

3.1 INTRODUCTION TO THE ERRATA

The Draft EIR for the Clean Water Factory Project dated April 2016, is hereby incorporated by reference as part of the Final EIR. Changes to the Draft EIR are further detailed below.

The changes to the Draft EIR do not affect the overall conclusions of the environmental document, and instead represent changes to the Draft EIR that provide clarification, amplification and/or insignificant modifications, as needed as a result of public comments on the Draft EIR, or due to additional information received during the public review period. These clarifications and corrections do not warrant Draft EIR recirculation pursuant to CEQA Guidelines Section 15088.5. None of the changes or information provided in the comments reflect a new significant environmental impact, a substantial increase in the severity of an environmental impact for which mitigation is not proposed, or a new feasible alternative or mitigation measure that would clearly lessen significant environmental impacts but is not adopted. In addition, the changes do not reflect a fundamentally flawed or conclusory Draft EIR.

Changes to the Draft EIR are listed by Section, page, paragraph, etc. to best guide the reader to the revision. Changes are identified as follows:

- Deletions are indicated by ~~strikeout text~~
- Additions are indicated by underline text

3.2 CHANGES TO THE DRAFT EIR

SECTION 1.0 EXECUTIVE SUMMARY

Page 1.0-5, Table 1.0-2, Summary of Impacts and Mitigation Measures

(See next page)

Table 1.0-2, Summary of Impacts and Mitigation Measures

Impact Statement	Significance	Mitigation Measure
Air Quality and Greenhouse Gas Emissions		
<p>Impact 4.3-1: Would the Project violate any air quality standard or contribute substantially to an existing or projected air quality violation?</p>	<p><u>Significant and Unavoidable Impact Less than Significant Impact with Mitigation Incorporated</u></p>	<p><u>AQ-4 The SBMWD will pay SCAQMD an offsite mitigation fee (mobile source emission reduction credits [MSERCs]) for construction activities, to be determined prior to construction, for the purpose of offsetting regional NO_x and localized PM₁₀ and PM_{2.5} emissions such that emissions are reduced to a less-than-significant level. The fee calculation to offset daily NO_x emissions is based on the SCAQMD-determined cost to reduce NO_x, and an assumed 264 construction work days during the first year of construction (the Draft EIR determined that emissions would be less than significant with the implementation of Mitigation Measures AQ-1 through AQ-3 in subsequent construction years). The payment and schedule will be negotiated between SCAQMD and SBMWD. Initial payment will be remitted to SCAQMD prior to groundbreaking. The final mitigation fee will be based on contractor equipment inventories provided by the SBMWD to SCAQMD and will reconcile any fee discrepancies due to schedule adjustments, and increased or decreased equipment inventories. Equipment inventories and NO_x emissions estimates for subsequent construction phases shall be coordinated with SCAQMD, and the offsite mitigation fee measure shall be assessed to any construction phase that would result in an exceedance of SCAQMD's mass emission threshold for NO_x, SCAQMD's localized emissions threshold for PM₁₀ and PM_{2.5}, and the federal de minimis threshold for NO_x. In addition, if necessary to meet SCAQMD thresholds for localized emissions, SBMWD will implement construction constraints (e.g., equipment or schedule changes) to ensure that emissions are below applicable SCAQMD thresholds.</u></p>
<p>Impact 4.3-2: Would the Project result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions</p>	<p><u>Significant and Unavoidable Impact Less than Significant Impact with Mitigation Incorporated</u></p>	<p>AQ-1 Refer to Impact 4.3-1 above. AQ-2 Refer to Impact 4.3-1 above. AQ-3 Refer to Impact 4.3-1 above. AQ-4 Refer to Impact 4.3-1 above.</p>

Impact Statement	Significance	Mitigation Measure
which exceed quantitative thresholds for ozone precursors)?		
Impact 4.3-3: Would the Project expose sensitive receptors to substantial pollutant concentrations?	Significant and Unavoidable Impact <u>Less than Significant Impact with Mitigation Incorporated</u>	AQ-1 Refer to Impact 4.3-1 above. AQ-2 Refer to Impact 4.3-1 above. AQ-3 Refer to Impact 4.3-1 above. <u>AQ-4 Refer to Impact 4.3-1 above.</u>
Impact 4.3-5: Would implementation of the proposed Project result in an exceedance of federal de minimis levels?	Less than Significant Impact with Mitigation Incorporated	AQ-1 Refer to Impact 4.3-1 above. AQ-2 Refer to Impact 4.3-1 above. AQ-3 Refer to Impact 4.3-1 above. <u>AQ-4 Refer to Impact 4.3-1 above.</u>
Impact 4.3-6: Would the Project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Less than Significant Impact with Mitigation Incorporated	GHG-1 To reduce Project-generated GHG emissions, the SBMWD may choose any combination of the following measures, as long as they result in net emissions below 10,000 MTCO ₂ eq/yr or the applicable significance threshold at the time of each subsequent construction phase. <u>Emissions reductions from the GHG reduction measures shall be documented and incorporated into the carbon footprint estimate within a GHG Emissions Reduction Plan. The GHG Emissions Reduction Plan shall be prepared by a qualified air quality specialist experienced in the preparation of such plans. The carbon footprint estimate for the proposed Project shall include consideration of all renewable energy that would directly be used by the Project in the form of kilowatt-hours per year, and shall describe the approximate GHG emissions reductions that will be associated with the use of the renewable energy. The GHG Emissions Reduction Plan shall demonstrate compliance with the applicable GHG emissions significance threshold.</u> <ul style="list-style-type: none"> • Reduce consumption of non-renewable energy. This can be accomplished by: <ul style="list-style-type: none"> ○ As advanced water treatment would be phased in, future GHG emissions factors (i.e., the carbon intensity from power generation) may decline due the implementation of the State’s Renewable Portfolio

Impact Statement	Significance	Mitigation Measure
		<p>Standards. Advanced water treatment can be limited to 13.83 MGD (reducing 15 MGD of advanced water treatment by 1.17 MGD) until it can be shown that GHG emissions from full project implementation would not exceed 10,000 MTCO₂eq/yr or applicable threshold at the time of project construction;</p> <ul style="list-style-type: none"> ○ Providing onsite renewable energy such as solar panels, or similar means to offset fossil fuel powered electricity generation; or ○ Purchasing GHG offsets.
<p>Cumulative Impacts (Air Quality and Greenhouse Gas Emissions) Would the Project result in cumulative impacts associated with implementation of the Clean Water Factory Project?</p>	<p>Significant and Unavoidable Impact <u>Less than Significant Impact with Mitigation Incorporated</u></p>	<p>AQ-1 Refer to Impact 4.3-1 above. AQ-2 Refer to Impact 4.3-1 above. AQ-3 Refer to Impact 4.3-1 above. <u>AQ-4 Refer to Impact 4.3-1 above.</u></p>
Biological Resources		
<p>Impact 4.4-1: Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service?</p>	<p>Less than Significant Impact with Mitigation Incorporated</p>	<p>BIO-8 The SBMWD shall work through the USACE to initiate consultation with USFWS under Section 7 consultation of the federal endangered species act (ESA) regarding the loss and adverse modification of Critical Habitats for southwestern willow flycatcher and Santa Ana sucker as required under the Federal Endangered Species Act. Regulatory requirements associated with the Section 7 Consultation will address impacts to federally listed species that may be harmed during the operational phase of the Project, including the Santa Ana sucker and least Bell's vireo, including any additional mitigation deemed necessary by the USFWS to ensure that Project impacts are not significant. SBMWD shall implement all conditions imposed on the Project as a result of consultation under the ESA.A. Incidental take authorization, either through the execution of the Upper Santa Ana River Habitat Conservation Plan or through other mechanisms, for the California Endangered Species Act and federal Endangered Species Act listed species shall be obtained by SBMWD before the Clean Water</p>

Impact Statement	Significance	Mitigation Measure
		<p><u>Factory reduction in discharge of 17.9 MGD of wastewater RIX shall occur.</u></p> <p><u>B. If incidental take authorization is obtained through a mechanism other than the Upper Santa Ana River Habitat Conservation Plan, SBMWD shall complete early consultation with the U.S. Fish and Wildlife Service and California Department of Fish and Wildlife (Wildlife Agencies) to facilitate the development of the Adaptive Management Plan required by Mitigation Measure BIO-7 that will address potential impacts to riparian habitat in the Santa Ana River and include specific thresholds and/or success criteria to protect fish and wildlife resources. The Wildlife Agencies shall approve the Adaptive Management Plan prior to any reduction in discharge to the Santa Ana River resulting from implementation of the Clean Water Factory project.</u></p>

Page 1.0-27, first paragraph

1.6 Significant and Unavoidable Environmental Impacts

The Project's potentially significant impacts are set forth in Sections 4.1 through 4.11 of this EIR. As noted in these sections, ~~most of the~~ potentially significant impacts identified can be mitigated to a less than significant level through implementation of feasible mitigation measures. ~~However, No~~ significant and unavoidable impacts would occur as a result of implementation of the proposed Project in the following areas:

