduce noise levels to FTA (2018) construction noise criteria, as feasible.
- If the individual project would be constructed concurrently with development projects located within a 0.5-mile radius of the individual project location, the noise study shall also consider the cumulative impact of construction noise on sensitive receivers. If applicable, construction noise reduction measures shall be implemented to reduce cumulative noise levels to local jurisdiction or FTA (2018) construction noise criteria, as feasible.
- MM NOI-2(c) Conduct Project-Level Noise Studies for Post-Construction Activities Where Noise Sensitive Receivers are Present.** Prior to the commencement of construction activities for individual projects that may be implemented under the CAP where sensitive receivers are located within 1,000 feet of the individual project sites, project-level post-construction noise studies shall be conducted. Such noise studies shall identify the ambient noise levels, characterize the nearest sensitive receivers, estimate the noise levels receivers will experience during operation of individual projects during the post-construction period, compare estimated noise levels to the noise level standards of the applicable jurisdiction, outline any measures that may be used to reduce noise levels, and determine the amount of noise reduction that would occur with implementation of these measures. Noise reduction measures may include, but would not be limited to, alternative site design, alternative orientation of noise sources, and construction of berms and/or barriers. Noise reduction measures shall be implemented to reduce noise levels to the noise level standards of the applicable jurisdiction, as feasible.

MM NOI-3 (a) Locate Excavation Sites Away from Vibration-Sensitive Receivers, Where Feasible. Whenever practicable, vibration-generating equipment including bulldozers, loaded trucks, pile drivers/pneumatic post drivers, bore/drill rigs, vibratory rollers, and jackhammers shall operate outside the minimum distances specified in Table 33 of the draft PEIR for historic sites, other structures, and vibration-sensitive receivers during project construction activities. Furthermore, whenever practicable, vibration-generating equipment including bulldozers, loaded trucks, pile drivers/pneumatic post drivers, bore/drill rigs, vibratory rollers, and jackhammers shall not be operated concurrently with vibration-generating equipment associated with cumulative development projects located within 600 feet of project construction sites.

MM NOI-3(b) Conduct Project-Level Vibration Analysis for Construction Activities Where Vibration-Sensitive Receivers are Present. If operation of construction equipment outside the specified buffer distances is not practicable, a detailed study of vibration impacts shall be conducted prior to the commencement of construction for that project. Such vibration studies shall characterize the nearest historic sites, structures, and/or sensitive receivers; estimate the vibration levels receivers will experience during construction of individual projects; compare estimated vibration levels to applicable Caltrans (2020) standards for vibration impacts related to structural damage and human annoyance; outline any measures that may be used to reduce vibration levels; and determine the amount of vibration reduction that would occur with implementation of these measures. Vibration reduction measures may include, but would not be limited to, the use of non-vibratory equipment, vibration monitoring, and repair of structural damage. Construction vibration reduction measures shall be implemented to reduce vibration levels to Caltrans (2020) construction vibration thresholds as feasible.

If the individual project would be constructed concurrently with cumulative development projects located within a 600-foot radius of the activity location, the vibration study shall also consider the cumulative impact of combined vibration levels at the nearest sensitive receivers by estimating the combined vibration levels receivers will experience during construction of individual projects and cumulative development; compare estimated vibration levels to applicable standards for vibration impacts related to structural damage and human annoyance described in the Caltrans (2020) *Transportation and Construction Vibration Guidance Manual* (CT-HWANP-RT-20-365.01.01); identify whether the individual project's contribution to any identified cumulative impact would be cumulatively considerable; outline any measures that may be used to reduce the project's contribution to combined vibration levels; and determine the amount of vibration reduction that would occur with implementation of these measures. Such measures may include, but are not limited to, the installation of wave barriers, maximization of the distance between vibratory equipment and receivers, restriction of vibration-generating activities to daytime hours, or temporary relocation of affected residents. Construction vibration reduction measures shall be implemented to reduce cumulative vibration levels to Caltrans construction vibration thresholds as feasible.

2.1.4.3 Findings per State CEQA Guidelines

Consistent with *State CEQA Guidelines* Section 15126.4(a)(1), feasible measures that can minimize significant adverse impacts were developed for the potentially significant impacts described above. The feasible measures are listed above as MM NOI-1 through MM NOI-3. Metropolitan finds that the above mitigation measures are feasible, are adopted, and will reduce the potential noise impacts. Nonetheless, the impacts would not be reduced to a less-than-significant level. Specific economic, legal, social, technological, or other considerations make mitigation measures or alternatives that would reduce noise impacts to a less-than-significant level infeasible.

2.1.4.4 Facts in Support of Findings Related to Noise

Implementation of MM NOI-1 through MM NOI-3 would reduce potentially significant impacts related to noise, but due to unknowns with respect to implementation of individual projects under the proposed program, it is possible such impacts may not be reduced to a less-than-significant level. As such, impacts would remain significant and unavoidable.

2.2 General Findings

1. The potential environmental impacts of the proposed program have been analyzed, and the public has been afforded the opportunity to submit comments pursuant to CEQA requirements.
2. The proposed program would result in direct and/or indirect potentially significant impacts to the following issues: air quality, biological resources, cultural resources, and noise. Impacts to biological resources would be reduced to a less than significant level through the adoption of feasible mitigation measures set forth in the Draft PEIR. However, even with implementation of the mitigation measures set forth in the Draft PEIR, the proposed program would result in significant and unavoidable impacts to air quality, cultural resources, and noise; therefore, a Statement of Overriding Considerations is required.
3. Thirteen comments regarding the Draft PEIR were received during the public review period. Two of these comment letters were received after the public review period closed. Responses to the comments in those letters are provided in Chapter 1 of the Final PEIR, Volume 1, *Responses to Comments*. No new significant effects were identified as a result of public comments. Impacts have been avoided or substantially lessened by the mitigation measures described in the Draft and Final PEIR.

