COMMENT LETTER M: STATE CLEARINGHOUSE, SCOTT MORGAN, DIRECTOR

COMMENT LETTER M

STATE OF CALIFORNIA
GOVERNOR'S OFFICE *of* PLANNING AND RESEARCH
STATE CLEARINGHOUSE AND PLANNING UNIT

EDMUND G. BROWN JR.
GOVERNOR

KEN ALEX
DIRECTOR

June 9, 2016

RECEIVED
JUN 13 2016
SBMWD/WATER RECLAMATION
DIRECTOR'S OFFICE

John A. Claus
City of San Bernardino Municipal Water Dept.
399 Chandler Place
San Bernardino, CA 92408

Subject: Clean Water Factory
SCH#: 2014111012

Dear John A. Claus:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on June 8, 2016, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

> "A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

1

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

Scott Morgan
Director, State Clearinghouse

Enclosures
cc: Resources Agency

1400 10th Street P.O. Box 3044 Sacramento, California 95812-3044
(916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

Document Details Report
State Clearinghouse Data Base

SCH# 2014111012
Project Title Clean Water Factory
Lead Agency San Bernardino, City of

Type EIR Draft EIR

Description Note: Extended review per lead

SBMWD is proposing the Project to reduce its dependence on imported water and to establish a reliable, sustainable source of clean water. The proposed Project will treat effluent from the San Bernardino Water Reclamation Plant to a quality approved for recharge as set by the California Department of Public Health and the Santa Ana Regional Water Quality Control Board. The treated effluent will be conveyed to the Waterman Basins and the East Twin Creek Spreading Grounds. Recycled water spread at these facilities will artificially recharge the Bunker Hill Groundwater Basin and, more specifically, the Bunker Hill a Management Zone, as described in the Water Quality Control Plan for the SAR Watershed (Basin Plan). The Project will also treat a side stream of SBWRP effluent to a quality approved for direct use and convey the tertiary treated recycled water to customers that can benefit from a non-potable water supply, and would also involve various improvements at the RIX facility and a future connection of the RIX facility to the Chino Basin and the Inland Empire Utilities Agency's non-potable system. The project's use of treated wastewater for direct reuse and recharge would result in a reduction in the volume of treated effluent that is presently discharged to the Santa Ana River.

Lead Agency Contact

Name John A. Claus
Agency City of San Bernardino Municipal Water Dept.
Phone 909-384-5502 **Fax**
email
Address 399 Chandler Place
City San Bernardino **State** CA **Zip** 92408

Project Location

County San Bernardino
City San Bernardino
Region
Lat / Long 34° 7' N / 117° 16' W
Cross Streets Various through the Project area
Parcel No. Various
Township 1N/1S **Range** 4W **Section** Variou **Base** SBB&M

Proximity to:

Highways I-215, 210
Airports San Bernardino Int'l
Railways UPRR & BNSF
Waterways Santa Ana River, East Twin & Waterman Canyon Creek
Schools Various
Land Use Various

Project Issues Air Quality; Archaeologic-Historic; Biological Resources; Drainage/Absorption; Flood Plain/Flooding; Forest Land/Fire Hazard; Geologic/Seismic; Noise; Population/Housing Balance; Public Services; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian; Growth Inducing; Landuse; Cumulative Effects; Aesthetic/Visual

Note: Blanks in data fields result from insufficient information provided by lead agency.

Document Details Report
State Clearinghouse Data Base

Reviewing Agencies	Resources Agency; Department of Fish and Wildlife, Region 6; Department of Parks and Recreation; Department of Water Resources; Caltrans, Division of Aeronautics; California Highway Patrol; Caltrans, District 8; Native American Heritage Commission; Regional Water Quality Control Board, Region 9; State Water Resources Control Board, Divison of Financial Assistance; State Water Resources Control Board, Division of Drinking Water; Public Utilities Commission; Department of Fish and Wildlife, Region 5

Date Received 04/13/2016 ***Start of Review*** 04/13/2016 ***End of Review*** 06/08/2016

Note: Blanks in data fields result from insufficient information provided by lead agency.

RESPONSE TO COMMENT LETTER M: STATE CLEARINGHOUSE, SCOTT MORGAN, DIRECTOR

Response to Comment M1.

The Final EIR provides responses to each of the comment letters provided by the State Clearinghouse.

COMMENT LETTER N: SOUTHERN CALIFORNIA GAS, JAMES CHUANG, SENIOR ENVIRONMENTAL SPECIALIST

COMMENT LETTER N

James Chuang
Environmental Specialist

Southern California Gas Company
Sempra Energy utilities
GT17E2
555 Fifth Street
Los Angeles, Ca. 90013
Tel: 213-244-5817
Fax: 323 518 2324

SoCalGas
A Sempra Energy utility

05/11/2016

Mr. John A. Claus
Director of Water Reclamation
City of San Bernardino Municipal Water Department
399 Chandler Place
San Bernardino, CA 92408

Re: **Clean Water Factory Project**

Dear Mr. Claus:

Southern California Gas Company (SoCalGas) appreciates the opportunity to review and respond to the Draft Environmental Impact Report (EIR). SoCalGas understands that the proposed project would involve the updating of the RIX Facility and San Bernardino Water Reclamation Plant along with the construction of new conveyance pipelines to convey advanced treated recycled water to direct use customers and existing recharge basins. We respectfully request that the following comments be incorporated in the Final EIR. 1

- SoCalGas has several medium pressure distribution pipelines and high pressure transmission pipelines along the three proposed conveyance facility alignments within the City of San Bernardino. SoCalGas recommends that the project proponent call Underground Service Alert at 811 at least two business days prior to performing any excavation work for the proposed project. Underground Service Alert will coordinate with SoCalGas and other Utility owners in the area to mark the locations of buried utility-owned lines. 2

Once again, we appreciate the opportunity to comment on the Draft EIR. If you have any questions, please feel free to contact me at (213) 244-5817 or wcchuang@semprautilities.com. 3

James Chuang
Senior Environmental Specialist
Southern California Gas Company

cc. Carli Ewert, SoCalGas

RESPONSE TO COMMENT LETTER N: SOUTHERN CALIFORNIA GAS, JAMES CHUANG, SENIOR ENVIRONMENTAL SPECIALIST

Response to Comment N1.

San Bernardino Municipal Water Department (SBMWD) appreciates and values your comments during the Environmental Impact Report participation process. This comment provides general introductory and background information. Responses to specific comments are provided below; no further response is required.

Response to Comment N2.

The commenter explains that Southern California Gas Company (SoCal Gas) has several medium pressure distribution pipelines and high pressure transmission pipelines along the three proposed conveyance facility alignments within the City of San Bernardino. SoCal Gas recommends that the Project proponent call Underground Service Alert at 811 at least two business days prior to performing any excavation work for the proposed Project. Underground Service Alert will coordinate with SoCal Gas and other Utility owners in the area to mark the locations of buried utility-owned lines.

Response to Comment N3.

SBMWD thanks you for your participation in Environmental Impact Report Public Review period.

COMMENT LETTER O: JOINT LETTER FROM THE CENTER FOR BIOLOGICAL DIVERSITY, SAN BERNARDINO VALLEY AUDUBON SOCIETY, AND THE SIERRA CLUB

Comment Letter O

San Bernardino Valley Audubon Society

via electronic mail and USPS

June 8, 2016

John A. Claus
Director of Water Reclamation
City of San Bernardino Municipal Water Department
399 Chandler Place
San Bernardino, CA 92408
John.Claus@sbmwd.org

Re: Comment on Draft Environmental Impact Report for the Clean Water Factory State Clearinghouse No. 2014111012

Dear Mr Claus:

These comments are submitted to the City of San Bernardino Municipal Water Department (the "City") on behalf of the Center for Biological Diversity (the "Center"), San Bernardino Valley Audubon Society and the San Gorgonio Chapter of the Sierra Club regarding the Draft Environmental Impact Report ("DEIR") for the Clean Water Factory ("CWF"). The proposed project would divert 17.9 million gallons per day (MGD) of the current 22 MGD (DEIR at 1.0-2) from the Rapid Infiltration and Extraction (RIX) plant to spreading basins instead of allowing the treated water to flow into the Santa Ana River. Despite diverting over 80% of the existing flows of treated water from the Santa Ana River, remarkably the DEIR fails to consistently determine that a significant impact would occur to the federally threatened Santa Ana sucker – a fish species that is already suffering unpermitted mortalities when the RIX shuts down for maintenance[1]. The treated water is critical to sustaining the current population of the Santa Ana sucker in its namesake river. Our groups support sustainable management of local water resources that includes the preservation of native flora and fauna and their habitats, and in particular threatened and endangered plants and animals. For the reasons detailed below, we urge substantial revisions to the DEIR to adequately analyze, avoid or, if need be, mitigate the Project's significant environmental impacts. Adequate water must be released into the Santa Ana River to sustain the habitat for the Santa Ana sucker and other rare and endangered species and their habitats which are also suffering from drought as a likely result of climate change.

1a

[1] http://www.latimes.com/science/la-me-sucker-rescue-20160226-story.html

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 just under 48,500 members and over a million online activists, including over 136,000 members and online activists in California. 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 and wildlife in San Bernardino County.

The San Bernardino Valley Audubon Society ("SBVAS") is a local chapter of the National Audubon Society, a 501(c) 3 corporation. The SBVAS chapter area covers almost all of Riverside and San Bernardino Counties and includes the project area. SBVAS has about 2,000 members. Part of the chapter's mission is to preserve habitat in the area, not just for birds, but for other wildlife, and to maintain the quality of life in and around San Bernardino County.

The Sierra Club is a national nonprofit organization of over 732,000 members dedicated to exploring, enjoying, and protecting the wild places of the earth; to practicing and promoting the responsible use of the earth's ecosystems and resources; to educating and enlisting humanity to protect and restore the quality of the natural and human environment; and to using all lawful means to carry out these objectives. Over 193,500 Sierra Club members reside in California. The San Gorgonio Chapter of the Sierra Club focuses on issues within the inland empire, including San Bernardino County.

1b

A. Significant Impact to the Federally Threatened Santa Ana Sucker

The DEIR fails to adequately or accurately evaluate the current situation of the Santa Ana sucker (*Catostomus santaanae*) as part of the project's existing environmental setting. The Santa Ana sucker (SAS) is a federally threatened fish that relies upon the outflows of treated water from the RIX water treatment plant, an adjacent water treatment plant and groundwater to maintain adequate surface water flows to sustain the fish and its habitat. The outflow of treated water from RIX is critically important during the summer and fall.

The DEIR provides mixed messages regarding the impacts to SAS from the proposed project. The Executive Summary evaluation of significant impact to the Santa Ana sucker either fails to evaluate the impact or determines a "less than significant impact with mitigation incorporated" finding. (DEIR at 1.0-11 through 21.) However in the section entitled "SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS OF THE PROPOSED PROJECT", the DEIR states there will be 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." (DEIR at 1.0-27.) Then in the Biological Resources Section 4.4.10 SIGNIFICANT UNAVOIDABLE IMPACTS, the DEIR states "No unavoidable significant impacts to biological resources have been identified." (DEIR at 4.4-85.) These statements contradict each other, making the DEIR unclear and confusing. The inclusion of the phrase "the sheer listing of Santa Ana sucker in the federal ESA" in the statement cited above adds to the confusion.

2

We agree with the determination that the project will result in significant and unmitigable impacts to SAS due ultimately to the removal of 17.9 MGD of water from the Santa Ana River, which is over 80 percent of the 22 MGD currently being treated and discharged into the Santa Ana River from RIX. (DEIR at 1.0-2.) 3

SAS population in the Santa Ana River have been in steady decline in both density and abundance of fish since at least 2001[2] as documented by annual monitoring. Formerly much more widespread within the Santa Ana River watershed, the fish are now relegated to a small 2.6 to 6.0 mi (4.2 to 9.6 km) stretch of the Santa Ana River[3], supported in large part by releases for treated water from water treatment plants including the RIX facility. Despite efforts of the numerous agencies, the "available suitable habitat areas for successful breeding and feeding are in decline" in the Santa Ana River[4]. These facts establish the very alarming status of the SAS in its namesake river prior to the proposed project and other cumulative water diversion proposals. At issue here is the fact that fish need water to live and reproduce, yet the proposed action would reduce water in an already-in-decline habitat to the point where extirpation of the SAS in the Santa Ana River is the most likely outcome. For that reason alone, we oppose this proposed project because of the significant unmitigable impacts to the SAS. 4

Inadequate Analysis of Water Reductions on SAS and its Critical Habitat

Recent preliminary studies[5] by U.S. Geological Survey in support of the emerging Upper Santa Ana River Habitat Conservation Plan indicate that prime sucker habitat is dependent on river depth and water velocity. Depths of thirty-five centimeters (over one foot) or deeper and velocities of 0.75 to 1.1 meter/second (2.5 to 3.6 feet/second) is the range where most SAS are currently found in the Santa Ana River. Those habitat parameters must be met in order to help ensure that SAS remain extant in the Santa Ana River.