~~Significant Unavoidable Adverse Impacts of the Proposed Project~~

- ~~▪ Regional Construction Related Emissions — Construction of the Project would exceed the SCAQMD daily emission threshold for regional NO_x after implementation of all feasible mitigation measures. Therefore, the construction of the Project would have a significant and unavoidable impact on regional air quality. Construction emissions would not exceed the SCAQMD significance threshold for ROG CO, SO_x, PM₁₀, and PM_{2.5}.~~
- ~~▪ Localized Construction Related Emission — Construction related emissions would exceed the SCAQMD localized significance thresholds for PM₁₀ and PM_{2.5} after implementation of all feasible mitigation measures. Therefore, construction would have a significant and unavoidable impact on localized air quality.~~
- ~~▪ Cumulative Construction Emissions — As described in Section 4.3, Air Quality and Greenhouse Gas, compliance with SCAQMD rules and implementation of Mitigation Measures AQ-1 through AQ-3 would minimize construction emissions from the proposed Project. However, despite the implementation of these mitigation measures, total construction impacts would not be reduced to a less than significant level (refer to Table 4.3-7, Maximum Daily Pollutant Emissions During Construction (Mitigated)). Therefore, the proposed Project would have a cumulative contribution to air emissions in the region and impacts would be cumulatively considerable in this regard.~~
- ~~▪ Santa Ana Sucker — The Project identifies a significant unavoidable impact to Santa Ana sucker. It is noted that even with the Project's full implementation of BIO-7, BIO-14, other EIR mitigation measures and Project Design Features noted herein, as well as ongoing SBMWD commitment and participation in the HCP, the sheer listing of Santa Ana sucker in the federal ESA, along with the RIX Phased Discharge Reduction, would result in a significant unavoidable impact to Santa Ana sucker.~~

Page 1.0-28 first complete paragraph

An analysis of cumulative impacts determined that ~~even~~ with the implementation of mitigation measures, significant and unavoidable cumulative environmental impacts would be less than significant ~~may occur~~ with regard to air quality, including impacts to climate change during Project construction. Therefore, construction of the proposed Project would have a cumulative contribution to air emissions in the region and impacts would be cumulatively considerable in this regard.

Page 1.0-28, under Alternative 1: No Project Alternative, second paragraph

~~The No Project Alternative would effectively avoid all potentially significant impacts identified for Project implementation. The No Project Alternative would not reduce dependence on imported water supplies and, as such, this alternative would likely still retain a significant unavoidable impact to air quality and greenhouse gases due to the large amount of energy required to transport imported water to the SBMWD~~

~~service area (refer to Section 4.3, *Air Quality and Greenhouse Gas Emissions*). The No Project Alternative would not achieve any of the Project's objectives outlined in Section 1.2, above.~~

Page 1.0-33, above Environmentally Superior Alternative

Alternative 9: Flow Mitigation Alternative

Under the Flow Mitigation Alternative (Alternative 9), SBMWD would utilize groundwater pumped from the existing wells at the RIX facility and new wells on the RIX facility property to replace the water diverted for recycling and maintain the flow at the RIX facility outfall at the volume necessary to keep project impacts less than significant (maintaining the RIX discharge at levels greater than, or equal to, the Phase 3 level, when necessary). The volume of water necessary to maintain continuous Santa Ana River surface flow (and habitat) varies significantly. As such, SBMWD would be required to monitor stream conditions on a regular basis in order to determine the volume of supplemental water necessary to maintain favorable stream conditions. SBMWD estimates that all thirty-three (33) existing wells at the RIX Facility, three existing wells (TW-1, PW-2, and PW-3) located on the RIX Facility expansion property, and one new well (PW-4) that is being added under the RIX Well Retrofit project (refer to Exhibit 6.0-2, *RIX Wells Retrofit Site Plan*) would be required to provide the supplemental water. All thirty-seven (37) wells are located in the City of Colton between Agua Mansa Road and the Santa Ana River, to the east of Riverside Avenue, and to the west of the Rialto Drain and draw from the Riverside Groundwater Basin, and specifically, from the Riverside-A Groundwater Management Zone (Riverside-A).

Alternative 9 would reduce the Project's impacts to the federally threatened Santa Ana sucker and associated Santa Ana River habitat and species as it would maintain substantially higher Santa Ana River flows. Alternative 9 would involve comparable construction-related impacts as the proposed Project and would fully achieve the Clean Water Factory Project Objectives. However, overall operating costs would increase due to the operation of additional wells at the RIX Facility. Refer to Section 6.0, *Alternatives to the Proposed Action*, for a detailed discussion of this alternative.

Page 1.0-33, under Environmentally Superior Alternative

ENVIRONMENTALLY SUPERIOR ALTERNATIVE

The Reduced Capacity Alternative (Alternative 3) is environmentally superior to the proposed Project.

The Hybrid Alternative (Alternative 7) would result in a slight reduction in impacts compared to the proposed Project, and is therefore, considered an environmentally superior alternative.

The Imported Water Supply Alternative (Alternative 5) is an environmentally superior alternative to the proposed Project. It also is environmentally superior when compared to the other alternatives evaluated herein, and therefore, is considered *the* environmentally superior alternative.

The Flow Mitigation Alternative (Alternative 9) is an environmentally superior alternative to the proposed Project.

SECTION 2.0 INTRODUCTION AND PURPOSE

Page 2.0-3, fourth paragraph, under 2.4 Notice of Preparation/Early Consultation

SBMWD filed a “Petition for Change for Owners of Waste Water Treatment Plants” with the State Water Resources Control Board (SWRCB) on April 22, 2010 (Petition revised June 7, 2010), pursuant to Water Code Section 1211 (and in accordance with Water Code Sections 461, 13500 *et seq.* and 13575 *et seq.*) to decrease current tertiary discharge from the Rapid Infiltration and Extraction Facility (RIX) to the Santa Ana River from approximately 35.7 mgd (40,000 acre-feet per year) to approximately 11.9 mgd (13,300 acre-feet per year).¹ The Petition for Change proposes the “reuse of recycled water in [SBMWD’s] service area and the marketing of surplus recycled water to water agencies outside the SBMWD service area.” The “change” that would result from approval of this Petition includes the “place of use” and the “purpose of use” of SBMWD’s existing and future effluent. The Petition elicited four response letters from stakeholders including the United States Fish and Wildlife Service, California Department of Fish and Wildlife (Formerly California Department of Fish and Game), the Center for Biological Diversity, and East Valley Water District. These letters requested, in part, that SBMWD formally analyze potential changes to discharge regimes and the resulting downstream impacts to the Santa Ana River. These comments helped to further refine the impact areas that would be analyzed as part of the environmental document and can be found in Appendix 10.2.2, Protests to Wastewater Change Petition WW0059 Appendix 10.1, Public Scoping.

Page 2.0-7, third paragraph, under Local and Regional Agencies

- County of San Bernardino Public Works Department
- San Bernardino Valley Municipal Water District
- East Valley Water District
- San Bernardino County Flood Control District
- South Coast Air Quality Management District
- Local Agencies (encroachment permits): City of San Bernardino, County of San Bernardino, City of Colton, County of Riverside
- San Bernardino Valley Water Conservation District
- City of Riverside

Draft EIR page 2.0-9 has been revised to incorporate a footnote to clarify the EIR’s inclusion of the 2016 RTP/SCS:

Southern California Association of Governments Regional Transportation Plan/Sustainable Communities Strategy Plan (2012)²

On April 4, 2012, SCAG’s Regional Council...

¹ City of San Bernardino Municipal Water Department, April 22, 2010, “Petition for Change: For Owners of Waste Water Treatment Plants” (WW0059).
http://www.waterboards.ca.gov/waterrights/water_issues/programs/applications/petitions/2010.shtml.
Accessed on March 1, 2012.

² The Draft EIR incorporates by reference and analyzes the Clean Water Factory Project’s consistency with the goals and policies identified under the 2012 RTP/SCS. It is noted that SCAG adopted the 2016 RTP/SCS in April 2016. The Project has been reviewed for its consistency with the goals and policies identified under the 2016 RTP/SCS, and no updates to the Draft EIR are necessary.

SECTION 3.0 PROJECT DESCRIPTION

Page 3.0-4, Footnote 2

The City of San Bernardino was dismissed pursuant to stipulated dismissals with other parties from the Orange County case. As a condition of dismissal, the City agreed to the physical solution ordered under the Judgment, and to perform on its April 10, 1969 agreement with Valley District to continue discharging at least 16,000 acre-feet of effluent each year from the City's treatment plants to the Santa Ana River. The Western Judgment requires that Valley District shall keep that 1969 agreement with the City in place. The City's obligation under its agreement with Valley District to discharge 16,000 acre-feet to the Santa Ana River can be met with discharge from either or both of SBMWD's wastewater treatment plants. The agreement does not require that the 16,000 acre-feet be discharged from the RIX Facility. If discharge were reduced at the RIX Facility below 16,000 acre-feet, the City would discharge sufficient wastewater from its Water Reclamation Plant (WRP) to ensure the minimum discharge obligation is fulfilled. The City currently discharges from the WRP in wet weather and during releases from Seven Oaks Dam, and will continue to do so, and such discharges are available to meet all discharge obligations.