2.3 Legal Effects of Findings

To the extent that these findings conclude that the proposed mitigation measures outlined in the Final PEIR are feasible and have not been modified, superseded, or withdrawn, Metropolitan hereby commits to implementing these measures. These findings, in other words, are not merely informational, but rather constitute a binding set of obligations that will come into effect when Metropolitan approves the proposed program. The mitigation measures that are referenced in the MMRP and adopted concurrently with these findings will be effectuated through the process of construction and implementation of the proposed program.

2.4 Statement of Overriding Considerations

2.4.1 Significant and Unavoidable Impacts

The proposed program would have significant, unavoidable impacts to the following areas, described in detail in Section 2.1 of these Findings of Fact:

Air Quality

- Conflict with or obstruct implementation of the applicable air quality plan
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard

Cultural Resources

- Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5
- Cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5

Noise

- Result in the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies
- Result in the generation of excessive groundborne noise levels

Metropolitan has adopted all feasible mitigation measures and supplemental mitigation measures with respect to these impacts. Although implementation of these measures would substantially lessen these significant impacts, adoption of the measures will, for these impacts, not fully avoid the impacts.

As a result of these significant and unavoidable impacts, Metropolitan must adopt a Statement of Overriding Considerations pursuant to *State CEQA Guidelines* Sections 15043 and 15093. This provision allows a lead agency to cite a project's general economic, social, or other benefits as a justification for choosing to allow the occurrence of specified significant environmental effects that have not been avoided. The provision explains why, in the agency's judgment, the project's benefits outweigh the unavoidable significant effects. Where another substantive law (e.g., the California Clean Air Act, the federal Clean Air Act, or the California and federal Endangered Species Acts) prohibits the lead agency from taking certain actions with environmental impacts, a statement of overriding considerations does not relieve the lead agency from such prohibitions. Rather, the decision-maker has recommended mitigation measures based on the analysis contained in the Final PEIR, recognizing that other resource agencies have the ability to impose more stringent standards or measures.

CEQA does not require lead agencies to analyze "beneficial impacts" in an EIR. Rather, EIRs are to focus on potential "significant effects on the environment" defined to be "adverse." (California Public Resources Code, Section 21068.) The state legislature amended the definition to focus on "adverse" impacts after the California Supreme Court held that beneficial impacts must also be addressed (see *Wildlife Alive v. Chickering* (1976) 18 Cal.3d 190, 206). Nevertheless, decision-makers benefit from information about project benefits. These benefits can be cited, if necessary, in a Statement of Overriding Considerations (14 CCR 15093).

Metropolitan finds that the proposed program would have substantial benefits as specified in Section 2.4.2, *Substantial Benefits of the Program*, below. Metropolitan, after balancing the specific economic, legal, social, technological or other benefits of the proposed program, determines and finds that the unavoidable adverse environmental effects may be considered “acceptable” due to the following specific considerations.

2.4.2 Substantial Benefits of the Program

2.4.2.1 Reinforcing Metropolitan’s Commitment to Environmental Stewardship

The CAP represents the next step of Metropolitan’s long-standing commitment to environmental stewardship and complements Metropolitan’s various long-range planning efforts. As described in the CAP itself, Metropolitan’s mission has evolved to ensure the water reliability of Southern California by incorporating a diverse portfolio of water sources and initiatives to help meet the needs of the region. As such, environmental stewardship and responsibility, particularly as they relate to efficiency and energy reliability, are integral to Metropolitan’s mission and operations. Beyond establishing a feasible and implementable pathway to its emissions reduction target of carbon neutrality by 2045, the CAP:

- Incorporates legislation and guidance from state, federal, and international sources;
- Identifies cost-effective energy efficient measures; and
- Integrates actions to achieve California’s transportation strategies to transition away from fossil fuels.

The emissions reduction measures contained in the CAP, while intended to achieve reductions in GHG emissions, also have the potential to deliver various environmental co-benefits, including, but not limited to, the following:

- Strategy 6 – Incentivize More Sustainable Commutes – of the CAP includes multiple measures intended to reduce vehicle miles traveled (VMT) by subsidizing transit, encouraging telecommuting and vanpooling, and installing electric vehicle (EV)/ zero-emission vehicle (ZEV) infrastructure. Not only would these measures reduce GHG emissions associated with vehicle use, but they would also result in reductions in air quality contaminant emissions—such as total organic gases (TOG) and diesel particulate matter—associated with mobile sources.
- Strategy 7— Increase Waste Diversion to Achieve Zero Waste—of the CAP includes multiple measures to reduce GHG emissions by reducing the waste produced at Metropolitan’s facilities and increasing waste diversion. Not only would these measures reduce GHG emissions associated with solid waste, but they would also result in improved utility and service system impacts by reducing strain on landfill capacity and reducing trash pollution to land and waterways.
- Strategy 8 – Increase Water Conservation and Local Water Supply – of the CAP includes multiple measures to reduce GHG emissions by increasing water conservation. In addition to GHG emissions benefits associated with reduced energy to pump, treat, and heat water, implementing innovative water conservation and education programs would also reduce pollution associated with water runoff due to reduced consumption for uses such as lawn irrigation.

While the Final PEIR identifies several significant and unavoidable impacts, many of these impacts are identified due to the programmatic nature of the analysis and lack of project-specific details at this time. Additionally, many of these impacts—while significant—are associated with short-term construction activities. It should be noted that the PEIR also acknowledges potential longer-term, post-construction beneficial impacts, where appropriate. For example, Chapter 5, *Effects Found Not to be Significant*, describes potential beneficial impacts of CAP measures to CEQA resource areas such as energy, transportation, utilities and service systems, and GHG emissions. As such, despite significant and unavoidable impacts identified in the PEIR, the proposed program also offers a substantial benefit by reinforcing Metropolitan’s commitment to environmental stewardship and responsibility, particularly as it relates to the pressing environmental challenge of GHG emissions and global climate change. Lastly, as proposed projects are implemented under the CAP and project-specific details become available, the appropriate level of project-specific CEQA analysis will be conducted to determine the impact significance level for each resource area.