The DEIR provided modeling of the flow reductions yet the model was based on only two years of habitat studies by SMEA in 2003 and 2004 (DEIR at 4.4-58), studies which are over twelve years old and are not the most current best available science. Extensive habitat survey data were published in 2010 from multiple years of SAS habitat evaluation[6]. The DEIR would be better served to use the most recent data as a basis for any modeling. 5

We could not find any analysis of the reduced water flow's ability to move sediments through SAS habitat, in order to protect and replenish the extremely limited spawning habitat of SAS in the Santa Ana River. Because the persistence of cobbles and gravels are key features for successful SAS reproduction, adequate flows must be maintained in the Santa Ana River in order to prevent excessive sand deposition on cobble/gravel substrates and to move cobble/gravels into occupied SAS habitat.

[2] USFWS 2011
[3] USFWS 2014a
[4] IBID
[5] USGS 2016
[6] Thompson et al. 2010

Despite the "old" data used in the modeling, the results, as expected, show a significant reduction in "usable" habitat based solely on hydrology (not other impacts – see red algae section below). The model does not however include any carrying capacity data of that habitat reduction, which is the key to evaluating the biological impacts to SAS. The analysis of impacts to SAS is inadequate for all of the reasons discussed above. 6

SAS Recovery Actions Unsupported

In 2014, U.S. Fish and Wildlife Service published a Draft Recovery Plan for SAS which identifies "The primary threat to Santa Ana sucker is ongoing, range wide hydrological modifications which lead to degradation and loss of habitat. Additionally, isolation by impassable barriers or unsuitable habitat limits gene flow within the watershed, thus increasing the vulnerability of small occurrences to a range of stochastic (random) factors" and goes on to state that "the highest priority for the recovery of Santa Ana sucker is implementation of management actions to restore and improve habitat conditions throughout the current range of the species."[7] The Recovery plan lays out goals and objectives necessary for the recovery SAS as follows: 7

- Increase the abundance and develop a more even distribution of Santa Ana sucker within its current range by reducing threats to the species and its habitat.
- Expand the range of the Santa Ana sucker by restoring habitat (if needed), and reestablishing occurrences within its historical range.

Because the proposed project will decrease SAS' abundance, increase the threats to it and its habitat, and eliminate restoration opportunities, it is antithetical to the needed recovery actions. Despite all this, the DEIR fails to propose any recovery actions as potential mitigation, and fails to acknowledge that the project is inconsistent with the SAS Recovery Plan.

Missing SAS Mitigation

The DEIR fails to include any actual mitigation for SAS. For example, the proposed salvage of SAS (Bio-14) is actually just an unproven avoidance measure. While we support avoiding impacts to SAS and rescuing fish from stranding, the implemented procedures used previously when RIX shuts down and actually notifies agencies ahead of time of the shutdown, has no grounding in science. Agencies scrambling to put fish into ice chests and buckets when fish are either stranded or their pools are drying up provide only a temporary benefit – if the fish are even successfully salvaged. No studies are available that evaluate the ultimate success of the salvage – how many the fish survive over the long-term? Are they reproductively successful? Is their life span reduced? This action is not mitigation. 8

If the City is serious about mitigating impacts, it needs to propose measures that would offset impacts. Those types of mitigations are absent from the DEIR. We refer the City to the draft Recovery Plan for mitigation ideas that may be appropriate.

[7] USFWS 2014a

Failure to Address Red Algae

The recent establishment of the invasive red algae (*Compsopogon coeruleus*) in SAS habitat[8], covering the spawning and feeding areas, presents a new substantial threat to SAS' persistence in the Santa Ana River. The DEIR fails to mention much less address this new threat, and fails to address safeguarding future introduction of this algae or other invasive algae into the system from the water treatment facilities through upgrades in water treatment water. 9

Adaptive Management Plan Missing

Bio-7 states that an Adaptive Management Plan will be produced (DEIR at 1.10-11) and an outline of the issues to be included are provided in Section 4.4 (DEIR at 4.4-72 to 73). An outline does not adequately address how the Adaptive Management Plan will actually address the crucial issues related to the proposed project. Based on the result of informative monitoring, measureable and implementable triggers for action and sustainable actions need to be clarified. A supplemental DEIR is necessary that includes at least a draft of the Adaptive Management Plan, so that the public and decision makers can adequately evaluate and comment on the effectiveness of the proposed plan. We are skeptical that an Adaptive Management Plan can be crafted that adequately addresses and mitigates the impacts to SAS and to its critical habitat. It also appears that the Adaptive Management Plan only addresses issues related to SAS (and other aquatic species). However, rare plant communities, including Riversidean Alluvial Fan Sage Scrub and Southern Willow Scrub may also be impacted by operations in the spreading basins (see discussion below on the lack of impact analysis), the Adaptive Management Plan should include provisions for all species and habitat types that would require monitoring and adaptive management. At best, the Adaptive Management Plan to be prepared in the future represents improperly deferred mitigation, but without any indication of how the Adaptive Management Plan will address the project's significant environmental impacts, it is not mitigation at all. 10

B. Inadequate and Deferred Surveys and Impact Analysis

The proposed project area has high biodiversity with an exceptional number of protected species – 29 special-status plant species and 35 special-status wildlife species acknowledged in the DEIR. The on-the-ground survey effort to analyze biological resources did not include any data outside of June, July and August and did not even cover the entire project area. (DEIR at Appendix 10.4.) Appendix 10.4 – Habitat Assessment appears to only include the conveyance facility corridors, the RIX facility and the spreading grounds, and none of the downstream areas of the Santa Ana River where impacts from the water diversions would occur and where federally designated critical habitats for three threatened or endangered species are designated. Three days of surveys in late June and early July 2014 were done to evaluate the plant communities, well past the appropriate time to identify most rare annual or herbaceous plant species. The spreading grounds were surveyed in August 2014, well outside the typical survey window for most biological surveys. 11

[8] USFWS 2014b

The Habitat Assessment recognizes a high diversity of avian species but inappropriately states that "The project site and adjacent area support a high variety of avian species. Because of the high number of species observed, only the most numerous are mentioned here" (DEIR Appendix 10.4 at pg. 23), unusual (and inadequate) reporting in that the most sensitive species are not revealed. 12

San Bernardino Merriam's kangaroo rat

For one of the endangered species, the San Bernardino Merriam's kangaroo rat, the analysis of biological resources has been in part impermissibly deferred to preconstruction surveys (DEIR at 1.0-10 Mitigation Measure Bio-3). Surveys are not mitigation. Surveys must be completed prior to the impact analysis otherwise evaluation of the impact is impossible, much less incorporating avoidance and minimization strategies. Surveys were not conducted along the Santa Ana River for either the southwestern willow flycatcher or least Bell's vireo, despite the fact that federally designated critical habitat for the flycatcher will be negatively affected by the proposed water diversion. 13

Arroyo Chub

The arroyo chub is another endemic species to southern California that inhabits the Santa Ana River. The State of California recently updated its *Fish Species of Special Concern Accounts, 3rd Edition (2015)* and determined that the arroyo chub status is "High Concern" and that "the arroyo chub is vulnerable to extinction in its native range in the next 100 years"[9].

While no surveys were conducted for arroyo chub for this project (DEIR at 4.4-74), arroyo chub are actually well documented to be sympatric with Santa Ana sucker directly downstream of the RIX outflow.[10] The DEIR concludes that through the measures in the proposed Adaptive Management Plan and which is not part of the DEIR or available for public review that "The Project would not substantially reduce or eliminate habitat for the arroyo chub." (DEIR at 4.4-74.) Because the Adaptive Management Plan is not available, it is impossible for the public and decision makers to evaluate this unsubstantiated conclusion. 14

Southwestern Willow Flycatcher

The DEIR fails to evaluate the impact to the southwestern willow flycatcher federally designated critical habitat which will be impacted by the water diversion. The DEIR fails to quantitatively estimate the decrease in southwestern willow flycatcher habitat due to the ultimate decrease of 17.9 MGD into the Santa Ana River. We believe the impact from the decrease must be offset by mitigation measures that are absent in the DEIR. But without a quantitative estimate of impact, clear goals for mitigation cannot be developed or implemented to truly offset the impact. This failure in of itself makes for a legally deficient DEIR. 15

[9] https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=104270&inline
[10] USGS 2016

Least Bell's Vireo

The DEIR provides the typical avoidance measures for construction during the breeding season (DEIR at 4.4-69) but is mute on the long-term effects of the treated water diversion on the riparian habitat that the vireo depends upon for successful nesting. Diverting 80% of the existing RIX outflow from the Santa Ana River is very likely to result in die-off of riparian vegetation and a decrease in existing habitat for this neotropical migrant. As with the willow flycatcher above, the DEIR is inadequate based on its failure to evaluate and disclose the downstream impacts to habitat for this state and federally endangered bird. 16

Rare Plant Communities

The surveys performed in the spreading basins document several rare plant communities including Riversidean Sage Scrub (41.85 acres), Disturbed Riversidean Sage Scrub (63.43 acres) and Southern Willow Scrub (6.36 acres) (DEIR at Appendix 10.4 – Exhibit 5). The DEIR is unclear on how these rare plant communities will be affected by the proposed project. It is conceivable that impacts will occur to these communities based on activities proposed in the spreading basins, but absent impact analyses, it is unclear if mitigation is required. 17

The variety of rare riparian plant communities along the Santa Ana River are not addressed at all in the DEIR, yet they will be affected by the water diversions of the proposed project. Therefore a supplemental or revised DEIR that includes analyses of impacts is necessary to fully identify potential impacts, and provide measures to avoid, minimize and if need be mitigate impacts to these rare plant communities.

C. Failure to Assure Compliance with State and Federal Endangered Species Acts

Mitigation Measure Bio-8 is not a mitigation measure, but rather a commitment to acquire a take permit under the Endangered Species Act as required by law for southwestern willow flycatcher, and Santa Ana sucker (DEIR at 1.10-11 and 12). Bio-8 does not indicate that take permit will be sought for the San Bernardino Merriam's kangaroo rat, likely because the required surveys have not been implemented.

For all these imperiled species, the actual impacts to them remain unidentified and therefore fail to provide the public and decision makers with adequate data and analysis of impacts. It also removes the opportunity for the interested public to comment on the proposed conservation measures and compensation that the U.S Fish and Wildlife Service would require. A Biological Assessment will be prepared as part of the process for the Army Corps of Engineers Section 7 consultation. In our experience, Biological Assessments are typically provided, often as an appendix in DEIRs. The supplemental DEIR that needs to be prepared to address the issues that are lacking in the current DEIR must also include the Biological Assessment, which should provide more specific data on the existing resources with potential for impact and clear avoidance, minimization and, if necessary mitigation measures to reduce or eliminate the impact. 18

The DEIR fails to acknowledge that a 2081 permit from the state of California is also required for impacts to willow flycatchers. It also is mute on the need to acquire a 1600 streambed alteration agreement, despite the fact that the proposed water diversion would impact the Santa Ana River Streambed and alter its flow. 18

D. Failure to Analyze Impacts to Southern Steelhead

The federally endangered southern California Distinct Population Segment of steelhead is another iconic aquatic fish species known to inhabit the Santa Ana River, although currently just the upper reaches of the Santa Ana River, where they are stranded from running. The DEIR is mute on the impacts of the proposed project on the implementation of recovery as spelled out in the Southern California Steelhead Recovery Plan[11]. The Mojave Rim Biogeographic Population Group (BPG), which includes the populations in the Santa Ana River, is the most imperiled BPG. This proposed project threatens to make recovery of steelhead even worse than the current situation. A revised DEIR needs to include an analysis of impacts on steelhead recovery. 19

E. Cumulative Impacts

The results of the cumulative impacts analysis indicates a catastrophic decline in water for the Santa Ana sucker, other aquatic organisms and the riparian corridor along the Santa Ana river downstream of RIX. Given that the San Bernardino Valley Municipal Water District's Sterling Natural Resource Center project will divert 6 MGD of water from RIX[12], and that the city of Rialto plans to divert outflows from their water treatment plan, the City needs to carefully consider the need to divert any additional water from the RIX. The treated water outflow from RIX supplies most of the surface flow upon which the Santa Ana sucker relies, particularly in low flow seasons, but the cumulative impacts of all these projects if they all move forward, in conjunction with other threats (for example red algae), could be catastrophic. We agree with the conclusion in the Sterling Natural Resource Center's EIR that, if all of the projects move forward, the Santa Ana sucker faces extirpation from its namesake river. We urge the San Bernardino Valley Municipal Water District and the Cities of San Bernardino and Rialto to safeguard against this extirpation, and the state and federal wildlife agencies to prevent this extirpation as they implement protections for the Santa Ana sucker. 20