SECTION 4.2 AESTHETICS, LIGHT, AND GLARE

Page 4.2-16, second paragraph, under Construction

Pipelines would be constructed from the SBWRP north to the Waterman Basins and East Twin Creek Spreading Grounds. Alternatively, pipelines may also be constructed from the ~~SBWRP~~ RIX Facility west to the Chino Basin. These pipelines would be installed underground and installation would occur within existing roadways and/or public rights-of-way. Conveyance system construction would require trenching and installation and would progress in a linear manner. Construction impacts would be temporary in nature, and would not result in impacts to aesthetics and scenic resources.

SECTION 4.3 AIR QUALITY AND GREENHOUSE GAS EMISSIONS

Page 4.3-27, Impact 4.3-1

Impact 4.3-1: Would implementation of the proposed Project result in an exceedance of federal de minimis levels? *Level of Significance: ~~Significant and Unavoidable Impact~~ Less Than Significant Impact with Mitigation Incorporated.*

Page 4.3-29, under Construction Exhaust Emissions

Exhaust emissions from construction activities include emissions associated with the transport of machinery and supplies to and from the Project site, emissions produced on site as the equipment is used, and emissions from trucks transporting materials to/from the site. The majority of construction equipment and vehicles would be diesel powered, which tends to be more efficient than gasoline-powered equipment. Diesel-powered equipment produces lower carbon monoxide and hydrocarbon emissions than gasoline equipment, but produces greater amounts of NO_x, SO_x, and particulates per hour of activity. The transportation of machinery, equipment and materials to and from the Project site, as well as construction worker trips, would also generate vehicle emissions during construction. As presented in Table 4.3-6, construction-related unmitigated NO_x emissions would result in a significant impact due to its contribution in forming ozone. As NO_x emissions are primarily generated by engine combustion in construction equipment, haul trucks, and employee commuting, requiring the use of newer construction equipment

with better emissions controls would reduce short-term NO_x emissions. Therefore, Mitigation Measure AQ-3 would require the Project to use diesel construction equipment that complies with Tier 3-level emissions standards during all construction phases. Tier 4 certified equipment is generally available and would reduce short-term NO_x emissions and these standards apply to new equipment. However, construction fleets typically include a mix of older and newer equipment and other non-Tier 4 equipment are still permitted to operate. Mitigation requiring all construction equipment to meet Tier 4 standards is not considered feasible because it means that the entire construction fleet would need to consist of new (or newly retrofitted) equipment. No other feasible mitigation measures exist that would reduce these emissions to levels that are less than significant. Despite the implementation of Mitigation Measure AQ-3, construction exhaust emissions would remain significant and unavoidable. Thus, in order to reduce construction emissions to less than significant, SBMWD would obtain the necessary off-set credits as outlined in Mitigation Measure AQ-4.

Page 4.3-30, under Total Daily Construction Emissions, second paragraph

As indicated in Table 4.3-6 and Table 4.3-7, NO_x emissions would exceed SCAQMD thresholds during construction. Implementation of Mitigation Measures AQ-1 through AQ-3 would lessen construction-related impacts by requiring measures to reduce air pollutant emissions from construction activities. These measures call for the maintenance of construction equipment, use of non-polluting and non-toxic building equipment, the use of Tier 3 engines, and minimizing fugitive dust. . . However, despite the implementation of Mitigation Measures AQ-1 through AQ-3, construction impacts would be significant and unavoidable. Thus, in order to reduce construction emissions to less than significant, SBMWD would obtain the necessary off-set credits as outlined in Mitigation Measure AQ-4.

Page 4.3-31

Water Reclamation Plant

As described above, construction activities at the Water Reclamation Plant, conveyance systems, and recharge sites would occur concurrently during the first phase. The future phased plant expansions would occur independent of the conveyance and recharge basin construction activities. The emissions modeling conservatively assumes that these various construction activities would occur concurrently. Emissions associated with each of these components are depicted in Table 4.3-6 and Table 4.3-7. As depicted in Table 4.3-7, construction emissions would be significant and unavoidable despite the implementation of Mitigation Measures AQ-1 through AQ-3. Thus, in order to reduce construction emissions to less than significant, SBMWD would obtain the necessary off-set credits as outlined in Mitigation Measure AQ-4.

Conveyance Systems

Emissions associated with the conveyance systems are depicted in Table 4.3-6 and Table 4.3-7. As depicted in Table 4.3-7, construction emissions would be significant and unavoidable despite the implementation of Mitigation Measures AQ-1 through AQ-3. Thus, in order to reduce construction emissions to less than significant, SBMWD would obtain the necessary off-set credits as outlined in Mitigation Measure AQ-4.

Recharge Sites

Emissions associated with the recharge sites are depicted in Table 4.3-6 and Table 4.3-7. As depicted in Table 4.3-7, construction emissions would be significant and unavoidable despite the implementation of Mitigation Measures AQ-1 through AQ-3. Thus, in order to reduce construction emissions to less than significant, SBMWD would obtain the necessary off-set credits as outlined in Mitigation Measure AQ-4.

Page 4.3-34, Mitigation Measures

AQ-4 The SBMWD will pay SCAQMD an offsite mitigation fee (mobile source emission reduction credits [MSERCs]) for construction activities, to be determined prior to construction, for the purpose of offsetting regional NO_x and localized PM₁₀ and PM_{2.5} emissions such that emissions are reduced to a less-than-significant level. The fee calculation to offset daily NO_x emissions is based on the SCAQMD-determined cost to reduce NO_x, and an assumed 264 construction work days during the first year of construction (the Draft EIR determined that emissions would be less than significant with the implementation of Mitigation Measures AQ-1 through AQ-3 in subsequent construction years). The payment and schedule will be negotiated between SCAQMD and SBMWD. Initial payment will be remitted to SCAQMD prior to groundbreaking. The final mitigation fee will be based on contractor equipment inventories provided by the SBMWD to SCAQMD and will reconcile any fee discrepancies due to schedule adjustments, and increased or decreased equipment inventories. Equipment inventories and NO_x emissions estimates for subsequent construction phases shall be coordinated with SCAQMD, and the offsite mitigation fee measure shall be assessed to any construction phase that would result in an exceedance of SCAQMD's mass emission threshold for NO_x, SCAQMD's localized emissions threshold for PM₁₀ and PM_{2.5}, and the federal de minimis threshold for NO_x. In addition, if necessary to meet SCAQMD thresholds for localized emissions, SBMWD will implement construction constraints (e.g., equipment or schedule changes) to ensure that emissions are below applicable SCAQMD thresholds.

Page 4.3-34, Impact 4.3-2

Impact 4.3-2: Would the Project result in a cumulatively considerable net increase of any criteria pollutant for which the air basin is in nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)? Level of Significance: ~~Significant and Unavoidable Impact Less Than Significant Impact with Mitigation Incorporated.~~

Page 4.3-34, beginning with Water Reclamation Plant**Water Reclamation Plant**

As described above, compliance with SCAQMD rules and implementation of Mitigation Measures AQ-1 through AQ-3 would minimize SBWRP construction emissions from the proposed Project. In addition, to reduce construction emissions to less than significant, SBMWD would obtain the necessary off-set credits as outlined in Mitigation Measure AQ-4. ~~However, despite the implementation of these mitigation measures, total construction impacts would not be reduced to a less than significant level (refer to Table 4.3-7, above).~~ Therefore, the proposed Project would not have a cumulative contribution to air emissions in the region and impacts would not be cumulatively considerable.

Conveyance Systems

As described above, compliance with SCAQMD rules and implementation of Mitigation Measures AQ-1 through AQ-3 would minimize conveyance system construction emissions from the proposed Project. In addition, to reduce construction emissions to less than significant, SBMWD would obtain the necessary off-set credits as outlined in Mitigation Measure AQ-4. ~~However, despite the implementation of these mitigation measures, total construction impacts would not be reduced to a less than significant level (refer to Table 4.3-7, above).~~ Therefore, the proposed Project would not have a cumulative contribution to air emissions in the region and impacts would not be cumulatively considerable.

Recharge Sites

As described above, compliance with SCAQMD rules and implementation of Mitigation Measures AQ-1 through AQ-3 would minimize recharge sites construction emissions from the proposed Project. In addition, to reduce construction emissions to less than significant, SBMWD would obtain the necessary off-set credits as outlined in Mitigation Measure AQ-4. ~~However, despite the implementation of these mitigation measures, total construction impacts would not be reduced to a less than significant level (refer to Table 4.3-7, above).~~ Therefore, the proposed Project would not have a cumulative contribution to air emissions in the region and impacts would not be cumulatively considerable.

Page 4.3-36, under Mitigation Measures

AQ-4 Refer to Impact 4.3-1 above.

Page 4.3-36, under Impact 4.3-3

Impact 4.3-3: Would the Project expose sensitive receptors to substantial pollutant concentrations? Level of Significance: Significant and Unavoidable Impact Less Than Significant Impact with Mitigation Incorporated.