2.4.2.2 Providing a Roadmap for Compliance with State Emissions Targets

The CAP provides Metropolitan with a broad range of feasible and implementable strategies and measures to mitigate or reduce GHG emissions in line with state goals and targets. The emissions reduction regulations establishing these goals and targets are described in Chapter 2, *Project Description*, of the PEIR and include the following:

- **Assembly Bill (AB) 32.** Signed into law in 2006, the California Global Warming Solutions Act codifies a statewide goal of reducing GHG emissions to 1990 levels by 2020.
- **Senate Bill (SB) 32.** SB 32 serves as an update to the emissions reduction target codified under AB 32. Signed into law in 2016, SB 32 establishes a statewide emissions reduction target of 40 percent below 1990 levels by 2030.
- **Executive Order B-55-18.** On September 10, 2018, former Governor Jerry Brown issued this Executive Order, which established a new statewide goal of achieving carbon neutrality by 2045 and maintaining net negative emissions thereafter.

The CAP is designed to be consistent with the above regulatory goals and targets, specifically by establishing a 2030 target of 40 percent below 1990 levels (consistent with SB 32) and a 2045 target of carbon neutrality (consistent with Executive Order B-55-18). By adopting these targets—as well as the CAP’s supporting measures, tracking and implementation mechanisms intended to demonstrate attainment of these targets over time—Metropolitan is creating a roadmap for regulatory compliance and meaningfully contributing to the state’s emissions reduction goals.

2.4.2.3 Streamlining California Environmental Quality Act Review for Future Projects

As described in the CAP and consistent with the program objectives described in Chapter 2, *Project Description*, one of the key intents and uses for the proposed program is to provide Metropolitan with a “Qualified GHG Reduction Plan” pursuant to the requirements of *State CEQA Guidelines* Section 15183.5(b)(1). Using a qualified CAP will allow Metropolitan to realize efficiencies in the environmental review process by facilitating tiering of future project-specific GHG emissions analyses from the CAP, if those projects demonstrate consistency with the CAP. Section 1.1 of the CAP document explains the proposed CAP’s consistency with the requirements for a qualified CAP, specifically:

- Quantification of existing and projected GHG emissions within the Plan Area (refer to Section 3.0 of the CAP)
- Establishment of a reduction target based on local, regional, or state targets (refer to Section 4.0 of the CAP)
- Identification and analysis of sector-specific GHG emissions from Plan activities (refer to Section 3.0 of the CAP)
- Specification of policies and actions (measures) that, if implemented, would achieve the specific reduction target (refer to Section 5.0 of the CAP)
- Establishment of a mechanism to monitor progress and amend the CAP (refer to Section 6.0 of the CAP)
- Adoption of the document in a public process following environmental review

The proposed program, as described and analyzed in this CEQA document, satisfies the requirements of *State CEQA Guidelines* Section 15183.5(b)(1) and, as such, offers a substantial benefit by facilitating streamlining of GHG emissions analyses for future Metropolitan projects undergoing CEQA review.

2.5 Independent Review and Analysis

Under CEQA, the lead agency must (1) independently review and analyze the EIR; (2) circulate draft documents that reflect its independent judgment; (3) as part of the certification of an EIR, find that the report or declaration reflects the independent judgment of the lead agency; and (4) submit copies of the documents to the State Clearinghouse if there is state agency involvement or if the project is of statewide, regional, or area-wide significance (California Public Resources Code Section 21082.1(c)).

Metropolitan independently reviewed and analyzed the PEIR and determined that it reflects its independent judgment. Moreover, upon completing this review and making this determination, Metropolitan circulated the Draft PEIR for public review. With the preparation of these findings for submittal to Metropolitan's Board of Directors for adoption, Metropolitan finds that this Final PEIR reflects its independent judgment.

CHAPTER 3

MITIGATION AND MONITORING PROGRAM

3.1 Mitigation Monitoring and Reporting Program

The Mitigation Monitoring and Reporting Program (MMRP) for the proposed program has been prepared in accordance with Public Resources Code Section 21081.6 and *State CEQA Guidelines* Section 15091(d). Metropolitan will use this MMRP to track compliance with the required program mitigation measures.

Metropolitan's Board of Directors will consider the MMRP during the certification hearing for the Final PEIR. The final MMRP will incorporate all mitigation measures adopted for the proposed program. Metropolitan makes the finding that the measures included in the MMRP constitute changes or alterations that avoid or substantially lessen the potentially significant environmental effects of the proposed program on the environment.

This MMRP summarizes mitigation commitments identified in the Climate Action Plan Final PEIR. Table 2 provides the MMRP, which includes all mitigation measures, monitoring process, and monitoring timing. Metropolitan is the agency responsible for ensuring implementation of all mitigation measures. Impacts and mitigation measures are presented in the same order as in the Final PEIR. The columns in the table provide the following information:

- **Mitigation Measures:** This column indicates the action(s) that will be taken to reduce the impact to a less-than significant level or to the maximum extent feasible.
- **Responsible Party:** This column indicates the party who must ensure each mitigation measure is implemented and that monitoring, and reporting activities occur.
- **Timing of Implementation:** This column indicates the general schedule for conducting each monitoring task, either during the design phase, prior to construction, during construction, and/or after construction.
- **Implementation Party:** This column lists the party responsible for implementing the mitigation measure.