F. Inconsistencies with State Water Board Application WW0059

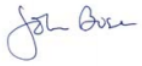
The City submitted a Petition for Change to the California State Water Resources Board for the proposed project in April 2010. The Application WW0059 states "The proposed project consists of the following: The City of San Bernardino currently discharges approximately 40 million gallons per day (mgd) from the Regional Rapid Infiltration and Extraction (RIX) Facility to the Santa Ana River. The City of San Bernardino, in conjunction with Western Water Company, intends to market the excess tertiary effluent from the RIX facility (currently estimated to be about 15 MGD, or 16,794 acre-feet per year) and sell the excess effluent for long-term beneficial 21

[11] http://www.westcoast.fisheries.noaa.gov/protected_species/salmon_steelhead/recovery_planning_and_implementation/south_central_southern_california_coast/south_central_southern_california_coast_recovery_publications.html
[12] http://sterlingnrc.com/

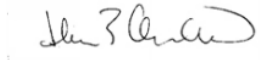
uses to water users in the region."[13] The Center for Biological Diversity filed a protest on the Petition for Change because of the impacts to the Santa Ana sucker from the proposed diversion. The total amount of water discharge from RIX in Petition Application WW0059 is almost double (44 MGD) the amount presented in the DEIR of 22MGD (DEIR at 1.0-2). The amount of water in the Petition Application WW0059 to be diverted is 15 MGD and yet the DEIR is proposing 17.9 MGD. We recognize that the conditions on the Santa Ana River have changed between 2010 and 2016, however, the DEIR does not accurately reflect the Petition for Change that is currently pending before the State Water Resources Control Board. Clarification of the mismatch in the water discharges and diversions between the Petition for Change and the DEIR need to be addressed in a supplemental or revised DEIR. 21

Thank you for the opportunity to submit comments on this proposed Project. We look forward to working to assure that the Project and environmental review conforms to the requirements of state and federal law and to assure that all significant impacts to the environment are fully analyzed, mitigated or avoided. In light of the significant, unavoidable environmental impacts to the Santa Ana sucker fish, the incomplete biological surveys of the project area that are a prerequisite to adequate impact analysis, we strongly urge a vastly improved revised or supplemental DEIR be recirculated. Please do not hesitate to contact the Center with any questions at the number listed below. Please keep us on the "interested public" list with regards to any notifications about this project. 22

Sincerely,



John Buse
Senior Attorney
Center for Biological Diversity



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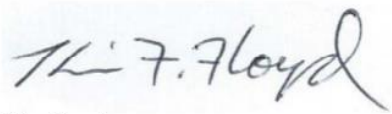
[13] http://www.waterboards.ca.gov/waterrights/water_issues/programs/applications/petitions/2010/ww0059petition.pdf

Drew Feldmann
Conservation Chair
San Bernardino Valley Audubon Society



Kim Floyd
Conservation Chair
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RESPONSE TO COMMENT LETTER O: JOINT LETTER FROM THE CENTER FOR BIOLOGICAL DIVERSITY, SAN BERNARDINO VALLEY AUDUBON SOCIETY, AND THE SIERRA CLUB

Response to Comment O1.

The commenter summarizes a number of comments contained within the following sections of the comment letter, as well as introduces the Center for Biological Diversity, San Bernardino Audubon Society, and the Sierra Club. This comment serves as an introduction to the letter, responses to specific comments are provided below.

Response to Comment O2.

The commenter asserts that the Draft EIR contains contradictory language in regards to the significance determinations between the Executive Summary and the Biological Resources section. See Response to Comment C11 above.

Response to Comment O3.

Refer to Response to Comment O2 above. In regards to the impact determination, as explained in Draft EIR Section 4.4, *Biological Resources*, impacts to the Santa Ana sucker would be less than significant; refer to Draft EIR page 4.4-66.

Response to Comment O4.

The commenter asserts the habitat and populations of the Santa Ana sucker are in decline, and that the proposed Project will have a significant impact on the Santa Ana sucker. While densities have declined from 2000 to 2010, recent data show that densities in 2011 were similar to densities in 2001. In regards to the reduction in habitat along the Santa Ana River, the Santa Ana sucker inhabits a rather limited portion of the Santa Ana River; however, little documentation is available for the species inhabiting a larger portion of the Santa Ana River than its current extent. The distribution of this fish was largely centered in a small number of tributaries in the 1990s because they contained more suitable habitat. Further, data from the 1990s and earlier is limited, and as such declines in this decade were inferred from qualitative and anecdotal data not the quantitative data that exists documenting trends in the 2000s. The USFWS Draft Recovery Plan supports the fact that historical data are unfortunately sparse for this species.

Further, the commenter opines that local extinction of the species (extirpation) is the fate of the Santa Ana sucker due to the Project; however, these comments are not supported by evidence. The Draft EIR contains a sophisticated analysis of the potential effects of the proposed reduction in discharge on habitat values important to the Santa Ana sucker and provides substantial evidence and analysis to support the determination that the Project-related changes, with implementation of the Adaptive Management Plan and associated commitments in revised Mitigation Measure BIO-7, and Mitigation Measure BIO-8, would not have a substantial adverse impact on the species. See Section 3.0, *Errata to the Draft EIR*, for the revised mitigation measures.

Conditions in the Santa Ana River have never been actively managed for the Santa Ana sucker, as evidenced by the fact that the models in the Draft EIR represent the first attempt to link water use, habitat change, and a population response in the Santa Ana sucker. Mitigation Measure BIO-7 specifies a range of actions that will be taken to manage the species and its habitat in response to changing and uncertain

conditions, including specific measures to mitigate any observed adverse effects, and it is the opinion of the EIR experts who prepared the technical studies and impact analysis that the proposed adaptive management approach is a feasible means of avoiding significant impacts to the species. Mitigation Measure BIO-7 has been updated to better describe specific performance measures and implementation strategies for the Adaptive Management Plan. Revised Mitigation Measure BIO-8 will further ensure that impacts are not significant. See Section 3.0, *Errata to the Draft EIR* for the revised mitigation measures.

Response to Comment O5.

The commenter states that modeling done by USGS should have been utilized in the Project analysis. For the Project, staff used all available data to build the suitability models. The modeling conducted by the USGS is relatively recent and was not available at the time the Project studies were commenced. In addition, SBMWD understands that the model has not been published, peer reviewed, or otherwise been made available, so it was not feasible to assess its appropriateness or measure its validity against the analysis conducted for the Project. In addition, the availability of other models and data does not invalidate the existing studies. The data and methods used for the Project modeling provides a useful and sufficient model to estimate Project effects. If available, all of these data can be used to further address Santa Ana River flows and potential impacts to riparian habitats as part of the Adaptive Management Plan. Refer also to Response to Comments K10 and L8 above.

The commenter also indicates that certain habitat parameters must be met to ensure that Santa Ana sucker remain extant in the Santa Ana River. However, the mere presence of Santa Ana sucker does not mean all the existing values are essential or must be met in order to avoid the adverse effects to the species. As indicated in Table 4.4-5 of the Draft EIR, the modelling indicates that the Project would not reduce average depths below 1 foot in Reach 1 and result in only minor reductions (1 or 2 inches) in other reaches where the depth is already less than 1 foot. Given that Santa Ana sucker are readily found in areas less than 1 foot in depth, the 1 foot depth is not considered an essential minimum value.

In addition, the modelled effects are conservative estimates and the actual reductions are expected to be less, as explained in the Draft EIR (see pp. 4.4-61 to 62). For instance, for Reaches 2 and 3, modeled predictions were based on stream depths that represent an average value and trapezoidal stream geometry, which exaggerate the results in the model.

Response to Comment O6.

The commenter expresses the opinion that any reduction in habitat area would be a significant adverse effect but provides no evidence or analysis to support this assertion. CEQA defines a significant impact as a substantial adverse change in the environment. The Draft EIR provides evidence and analysis to support its determination that Project-related changes would not have a substantial adverse effect on Santa Ana sucker with implementation of mitigation identified in the Draft EIR, including Mitigation Measure BIO-7, BIO-8, as well as revised Mitigation Measure BIO-8, which will further ensure that impacts are less than significant. Refer to revised Mitigation Measures in Section 3.0, *Errata to the Draft EIR*.

In addition, the commenter states that the model did not include carrying capacity data, which the commenter asserts is key to evaluating biological impacts to Santa Ana sucker. However, no substantial evidence is provided to indicate why carrying capacity data would be useful in illustrating the Project impacts. Carrying capacity is the theoretical maximum population size of a species that the environmental can sustain. The carrying capacity of any particular population depends on habitat factors that constantly

vary, so the carrying capacity itself varies and is not a stable value. In addition, carrying capacity is highly dynamic, informed by many variables, and unlikely to be illustrative at a discrete (project-specific) scale. Based on these considerations it is unclear how an analysis of carrying capacity would be performed for any particular Project site and how, even if feasible, such analysis would evaluate the impacts of the Project to the sucker population as a whole.

Response to Comment O7.

The commenter states that the proposed Project could further reduce Santa Ana sucker populations, and as such would conflict with the USFWS Recovery Plan. The Draft EIR identified potential impacts to habitat as a result of the Project. The best methods of mitigation can be determined using the Adaptive Management Plan, which will also provide for collection of new data that will inform recovery efforts; refer to revised Mitigation Measure BIO-7 in Section 3.0, *Errata to the Draft EIR*. Mitigation Measure BIO-8, as well as revised Mitigation Measures BIO-8, will ensure that the Project is consistent with the USFWS Recovery Plan by requiring that the Project proceed under the Upper Santa Ana River HCP or otherwise obtain incidental take authorization from the USFWS and CDFW. Refer also to Response to Comment L10 above.

Response to Comment O8.

Under CEQA, "mitigation" is defined to include "(a) avoiding an impact altogether by not taking a certain action or parts of an action; (b) minimizing impacts by limiting the degree or magnitude of the action and its implementation; (c) rectifying the impact by repairing, rehabilitating or restoring the impact environment; (d) reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action or (e) compensating for the impact by replacing or providing substitute resources or environments." (CEQA Guidelines, Section 15371.) The Draft EIR includes a variety of mitigation to ensure that impacts to Santa Ana sucker will not be significant, including measures to reduce impacts associated with any facility shutdowns (BIO-14) and a comprehensive Adaptive Management Plan that will monitor river hydrology, document changes in hydrology, aquatic and riparian habitats, and changes in Santa Ana sucker distribution and population densities, and respond to changes that may be expected to exceeding the baseline range of variability by implementing any number of mitigation measures identified in the Draft EIR, including, but not necessarily limited to, the measures identified on page 4.4-73. Those measures include (but are not limited to) increasing discharge (returning more flow to the river), microhabitat enhancements, providing supplemental water, and exotic weed management to pretext native riparian plant communities. These measures have been supplemented by revision to Mitigation Measure BIO-8; refer to Response to Comment L10 above. Each of these mitigation options would avoid or minimize adverse impacts to Santa Ana sucker and its habitat and meet the definition of mitigation under CEQA. As stated in the Draft EIR, the list of potential mitigation actions is not exclusive and may be expanded upon consultation with the relevant resource agencies and as the body of knowledge about Santa Ana sucker habitat requirements and response to changes develops once the Project and its Adaptive Management Plan are implemented. The proposed discharge reduction itself would never result in conditions of zero discharge; the RIX Facility improvements currently underway and those described in the EIR will improve the existing conditions by minimizing the frequency and duration of shutdowns and providing a supplemental water supply to avoid fish stranding.

Response to Comment O9.

Refer to Response to Comment H12 above.

Response to Comment O10.

As discussed in the Draft EIR, there is a lack of information about the precise ways in which the Santa Ana River ecosystem or the Santa Ana sucker will respond to the phased reduction in discharge of treated wastewater, which itself is a relatively new condition, having occurred only since 1996. The specific triggers for implementation of the mitigation actions identified in the Adaptive Management Plan cannot be predicted without information obtained through the plan implementation itself, in the required consultation with the USFWS (see discussion on Draft EIR p. 4.4-72), but the commitment to mitigate impacts so they are not significant has not been deferred. Mitigation Measure BIO-7 specifies SBMWD's commitment to monitor change and respond so that the Project does not result in adverse effects to the Santa Ana suckers or their habitat and clearly specifies the types of actions that can be taken, if needed, each of which meets CEQA's definition of mitigation. Moreover, the Draft EIR includes Mitigation Measure BIO-8, which commits the SBMWD to engage in consultation under the federal ESA, and obtain incidental take authorization before proceeding with the Project, a process that is designed to ensure protection of listed species and their habitat, and to implement all conditions imposed on the Project as a result of consultation under the ESA. Refer also to revised Mitigation Measure BIO-7 in Section 3.0, *Errata to the Draft EIR*.