Page 4.3-38, under Conveyance Systems

The closest sensitive receptors to the conveyance system would be the residences located along the various pipeline alignments or adjacent to a reservoir or pump station. As construction for these components could be located within the street and/or adjacent to existing residences, the 25 meter LST was used. It should be noted that the 25 meter LST is applicable for sensitive receptors located 25 meters away or less. Table 4.3-10, Conveyance Systems - Localized Significance of Emissions, depicts the mitigated construction-related emissions for NO_x, CO, PM₁₀, and PM_{2.5} compared to the LSTs for SRA 34, Central San Bernardino Valley. It should be noted that Table 4.3-10 uses the 1-acre LST threshold as pipeline construction would occur at a rate of approximately 300 to 500 feet per day (depending on location). Additionally, construction of the reservoirs would occur at separate locations (approximately 1 acre sites, each). As shown in Table 4.3-10, construction emissions would exceed the LSTs for PM₁₀ and PM_{2.5}, despite the implementation of Mitigation Measures AQ-1 through AQ-3. Mitigation Measures AQ-1 through AQ-3 require the implementation of dust control measures to reduce fugitive dust (PM₁₀ and PM_{2.5}) to the maximum extent practicable. These measures include compliance with SCAQMD Rules 403 and 402 (e.g., watering loose soils, cleaning track outs, covering stockpiles, preventing nuisances, etc.) as well as compliance with the State vehicle code that requires haul trucks to be covered. In addition, to reduce construction emissions to less than significant, SBMWD would obtain the necessary off-set credits as outlined in Mitigation Measure AQ-4. ~~There are no other feasible mitigation measures that would further reduce PM₁₀ and PM_{2.5} emissions or reduce emissions to a less than significant level.~~

Page 4.3-40, under Mitigation Measures

AQ-4 Refer to Impact 4.3-1 above.

Page 4.3-41, sixth paragraph, under Impact 4.3-5

Impact 4.3-5: Would implementation of the proposed Project result in an exceedance of federal de minimis levels? Level of Significance: Less Than Significant Impact with Mitigation Incorporated.

Construction- and Operations-related Impacts

Pursuant to State Water Resources Control Board (SWRCB) CEQA-Plus requirements, this analysis has been structured to illustrate how the proposed Project would meet the Federal Clean Air Act (FCAA) General Conformity requirements, as well as those set forth by the SCAQMD. As identified above, the Project site is located in the South Coast Air Basin (Basin), which is designated non-attainment for ozone and PM_{2.5}. Thus, the proposed Project is subject to a screening level general conformity analysis. As indicated in Table 4.3-12, Net Increase in Annual Emissions, the proposed action would ~~not~~ result in a net increase of emissions that would exceed applicable federal general conformity de minimis levels.

The purpose of a general conformity review is to ensure that federal actions (1) do not interfere with the emissions budgets in the SIPs; and (2) do not cause or contribute to new violations; do not increase the frequency or severity of existing violations; and (3) to ensure attainment and maintenance of the NAAQS. Because net increases in mitigated emissions attributable to the proposed Project would exceed federal de minimis levels during construction Year 1, implementation of the proposed Project would potentially conflict with the state implementation plan. As described above, Mitigation Measures AQ-1 through AQ-3 would be required to minimize construction related emissions. In addition, to reduce construction emissions to less than significant, SBMWD would obtain the necessary off-set credits as outlined in Mitigation Measure AQ-4. With implementation of Mitigation Measures AQ-1 through AQ-4, impacts would be less than significant. ~~However, despite the implementation of all feasible mitigation measures, construction emissions would exceed de minimis levels during Year 1. It should be noted that this exceedance from construction emissions would only occur during the first year of construction and construction emissions in subsequent years would be below de minimis thresholds. Air quality conformity and attainment are primarily influenced by long term (operational) emissions instead of short term construction emissions. Nonetheless, as project construction would exceed thresholds in Year 1 of construction, impacts would be significant despite the implementation of Mitigation Measures AQ-1 through AQ-3.~~

Page 4.3-43, under Mitigation Measures

- AQ-1** Refer to Impact 4.3-1 above.
- AQ-2** Refer to Impact 4.3-1 above.
- AQ-3** Refer to Impact 4.3-1 above.
- AQ-4** Refer to Impact 4.3-1 above.

Page 4.3-47, sixth paragraph

- GHG-1** To reduce Project-generated GHG emissions, the SBMWD may choose any combination of the following measures, as long as they result in net emissions below 10,000 MTCO₂eq/yr or the applicable significance threshold at the time of each subsequent construction phase. Emissions reductions from the GHG reduction measures shall be documented and incorporated into the carbon footprint estimate within a GHG Emissions Reduction Plan. The GHG Emissions Reduction Plan shall be prepared by a qualified air quality specialist experienced in the preparation of these plans. The carbon footprint estimate for the proposed Project shall include consideration of all renewable energy that would directly be used by the Project in the form of kilowatt-hours per year, and shall describe the approximate GHG emissions reductions

that will be associated with the use of the renewable energy. The GHG Emissions Reduction Plan shall demonstrate compliance with the applicable GHG emissions significance threshold.

- Reduce consumption of non-renewable energy. This can be accomplished by:
 - As advanced water treatment would be phased in, future GHG emissions factors (i.e., the carbon intensity from power generation) may decline due the implementation of the State’s Renewable Portfolio Standards. Advanced water treatment can be limited to 13.83 MGD (reducing 15 MGD of advanced water treatment by 1.17 MGD) until it can be shown that GHG emissions from full project implementation would not exceed 10,000 MTCO₂eq/yr or applicable threshold at the time of project construction;
 - Providing onsite renewable energy such as solar panels, or similar means to offset fossil fuel powered electricity generation; or
 - Purchasing GHG offsets.

Page 4.3-49, under Cumulative Impacts

Cumulative air quality and GHG impacts are discussed above under impact discussion 4.3-2 and 4.3-6, respectively. Planned or future projects in the area could consist of many types of development projects ranging from residential/commercial/industrial developments, to projects related to the proposed recharge project that may occur along the Santa Ana River that would include, but not be limited to, dam projects channel diversion projects, recycled water projects, and various maintenance and improvement projects along the Santa Ana River.

Concurrent construction of the proposed Project with other projects listed in Section 4.1, Environmental Analysis, of this EIR, would contribute to short-term, construction-related cumulative impacts. With respect to the proposed Project’s construction-period air quality emissions and cumulative Basin-wide conditions, the SCAQMD has developed strategies to reduce criteria pollutant emissions outlined in the 2012 AQMP pursuant to FCAA mandates. Based on SCAQMD rules and mandates, as well as the CEQA requirement that significant impacts be mitigated to the extent feasible, these same requirements (i.e., Rule 403 compliance, the implementation of all feasible mitigation measures, and compliance with adopted Air Quality Management Plan emissions control measures) would also be imposed on construction projects throughout the Basin, which would include related projects. ~~However, despite~~With the implementation of Mitigation Measures AQ-1 through ~~AQ-4~~AQ-3, total construction impacts would ~~not~~ be reduced to a less than significant level. Therefore, the proposed Project would not have a cumulative contribution to air emissions in the region and impacts would be less than significant cumulatively ~~considerable in this regard. No further mitigation is available to reduce the Project’s contribution to this cumulative impact.~~

Page 4.3-49, under Significant Unavoidable Impacts

4.3.6 Significant Unavoidable Impacts

~~Implementation of the proposed Project would result in a significant and unavoidable impact for the following areas:~~

- ~~▪ Regional Construction Related Emissions – Construction of the Project would exceed the SCAQMD daily emission threshold for regional NO_x after implementation of all feasible mitigation measures. Therefore, the construction of the Project would have a significant and unavoidable impact on~~

regional air quality. Construction emissions would not exceed the SCAQMD significance threshold for ROG-CO, SO_x, PM₁₀, and PM_{2.5}.

- ~~Localized Construction Related Emission~~ — Construction related emissions would exceed the SCAQMD localized significance thresholds for PM₁₀ and PM_{2.5} after implementation of all feasible mitigation measures. Therefore, construction would have a significant and unavoidable impact on localized significance air quality.
- ~~Cumulative Construction Emissions~~ — As described above, compliance with SCAQMD rules and implementation of Mitigation Measures AQ 1 through AQ 3 would minimize construction emissions from the proposed Project. However, despite the implementation of these mitigation measures, total construction impacts would not be reduced to a less than significant level (refer to Table 4.3-7, above). Therefore, the proposed Project would have a cumulative contribution to air emissions in the region and impacts would be cumulatively considerable in this regard.

If the Lead Agency approves the Project, the City shall be required to adopt findings of fact in accordance with Section 15091 of the CEQA Guidelines, as well as adopt a Statement of Overriding Considerations in accordance with Section 15093 of the CEQA Guidelines.