Table 2 Mitigation Monitoring and Reporting Program

Mitigation Measure	Responsible Party	Timing of Implementation	Implementation Party
Air Quality			
AQ-1 Construction Air Quality Assessment			
For individual projects to be implemented under the CAP that involve construction activities with an intensity (i.e., size, schedule, equipment, demolition, import/export of soil, architectural coating) greater than the sample program activity, an air quality assessment shall be prepared to evaluate construction emissions in light of the applicable air district thresholds.	Metropolitan	Prior to construction	Metropolitan
AQ-2 Implement Emission Reduction Measures			
If construction emissions would exceed any of the applicable thresholds, emission reduction measures shall be implemented to reduce emissions below the thresholds. Measures may include, but would not be limited to:	Metropolitan	<ul style="list-style-type: none"> • Prior to construction to confirm all applicable reduction measures • Periodic field checks throughout construction to confirm proper implementation of all applicable reduction measures 	Metropolitan Contractor
<ul style="list-style-type: none"> • All construction equipment shall be equipped with Tier 4 certified engines or CARB-certified Level 3 diesel particulate filters. All diesel particulate filters shall be kept in working order and maintained in operable condition according to manufacturer’s specifications, as applicable. • Construction equipment with lower horsepower ratings shall be utilized, as applicable and practicable. • Ultra-low-sulfur diesel fuel shall be used for stationary construction equipment, as applicable. • Low-emission on-site stationary equipment shall be used, as applicable. • Alternatively-fueled construction equipment (e.g., renewable diesel, natural gas, electric) shall be utilized instead of diesel-fueled construction equipment, as applicable. • The schedule for soil import and/or export shall be extended to reduce the number of daily haul truck trips, as applicable. • The schedule for the coating/painting phase shall be extended to reduce the square footage coated/painted each day, as applicable. • Architectural coatings with a VOC content of less than 250 grams per liter shall be utilized. 			

Mitigation Measure	Responsible Party	Timing of Implementation	Implementation Party
Biological Resources			
BIO-1 Special Status Plant Species Surveys			
<p>If completion of the project-specific biological resources assessment determines that special status plant species have potential to occur on site, surveys for special status plants shall be completed prior to any vegetation removal, grubbing, or other construction activity of each program activity (including staging and mobilization). The surveys shall be floristic in nature and shall be seasonally timed to coincide with the target species identified in the program activity-specific biological resources assessment. All plant surveys shall be conducted by a qualified biologist no more than one year prior to project implementation (annual grassland habitats may require yearly surveys). Surveys shall be conducted in accordance with current protocols established by the CDFW, USFWS and the local jurisdictions if said protocols exist. If special status plant species are identified, Mitigation Measure BIO-2 shall apply.</p>	Metropolitan	No more than one year prior to any vegetation removal, grubbing, or other construction activity and during the appropriate season for the target species	Metropolitan Qualified biologist
BIO-2 Special Status Plant Species Avoidance, Minimization, and Mitigation			
<p>If state- or federally listed special status and/or CRPR 1 and 2 plant species are identified during the project-specific biological assessment, the activity shall be re-designed to avoid impacting these plant species to the maximum extent feasible. If CRPR 3 and 4 species are found, the biologist shall evaluate if they meet criteria to be considered special status, and if so, the same process as identified for CRPR 1 and 2 species shall apply.</p> <p>If special status plant species cannot be avoided and would be impacted by a program activity implemented under the proposed CAP, all impacts shall be mitigated at an appropriate ratio (minimum ratio of 1:1) to fully offset program activity impacts, as determined by a qualified biologist for each species. A restoration plan shall be prepared and implemented, as applicable.</p>	Metropolitan	<ul style="list-style-type: none"> • Prior to vegetation removal, grubbing, or other construction activity for re-design or preparation of a mitigation strategy/restoration plan (if avoidance is not feasible) • Within one year of initiation of construction activity for purchase of mitigation • Within one year of completion of construction activity for initial implementation of restoration plan 	Metropolitan Qualified biologist
BIO-3 Endangered/Threatened Animal Species Habitat Assessment and Protocol Surveys			
<p>If the results of the project-specific biological resources assessment determine suitable habitat may be present for any federally and/or state endangered or threatened animal species, habitat assessments and/or protocol surveys shall be completed in accordance with CDFW and/or USFWS/NMFS protocols prior to construction.</p> <p>Alternatively, in lieu of conducting protocol surveys, Metropolitan may choose to assume presence within the activity footprint and proceed with implementing appropriate avoidance measures, consultation, and permitting, as applicable.</p> <p>If the target species are detected during protocol surveys, or protocol surveys are not conducted and presence is assumed based on suitable habitat, Mitigation Measure BIO-4 shall apply.</p>	Metropolitan	Prior to construction and during the appropriate season as identified by the survey protocols for the target species	Metropolitan Qualified biologist