It should be stated that adaptive management is an acceptable procedure for conducting biological monitoring and responding to changes in baseline conditions where potential impacts could occur but are not fully understood or quantifiable at the time of Project review and approval. An adaptive management process is critical to providing continuous assessment of the status of the various species found within or adjacent to the Santa Ana River, being able to respond quickly to environmental changes in the riverine and riparian habitats and to be able to effective manage these biological resources over the long-term. SBMWD concurs with CBD that the Adaptive Management Plan should be expanded to include riparian habitat and associated species along the edge of the Santa Ana River and will expand the Adaptive Management Plan in accordance with this suggestion. The SBMWD's obligations, as is the obligation of all users along the Santa Ana River, to protect the various sensitive biological resources is very real and is an obligation that SBMWD does not take lightly, as evidenced by its long standing policy of working closely with the wildlife agencies. The SBMWD is committed to the long-term management of biological resources within and adjacent to the Santa Ana River and looks forward to continuing its relationship and work with the wildlife agencies to ensure the long-term survival of the Santa Ana sucker and other sensitive plant and wildlife species. The proposed Adaptive Management Plan is not SBMWD's first commitment to protect sensitive biological resources that could be affected by the SBMWD's operations but, rather, a continuum of the City's long standing commitment and dedication to ensuring the long-term survival of sensitive habitats and species while continue its mission of providing water for the citizens of the City of San Bernardino.

Response to Comment O11.

The commenter asserts that further biological surveys should have been conducted in different months than the ones performed for the Project. Spring surveys are the standard for determining the presence or absence of sensitive biological resources. However, presence or absence surveys were not performed or necessary for the Draft EIR's impact evaluation, and the surveys that were performed were adequate for purposes of establishing baseline conditions and assessing impacts. Sensitive plant species were evaluated for their potential to occur based on habitat requirements, availability and quality of suitable habitat, and known distributions, not to determine presence/absence. Further, the commenter noted concerns regarding the lack of field study completed downstream from the proposed Project. Only one sensitive

plant species, Parry's spineflower, was identified as having a moderate or high potential to occur based on a query of the California Natural Diversity Database (CNDDB) and California Native Plant Society (CNPS) search. As discussed on Draft EIR page 4.4-66, the species was not identified during the 2014 habitat assessment or focused sensitive plant surveys in the Waterman Basins in 2015. Therefore, Project implementation is not anticipated to result in direct impacts to Parry's spineflower. Not all downstream areas were surveyed due to the vast watershed downstream from the Project area. As such, areas where direct impacts would occur were studies during field surveys; however, conditions in downstream areas where indirect impacts could occur have been considered and analyzed throughout the EIR.

Response to Comment O12.

The commenter incorrectly states that the Habitat Assessment, which is an appendix to the Draft EIR, does not identify the most sensitive bird species that could be affected by the Project. While the main text of the Habitat Assessment document only contains an abbreviated list of species observed, the wildlife compendium included in the Habitat Assessment contains all avian species observed. Due to the vast number of species observed during the Project field studies, key species were included in the main Habitat Assessment to reduce the volume of the document; however, all site species were included in the Flora and Fauna Compendium, attached as Appendix C of the Habitat Assessment. Most important, all potentially affected sensitive species were clearly identified in Draft EIR Section 4.4; refer to Table 4.4-2, *Suitable Habitats and Potentially Occurring Sensitive Plant and Wildlife Species*.

Response to Comment O13.

The commenter objects to the inclusion of a mitigation measure calling for preconstruction surveys for San Bernardino kangaroo rat. A suitability assessment of habitats within the Project site identified one area with suitable San Bernardino kangaroo rat habitat. This area was trapped and no San Bernardino kangaroo rat were caught. A subsequent pre-construction survey was recommended out of an abundance of caution to verify that San Bernardino kangaroo rat is still absent from the site. Mitigation Measure BIO-3 requires that if San Bernardino kangaroo rat or any other special status wildlife species is found within the survey area, no ground disturbing activity will occur until SBMWD consults with USFWS and CDFW and implements measures identified by the agencies that either avoid or mitigate any impact. Mitigation Measure BIO-8 also requires that SBMWD obtain incidental take authorization from federal and state wildlife agencies prior to proceeding with the Project, which will ensure that impacts are mitigated. By including a commitment to avoid or mitigate impacts to the satisfaction of the relevant wildlife regulatory agencies, Mitigation Measures BIO-3, and BIO-8 thus constitute appropriate mitigation under CEQA. Least Bell's vireo is known to occur along the Santa Ana River within the Project area. Surveying to determine presence or absence is not needed and, for the CEQA analysis, they are assumed to be present. The willow riparian habitat within the Project area does not provide the complex over-story needed by Southwestern willow flycatcher to occur, but protections for riparian habitat included in Mitigation Measure BIO-7, along with the implementation of conditions that may be imposed through revised Mitigation Measure BIO-8 (see Section 3.0, *Errata to the Draft EIR*), will ensure that impacts are not significant.

Response to Comment O14.

The commenter raises concerns regarding the proposed mitigation for the Arroyo chub. As explained in the Draft EIR, like Santa Ana sucker, the Arroyo chub is assumed to be present throughout the length of the Santa Ana River within the Project site. Since both species are assumed to be present, surveys were not required. The impact assessment determined that the Project as mitigated will not substantially

reduce or eliminate habitat for the Santa Ana sucker or the Arroyo chub. Any Adaptive Management Plan measures implemented for the benefit of the Santa Ana sucker would similarly benefit any Arroyo chub present. If the Adaptive Management Plan identifies specific management measures that would benefit the Arroyo chub, SBMWD would implement those as part of the Adaptive Management Plan. Refer also to Revised Mitigation Measure BIO-7 in Section 3.0, *Errata to the Draft EIR*.

Response to Comment O15.

Refer to Response to Comment O13 above.

Response to Comment O16.

The commenter states that the Draft EIR does not analyze the impacts on the Least Bell's vireo and riparian habitat downstream from the Project. The Draft EIR Impact 4.4-2 analyzes Project effects on downstream riparian habitat and concludes that there will not be significant effects on riparian habitat from the Project with implementation of the proposed mitigation measures; refer to Draft EIR page 4.4-76. Because there would not be significant impacts to the riparian vegetation, there would not be significant impacts to Least Bell's vireo habitat or nesting activities. See also Response to Comment L10 and revised Mitigation Measure BIO-8 (see Section 3.0, *Errata to the Draft EIR*), which provide additional protection for listed species and their habitat.

Response to Comment O17.

The commenter states that the EIR is not clear regarding impacts to vegetation in the spreading grounds and recharge basins. Draft EIR Impact 4.4-2 concludes that there would be no significant impacts to the riparian vegetation in the spreading basins; refer to Draft EIR page 4.4-76. As such, no mitigation is required. Refer to Response to Comment O16 above.

Response to Comment O18.

The commenter asserts that Mitigation Measure BIO-8 is not actually a mitigation measure, and that the Incidental Take Permit would not cover all potential species within the Project area. However, the Incidental Take Permit, under Section 7, would address all potentially occurring federally listed species and their critical habitat and has been accepted by USFWS and CDFW as acceptable mitigation for the types of impacts the Project could cause. The Incidental Take Permit would not be limited to one or two species, it would be required for all federally listed species. Further, a 1602 permit would be sought for impacts to waters of the State. Lastly, a 2081 Incidental Take Permit or 2080.1 Consistency Determination will be obtained for impacts to state listed species. Refer also to Response to Comment L10 above.

Response to Comment O19.

The commenter states that the Draft EIR should analyze the Project's impacts on Southern steelhead. While Southern steelhead may deserve mention as an important native species, they have not been present in the study area for an extended period of time as they are prevented from migrating by dry channels, dams, and the many constraints associated with urban streams, including the Prado Dam. As such, the Project site does not offer suitable habitat or a connecting migratory corridor for the Southern California Distinct Populations Segment of Steelhead. The Santa Ana River steelhead run was listed as extinct by National Marines Fisheries Service in 2005.

Response to Comment O20.

SBMWD recognizes that other water agencies including the San Bernardino Valley Municipal Water District and City of Rialto are considering projects that, if approved, could also reduce flows to the Santa Ana River along the study reaches. The Draft EIR analyzes what is considered to be a cumulative worst-case condition for potential future wastewater treatment plant discharge reductions in the study reaches based on the limit of acceptable potential impacts to biological resources. There is a limit to the amount of discharge reduction that can occur without significant impacts; as a result, not all currently proposed or potential future discharge reductions are likely to be implemented. Depending on what happens with other proposed or future discharge reduction projects, the Project's contribution to a cumulative impact could be reduced. However, the Draft EIR assumes the maximum contribution of the Project within the reasonably foreseeable future cumulative condition. As such, the Draft EIR analyzes what is considered a cumulative worst-case condition for potential future wastewater treatment plant discharge reductions in the study reaches based on the limit of acceptable potential impacts to biological resources. In the event that the Sterling Project or others were implemented and reduced discharge to the Santa Ana River, the Project would modify its reductions to account for this loss in discharge, so that there would be no net cumulative effect.

Response to Comment O21.

The 15 MGD represents a side stream of the larger project, and would likely only be exercised when SBMWD is not able to recharge in the upper basin.

Response to Comment O22.

This comment serves as the conclusion to the commenter's letter, and as such summarizes the key points of the submitted letter. Responses to specific comments have been provided and no further response is warranted.

COMMENT LETTER P: SOCAL JUSTICE ALLIANCE, CRAIG M. COLLINS, BLUM COLLINS LLP

Comment Letter P

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June 8, 2016

John A. Claus
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Via Email & U.S. Mail

Re: *California Environmental Quality Act Comments on Clean Water Factory DEIR (State Clearinghouse No. 2014111012)*

Dear Mr. Claus and the San Bernardino Municipal Water Department ("SBMWD"):

On behalf of the SoCal Environmental Justice Alliance, this is to comment under the California Environmental Quality Act ("CEQA") upon the Draft Environmental Impact Report ("DEIR") for the Clean Water Factory Project ("The Project"). As we understand it, the Project will upgrade the San Bernardino Water Reclamation Plant ("SBWRP") to generate tertiary or better effluent, will involve the laying of pipe for about 7.5 miles from the SBWRP to the Waterman Spreading Grounds and the East Twin Creek Spreading Grounds, and diverting a substantial quantity of water from the outfall at the Rapid Infiltration/Extraction ("RIX") Facility further down the Santa Ana River ("SAR") from the SBWRP (although the exact quantity to be diverted varies in different parts of the document). Other unevaluated components of the Project are to install solar panels adjacent to the SBWRP, to lay pipe to carry effluent from RIX to the somewhere in the Chino Basins, and to possibly use existing pipe to convey effluent to the Redlands Basins or elsewhere. Finally, in addition to diverting the water at issue, you plan to sell it directly to recycled water customers along the various pipeline routes. 1

In general, our comments follow the order of the DEIR.

Table 1.0-1, which is reproduced later as Table 3.0-1, indicates that volumes at RIX would be reduced by "up to" 17.9 MGD (million gallons a day), although elsewhere in the document it appears the reductions are more than this. Perhaps this relates to your rather inscrutable footnote that "Volumes represent the average RIX discharge in 2009/2010, the projected wastewater available for recycling over a 20-year period, and overextraction." Specifically what 20 year period? And what does overextraction mean and have to do with it? Table 1.0-1 also indicates the Project would involve "minor" 2

upgrades to the RIX facility under the "Chino basin recharge option," which is left further undefined, and we don't believe those upgrades are described anywhere. Next, the Table indicates that the SBWRP would be upgraded to provide "enhanced treatment" to up to 33 MGD capacity for 2035, *and* that there would be up to 5 MGD "tertiary filtration/disinfection facilities," *and* that there would be up to 15 MGD of advanced wastewater treatment facilities to provide a source of groundwater replenishment *and* that the Project "would include 5 MGD of tertiary water, treated at SBWRP, for direct use by local municipal facilities and other recycled water users." The DEIR should specify how much wastewater is being subject to which new processes. At present it is indecipherable. 2

At Section 1.6, Significant and Unavoidable Environmental Impacts, you indicate that regional construction air emissions, local construction air emissions, and cumulative construction air emissions will be significant, as will direct (but not cumulative) impacts to the Santa Ana sucker ("SAS"). We wish to note two things here: first, the DEIR varies in describing impacts to the SAS as significant and not significant, which is a fatal flaw, and second, impacts to the SAS would be cumulative as well as direct, as there are at least two other projects that would further withdraw water from the SAR planned by the City of Rialto and San Bernardino Valley Municipal Water District. Section 1.6 suggests that it is the "sheer listing" of the SAS as threatened which will result in significant unavoidable impacts to the species. We disagree; it is the impacts of the Project that are significant. 3