SECTION 4.4 BIOLOGICAL RESOURCES

Page 4.4-23, Table 4.4-2: Suitable Habitats and Potentially Occurring Sensitive Plant and Wildlife Species

Table 4.4-2: Suitable Habitats and Potentially Occurring Sensitive Plant and Wildlife Species

CDFW Sensitive Habitat					
Riversidean Alluvial Fan Sage Scrub	CDFW Sensitive Habitat	Considered a distinct and rare plant community found primarily on alluvial fans and flood plains along the southern bases of the Transverse Ranges and portions of the Peninsular Ranges in southern California. Relatively open vegetation type is adapted to periodic flooding and erosion and is comprised of an assortment of drought-deciduous shrubs and larger evergreen woody shrubs characteristic of both coastal sage scrub and chaparral communities.	No Yes	Absent.	<u>Present. Suitable habitat exists in the Waterman Basins.</u>
Southern Cottonwood Willow Riparian Forest	CDFW Sensitive Habitat	Dominated by cottonwood (<i>Populus</i> ssp.) and willow (<i>Salix</i> ssp.) trees and shrubs. Considered to be an early successional stage as both species are known to germinate almost exclusively on recently deposited or exposed alluvial soils.	No	Absent.	

Southern Riparian Scrub	Riparian	CDFW Sensitive Habitat	Riparian zones dominated by small trees or shrubs, lacking taller riparian trees.	No Yes	Absent. <u>Present.</u> Suitable habitat exists in the Waterman Basins and East Twin Creek Spreading Grounds.
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Page 4.4-72, under Mitigation Measures

BIO-7 Adaptive Management Plan. Prior to any Project-related reduction in RIX discharge that will result in greater than a 10% reduction in available Santa Ana sucker habitat in any study reach, as predicted by the Low Flow Study performed for this EIR, the San Bernardino Municipal Water Department (SBMWD) shall develop and implement an adaptive management program (AMP) for that will provide the long-term management of the relevant reaches of the Santa Ana River, the adjacent riparian habitats, the Santa Ana sucker and its aquatic habitat. The AMP is intended to monitor and protect the Santa Ana River, its in-stream habitats and the adjacent additional riparian habitat and, by extension, protect the species that inhabit these two habitat types. The primary goal of the AMP will be to monitor the response of these two habitats to the Project and, implement adaptive management measures, as required, to correct changes that could result in adverse effects to Santa Ana suckers or their habitat. The plan will monitor current and future biologic conditions, changes in substrate and hydrologic conditions, as well as track the success of habitat improvements with the goal of improving habitat conditions in the river by gathering and documenting baseline data during the first year of AMP implementation prior to the start of planned RIX discharge reductions. Conditions to be monitored include river depths and widths, flow rates, interaction of groundwater and its contribution to river flows, substrate, and suitable sucker habitat.

The AMP will include a rigorous ~~hydrologic and biological~~ monitoring program for the upper reaches of the Santa Ana River that will track Project-related changes in hydrologic conditions, including interactions with groundwater contributions, substrate and sediment transport, and available sucker habitat, and compare those changes against ~~the observed changes in baseline conditions, with particular emphasis on~~ the distribution and population densities of Santa Ana sucker in the river. As part of developing a final AMP, SBMWD will work with USFWS to identify key habitat features for each life stage and determine how to monitor these features. The correlation and analysis of the changes in hydrology and sediment transport against sucker habitat characteristic and population variations will provide the foundation for the AMP and will contribute to the broader regional strategy for Santa Ana sucker conservation and recovery, as well as establishing/adjusting long-term management goals for the Santa Ana River and its aquatic and riparian habitats in a comprehensive manner.

Specifically, the AMP will be designed to monitor river hydrology, sediment transport, and sucker habitats in order to document annual changes in hydrology, aquatic and riparian habitats, as well as changes in Santa Ana sucker distribution, population densities, and to respond to any documented Project-related change that exceeds the expected baseline range of variability developed for the riverine environment, suitable sucker habitat and riparian habitat, so that the Project does not result in adverse effects to Santa Ana suckers or their habitat. An acceptable range of variability for physical and biological conditions will be developed in consultation with the USFWS, to protect the Santa Ana River, its associated habitats and sensitive plant and wildlife species. Any variation that falls outside of the adopted

acceptable range will require assessment and implementation of necessary corrective action. Responses to variations may include but are not limited to:

- Increase discharge rate.
- Provide pulses of high discharge levels to facilitate sediment removal following storm events.
- Increase available sucker habitat through microhabitat enhancements to increase scour in the streambed such as boulder seeding, variation in flow rates, including the use of high pulses of discharge to accelerate scouring, as well as the creation of deep pools or refuge areas.
- Provide supplemental water to provide local thermal refuge when water temperatures exceed 85 degrees.
- Provide exotic weed management for decline in the function of native riparian plant communities.
- Provide supplemental water to maintain or enhance the aerial extent and health of riparian habitat with the Study Reaches, as well as further downstream to Prado Basin.

The AMP shall include the following:

- Baseline conditions for flows, river depths, stream width, substrate characteristics, sediment transport, location of riparian vegetation and species.
 - Baseline information on Santa Ana ~~Sucker~~sucker populations will provide a description of the current range of variability in fish densities and a description of how that density relates to factors such as flow, average annual temperature, and the extent of coarse substrate in the river and available sediment transport mechanisms.
- Identification of current areas where cooler water provides thermal refuge from high summer temperatures;
- Monitoring protocols, including schedule and annual report requirements;
 - Monitoring protocols will be developed using standard methods. If possible, these protocols should be consistent enough with existing collection/monitoring protocols to provide data continuity.
- Ecological performance standards, based on the best available science and including specifications for:
 - Hydrologic performance standards, including but not limited to: changes in river depth, stream width, percent cobble and/or sand; clearing sand between the RIX facility and Riverside Avenue following storm events;
 - Sediment transport standards, including but not limited to: required discharge rates to effectively remove sand depositions following storm events;
 - Biological performance standards, including but not limited to: changes in adult and juvenile habitat within the three study reaches; shifts in sucker population within the study reaches; changes in population size by study reach; changes in extent of riparian habitat; changes in extent of each riparian plant community type;

- Corrective measures if performance standards are not met;
- Responsible parties for monitoring and preparing reports;
- Responsible parties for receiving and reviewing reports and for verifying success or prescribing implementation or corrective actions.

The AMP will remain in effect for as long as ~~the RIX~~ there are reductions in discharge, as a result of from RIX directly attributable to the Project, remains at or below 38.4 cfs, or until no longer necessary as documented by lack of adverse impacts to Santa Ana sucker, as determined by applicable regulatory agencies.

BIO-8

~~The SBMWD shall work through the USACE to initiate consultation with USFWS under Section 7 consultation of the federal endangered species act (ESA) regarding the loss and adverse modification of Critical Habitats for southwestern willow flycatcher and Santa Ana sucker as required under the Federal Endangered Species Act. Regulatory requirements associated with the Section 7 Consultation will address impacts to federally listed species that may be harmed during the operational phase of the Project, including the Santa Ana sucker and least Bell's vireo, including any additional mitigation deemed necessary by the USFWS to ensure that Project impacts are not significant. SBMWD shall implement all conditions imposed on the Project as a result of consultation under the ESA.~~ **A. Incidental take authorization, either through the execution of the Upper Santa Ana River Habitat Conservation Plan or through other mechanisms, for the California Endangered Species Act and federal Endangered Species Act listed species shall be obtained by SBMWD before the Clean Water Factory reduction in discharge of 17.9 MGD of wastewater RIX shall occur.**

B. If incidental take authorization is obtained through a mechanism other than the Upper Santa Ana River Habitat Conservation Plan, SBMWD shall complete early consultation with the U.S. Fish and Wildlife Service and California Department of Fish and Wildlife (Wildlife Agencies) to facilitate the development of the Adaptive Management Plan required by Mitigation Measure BIO-7 that will address potential impacts to riparian habitat in the Santa Ana River and include specific thresholds and/or success criteria to protect fish and wildlife resources. The Wildlife Agencies shall approve the Adaptive Management Plan prior to any reduction in discharge to the Santa Ana River resulting from implementation of the Clean Water Factory project.

Page 4.4-74, under Least Bell's Vireo/Southwester Willow Flycatcher

As described above, Least Bell's vireo has a potential to occur on the Project site and in the riparian habitats downstream of the Santa Ana River, and designated Critical Habitat for Southwestern willow flycatcher occurs within the Project site. It should be noted that Southwestern willow flycatcher is not present along the Santa Ana River; however, Project implementation could result in the loss or adverse modification of designated Critical Habitat for the species. The phased reduction in flows from RIX would result in loss to wetted width in the Santa Ana River (less than 5% for Reaches 1 and 3 for all five phases and up to 13% through Phase 5 for Reach 2). This change is within the range of natural variation, and thus is expected to have a less than significant effect on the riparian plant community. However, any identified impact on the riparian habitats along the Santa Ana River could have an impact on the avian species that forage and nest within these riparian habitats, in particular, Least Bell's vireo and Southwestern willow flycatcher.