Mitigation Measure	Responsible Party	Timing of Implementation	Implementation Party
BIO-4 Endangered/Threatened Animal Species Avoidance and Mitigation			
<p>If habitat is occupied or presumed occupied by federal and/or state-listed species and would be impacted by program activities, the program activity shall be redesigned in coordination with a qualified biologist to avoid impacting occupied/presumed occupied habitat to the maximum extent feasible. If occupied or presumed occupied habitat cannot be avoided, Metropolitan shall consult with USFWS, NMFS, and/or CDFW in order to determine the appropriate course of action, which may include a Biological Opinion (BO) or HCP/ITP issued by the USFWS/NMFS (relevant to federally listed species) and/or the ITP issued by the CDFW (relevant to state listed species).</p> <p>If occupied or presumed occupied habitat cannot be avoided, compensatory mitigation shall be provided (minimum ratio of 1:1) to fully offset impacts to habitat prior to the construction. Compensatory mitigation may be provided through purchase of mitigation bank credits, in-lieu fee, or permittee-responsible habitat restoration/establishment/enhancement/preservation. Compensatory mitigation may be combined/nested with special status plant species and sensitive natural community restoration, where applicable. Temporary impact areas shall be restored to similar pre-project conditions.</p> <p>If on and/or off-site habitat restoration/conservation is identified, a Habitat Mitigation and Monitoring Plan (HMMP) shall be prepared to ensure the success of compensatory mitigation sites. The HMMP shall identify long-term site management needs, routine monitoring techniques, and performance standards for determining that the conservation site has met the necessary criteria to function as a suitable mitigation site.</p>	Metropolitan	<ul style="list-style-type: none"> • Prior to construction for re-design, agency consultation, permitting, and preparation of a mitigation strategy/HMMP (if avoidance is not feasible) • Within one year of initiation of construction activity for purchase of mitigation • Within one year of completion of construction activity for initial implementation of HMMP 	Metropolitan Qualified biologist
BIO-5 Endangered/Threatened Species Avoidance and Minimization During Construction			
<p>The following measures shall be applied to aquatic and terrestrial species, where appropriate. Metropolitan shall select from these measures as appropriate depending on site conditions, the species with potential for occurrence, and the results of the project-specific biological resources assessment (Mitigation Measure BIO-1).</p> <p>Pre-construction surveys for federal and/or state listed species with potential to occur shall be conducted where suitable habitat is present by a qualified biologist not more than 72 hours prior to the start of construction activities. The survey area shall include the proposed disturbance area and all proposed ingress/egress routes, plus a species-specific buffer. If any life stage of federal and/or state listed species is found within the survey area, the appropriate measures in the BO or HCP/ITP issued by the USFWS/NMFS (relevant to federally listed species) and/or the ITP issued by the CDFW (relevant to state listed species) shall be implemented; or if such guidance is not in place for the activity, the qualified biologist shall recommend an appropriate course of action, which may include consultation with USFWS, NMFS, and/or CDFW.</p>	Metropolitan	<ul style="list-style-type: none"> • Not more than 72 hours prior to the start of construction activities in suitable habitat for the target species for pre-construction surveys; prior to construction for agency consultation (if applicable) • Pre-, during, and post- construction for implementation of BO or HCP/ITP • Prior to construction for disturbance limit flagging • During initial ground disturbing/vegetation clearing within 	Metropolitan, Qualified biologist Contractor

Mitigation Measure	Responsible Party	Timing of Implementation	Implementation Party
<ul style="list-style-type: none"> The activity limits of disturbance shall be flagged. Areas of special biological concern within or adjacent to the limits of disturbance shall have Environmental Sensitive Area fencing installed between said area and the limits of disturbance. All activities occurring within or adjacent to sensitive habitats that may support federally and/or state endangered/threatened species shall have a qualified biologist present during all initial ground disturbing/vegetation clearing activities. Once initial ground disturbing/vegetation clearing activities have been completed, the biologist shall conduct pre-activity clearance surveys, as needed to ensure protection of endangered/threatened species. If pumps are used for dewatering activities, all intakes shall be completely screened with wire mesh not larger than five millimeters to prevent animals from entering the pump system. If at any time during construction of the program activity an endangered/threatened species enters the construction site or otherwise may be impacted by the program activity, all program activities shall cease. At that point, a qualified biologist shall recommend an appropriate course of action, which may include consultation with USFWS, NMFS, and/or CDFW. Alternatively, the appropriate measures shall be implemented in accordance with the BO or HCP/ITP issued by the USFWS (relevant to federal listed species) and/or the ITP issued by the CDFW (relevant to state listed species) and work can then continue as guided by those documents and the agencies, as appropriate. All trenches, pipes, culverts or similar structures shall be inspected for animals prior to burying, capping, moving, or filling. Upon completion of the program activity, a qualified biologist shall prepare a final compliance report documenting all compliance activities implemented for the activity, including the pre-construction survey results. 		<ul style="list-style-type: none"> or adjacent to sensitive habitats for qualified biologist monitoring During dewatering for wire mesh screening During construction for halting work if target species enters the construction site During construction for trench inspections Within one-year of completion of construction activity for final compliance report 	
BIO-6 Non-Listed Special Status Animal Species Avoidance and Minimization			
<p>Depending on the species identified in the project-specific biological resource assessment, the following applicable measures shall be implemented to reduce the potential for impacts to non-listed special status animal species:</p> <ul style="list-style-type: none"> Pre-construction clearance surveys shall be conducted by a qualified biologist within 14 days prior to the start of construction (including staging and mobilization). The surveys shall cover the entire disturbance footprint plus a minimum 100-foot buffer and shall identify all special status animal species that may occur on-site. The qualified biologist shall make recommendations for avoidance of non-listed special status species, such as through the use of exclusion fencing, buffer zones, etc. 	Metropolitan	<ul style="list-style-type: none"> Within 14 days prior to construction for pre-construction surveys During all initial ground disturbing activities for qualified biologist monitoring (if target species encountered) Within one-year of completion of construction activity for final compliance report Within 30 days prior to 	Metropolitan Qualified biologist Contractor

Mitigation Measure	Responsible Party	Timing of Implementation	Implementation Party
<ul style="list-style-type: none"> • A qualified biologist shall be present during all initial ground disturbing activities, including vegetation removal, to recover special status animal species encountered during construction activities. • Upon completion of the program activity, a qualified biologist shall prepare a final compliance report documenting all compliance activities implemented for the program activity, including the pre-construction survey results. • If special status bat species may be present and impacted by the program activity, within 30 days of the start of construction a qualified biologist shall conduct presence/absence surveys for special status bats where suitable roosting habitat is present. Surveys shall be conducted using acoustic detectors and by searching tree cavities, crevices and other areas where bats may roost. If active bat roosts or colonies are present, the biologist shall evaluate the type of roost to determine the next step. <ul style="list-style-type: none"> ○ If a maternity colony is present, all construction activities shall be postponed within a 250-foot buffer around the maternity colony until it is determined by a qualified biologist that the young have dispersed. Once it has been determined that the roost is clear of bats, the roost shall be removed immediately. ○ If a roost is determined by a qualified biologist to be used by a large number of bats (large hibernaculum), alternative roosts, such as bat boxes if appropriate for the species, shall be designed and installed near the program activity site. The number and size of alternative roosts installed will depend on the size of the hibernaculum and shall be determined by a qualified biologist. <p>If other active roosts are located, exclusion devices shall be installed such as valves, sheeting or flap-style one-way devices that allow bats to exit but not re-enter roosts to discourage bats from occupying the site.</p>		<p>construction for presence/absence bat surveys where suitable roosting habitat is present</p> <ul style="list-style-type: none"> • During construction for implementation of avoidance buffers, installation of alternative roosts/exclusion devices, and removal of roosts 	
BIO-7 Jurisdictional Delineation and Impact Avoidance			
<p>If the results of the project-specific biological resource assessment Mitigation Measure BIO-1 indicate program activities implemented under the proposed CAP would impact wetlands, drainages, riparian habitats, or other areas that may fall under the jurisdiction of the CDFW, USACE, and/or RWQCB, a qualified biologist shall complete a jurisdictional delineation. The jurisdictional delineation shall determine the extent of the jurisdiction for each of these agencies within the program activity site and shall be conducted in accordance with the requirement set forth by each agency. The results shall be provided in a jurisdictional delineation report submitted to Metropolitan, USACE, RWQCB, and CDFW, as appropriate, for review and approval. The program activity shall be designed to avoid or minimize impacts to jurisdictional areas to the maximum extent feasible.</p>	Metropolitan	Prior to construction	Metropolitan Qualified biologist