In Section 2.0 you assert that this is a Program EIR. Whether it is a Program EIR or not, it should analyze the impacts of what is clearly a project in all the detail the Project requires. As you know, the Project is unlikely to receive further review under CEQA. *See, e.g.,* CEQA Guidelines § 15168(c)(2). 4

In Section 2.3, you indicate that the U.S. Environmental Protection Agency ("EPA") uses "CEQA-Plus" to evaluate compliance with the federal Endangered Species Act ("ESA"), the National Historic Preservation Act and the federal Clean Air Act ("CAA") for the distribution of State Revolving Fund loans, which are partially funded by EPA. We question the legality of EPA's reliance on CEQA-Plus under the National Environmental Policy Act ("NEPA"). Please provide the legal justification for not preparing an Environmental Impact Report/Environmental Impact Statement ("EIR/EIS"). We note that because you are receiving federal funding Section 7 of ESA applies. 5

In Section 2.4, Notice of Preparation/Early Consultation, you indicate that you have filed a Petition for Change to decrease current tertiary discharge from RIX from 35.7 MGD (40,000 acre-feet a year ("afy")) to 11.9 MGD (13,300 afy). This is a reduction of 23.8 MGD, far in excess of the 17.9 MGD you proposed to reduce RIX discharges by in Table 1.0-1. You indicated that the comments on your Petition for Change are attached as Appendix 10.1, but Appendix 10.1 is your comments on the EIR/EIS Notice of Preparation not on the Petition for Change. 6

You claim that you will do further NEPA review later should it be necessary for further federal funding. However, the CEQA Guidelines indicate that you should prepare a joint document. Guidelines § 15222. 7

In Section 2.6.2 you specify some of the Trustee, Responsible, and Cooperating Agencies. However, you do not specify the local agencies from whom you would require encroachment permits. They should be indicated. 8a

In Section 3.1 you indicate that the "Project would aid SBMWD in meeting future projected water demands through methods that uphold the groundwater management obligations of the Western Judgment." While this may be true, we believe the Western Judgment also requires delivering a certain amount of water at Riverside Narrows and the proposed Project would reduce the potential deliveries there substantially. 8b

Also in Section 3.1 you indicate again that you will be reducing the discharge from the outfall at RIX. You should specify clearly by how much. Table 1.0-1 indicates a reduction of 17.9 MGD. Alternative 6's discussion in Section 1.7 indicates the Project would divert 23.3 MGD. And your Petition for Change indicates a diversion of 23.8 MGD. We also note that your Petition for Change's Environmental Information document, which should be a part of the administrative record for this proceeding, projects a reduction of 31.5 afy or approximately 28 MGD. We have included that as Attachment A hereto. 8c

In Section 3.1.2 you address Environmental Setting but you do not describe the habitat for the SAS, the San Bernardino Merriam's Kangaroo Rat ("SBKR") or any other species such as the Least Bell's vireo ("LBV") or the Southwestern willow flycatcher ("SWFL"). 8d

In Section 3.1.3 Background and History you address the Western Judgment and its requirement, through a subsidiary agreement, that the City discharge at least 16,000 afy to the SAR. You claim that "[i]n any event, even with the Clean Water Project fully implemented," at least 16,000 afy will be discharged at RIX, but your Petition for Change has you discharging only 13,300 afy at RIX, less than this amount. And you have failed to account for the reductions anticipated by the City of Rialto and Valley District recycled water projects. 8e

You indicate that the SBMWD and the City of Colton operate a Joint Powers Authority which operates RIX and that it discharges 31.3 MGD, 22 MGD from the SBWRP from San Bernardino, Loma Linda, and the East Valley Water District ("EVWD"), 5.3 MGD from Colton, and apparently 4 MGD from overextraction. Please confirm that the missing 4 MGD is from overextraction. Please indicate how much overextraction you anticipate to occur at RIX under the Project in all of its Phases. Also, we note that your Petition for Change indicated that RIX presently discharges 35.7 not 31.3 MGD. Please indicate which is the accurate figure and what is the source of the discrepancy. 8f

Under 3.1.4 Project Objectives we note that none of them take into account your environmental obligations to the SAS or other species downstream of RIX. 8g

In Section 3.2.1 RIX Phased Discharge Reduction, you assert that the Project would reduce secondary effluent from the SBWRP going to RIX from approximately 22 MGD to between 4-7 MGD over a period of 15 to 20 years. You haven't indicated whether the City of Colton has plans for its component of SBWRP effluent, or how the Sterling Natural Resource Center ("SNRC") will affect your plans. You indicate the Project would ultimately treat approximately 28 MGD to an advanced/tertiary level and that the remainder would go to RIX. This is a maximum of 5 MGD as of 2035. You need to evaluate, and have not evaluated, impacts from this level of withdrawal in combination with the SNRC and City of Rialto planned wastewater treatment facilities. 9

Under 3.2.2, Conveyance and Storage Systems, you say the EIR considers six primary conveyance and storage scenarios for delivery of the recycled water or advanced treated wastewater to direct use customers or recharge basins. The discussion of the six scenarios is largely absent from the DEIR. We also note that the DEIR considers the Waterman Basins and East Twin Creek Spreading Grounds as well as the Chino Basins, but your Petition for Change indicates the Devil Canyon Basins and Sweetwater Basins and omits any mention of the Chino Basins. Obviously it is improper to discharge to any basin not evaluated in the DEIR, and this includes the Chino Basins which are unaddressed although they are referred to. 10a

You indicate that there are more than 100 "possible combinations of Conveyance Scenarios with Pipeline Alignment Options, Conveyance Facility Site Options and SBWRP improvement options." But you describe only four in the EIR. This is not adequate and we have no way of discerning what you are leaving out. You assert that "The scenario/options that are ultimately selected would be identified as part of the final facilities design process, and would occur after the EIR is certified." This is not adequate given that some alignments may have endangered species impacts or other impacts. 10b

Table 3.0-3 Summary of Conveyance Components and Scenarios is concerning in that Scenario 5 involves advanced treatment "located offsite near the recharge basins." This is obviously very involved and will have impacts that have not been evaluated in the document. Also, Scenario 5 is identical to Scenario 6. You say that any of the 4 alignment options can be applied to any of the 6 conveyance scenarios and that the conveyance alignment options are illustrated in Exhibits 3.04-3.05-3.06. However, these are not individual alignment options so it is completely impossible to assess what your plans are. You then say that "A future connection of the RIX Facility to the Chino Basin and IEUA's non-potable system could be provided," although you do not evaluate the connection or the discharge from the connection in the DEIR. This is improperly left out, and if you argue you intend to evaluate it later, this is improper piecemealing. 10c

Under Pump Station/Storage Reservoir Site Options, you indicate that there are seven potential site options of 1 to 1.5 acres each depicted in Exhibit 3.0-5. Not so. That Exhibit shows three potential conveyance alignments (not 4), the East Twin Creek Spreading Grounds and the Waterman Basins along with potential recycled water users, but no pump stations or storage reservoir locations. You further state that each of these 10d

seven undepicted site options is separated into "an intermediate location; or at a northern location." This is inscrutable and not adequate evaluation under CEQA. 10d

In Section 3.2.3, Direct Use Sites, you say that there are 936 acres of potential "types of sites" that could directly use recycled water, but you do not identify them (other than mapping a few in Exhibit 3.0-5). You claim there would be further review under CEQA for distribution lines to these facilities but we think this is doubtful as facilities exemptions would likely apply and the impacts should be evaluated here. 11

At Section 3.2.4 you concede that there would be work in the recharge basins, such as flow measurement devices, monitoring wells, and "general improvements to increase the operational flexibility of the recharge facilities," but you never get to ground-level evaluation of the impacts of these facilities to the species that inhabit or potentially inhabit the Basins – particularly not the Chino Basin. The closest you get is in Section 3.3 where you assert that "Depending on the Conveyance Scenario selected, there would be temporary construction that would occur along East Twin Creek . . . and along the east and northeast edges of Waterman Basins. Grading and construction for these areas would be conducted in a manner that avoids and minimizes effects to sensitive habitat areas or other identified sensitive biological resources," although this is nowhere contained in a mitigation measure. We also note that these sensitive habitat areas are nowhere acknowledged in Section 3.1.2, Environmental Setting. In short, the DEIR neither identifies specific impacts, nor avoids, nor minimizes them with mitigation measures. 12a

You claim that in undeveloped areas there will be a 50-foot wide corridor for construction but that in developed areas or sensitive habitat areas it will only be 25 feet wide. You claim this information is in Table 3.04, but Table 3.04 is useless because there is no map depicting where the segments involved are. 12b

You indicate that Jack and Bore Tunneling and Directional Drilling are two methods you will use to avoid sensitive species. However, there is no indication that these methods will avoid burrowing species. Even if this is true you have not established in the DEIR that this is the case. 12c

Regarding Booster Pump Stations and Reservoir sites, you state that "Final site selection would consider avoidance of sensitive resources, preference for existing disturbed or developed sites, and absence of adjacent sensitive receptors." The sites should have been selected and analyzed as a part of the DEIR; there are no enforceable mitigation measures requiring such site selection, and the document is too vague for us to determine whether there are areas with both sensitive receptors and sensitive species and there is no way of assuring in general that this mandate will be followed. 12d

As to Staging Areas, you say they would be at the SBWRP, the Waterman Basins, the East Twin Creek Spreading Grounds, or at one or more of the seven unidentified pump stations/reservoir sites. We doubt that you will be using only one and you concede as much in the next paragraph. 12e

Under Section 3.4, Project Operation and Maintenance, you indicate that currently the SBWRP treats approximately 22 MGD and that the discharge will be reduced over a period of 15-20 years to a minimum flow of 13.4 MGD. We have two concerns here. First, we believe the Project involves Phases going to 25 years hence, and second, you have apparently underestimated the reduction, as you have elsewhere stated it will go down to 4-7 MGD. 13a

In Table 3.0-6 you show the estimated maximum recharge capacity for the Waterman Basins and the East Twin Creek Spreading Grounds. You assert that "While water may be conveyed to the Chino Basin, the specific locations and capacities of the recharge basins that would be used have not been determined." In other words, you have not evaluated this option under CEQA. Also, it is impossible to determine the alignment of the proposed pipe if you cannot tell us where the water is going, so you have not evaluated this aspect of the Project either. 13b

You contend recycled water would be discharged into the basins when storage capacity is available and not needed for flood control purposes and that you will be entering into an agreement with the San Bernardino County Flood Control District regarding this. That agreement should have been included with the DEIR and subject to evaluation under CEQA. 13c

As to Underground Retention Time you assert that the recycled water "would be retained underground in the aquifer for a minimum six-month period before it is extracted," but you say that the Project within three months of commencing operations would be required to demonstrate that a minimum *two* month underground retention time has been met. Your statement that the recycled water will stay underground for six months is not based on substantial evidence. 13d

Under Section 3.5, Project Phasing, in Table 3.0-7, you break down the reductions in RIX discharge to five Phases, which start at 34.3 MGD rather than the 31.3 MGD you assert RIX is discharging presently earlier. You state that if the City of Rialto and Valley District recycled water projects move forward, the net reduction in flows could be as much as 15.5 MGD or 24.0 cubic feet per second ("cfs"). You claim "This flow reduction would not be in addition to the proposed Project discharge reductions, but would reduce the amount of RIX discharge reduction available to SBMWD." However, you nowhere limit your planned reduction with mitigation measures in anticipation of the other projects, and all of your tables assume a 9.5 MGD contribution from the Rialto Channel which would not be present assuming that the City of Rialto's project is implemented. 14

Moving to your Environmental Analysis section, Exhibits 4.1-1 and Table 4.1-1, Cumulative Projects, includes neither the SNRC nor the Rialto project. 15

At 4.2-16, under Aesthetics, you say for the first time that the pipelines from the SBWRP to Waterman Basins and East Twin Creek Spreading Grounds would be *in lieu of* the pipeline to Chino Basins. Also, you assert that the pipelines to the Chino Basins would 16

run from the SBWRP, *not* from RIX. In short, throughout the document, your Project definition is inadequate. 16

Section 4.3 – Air Quality and Greenhouse Gas Impacts. Here you attempt to define the significance criteria for criteria air pollutants but not for greenhouse gases ("GHGs"). You attempt to rely on the *draft* South Coast Air Quality Management District ("SCAQMD") 10,000 $MTCO_2e$ threshold which was never finalized. You assert without support that the Project "is not a trip-generating land use (except for minor increases in employee trips and deliveries associated with expanded wastewater treatment facilities)." You should have quantified this increase in trips. It should be possible to identify increased numbers of employees and trips (including haul trucks) associated with the Project. 17a

You rely on SCAQMD's 1993 *CEQA Air Quality Handbook* to conclude that if the Project does not have significant direct impacts it has no cumulative impacts. This is not based on substantial evidence. As the CEQA Guidelines make clear, 17b

> When assessing whether a cumulative effect requires an EIR, the lead agency shall consider whether the cumulative impact is significant and whether the effects of the project are cumulatively considerable. An EIR must be prepared *if the cumulative impact may be significant and the project's incremental effect, though individually limited, is cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.*

Guidelines § 15064(h)(1) (emphasis supplied).