Mitigation Measures BIO-4, BIO-6, BIO-7, BIO-9, BIO-10, and BIO-11 would mitigate impacts to Least Bell's vireo and Southwestern willow flycatcher to a less than significant level.

Page 4.4-77, sixth paragraph

The Inland Empire Utilities Agency (IEUA) and Chino Basin Watermaster developed the 2016 Adaptive Management Plan for the Prado Basin Habitat Sustainability Program (2016 AMP) to monitor the impacts of pumping the Chino Desalter well field to create hydraulic control of the Chino Basin on the Prado Basin water levels along its northern margin ~~is in the process of implementing biological monitoring and adaptive management program for Prado Basin for ensuring that riparian habitats in the basin, as well as the upstream riparian areas, are not affected by groundwater pumping.~~ Implementation of the Prado AMP is the responsibility of the Chino Basin Watermaster. Mitigation Measure BIO-7 will seek to coordinate results gathered by IEUA ~~the Chino Basin Watermaster~~ with the SBMWD's long-term monitoring efforts for riparian habitats in Study Reaches 1 through 3, as well as any required adaptive management measures needed to address potential impacts to Santa Ana sucker habitats in the Santa Ana River. Mitigation Measure BIO-8 would require Section 7 consultation with the USFWS in conjunction with Clean Water Act permitting (Section 404).

SECTION 4.7 HYDROLOGY AND WATER QUALITY**Page 4.7-23, second paragraph, under RIX Phased Discharge Reduction**

The RIX tertiary treatment facility is located approximately four miles southwest of the SBWRP along the Santa Ana River. The discharge from the RIX Facility into the Santa Ana River would be gradually reduced over a period of 15 to 20 years, to minimize impacts to the River's hydrology. As noted in Table 3.0-1, Summary of Project Components in the Project Description, discharge into the Santa Ana River would be reduced from 53.0 cfs to 20.8 cfs. SBMWD recognizes that other water agencies are considering projects that, if approved, could also reduce flows to the Santa Ana River along the Study Reaches. However, ~~for the reasons stated below,~~ the volume of discharge reduction proposed by the Clean Water Factory Project and analyzed in this EIR is considered to represent the cumulative worst-case condition for potential future wastewater treatment plant discharge reductions in the Study Reaches, inclusive of other Projects.

Page 4.7-29, sixth paragraph, under Operations-related Impacts

Advanced treatment processes, beyond tertiary treatment, would include various combinations of methods, including Membrane Bioreactor (MBR), Micro Filtration/Ultrafiltration (MF/UF), Nano Filtration (NF), Reverse Osmosis (RO), and Advanced Oxidation Process (AOP). The advanced treated water would then be delivered to the recharge basins for groundwater recharge, and ultimately indirect potable reuse. Groundwater recharge is proposed at the existing Waterman Recharge Basins and East Twin Creek Spreading Grounds, as well as the Chino basins. If the Chino Basin was selected for groundwater recharge, it would be the responsibility of the Inland Empire Utilities Agency (IEUA) to assess the potential impacts of accepting water supplies produced under the proposed Project, if needed. This is standard practice for supply wheeling between agencies.

SECTION 5.0 OTHER CEQA CONSIDERATIONS**Page 5.0-6, under Significant Unavoidable Environmental Effects, Project Impacts**

Implementation of the proposed Project would not result in a significant and unavoidable impacts. ~~for the following Air Quality and Greenhouse Gas Emissions areas:~~

- ~~▪ **Regional Construction Related Emissions** — Construction of the project would exceed the SCAQMD daily emission threshold for regional NO_x after implementation of all feasible mitigation measures.~~

Therefore, the construction of the project would have a significant and unavoidable impact on regional air quality. Construction emissions would not exceed the SCAQMD significance threshold for ROG-CO, SO_x, PM₁₀, and PM_{2.5}.

- ~~**Localized Construction Related Emission**~~ — Construction-related emissions would exceed the SCAQMD localized significance thresholds for PM₁₀ and PM_{2.5} after implementation of all feasible mitigation measures. Therefore, construction would have a significant and unavoidable impact on localized air quality.
- ~~**Cumulative Construction Emissions**~~ — As described in Section 4.3, Air Quality and Greenhouse Gas Emissions, compliance with SCAQMD rules and implementation of Mitigation Measures AQ-1 through AQ-3 would minimize construction emissions from the proposed Project. However, despite the implementation of these mitigation measures, total construction impacts would not be reduced to a less than significant level (refer to Air Quality and Greenhouse Gas Emissions, Table 4.3-7). Therefore, the proposed Project would have a cumulative contribution to air emissions in the region and impacts would be cumulatively considerable in this regard.

If SBMWD approves the Clean Water Factory Project, SBMWD would be required to cite their findings in accordance with Section 15091 of CEQA and prepare a Statement of Overriding Considerations in accordance with Section 15093 of CEQA. Refer to Section 6.0, Alternatives to the Proposed Action, for a discussion of alternatives that could reduce potential unavoidable significant impacts. The Project itself represents a local, alternative water supply source for SBMWD and its service area, which reduces dependence on imported water supplies. From an air quality and GHG perspective, the Project is far superior to imported water in terms of energy required to produce and convey the water, and therefore has considerably less indirect emissions than imported water. It should also be noted that cumulative air quality and GHG emissions are regulated by SCAQMD (construction emissions, stationary emissions, and related regulations) and by the Air Resources Board (including mobile vehicle emissions and CAAQS).

SECTION 6.0 ALTERNATIVES

Page 6.0-1, under Significant Unavoidable Adverse Impacts of the Proposed Project

The Project's potentially significant impacts are set forth in Sections 4.2 through 4.11 of this EIR. As noted in these sections, most of the potentially significant impacts identified can be mitigated to a less than significant level through implementation of feasible mitigation measures. However, No significant and unavoidable impacts could would occur as a result of implementation of the proposed Project, in the following Air Quality and Greenhouse Gas Emissions areas:

- ~~**Regional Construction Related Emissions**~~ — Construction of the Project would exceed the SCAQMD daily emission threshold for regional NO_x after implementation of all feasible mitigation measures. Therefore, the construction of the Project would have a significant and unavoidable impact on regional air quality. Construction emissions would not exceed the SCAQMD significance threshold for ROG-CO, SO_x, PM₁₀, and PM_{2.5}.
- ~~**Localized Construction Related Emission**~~ — Construction-related emissions would exceed the SCAQMD localized significance thresholds for PM₁₀ and PM_{2.5} after implementation of all feasible mitigation measures. Therefore, construction would have a significant and unavoidable impact on localized air quality.

- ~~■ **Cumulative Construction Emissions** — As described in Section 4.3, Air Quality and Greenhouse Gas Emissions, compliance with SCAQMD rules and implementation of Mitigation Measures AQ 1 through AQ 4 would minimize construction emissions from the proposed Project. However, despite the implementation of these mitigation measures, total construction impacts would not be reduced to a less than significant level (refer to Table 4.3-7, Maximum Daily Pollutant Emissions During Construction (Mitigated)). Therefore, the proposed Project would have a cumulative contribution to air emissions in the region and impacts would be cumulatively considerable in this regard.~~
- ~~■ **Santa Ana sucker** — The Project identifies a significant unavoidable impact to Santa Ana sucker. It is noted that even with the Project's full implementation of BIO-7, BIO-14, other EIR mitigation measures and Project Design Features noted herein, as well as ongoing SBMWD commitment and participation in the HCP, the sheer listing of Santa Ana sucker in the federal ESA, along with the RIX Phased Discharge Reduction, would result in a significant unavoidable impact to Santa Ana sucker.~~

Page 6.0-3, under Alternatives to the Proposed Project

Based on the purpose of the alternatives analysis as described above, and as prescribed in Section 15126.6 of the State CEQA Guidelines, the following alternatives were selected by SBMWD for evaluation in the EIR.

- Alternative 1: No Project Alternative (rejected from further consideration)
- Alternative 2: Increased Conservation Alternative
- Alternative 3: Reduced Capacity Alternative
- Alternative 4: Project Variations Under Consideration
- Alternative 5: Imported Water Supply Alternative
- Alternative 6: In Lieu Water Supply Alternative
- Alternative 7: Hybrid Alternative
- Alternative 8: Regional Partnership Alternative
- Alternative 9: Flow Mitigation Alternative

Page 6.0-7, first paragraph, under Conclusion

The No Project Alternative would effectively avoid all potentially significant impacts identified for Project implementation. However, the No Project Alternative would not achieve any of the Project's objectives outlined in Section 6.2, above. The No Project Alternative would not reduce dependence on imported water supplies, and, as such, this alternative would likely still retain a significant unavoidable impact to air quality and greenhouse gases due to the large amount of energy required to transport imported water to the SBMWD service area (refer to Section 4.3, Air Quality and Greenhouse Gas Emissions). Additionally, this Alternative would not assist SBMWD in increasing local groundwater storage within the Bunker Hill Groundwater Basin.