Mitigation Measure	Responsible Party	Timing of Implementation	Implementation Party
BIO-8 Wetlands, Drainages and Riparian Habitat Restoration			
<p>If impacts to jurisdictional drainages, wetlands, riparian habitat, and sensitive vegetation communities cannot be avoided, impacts shall be mitigated at an appropriate ratio to fully offset project-specific impacts (minimum ratio of 1:1). Where feasible, temporarily impacted areas shall be restored to pre-project conditions. An HMMP shall be developed by a qualified biologist and submitted to the agency overseeing the program activity for approval. Alternatively, mitigation shall be accomplished through purchase of credits from an approved mitigation bank or in-lieu fee program.</p>	Metropolitan	<ul style="list-style-type: none"> • Prior to construction for preparation of a mitigation strategy/HMMP • Within one year of initiation of construction activity for purchase of mitigation • Within one year of completion of construction activity for initial implementation of HMMP 	<p>Metropolitan Qualified biologist</p>
BIO-9 Sensitive Natural Community Avoidance and Mitigation			
<p>If the results of the project-specific biological resource assessment-Mitigation Measure BIO-1 indicate program activities implemented under the proposed CAP would impact sensitive natural communities, impacts shall be avoided through final program activity design modifications.</p> <p>If Metropolitan determines sensitive communities cannot be avoided, impacts shall be mitigated on-site or off-site at an appropriate ratio to fully offset program activity impacts (minimum ratio of 1:1). Temporarily impacted areas shall be restored to pre-project conditions. An HMMP shall be developed by a qualified biologist and submitted to the agency overseeing the program activity for approval.</p>	Metropolitan	<ul style="list-style-type: none"> • Prior to construction for preparation of a mitigation strategy/HMMP • Within one year of initiation of construction activity for purchase of mitigation • Within one year of completion of construction activity for initial implementation of HMMP 	<p>Metropolitan Qualified biologist Contractor</p>
Cultural Resources			
CUL-1(a) Built Environment Investigation			
<p>A historic resources evaluation shall be prepared for any future proposed project facilitated by the CAP involving a property which includes buildings, structures, objects, landscape/site plans, or other features that are 45 years of age or older. The evaluation shall be prepared by a qualified architectural historian or historian who meets the Secretary of the Interior’s (SOI) Professional Qualifications Standards (PQS) in architectural history or history. The qualified architectural historian or historian shall conduct an evaluation in accordance with the guidelines and best practices promulgated by the State Office of Historic Preservation to identify any potential historical resources within the proposed project area. The evaluation of the potential resource within its historic context shall be documented. All evaluated properties shall be documented on Department of Parks and Recreation Series 523 Forms. If a property is identified as an eligible historical resource under CEQA, Mitigation Measure CUL-1(b) shall be implemented.</p>	Metropolitan	Prior to construction	<p>Metropolitan Qualified architectural historian or historian</p>

Mitigation Measure	Responsible Party	Timing of Implementation	Implementation Party
CUL-1(b) Built Environment Documentation Program			
<p>If eligible built environment historical resources are identified for a future proposed project implemented under the CAP, efforts shall be made to the extent feasible to ensure that impacts are avoided. If avoidance is not possible, a Built Environment Documentation Program shall be implemented. Measures may include but are not limited to, compliance with the Secretary of the Interior’s Standards for Treatment of Historic Properties and documentation of the historical resource in the form of a Historic American Building Survey (HABS)- report or HABS-Like report. The HABS or HABS-Like report shall comply with the Secretary of the Interior’s Standards for Architectural and Engineering Documentation and shall generally follow the HABS Level III requirements, including digital photographic recordation, detailed historic narrative report, and compilation of historic research. Application of mitigation shall generally be overseen by a qualified architectural historian or historic architect meeting the PQS, unless unnecessary in the circumstances (e.g., preservation in place).</p>	Metropolitan	Prior to construction	Metropolitan Qualified historian
CUL-2(a) Phase 1 Archaeological Resource Investigation			
<p>If archaeological resources are identified during project-specific analysis that may be adversely affected by any future proposed project implemented under the CAP, Metropolitan shall retain a qualified archaeologist meeting the Secretary of the Interior standards in archaeology to complete a Phase 1 cultural resources assessment of the site. A Phase 1 cultural resources assessment will include an archaeological pedestrian survey of the site, if feasible, and sufficient background archival research to determine whether subsurface prehistoric or historic remains may be present. Archival research should include a current records search from the appropriate California Historical Resources Information System information center and a Sacred Lands File search conducted with the Native American Heritage Commission. A Phase 1 report or results documentation shall be submitted to Metropolitan prior to any ground disturbing activities. Recommendations contained therein shall be implemented throughout all ground disturbance activities.</p>	Metropolitan	Prior to construction	Metropolitan Qualified archaeologist
CUL-2(b) Extended Phase 1 Investigation			
<p>For any projects proposed within 100 feet of a known archaeological site and/or in areas identified as sensitive by the Phase 1 study, an Extended Phase 1 (XPI) study shall be conducted to determine the presence/absence and extent of archaeological resources on the project site. XPI testing should comprise a series of shovel test pits and/or hand augured units and/or mechanical trenching intended to establish the horizontal and vertical boundaries of archaeological site(s) on the project site. No archaeological resources would be collected during the XPI Investigation. If an archaeological site is identified, Mitigation Measure CUL-2(c) or CUL-2(d) shall be implemented.</p>	Metropolitan	Prior to construction	Metropolitan Qualified archaeologist