Guidelines § 15065(a)(3) requires a mandatory finding of significance when "The project has possible environmental effects that are individually limited but cumulatively considerable," and provides the same definition of "cumulatively considerable."

Finally, Guidelines § 15355 defines cumulative impacts and states: 17c

> *"Cumulative impacts" refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.*
> (a) The individual effects may be changes resulting from a single project or a number of separate projects.
> (b) The cumulative impact from several projects is the change in the environment which results from the *incremental impact* of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. *Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.*

Guidelines § 15355 (emphasis supplied). *See also* Gordon & Herson, "Demystifying CEQA's Cumulative Impact Analysis Requirements: Guidance for Defensible EIR Evaluation," *Cal. Env't'l L. Reporter,* 379, 381 (Sept. 2011) (Vol. 2011, Issue 9) ("Critically, a proposed project's incremental effects may be 'cumulatively considerable' even when its individual effects are limited. (citations). *In other words, CEQA does not excuse an EIR from evaluating cumulative impacts simply because the project-specific analysis determined its impacts would be 'less than significant.'*") In short, your cumulative impacts analysis as to Air Quality is wholly without a basis in substantial evidence and represents a failure to proceed by law. 17c

At 4.3-22 regarding Air Quality Management Plan consistency you claim the Project is consistent with the General Plan and would not lead to additional growth. We disagree. By providing a new source of water the Project will lead to additional growth. 17d

At 4.3-29 you adopt mitigation requiring Tier 3 equipment and Tier 4 for newer equipment but you claim that requiring Tier 4 generally would not be "feasible." We fail to see why. You could require new or newly retrofitted equipment without incurring substantial hardship. 17e

Regarding Impact 4.3-2, Would the Project result in a cumulatively considerable net increase of any criteria pollutant for which the basin is nonattainment?, you say yes, but only with respect to NO_x as an ozone precursor. We dispute that cumulative impacts would be limited to NO_x for the reasons discussed above. 17f

As to Impact 4.3-5, at 4.3-41 to -42, Would the Project result in exceedance of federal de minimis levels?, you indicate in the heading that it would not but in the text and table that it would. 17g

Concerning Impact 4.3-6, Would the Project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?, you concede that even if you were to use the 10,000 $MTCO_2e$ draft standard from SCAQMD, you exceed it. The total construction emissions would be, according to your estimates, 3,366.58 $MTCO_2e$, which you choose to amortize. We believe amortization is contrary to the dictates of AB32 and Executive Orders S-3-05 and B-30-15. Again, you claim vehicle trips would be nominal "and only associated with maintenance and inspection activities and minor increases in employee trips associated with expanded wastewater treatment facilities," but you could have quantified these increases easily. You assert that as to energy consumption, the increased energy used at the SBWRP would be associated with decreased consumption at RIX to the tune of 20.9 MGD. For one thing, we don't know if you phased this in. For another, we don't know that RIX will decrease its operations given increases in other populations using it, for example, the City of Colton. Finally, Table 1.0-1 only has the total reduction in RIX discharges at 17.9 MGD, not 20.9. We assume the 20.9 MGD figure comes from increased effluent at SBWRP due to increases in population; it is inappropriate to transfer this to RIX. 17h

Finally, to get below the 10,000 $MTCO_2e$ threshold (which we disagree with), you indicate you will require some form of alternative energy or you will limit advanced water treatment by 1.17 MGD from 15.0 MGD to 13.83 MGD. This is uncertain mitigation deferred to the future under CEQA and is not permissible. You have to commit to a *specific, enforceable* mitigation measure. 17i

Next you point to Table 4.3-14, "Summary of Potential Impacts Associated with Installation of Solar Electric Facilities," which is contrary to what you said earlier that you were not relying on solar power to reduce impacts because you had not adequately planned for it. You have not reflected all the impacts of installing solar power such as direct mortalities to birds and bats that fly into the panels. 17j

Next you assert there is no conflict with the County of San Bernardino GHG Reduction Plan because you assert that it is focused on land use and that the County has no jurisdiction over SBMWD. We disagree with both of these conclusions. 17k

Also concerning air quality, your Appendix 10.3 does not detail the assumptions made in your modeling, and these assumptions should have been in the DEIR. Finally, in your Construction Assumptions table you indicate there will be 129,926 cubic yards of earthwork for conveyance line installation, but you assume *no* hauling trips in connection with that earthwork. We find this not to be credible. It also appears that you modeled no grading or paving, which is also not credible. 17l

Section 4.4 – Biological Resources. At 4.4-5 you indicate that you conducted "inventories" of plant communities on June 19, 25 and July 3, 2014 "within the boundaries of the survey area." It is apparent from your Appendix 10.4 that you surveyed not only plant communities across hundreds of acres but also for animal species. This is not a focused survey. Further, we're not sure what the "survey area" boundaries are and you didn't specify them. We're fairly certain that they did not include the area below RIX where the reduced discharge may well impact plant communities, including sensitive plant communities. You say to refer to Appendix 10.4 for results of the 2013, 2014 and 2015 surveys. You don't specify what was surveyed for, or how, in the DEIR. This violates CEQA. The Appendix discloses that you conducted focused surveys for the LBV and SBKR (but not the SWFL) only in the Waterman Basins, not the East Twin Creek Spreading Grounds, which also contains potential habitat.[1] It also appears you did not conduct a survey for sensitive plants in the East Twin Creek Spreading Grounds, other than the three days in June and July of 2014, while you were apparently also looking for animal species across hundreds of acres. You indicate in your Assessment, included in the Appendices, that your ~~surveys~~ were for the thread-leaved brodiaea, the Plummer's mariposa lily, the smooth tarplant, the mesa horkelia, the California satintail, and Robbin's pepper-grass. What about the Parry's spineflower, the 18

[1] You say in your Appendices that there was a survey effort in "early August 2014" regarding the SBKR and LBV in both sets of Basins, but we don't know how much time was involved and what was done. The Waterman site is 230 acres and the East Twin Creek Spreading Grounds is 170 acres. Did your two biologists walk transects? You indicate there were "meandering transects" for *plant* communities. This does not suffice.

slender horned spineflower, and the Santa Ana River woolly-star, all of which you acknowledged as having potential to occur? And it appears from the text that these surveys were done in the Waterman Spreading Grounds only. You also apparently did not – from what we can tell – survey the final 1.5 miles of East Twin Creek above the SAR where it is vegetated and along which Alignment 1 would run. Finally, the Black and Veatch Summary Report included as Appendix 10.2 discloses all the proposed Pump Stations are on open space that looks to be habitat in virtually all cases. There is no indication that these areas were specially surveyed or surveyed at all. 18

In Section 4.4.3 of the DEIR, Plant Communities, you concede that there is Riversidean Alluvial Fan Sage Scrub ("RAFSS"), a sensitive habitat, present in the southern half of the Waterman Basins and along the banks of East Twin Creek north of East 40th Street. You later contend, at 4.4-23, in Table 4.4-2, that this community is "absent" from the survey area. All told, according to the DEIR, there are over 70 acres of RAFSS in the area you have identified as subject to the Project. The same anomaly is present with respect to Southern Riparian Scrub. Again, we disagree that you have surveyed the entire area you should have, as there will be significant impacts to vegetation downstream of RIX. You haven't addressed the impacts to the RAFSS habitat in the Basins and how increased flooding may impact it, though it is a sensitive community entitled to mitigation in its own right. 19

At 4.4.4, Wildlife Species, you indicate there was a high quantity of bird species observed either at Waterman Basins or at East Twin Creek Spreading Grounds or along the bank of the downstream areas of the SAR. You don't specify where. 20

In 4.4.5, Sensitive Biological Resources, you indicate that Parry's Spineflower was identified in the Waterman Basins previously even though your 2015 surveys were negative. At 4.4-26 regarding the SBKR you assert that "[t]he Project site does not support undisturbed RAFSS habitats and is no longer exposed to hydrological processes needed to maintain suitable SBKR habitat." This is in contravention to your statement earlier that there is high quality RAFSS habitat located in the southern basins at 4.4-6. It also contravenes your later statement that SBKR has been documented according to SBCFCD in the Waterman Basins in the past. Though you say you did focused trapping for the SBKR in August 2015 and found none, you don't indicate whether any species was caught at all (including Dulzura, which is a species of special concern), and this isn't conclusive. You also concede that sign for kangaroo rat was found on the banks of both basins, but you apparently only surveyed the Waterman Basins. 21

Regarding the Los Angeles Pocket Mouse ("LAPM"), you say surveys for the SBKR determined this species was absent, but this survey was apparently only done in the Waterman Basins and the fact that nothing was trapped is inconclusive.

At 4.4-29 you address the SAS and conduct an analysis of the USFWS's Primary Constituent Elements ("PCEs") for Critical Habitat. You claim that the Project will not "compromise[]" any PCEs. With all due respect, the PCEs are minimum standards for the Critical Habitat for the SAS, not ideals (as you concede yourself with regard to PCE 22

3, for water depths of greater than 3 centimeters). There needs to be a minimum flow for the SAS to survive and we do not believe you have demonstrated that it will be present. Additionally, PCE 6 includes overhead vegetation and it is not apparent that such vegetation will survive with the reduced flows that will be coming from RIX under the Project. You have done nothing to assess these impacts. 22

At 4.4-30 you contend that your modeling indicates that the Clean Water Factory will be protective of all of the PCEs except temperature and water clarity throughout Phase 1 and Phase 2 of the Project, "with no reductions in habitat exceeding 25% of any reach or any lifestage of the SAS." First, there are five Phases of the Project so this is small consolation – and even if we can rely on your assertion that there will be no reductions below what is projected for Phase 5 with cumulative projects, there are significant impacts. Second, 25% is a significant quantity when assessing the viability of a threatened species for which the USFWS has a Recovery Plan. Third, as your statement itself acknowledges, there could be impacts to temperature and water clarity as a result of the Project. 23a

You purport to disagree with the USFWS 2012 study citing Thompson et al. for the proposition that the gravel and cobble substrate needed for the species is in decline. That USFWS study should be a part of the record since you have cited it. While you contend that SAS habitat has increased since the early 1990's with the presence of RIX since 1996, the fact is the species was listed after that so apparently it needs that increased habitat. 23b

You cite MBC 2000 for the conclusion that diversion of discharge from RIX "would likely result in a small decline in willow woodland vegetation." How, exactly, did the study characterize "small," and what level of reductions was it discussing? Moreover, though you assert that any decline "will likely be minor compared to impacts due to flooding and scouring during flows following large storm events," we note that the City of Riverside's planned collection of storm flows upstream will avert that flooding from happening to help with woodland cover. 23c

Concerning Critical Habitat, you concede that it occurs for the SWFL, the SBKR, and the SAS "within the Project site." If we are not mistaken, it also occurs for the LBV downstream of RIX. You claim that is over 9 miles southwest of the East Twin Creek Spreading Grounds but it is still likely to be impacted by the reduction of the flows at RIX. Regarding the SBKR you assert that the last 1.2 miles are within the Facility Corridor but that "SBKR Critical Habitat is not expected to be affected by Project implementation, as it terminates south of the treatment plant, *outside of Critical Habitat*, at the western edge of the Facility corridor and upstream of the RIX Facility." This makes no sense. 23d

Regarding impacts to wildlife corridors, you acknowledge that the SAR is a wildlife corridor – and though you don't acknowledge it, your reductions in flow will have an impact on it. 23e

As to 4.4.7, Regulatory Framework, you acknowledge the Project is subject to sections 7 and 9 of the ESA. You should have obtained a Biological Opinion prior to completing the DEIR; it should have been included as an Appendix. 24

At 4.4-55, you break down your proposed reductions at RIX into five Phases, going from 62.5 cfs to 30.3 cfs. This assumes there is 9.5 cfs coming from the Rialto Drain. First of all, the City of Rialto has petitioned to totally cut off this flow. Second, their Notice of Petition, attached as Attachment B, indicates their average flow is 9.11 cfs, not 9.5 cfs. 25a

Regarding the SAR Discharge Reductions, we question whether your reduction in flow modeling is accurate given the significant differences in modeling achieved, for example, regarding the width of the SAR, in San Bernardino Valley Municipal Water District's studies for its DEIR. A copy of the final study associated with its FEIR is attached hereto as Attachment C. Their draft study is attached as Attachment D. The draft Recovery Plan for the SAS is attached as Attachment E. We do not believe the reductions in flow you plan are consistent with the Recovery Plan. 25b