Page 6.0-12, second paragraph, under Alabama Street Effluent Pipeline and Redlands Recharge Basin

The Alabama Street Effluent Pipeline would transport water from the SBWRP to the Redlands Recharge Basin. This corridor is approximately 6 miles long and would traverse existing street right-of-way and easement areas, and portions of the SBIA in a west to east fashion, starting at East Dumas Street to South Waterman Avenue, then proceeding to East Central Avenue, along an easement to the SBIA as the pipeline

travels in an easterly direction to terminate at the Redlands Recharge Basin on Alabama Street. The existing pipeline may require replacement or rehabilitation, such as pipe bursting, slip lining, or repairs. The condition of the pipeline along with verification of the pipe's pressure class will need to be assessed to ensure that any additional pumping pressure will not affect the pipeline's integrity. Additional temporary construction easements may also be required in specific areas should repairs/replacement be required. The pipeline has existing turnouts into the Santa Ana River which would be retained in order to allow for potential Santa Ana River recharge. An approximately 200-foot section would traverse undeveloped land within the San Bernardino International Airport Authority (SBIAA) habitat conservation area. This area is subject to a Conservation Management Plan (CMP), and encompasses a portion of the eastern and southeastern airport property that was dedicated when the U.S. Air Force initiated the process of closing Norton Air Force Base and transferring operations and ultimately ownership of the Base airport facilities to the SBIAA. The CMP identifies three management areas: Core Management Area-1 (CMA-1); Core Management Area-2 (CMA-2); and Open Space Management Area-1 (OSMA-1). The 200-foot segment would border the southern boundaries of CMA-1 and OSMA-1. As such, any construction or staging associated with this segment would require coordination with the SBIAA and United States Fish and Wildlife Service (USFWS), and, if necessary, this relatively short pipeline section may be constructed using jack and bore or other trenchless construction methods to avoid sensitive habitat.²

Page 6.0-24, first paragraph, under Conclusion

This alternative would reduce the Project's potential impacts to the federally endangered Santa Ana sucker and associated habitat and species in the Santa Ana River; however, under the proposed Project these impacts would be phased, monitored and fully mitigated to less than significant levels as discussed in the EIR Section 4.4, *Biological Resources*. In addition, this alternative's potential reduction in the Project's Santa Ana River impacts would be offset by this alternative's contribution toward impacting biologically sensitive habitat and species in other surface water sources such as the Sacramento-San Joaquin Delta. This alternative could reduce the Project's ~~unavoidable significant impacts of construction-related greenhouse gas emissions (and other impacts related to the Project's physical construction footprint)~~ due to overall reduced construction and avoiding the more GHG-intensive advanced water treatment components of the Project. ~~However, the Project's air quality and GHG impacts would not be avoided and would likely remain significant, due to the various improvements anticipated to be required to convey, store, recharge and/or pump the imported water to SBMWD end users, as well as the additional GHG impact of conveying imported water long distances, especially if the source water is SWP.~~

Page 6.0-26, before 6.5 Environmentally Superior Alternative, a new alternative is added

Alternative 9 – Flow Mitigation Alternative

The proposed Project includes a number of phases that would be incrementally implemented in order to reduce impacts to the Santa Ana River hydrology. As such, a phased approach, including various "Reduced Capacity" scenarios, is analyzed across all impact areas throughout the EIR. The Project proposes reducing the RIX discharge into the Santa Ana River over five phases that span a total of 20 years. As noted in Table 6.0-1, *Proposed RIX Discharge Phased Reduction Scenarios*, the gradual reduction of the RIX discharge and increase in advanced treated water for both direct use and indirect potable reuse would allow for a reduced capacity alternative to the proposed Project, as described in Alternative 3; however, under the Flow

² Note: SBMWD has included this recycled water recharge option consistent with regional recycled water stakeholder discussions. The actual recharge location and end user extraction would be the responsibility of the appropriate municipal entity with recharge authority over the affected basin.

Mitigation Alternative (Alternative 9), SBMWD would utilize groundwater pumped from the existing wells at the RIX facility and new wells on the RIX facility property to replace the water diverted for recycling and maintain the flow at the RIX facility outfall at the volume necessary to keep project impacts less than significant (maintaining the RIX discharge at levels greater than, or equal to, the Phase 3 level, when necessary). The impact of this alternative (resulting in less reduction in RIX discharge) is addressed in detail within the Draft EIR, particularly biological resources and hydrology (Sections 4.4 and 4.7 of the Draft EIR, respectively).³

The volume of water necessary to maintain continuous surface flow in the Santa Ana River, specifically from the RIX outfall to approximately 3,340 feet downstream of Riverside Avenue, varies based upon river infiltration, location and magnitude of municipal groundwater production, groundwater levels, river base flow, upstream discharges, seasonal variability, climate conditions, etc. Under this alternative, SBMWD would augment the RIX discharge with groundwater pumped from the RIX facility during normal extraction operations (historically, the RIX facility has over-extracted as much as 12.6 MGD, or 19.5 cfs, on an annual basis [1998]), and from wells located outside of the influence of the wastewater infiltration basins⁴ (the retrofitted, or supplemental, wells' capacity is currently estimated at 11 MGD, or 17 cfs), in order to offset the volume of wastewater diverted for recycling. Since the volume of water necessary to maintain adequate surface flow (and habitat) varies significantly, SBMWD proposes to monitor stream conditions on a regular basis, either by taking field measurements or by utilizing installed USGS stream gauges, when flow is sufficient, to determine the volume of supplemental water, necessary to maintain favorable stream conditions.

Table 6.0-1: Proposed RIX Discharge Phased Reduction Scenarios

Source	Baseline ²	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Zero ³
RIX	<u>53.0 cfs/ 34.3 MGD</u>	<u>44.9 cfs/ 29.0 MGD</u>	<u>38.4 cfs/ 24.8 MGD</u>	<u>32.2 cfs/ 20.8 MGD</u>	<u>26.3 cfs/ 17.0 MGD</u>	<u>20.8 cfs/ 13.4 MGD</u>	<u>0</u>
Rialto Drain	<u>9.5 cfs /6.1 MGD</u>						
Model SAR Input	<u>62.5 cfs/ 40.4 MGD</u>	<u>54.4 cfs/ 35.2 MGD</u>	<u>47.9 cfs/ 31.0 MGD</u>	<u>41.7 cfs/ 27.0 MGD</u>	<u>35.8 cfs/ 23.1 MGD</u>	<u>30.3 cfs/ 19.6 MGD</u>	<u>9.5 cfs/ 6.1 MGD</u>
cfs = cubic feet per second, SAR=Santa Ana River							
Notes:							
1. The Project assumes phased discharge reduction approach, with additional reductions in discharge occurring every five years.							
2. For the model, baseline discharge was based on average RIX discharge measured on October 18-19, 2012. Average discharge was approximately 53 cfs. Annual RIX discharge has varied from 55.7 cfs in 2010 to 48.4 cfs in 2013.							

³ The Draft EIR addresses several Project phases, including a Phase 3 scenario. As discussed in the Draft EIR (Sections 4.4 and 4.7), Phase 3 implementation would not have any significant biological resource impacts. Although this Alternative reduces the Project's individual and cumulative impact to the Santa Ana River Study Reaches, neither the Project nor the Flow Mitigation Alternative would result in significant Project impacts or "cumulatively considerable" cumulative impacts.

⁴ SBMWD is undertaking the "Retrofit of RIX Expansion Project Test Wells into Production Wells" (also referred to as the RIX Well Retrofit) project to equip the three test wells located on the southwest finger of the RIX facility property (slated for expansion) as production wells, construct a fourth new well, and connect the wells (via a new pipeline) to an existing pipeline that leads to the RIX outfall. The well system is to be connected to the RIX Security and Supervisory Control and Data Acquisition (SCADA) systems so that their operation is interlocked with the RIX operations (triggered to start at the initiation of a RIX shutdown). An emergency generator (approximately 750 HP) will be installed to provide power in the event of the loss of utility power.

Source	Baseline ²	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Zero ³
3.	<u>The Zero scenario assumes a RIX shutdown, for instance for maintenance, in which case all discharge would come from the Rialto Drain, and a total flow volume of 9.5 cfs is used as a model assumption.</u>						
Source: City of San Bernardino Municipal Water Department 2015.							

Assumptions and Concepts⁵

- Upgrade of the SBWRP to realize 33 MGD design capacity, implemented to meet long-term treatment needs related to growth. Construction of the conveyance pipelines, pump stations, and recharge facilities would still be required.
- RIX discharge would be partially reduced; however, the actual amount of reduction will vary based upon stream conditions, and water not used for recycled water supply would be discharged into the River as it is currently. This would significantly reduce potential adverse effects on the Santa Ana River, although Project impacts are anticipated to be mitigated to less than significant levels (refer to Draft EIR Section 4.4, *Biological Resources*).
- All mitigation measures identified for the Project would apply to, and be required for, the Flow Mitigation Alternative.