Mitigation Measure	Responsible Party	Timing of Implementation	Implementation Party
CUL-2(c) Avoidance of Archaeological Resources			
Identified prehistoric or historic archaeological resources shall be avoided and preserved in place, where feasible. Where avoidance and preservation in place is not feasible, additional measures shall be applied as identified in Mitigation Measure CUL-2(d) through CUL-2(g).	Metropolitan	Prior to and during construction activities	Metropolitan Qualified archaeologist Contractor
CUL-2(d) Phase 2 Archaeological Resources Investigation and Evaluation			
Where preservation is not feasible, each resource shall be evaluated for significance and eligibility for listing in the CRHR through a Phase 2 archaeological resource evaluation. A Phase 2 evaluation shall include any necessary archival research to identify significant historical associations as well as mapping of surface artifacts, collection of functionally or temporally diagnostic tools and debris, and excavation of a sample of the cultural deposit to characterize the nature of the sites, define the artifact and feature contents, determine horizontal boundaries and depth below surface, and retrieve representative samples of artifacts and other remains. A final Phase 2 Testing and Evaluation report shall be submitted to Metropolitan prior to any ground disturbing activities. Recommendations contained therein shall be implemented throughout all ground disturbance activities.	Metropolitan	Prior to construction activities	Metropolitan Qualified archaeologist Contractor
CUL-2(e) Phase 3 Archaeological Data Recovery Program			
If an archaeological resource meets the CRHR eligibility and cannot be avoided, Metropolitan shall implement a Phase 3 Archaeological Data Recovery Program, conducted to exhaust the data potential of significant archaeological sites. The Phase 3 Archaeological Data Recovery Program shall follow a research design prepared by a qualified archaeologist meeting the SOI PQS standards for archaeology and approved by Metropolitan in advance of Phase 3 fieldwork and excavations. The Phase 3 Data Recovery research design will use appropriate archaeological field and laboratory methods consistent with the California Office of Historic Preservation Planning Bulletin 5 (1991), Guidelines for Archaeological Research Design, or the latest edition thereof. The final Phase 3 Data Recovery report shall be submitted to Metropolitan prior to and any ground disturbing activities. Recommendations contained therein shall be incorporated into project design and implemented throughout all ground disturbance activities.	Metropolitan	Prior to construction activities	Metropolitan Qualified archaeologist Contractor

Mitigation Measure	Responsible Party	Timing of Implementation	Implementation Party
CUL-2(f) Processing and Curation of Archaeological Materials			
<p>Archaeological materials collected from the sites during the implementation of Mitigation Measures CUL-2(d) through CUL-2(e) shall be processed and analyzed in the laboratory according to standard archaeological procedures. The age of the materials shall be determined using radiocarbon dating and/or other appropriate procedures; lithic artifacts, faunal remains, and other cultural materials shall be identified and analyzed according to current professional standards. The significance of the sites shall be evaluated according to the criteria of the CRHR. The results of the investigations shall be presented in a technical report following the standards of the California Office of Historic Preservation publication “Archaeological Resource Management Reports: Recommended Content and Format (1990 or latest edition)”. Upon completion of the work, all artifacts, other cultural remains, records, photographs, and other documentation shall be curated an appropriate established curation facility based on the location of the fieldwork and/or repatriated to local Native Americans as appropriate. All fieldwork, analysis, report production, and curation shall be fully funded by Metropolitan.</p>	Metropolitan	Following implementation of MM CUL-2(d) and CUL-2(e)	Metropolitan Qualified archaeologist
CUL-2(g) Cultural Resources Monitoring			
<p>If recommended by Phase 1 (Mitigation Measure CUL-2(a)), XPI (Mitigation Measure CUL-2(b)), Phase 2 (Mitigation Measure CUL-2(d)), or Phase 3 (Mitigation Measure CUL-2(e)) studies, Metropolitan shall retain a qualified archaeologist to monitor project-related, ground-disturbing activities.</p>	Metropolitan	<ul style="list-style-type: none"> • Prior to ground-disturbing activities for retaining a qualified archaeologist • During project ground-disturbing activities for monitoring 	Metropolitan Qualified archaeologist
CUL-3 Previously Unidentified Resources Encountered During Construction			
<p>In the event that any potentially significant cultural resources are unexpectedly encountered during construction, work will be immediately halted, and the discovery shall be protected in place. A 50-foot buffer around the exposed resource shall be established until a qualified cultural resources specialist evaluates the discovery. If the qualified cultural resources specialist determines that the discovery represents a potentially significant cultural resource, including a potential historical resource, additional investigations may be required to mitigate adverse impacts from project implementation. This additional work may include avoidance, testing, and evaluation or data recovery excavation. Work shall be prohibited in the restricted area until Metropolitan provides written authorization.</p>	Metropolitan	During ground-disturbing activities	Metropolitan Qualified archaeologist Contractor
Noise			
NOI-1 Locate Excavation Sites Away from Noise-Sensitive Receivers, Where Feasible			
<p>Construction staging and activities shall be located in areas as far as practicable from sensitive receivers or in areas where receivers can be shielded from construction noise.</p>	Metropolitan	During construction	Metropolitan Contractor