Your study appears markedly different from Valley District's study. You look at the averages in your study regarding width and you assert it changes less than 10% in Reaches 1 and 3 through all five phases of the Project and through the first four in Reach 2. But the minimums and maximums changed significantly more than this in Reach 2 and in the maximum in Reach 3 as well. 25c

As to Changes in Stream Velocity, you claim the velocities in Phase 5 are still substantially higher than the required minimum flow of 0.01 ft/s as defined in the PCEs for the SAS. But the USFWS was likely being conservative in defining the minimum required flow throughout the range of critical habitat for the SAS, rather than defining an ideal. And while it may be true that suckers prefer low velocities, higher velocities are still needed to clear the substrate. 25d

You assert that "The proposed reduction in discharges from RIX . . . would not substantially alter the existing drainage pattern of the river because it flows within an inset, or low flow channel, through the Project site for most, if not all, of its course downstream." This assertion is contrary to your Table 4.4-7 Modeled Velocities in Feet per Second, Percentage of Change from Baseline, which discloses a 41% change in average velocity from the baseline to Phase 5 in Reach 1, where most SAS are currently present. 25e

Regarding modeling of SAS Habitat in the SAR, you indicate that "substrate data was not modeled by WEI, but by estimating substrate as a separate constant for each study reach, substrate was incorporated into the model by GEI." How was this done? We note that even according to your own construct, the weighted usable area ("WUA") was reduced by 27.6% in Reach 1, 48.6% in Reach 2, and 42.0% in Reach 3 for adults; by 19.6% in Reach 1, 37.2% in Reach 2, and 41.0% in Reach 3 for juveniles. You assert that changes in the range of 10% were considered within the range of natural variability and changes between 10 to 25% were "less than significant impact." We think this is baseless. As 26a

Valley District found regarding the SNRC, *any* impact to this vulnerable species is significant. 26a

You next attempt to discredit your own Study: "For Study Reaches 2 and 3, the actual reductions would be less likely than the modeled predictions because these two study reaches were modeled based on stream depths that represent more of an average value based on the trapezoidal stream geometry used in the model, as opposed to Study Reach 1 that used actual cross-sectional data . . . In fact, the boundary for coarse substrate in Study Reach 2 has been measured to extend from the upper 25% of the study reach to 100% of the study reach." This is based on present conditions. What does this have to do with what would happen under low flow conditions or after storms? We also note you have not assessed what changes there will be to storm flows as a result of the Riverside project to recharge storm flows, which could significantly impact your model. Finally, you go on from here to explain how Reach 3 has at the same time none and then more coarse substrate so that "impacts to juvenile WUA would be expected to be less than predicted in the model." This is not substantial evidence. 26b

You claim potential impacts to the SAS of greater than 10% will only occur in Reaches 2 and 3 and only 10 years or more after Project implementation. This is of no consequence to the sucker: whether its decline is rapid or slow, there will be a decline. As to potential impacts in Phase 3 and beyond they will occur only in Reaches 2 and 3, you assert. But you provided a study showing far greater impacts with Phase 5, and we are likely to be at Phase 5 much sooner than you had planned due to reductions from other projects (SNRC and City of Rialto) that you don't even acknowledge here. 26c

You say the phased approach "provides the opportunity to design and implement a biological monitoring and adaptive management approach for effectively managing the stream environment through the various phases of flow reduction from the RIX Facility." You could have designed such an Adaptive Monitoring Program in advance but you have left much of it to be developed in the future. This is not adequate mitigation. 26d

Under "Low Flow Sediment Scour and Transport for the Santa Ana River," you say Michael Baker International developed a model to answer the question of whether reduced flows from RIX would hinder the removal of episodic sandy deposition that occurs during storm events. This study disclosed a minimum requirement for scour of 4.8 MGD which would take an estimated 100 days to remove sand from the combined Study Reaches 1 and 2. You did not correlate this 100 days – or the roughly 80 days it would take at 11.9 MGD – with the life stages of the SAS, so we don't know how significant this impact could be, but this is a great deal longer than what it would take under present conditions. 26e

Impact 4.4-1: Would the Project Have a Substantial Adverse Effect, either Directly or Through Habitat Modification, on [Sensitive] Species? Here you state the impacts would be less than significant. We disagree, in part for reasons already listed. 27a

First, regarding Parry's Spineflower, you claim there is only "marginal" habitat for it in the Waterman Basins and East Twin Creek Spreading Grounds, and that it is "presumed not to be present on the Project site." Therefore, you say there will be no direct impacts to the species. We've been in drought conditions. The plant could well be present, especially since it has been seen in the Waterman Basins before. You indicated in your Assessment in the Appendices that you did focused surveys in 2015, but you said you were going to do them during the blooming period (between April and June), and you did them in the summer. Your conclusion that there will be no impact is not based on substantial evidence. 27b

You cite mitigation measures ("MMs") BIO-1 and BIO-2 here. BIO-1 is a Worker Environmental Awareness Program that you say "will constitute the conveyance of environmental concerns and appropriate work practices including spill prevention, emergency response measures, and protection of sensitive resources." Were you planning on teaching the workers what Parry's spineflower looks like so there can be avoidance? Nowhere is this specified. BIO-2 is weed control measures. The combination of these two measures do not reduce impacts to special status plant species to less than significant. 27c

Concerning listed wildlife species you concede the SBKR could be present in Waterman Basins and East Twin Creek Spreading Grounds and that you will do focused trapping in both and consult with the USFWS if they are present. An incidental take permit doesn't mitigate impacts; you should as a mitigation measure indicate that you will catch and release the species in adjacent appropriate habitat. The content of your preconstruction trapping hasn't been specified and thus we cannot verify how effective it will be. Trapping should have occurred in the East Twin Creek Spreading Grounds beforehand and it did not. 27d

Regarding the LBV you concede that one was sighted at the Waterman Basins in summer 2015. This means there are likely more present. You cite to MM BIO-1 and MM-BIO-4 combined with MM BIO-5, construction outside the avian breeding season, along with BIO-6, LBV surveys. You've said the avian breeding season for purposes of the MM is from January to August 30 though your previously acknowledged that the LBV are present through mid-September. This is therefore not an adequate measure.[2] You also have not assessed impacts to LBV critical habitat (or mitigated for it) downstream from RIX. You also have not addressed impacts to the SWFL at all though they could be similar and you have not mitigated for them at the Basins or downstream. 27e

You concede the SBKR could be impacted downstream of RIX if reduced flows decrease the amount of habitat present. You assert MM BIO-1, BIO-3 and BIO-4 would reduce 27f

[2] MM BIO-5 requires maintaining boundaries around any active nests until the young have fledged or the nest becomes inactive, but it does not require monitoring by a qualified biologist to assure nests are not being disturbed and to determine when the young have fledged. This should not be left to construction workers.

this impact to less than significant. None of these measures addresses impacts to the SBKR from reduced flows. 27f

Your Habitat Assessment in the Appendices acknowledges that the burrowing owl may be present on the Project site but there are absolutely no mitigation measures for it or assessment of impacts to it. 27g

Regarding the SAS, at 4.4-70 you state that with respect to Reach 2 there is a 7% loss at the end of Phase 1 or a 9.5% loss, and there is a 13.7% or 17.3% loss at the end of Phase 2. Which numbers are accurate? We should not have to root through the Appendices to find this out. You then describe the habitat conditions below RIX as "harsh" and describe the SAS as "adaptive." On what basis do you make this statement? This species is listed as threatened and has a severely limited range. 27h

You say "The gradual changes that would occur under the Project are expected to be within the natural range of variability, and would not be expected to reduce the available sucker habitat to an extent that it could not sustain the existing population of sucker." But the SAS is subject to a Recovery Plan. We're not talking about maintaining existing populations of fish but of increasing them to recovery so they are no longer on the endangered species list. Second, it appears that you are extrapolating a 10% reduction from each Phase as not significant, even though the DEIR shows numbers that are far higher for later Phases. Your approach is not based on substantial evidence. There is no evidence that the species is going to learn how to adapt in 5 year increments. 27i

MM BIO-7 is your Adaptive Management Plan ("AMP") – or actually, a *plan* for an Adaptive Management Plan. It says that prior to any Project-related reduction in RIX discharge that will result in a 10% reduction in SAS habitat available in any study reach, you will develop and implement an AMP. We have to note that your text diverges from your Tables again. The text of the DEIR at 4.4-70 says that you anticipate losing 10% of habitat at the end of Phase 3 – but in your Tables adult habitat is reduced by more than 10% in Phase 1 (if you equate habitat with Weighted Usable Area, which is what we presume you developed that term for). So are you planning to develop an AMP now or 15 years from now? 15 years is not soon enough. 27j

Also the AMP should have been developed already so this is improperly deferred mitigation. You list a number of items which "may" be included but these should be required. Finally, you say the AMP will remain in effect so long as RIX discharge is below 38.4 cfs. On what basis did you arrive at this number? According to Tables 4.4-8 and 4.4-9, this is between Phase 3 and Phase 4, long after there are significant effects to the SAS. 27k

In MM BIO-8 you indicate that SBMWD shall work with the USACE to initiate consultation with USFWS under Section 7 of ESA. Finally there is reference to the SWFL, but you should have sought a Biological Opinion long ago, and it should address the LBV as well. 27l

Concerning the LBV and SWFL, you say phased reduction in loss of flow below RIX would result in loss of wetted width to the SAR of less than 5% for Reaches 1 and 3 and a maximum of 13% for Reach 2. We dispute this based on the findings of the SNRC study which show a 7% loss of width from loss of only 6 MGD. Regarding your MM's, BIO-9 is to reduce noise in areas adjacent to riparian habitat. How do you propose to enforce this? BIO-10 prohibits nighttime construction within 500 feet of sensitive species. How is this going to help? BIO-11 says in areas within 100 feet of riparian habitat BMPs during construction will be enforced. In short, these are all construction-related mitigations. They will do nothing to address the loss of cover that will impact the SAS as well as these species downstream of RIX. Your conclusion this MM's reduce impacts to less than significant levels is not based on substantial evidence. 27m

Next we come to your discussion regarding the Arroyo chub. The chub is a species of special concern that is threatened within its native range. You state that it has been observed near RIX though it is expected to be present further downstream where there are sandier substrates. You claim that the Adaptive Management Plan for the SAS and Section 7 consultation for the SAS will protect this species as well. This conclusion is not based on substantial evidence. The species have different needs as you acknowledge; the chub needs sandier bottoms. In other words, what protects the chub is exactly the *opposite* of what is good for the SAS. 27n

Regarding non-listed wildlife species, you indicate the yellow warbler was observed, and while no surveys have been done, the Project site(s) may be home to the northwestern San Diego pocket mouse, the rosy boa, the California horned lark, the western yellow bat, the Los Angeles pocket mouse, and the coast horned lizard. You claim without substantial evidence that without surveys or any effort to clear these individuals there will be no significant impacts to them based on your existing mitigation measures. 27o

Regarding Impact 4.4-2, impacts to riparian habitat or other sensitive natural communities, you again claim with next to no evidence that there will be no significant impact. You concede here that reductions in RIX flow could result in degradation of riparian habitat particularly in drought years. You finally indicate that this could affect wildlife species downstream as well. But you claim this will all be fixed by the as yet undeveloped AMP. MMs BIO-12 and -13 will not reduce this impact to less than significant levels. 28

Regarding Impact 4.4-4, wildlife corridors, you again state the impact is less than significant with mitigation. The area below RIX is known as a spawning site for the SAS; thus it is both a wildlife corridor and a nursery site. 29

As to Impact 4.4-6 relating to conservation plans you claim the Project would not conflict with an HCP or NCCP because it is a covered activity under the Upper SAR HCP. That HCP has yet to be approved so we don't know if the Project will conflict or not. 30

Relating to Cumulative Impacts, in Section 4.4.9 you indicate that you will focus on the SAS. The fact is that there are multiple other species that may be impacted by reduced flows as discussed above, and all of them should be evaluated here. 31a

You refer to the Riverside North Aquifer Storage & Recovery Project, which you indicate is a rubber dam which will extend 3 miles northeast of RIX to capture storm flows and recharge the Riverside and Colton groundwater basins. You state that it will divert storm flows "that may not reach sensitive species at the Clean Water Factory site regardless." The impact of this project should be evaluated and could have an effect on the SAS and the chub as well as the LBV and SWFL which depend on more water reaching past RIX. 31b

You finally acknowledge the other water projects diverting flows from RIX here. You say these other projects are referred to in your Table in Section 4.0 but they are not. Here you indicate that the impacts of the final two Phases of the Project, only, would be mitigated through the AMP. So you are not planning on implementing this mitigation for 15 years. You claim these two recycled water projects are different from the RNASR Project because it doesn't affect base flows. It can definitely still affect vegetation and habitat to the southwest. 31c

Here you indicate for the first time that the incremental impact of the Project with other projects would be cumulatively significant. But you claim that three "Measures" will reduce impacts below a significant level. You assert these measures are incorporated into MM BIO-14 though it is far from specific. We disagree that these measures will reduce impacts to the SAS or other species to less than significant levels. 31d

In short we disagree that you have addressed significant impacts to a number of sensitive species and that you have adequately mitigated for those impacts.