Relationship of Flow Mitigation Alternative to Project objectives:

- **Reduce SBMWD's dependence on imported water and establish a reliable, sustainable source of potable water:** The Flow Mitigation Alternative would fulfill the objective of reducing dependence on imported water and establishing a reliable, sustainable source of potable water to the same extent as the Project.
- **Reduce the need for SWP water to replenish local groundwater basins by providing an alternate source of recycled, Title 22 treated water:** The Flow Mitigation Alternative's ability to fulfill the objective of providing an alternate recycled, Title 22 water supply source would be comparable to that of the Project.
- **Maximize the availability of recycled water to local users:** The Flow Mitigation Alternative would fulfill the objective to maximize the availability of recycled water to the same extent as the Project.
- **Allow SBMWD to effectively address the obligations of the Western Judgment:** The Flow Mitigation Alternative would enable SBMWD to address the obligations of the Western Judgment to the same extent as the Project.
- **Minimize risk to existing and potential future supply reliability and system operations associated with imported water, regulatory requirements, and other factors:** The Flow Mitigation Alternative would minimize risk to existing and potential future supply reliability and system operations associated with imported water, regulatory requirements, and other factors in a manner comparable to the Project.

Conclusion

By maintaining substantially higher flows in the Santa Ana River, this alternative would reduce the Project's potential impacts to the federally threatened Santa Ana sucker and associated habitat and species in the Santa Ana River. The Santa Ana sucker would also be expected to benefit from the introduction of cooler groundwater. While the Flow Mitigation Alternative would reduce impacts on the Santa Ana River, conveyance infrastructure would still be required and as such, construction impacts would largely remain

⁵ All references to UWMP figures are based on Projected Single-Dry year Supplies and Demand for 2035, unless otherwise indicated.

the same as the proposed Project. The Flow Mitigation Alternative would fully achieve the Project Objectives as successfully as the full-scale Project; however, overall operating costs will increase as a result of operating additional wells at the RIX facility.

Hydrology and Water Quality

Compared to the proposed Project, the Flow Mitigation Alternative would involve the same construction activities; thus, the alternative would not reduce the hydrology and water quality impacts related to construction of conveyance facilities from the SBWRP to the recharge facilities and/or direct use sites. The already less than significant construction-related impacts to hydrology and water quality identified by the proposed Project would therefore be similar under this Alternative.

The wells that are proposed to provide the supplemental water are the thirty-three (33) existing wells within the RIX facility that are used during normal RIX operations, three existing wells (TW-1, PW-2, and PW-3) located on the RIX facility expansion property that are under development and are being equipped under the RIX Well Retrofit project, and one new well (PW-4) that is being added under the RIX Well Retrofit project (refer to Exhibit 6.0-x, *RIX Wells Retrofit Site Plan*). All thirty-seven (37) wells are located in the City of Colton between Agua Mansa Road and the Santa Ana River, to the east of Riverside Avenue, and to the west of the Rialto Drain. The wells all draw from the Riverside Groundwater Basin, and specifically, from the Riverside-A Groundwater Management Zone (Riverside-A).

Riverside-A underlies the Santa Ana River, from approximately 3.3 miles upstream of the RIX outfall to the Riverside Narrows, located approximately 5.5 miles downstream of the RIX outfall. From the RIX outfall to approximately 4.8 miles downstream, this reach of the river is a losing reach. At this downstream location (approximately 0.63 miles downstream of Mission Inn Avenue), the Santa Ana River becomes a gaining stream, which is explained by groundwater seepage to the river, as well as from unknown dry-weather discharge through tributary drainages within this river reach (WEI 2013). Therefore, during dry periods, the treated wastewater discharged from the RIX facility and from the City of Rialto's wastewater treatment plant (through the Rialto Drain) is recharging Riverside-A. The amount of recharge varies, based upon seasonal and longer-term weather conditions.

The United States Geological Survey (USGS) performs stream gauging in the Santa Ana River, and data (available at: <https://waterdata.usgs.gov/nwis/measurements>) from 1999 through October 2016, indicate the losses in stream flow from the RIX outfall to Riverside Avenue (approximately 1.2 miles downstream) have varied from approximately 0.8 MGD (1.2 cfs) to as much as 14.6 MGD (22.6 cfs). This indicates that at times, a significant portion of the groundwater in the area of the four wells associated with the RIX Wells Retrofit project is influenced by (and consists of) the discharged treated wastewater that has percolated into the river's bottom. Groundwater levels will not be adversely effected, as the volume of pumped groundwater proposed in the Flow Mitigation Alternative is within the range of historic over-extraction at RIX, and the groundwater management zone from which the four RIX Wells Retrofit project wells draw will continue to receive recharge from the continued RIX discharge (refer to Exhibit 6.0-2, *Flow Mitigation Concept*).

Page 6.0-26, Under 6.5 Environmentally Superior Alternative

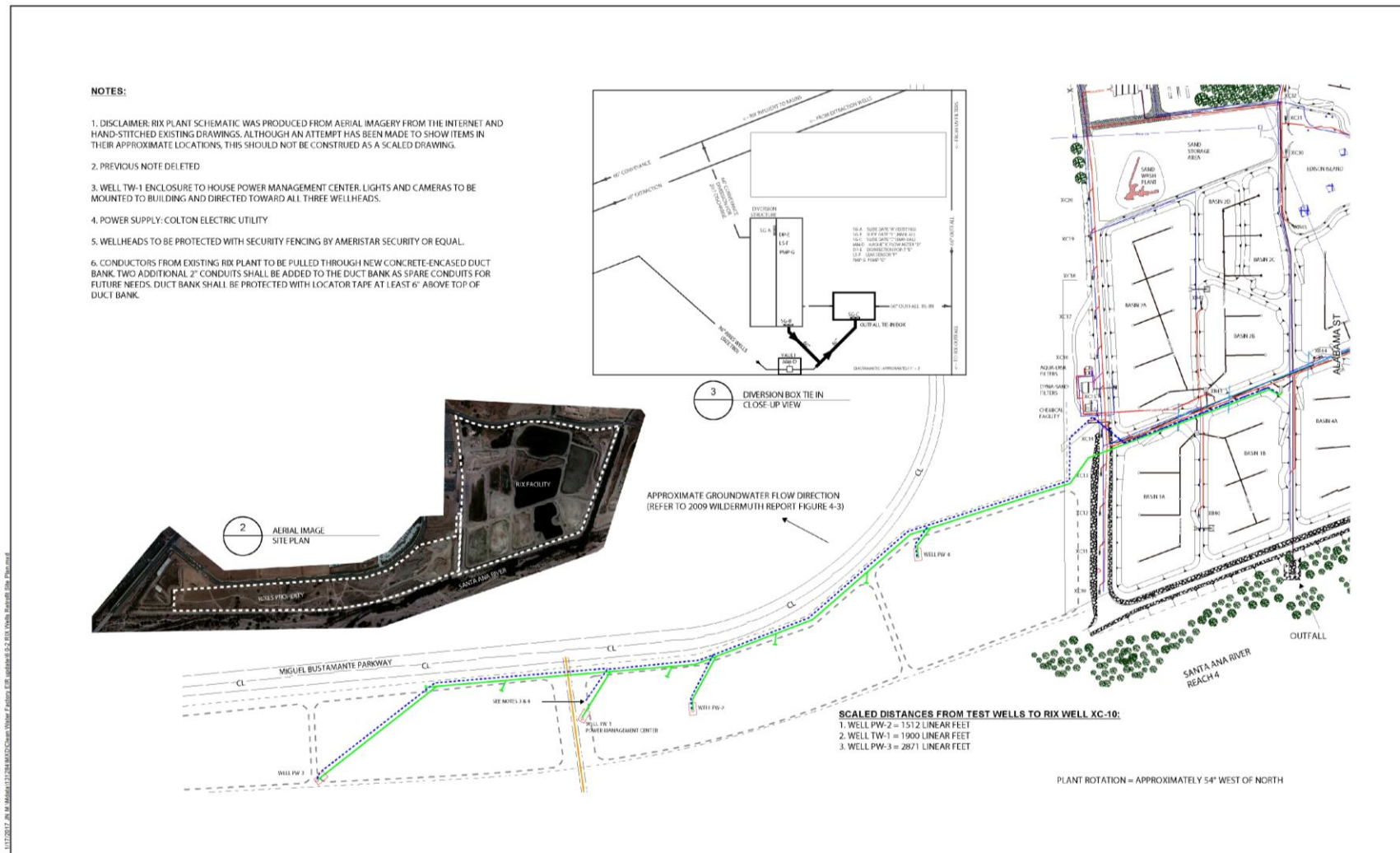
The Reduced Capacity Alternative (Alternative 3) is an environmentally superior alternative to the proposed Project.

The Hybrid Alternative (Alternative 7) would result in a slight reduction in impacts compared to the proposed Project, and is therefore, considered an environmentally superior alternative.

The Imported Water Supply Alternative (Alternative 5) also is an environmentally superior alternative to the proposed Project. The Imported Water Supply Alternative is also environmentally superior when compared to the other alternatives evaluated herein, and therefore, is considered *the* environmentally superior alternative.

The Flow Mitigation Alternative (Alternative 9) is an environmentally superior alternative to the proposed Project.

Page 6.0-28, New Exhibit 6.0-2 is added



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Source: City of San Bernardino Water Department