Mitigation Measure	Responsible Party	Timing of Implementation	Implementation Party
NOI-2(a) Conduct Project-Level Noise Studies for Construction Activities Where Noise-Sensitive Receivers are Present			
<p>Project-level construction noise studies shall be conducted for project activities that would exceed the screening criteria for a less-than-significant impact, as summarized in Table 30 and Table 32 of the draft PEIR. Such noise studies shall identify the existing ambient noise levels, characterize the nearest sensitive receivers, estimate the noise levels receivers will experience during construction of individual projects, compare estimated noise levels to the local jurisdiction’s noise limits or to the construction noise criteria in the FTA (2018) <i>Transit Noise and Vibration Impact Assessment Manual</i> for those that do not have quantitative construction noise level limits, outline any measures that may be used to reduce noise levels, and determine the amount of noise reduction that would occur with implementation of these measures. If the project-level noise study concludes that noise reduction measures are required, Mitigation Measure NOI-2(b) shall be implemented.</p>	Metropolitan	Prior to construction	Metropolitan Qualified noise specialist Contractor
NOI-2(b) Implement Noise Reduction Measures			
<p>If the results of the noise study determine noise reduction measures are required, noise reduction measures shall be implemented. Construction noise reduction measures may include, but would not be limited to, the use of mufflers, sound blankets/barriers, and/or enclosures and scheduling construction activities to minimize simultaneous operation of noise-producing equipment. Construction noise measures shall be implemented to reduce noise levels to FTA (2018) construction noise criteria, as feasible.</p> <p>If the individual project would be constructed concurrently with development projects located within a 0.5-mile radius of the individual project location, the noise study shall also consider the cumulative impact of construction noise on sensitive receivers. If applicable, construction noise reduction measures shall be implemented to reduce cumulative noise levels to local jurisdiction or FTA (2018) construction noise criteria, as feasible.</p>	Metropolitan	During construction	Metropolitan Qualified noise specialist Contractor
NOI-2(c) Conduct Project-Level Noise Studies for Post-Construction Activities Where Noise Sensitive Receivers are Present			
<p>Prior to the commencement of construction activities for individual projects that may be implemented under the CAP where sensitive receivers are located within 1,000 feet of the individual project sites, project-level post-construction noise studies shall be conducted. Such noise studies shall identify the ambient noise levels, characterize the nearest sensitive receivers, estimate the noise levels receivers will experience during operation of individual projects during the post-construction period, compare estimated noise levels to the noise level standards of the applicable jurisdiction, outline any measures that may be used to reduce noise levels, and determine the amount of noise reduction that would occur with implementation of these measures. Noise reduction measures may include, but would not be limited to, alternative site design, alternative orientation of noise</p>	Metropolitan	Prior to the commencement of construction activities	Metropolitan Qualified noise specialist Contractor

Mitigation Measure	Responsible Party	Timing of Implementation	Implementation Party
sources, and construction of berms and/or barriers. Noise reduction measures shall be implemented to reduce noise levels to the noise level standards of the applicable jurisdiction, as feasible.			
NOI-3(a) Locate Excavation Sites Away from Vibration-Sensitive Receivers, Where Feasible			
Whenever practicable, vibration-generating equipment including bulldozers, loaded trucks, pile drivers/pneumatic post drivers, bore/drill rigs, vibratory rollers, and jackhammers shall operate outside the minimum distances specified in Table 33 of the draft PEIR for historic sites, other structures, and vibration-sensitive receivers during program construction activities. Furthermore, whenever practicable, vibration-generating equipment including bulldozers, loaded trucks, pile drivers/pneumatic post drivers, bore/drill rigs, vibratory rollers, and jackhammers shall not be operated concurrently with vibration-generating equipment associated with cumulative development projects located within 600 feet of program construction sites.	Metropolitan	During construction	Metropolitan Contractor
NOI-3(b) Conduct Project-Level Vibration Analysis for Construction Activities Where Vibration-Sensitive Receivers are Present			
<p>If operation of construction equipment outside the specified buffer distances is not practicable, a detailed study of vibration impacts shall be conducted prior to the commencement of construction for that project. Such vibration studies shall characterize the nearest historic sites, structures, and/or sensitive receivers; estimate the vibration levels receivers will experience during construction of individual projects; compare estimated vibration levels to applicable Caltrans (2020) standards for vibration impacts related to structural damage and human annoyance; outline any measures that may be used to reduce vibration levels; and determine the amount of vibration reduction that would occur with implementation of these measures. Vibration reduction measures may include, but would not be limited to, the use of non-vibratory equipment, vibration monitoring, and repair of structural damage. Construction vibration reduction measures shall be implemented to reduce vibration levels to Caltrans (2020) construction vibration thresholds as feasible.</p> <p>If the individual project would be constructed concurrently with cumulative development projects located within a 600-foot radius of the activity location, the vibration study shall also consider the cumulative impact of combined vibration levels at the nearest sensitive receivers by estimating the combined vibration levels receivers will experience during construction of individual projects and cumulative development; compare estimated vibration levels to applicable standards for vibration impacts related to structural damage and human annoyance described in the Caltrans (2020) <i>Transportation and Construction Vibration Guidance Manual</i> (CT-HWANP-RT-20-365.01.01); identify whether the individual project’s contribution to any identified cumulative impact would be cumulatively considerable; outline any measures that may be used to reduce the project’s contribution to combined vibration levels; and determine the amount of vibration</p>	Metropolitan	Prior to and during construction	Metropolitan Qualified noise specialist Contractor

Mitigation Measure	Responsible Party	Timing of Implementation	Implementation Party
<p>reduction that would occur with implementation of these measures. Such measures may include, but are not limited to, the installation of wave barriers, maximization of the distance between vibratory equipment and receivers, restriction of vibration-generating activities to daytime hours, or temporary relocation of affected residents. Construction vibration reduction measures shall be implemented to reduce cumulative vibration levels to Caltrans construction vibration thresholds as feasible.</p>			

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