Section 4.7 – Water Quality and Hydrology. In this section you indicate that the SAR for Regulatory Reaches 3 and 4 are on EPA's section 303(d) list of water quality impaired segments. Reach 3 is impaired by pathogens, copper and apparently lead though it doesn't make your table, only the text. Reach 4 is impaired by pathogens, salinity, Total Dissolved Solids ("TDS"), and chlorides, though in your Table you only list pathogens. Whatever the cause of that error, the point is that reducing discharges below RIX will leave the waterbody more impaired. 32a

At 4.7-23 you indicate the Project would reduce RIX discharge from 53.0 cfs to 20.8 cfs. You state then that you recognize that other water agencies are considering projects that would also reduce flow at RIX but that "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." You say this is for "the reasons stated below," but we find no reasons there. 32b

You then state under Impact 4.7-1, Would the Project violate water quality standards or waste discharge requirements?, that the impacts would be less than significant with 32c

mitigation. You state that current Division of Drinking Water Replenishment regulations allow groundwater recharge of tertiary treated water with 80% dilution and that you would do this with SWP water. First, this goes back to the dependence you assert you were trying to get away from. Second, you previously noted (*see* Section 1.7, Alternatives Analysis, Alternative 2) that the SWP water exceeds the basin objectives for TDS and possibly nitrate. You claim you would produce blended water for recharge that would have a combined TDS of 233 mg/L and nitrate of 2.45 mg/L which is well below basin objectives. Please explain how you arrived at these calculations. 32c

As to Impact 4.7-3 Would the Project substantially alter the existing drainage pattern of the site or area including the alteration of the course of a stream or river?, you assert "The change in flow associated with the reduction of RIX effluent would be negligible due to the large capacity of the [SAR] to accumulate low flows and storm flows." You assert with the implementation of the AMP that this would have insignificant effects. Again, the AMP won't, according to you, be implemented for 15 years, and it won't, in our estimation, reduce the impacts of such dramatically reduced flows at RIX. 32d

Regarding 4.7.4, Cumulative Impacts, you again assert that the Rialto and SNRC projects would not reduce flows at RIX more than by Phase 5 reductions. Since the combined effect of those projects will be to reduce flows by 24.0 cfs or 15.5 MGD, this leaves the Project with a reduction of 9 – 11 cfs reduction only, and a requirement that it implement the AMP immediately. You have not included this as a mitigation. 32e

Incidentally, you say that Phase 2 of the Upper SAR HCP would involve an extensive effort to model the hydrology of the SAR watershed to understand how to best avoid impacts, but it appears that all three projects are going ahead in the absence of that effort. In short we do not believe your mitigation is adequate, or all that could feasibly be imposed.

Section 4.11 – Transportation. Under Impact 4.11-1, Would the Project conflict with an applicable plan, ordinance or policy establishing the measures of effectiveness for the performance of the circulation system . . .?, you again conclude the impacts are less than significant with mitigation. However, you apparently did not analyze the impacts of road closures or partial closures for any of the alignments – only the increased worker traffic. We're not even sure you modeled the trips by haul trucks with their increased PCEs. This is not realistic and is not supported by substantial evidence. 33

Section 5.0 – Other CEQA Considerations. As to 5.1, Growth Inducing Impacts, we believe a new supply of potable water will increase potential growth in the area and that it should have been acknowledged as such. The increased population growth should have been assessed. As to 5.5 Significant Unavoidable Environmental Effects, you failed to acknowledge impacts to the SAS or other species here; this is not based on substantial evidence. 34

Section 6.0 – Alternatives Analysis. Here, in contrast to the last section, you state that the SAS will face a significant unavoidable impact. Your document should be consistent in 35a

making this finding throughout and it should be recirculated as revised to do so because the public has not been adequately informed of this impact. 35a

Regarding Alternative 1, the No Project Alternative ("NPA"), you assert that it would have the same air quality and GHG impacts as the proposed Project. This conclusion is not based on substantial evidence. As to air quality, your impacts are regional and local as to construction, which would not occur under the NPA. As to GHGs it is possible that the transportation of the SWP water will have equivalent impacts as construction and operation of the Project but you have not quantified them and merely making this assertion is not based on substantial evidence. 35b

You failed to identify Alternative 1 as an environmentally superior alternative. It may be *the* environmentally superior alternative. There was no substantial evidence for excluding it.

Regarding Alternative 3, the Reduced Capacity Alternative, you should have considered this alternative more carefully in light of the additional water recycling projects you have already noted. You state that it would need to be coupled with one or more other supply systems. Those are now in the offing so there is nothing to prevent you from pursuing this alternative. 35c

Regarding Alternative 4, Project Variations Under Consideration, these variations should have been considered as part of the Project, and it was an abuse of discretion and failure to proceed by law to relegate these potential project components to an alternative when they clearly are planned as potential supplements to the Project. In particular, your analysis of impacts of the Alabama Street Effluent Pipeline and Redlands Basins is lacking. The very brief discussion of impacts to the SBKR and SAR woolly-star and slender horned spineflower is not adequate for implementation of this Project component. Jack-and-bone technology may well disturb burrows; it is impossible to determine otherwise with this level of analysis in any event. And consultation with and a Biological Opinion from the USFWS should have been sought in advance so the public would be apprised of the impacts of this action. As to Hazards and Hazardous Materials and Hydrology and Water Quality, you assert that the "Alternative" would have the same effects as to the Project or slightly less – would not impacts be substantially less given the pipelines are already extant? Regarding the relationship of the Alternative to the Project Objectives you claim without any basis that the Alternative would not reduce reliance on SWP water – but that is because you are not evaluating it in combination with the Project which it must be evaluated in combination with, because it is merely an alternative conveyance system. 35d

Concerning Alternative 5, Imported Water Supply, you state that water banking has its own environmental impacts due to energy required for recharge, extraction and conveyance. Since we don't believe you have evaluated the energy required for recharge associated with the Project we don't believe you should be evaluating the energy required for recharge here. You conclude this is the environmentally superior alternative without 35e

substantial evidence in the record. We are unclear how this differs from the No Project Alternative. 35e

As to Alternative 7, the Hybrid of the Reduced Capacity Alternative and the In Lieu Water Supply Alternative, you have not discussed its environmental impacts in depth, yet you have identified it an the environmentally superior alternative. This is not based on substantial evidence. 35f

Regarding Alternative 8, Regional Partnership, you again have not discussed it in any depth. Since this Project could reduce the impacts of the Project significantly you should have done so, and rejecting it without such a discussion is not based on substantial evidence. We note from your Appendix 10.2 that an earlier Petition for Change by SBMWD resulted in an MOU between Valley District and SBMWD to cooperate on the Clean Water Factory. What happened to this? 35g

Section 7.0 – Effects Found Not to Be Significant. Under Section 7.6, Population, Housing, Socioeconomics and Environmental Justice, you ask whether the Project would induce substantial growth in the area. We believe that it would as it would eliminate a barrier to growth. Under d., Would the Project Result in Impacts to Minority and/or Low Income Populations?, you acknowledge there is a minority population in the area of the Project but you claim that planned mitigations will reduce impacts to less than significant. We believe traffic, air quality, and noise impacts would primarily affect these populations and we don't believe you have adequately mitigated for these impacts. 36

Comments on the Appendices. While we have attempted to refer to your Appendices throughout our discussion of the DEIR, we have a few additional comments we will provide here. First, your Low Flow Study asserts "In reality, the SAR is a very dynamic river with winter floods capable of scouring away riparian vegetation and islands, relocating the active channel and redistributing substrate. Thus, it is likely that the channel should adapt to reduction in flows from RIX and will be periodically reset from flooding events." Low Flow Study at 23. We have a number of problems with this assertion. First, it is totally contrary to the presumption in the DEIR text and the entire purpose of the Michael Baker International 2015 study concluding that storm events are likely to deposit sand and that high flow "pulse events" may be necessary to clear this sand away. Indeed, later on the same page, under Sediment Scour and Transport Modeling, you acknowledge that it is your conclusion that storm events *deposit* sand. Second, this presumes there will be no reduction in flows during storm events, which is not a good assumption given the City of Riverside's project to redirect storm flows to groundwater recharge with a bladder to be placed upstream. 37a

Next, the modeling you did as to effects on substrate was based on three data points – 23.6 MGD (the flow measured by USGS during field measurements, presumably around the time of the Study), 29 MGD (the operational mean RIX discharge in 2014), and 64 MGD, the RIX permitted maximum. From this you *extrapolated* substrate exposure possibilities at much lower levels of discharge. Given that you did not have actual 37b

observations at those lower levels of discharge we cannot be confident that your conclusions regarding substrate exposure are correct. 37b

At 29 of the Low Flow Study you say "[SAS] shifted their population upstream in Study Reach 1 between 2004 and 2005, which now has deeper habitats and coarse substrates. Even with the reductions in average depth in Study Reach 3 that will occur with reducing discharges from RIX (WEI 2014a), the localized deeper areas of scour along stream banks and island edges would remain, as they do now and did before RIX discharge was added to the mix." Here you are talking about adversely modifying what is now Critical Habitat for the SAS and negatively affecting the recovery of the species. 37c

Finally, at page 30, regarding the AMP, you say "Based on the model (WEI 2014b), it was determined that at Phase 5 in Study Reach 1 the maximum and average maximum depths for all transects would be 1.82 and 1.08 [feet] respectively – both depth are greater than the average depth of 0.7 feet that supported [SAS] in Study Reach 3 in Saiki et al. (2007)." The fact that SAS may survive in lesser depths does not make these conditions ideal. In general, the fact that habitat has increased while the species has been listed does not suggest that reducing habitat will be in its best interest. One of your own studies later notes that SMEA data showed SAS did not utilize the SAR unless at a depth of 0.94 feet *and with a maximum utilization at 2.3 feet or greater.* GEI Consultants, Inc. (July 2014) Santa Ana Sucker Habitat Impacts Report at 28. 37d

Please advise us when SBMWD issues a Final EIR and when it will be considering this Project, at collins@blumcollins.com and bentley@blumcollins.com. Thank you for your consideration. 38

Sincerely,

Craig M. Collins
Blum Collins LLP

Attachments: A through E

RESPONSE TO COMMENT LETTER P: SOCAL JUSTICE ALLIANCE, CRAIG M. COLLINS, BLUM COLLINS LLP

Response to Comment P1.

San Bernardino Municipal Water Department (SBMWD) appreciates and values your comments during the Environmental Impact Report participation process. This comment provides general introductory and background information. Responses to specific comments are provided below; no further response is required.

Response to Comment P2.

The *Draft EIR* and *Petition for Change for Owners of Waste Water Treatment Plants* submitted to the SWRCB are different documents suited to different purposes, and rely on differing information. As a result, there are differences between the baseline data used within the EIR, and the information contained in the *Petition for Change*. The table below outlines the discharge from the RIX facility in cubic feet per second (CFS), million gallons per day (MGD) and acre-feet per year (AFY) for the baseline discharge, as well as the proposed reduction and remaining flows from the RIX facility.

Table 2.0-2: RIX Discharge Reduction

Discharge Units[1]	CFS	MGD	AFY
Petition for Change Baseline Discharge	55.2358	35.7	39,989
Proposed RIX Discharge Reduction			
Baseline	53	34.3	38,421
Phase 1	44.9	29	32,484
Phase 2	38.4	24.8	27,780
Phase 3	32.2	20.8	23,299
Phase 4	26.3	17	19,042
Phase 5	20.8	13.4	15,010
Total Proposed Reduction	32.2	20.9	23,411
Remaining Rix Discharge	20.8	13.4	15,010

Notes:

CFS=cubic feet per second, MGD=million gallons per day, AFY=acre-feet per year

1. The existing RIX discharge noted in the "Petition for Change for Owners of Waste Water Treatment Plants" was calculated as of 2010, as such the baseline data used for the Project analysis, recorded in the fall of 2010, contains different flow levels due to seasonal variations and climate changes in the project region.

Response to Comment P3.

The commenter notes that Draft EIR varies in describing impacts to Santa Ana sucker. SBMWD acknowledges that there was an error in the Executive Summary on this topic. Refer to Response to Comment C11 for clarification.

The commenter also asserts that Project-related impacts to Santa Ana sucker would be cumulative as well as direct due to cumulative projects along the Santa Ana River, and argues that the impacts of the

Project are significant. SBMWD disagrees with this statement. There are several other water agencies that are considering projects which, if approved, could act to reduce flows in the Santa Ana River; refer to Draft EIR page 4.4-79. The Project's impacts to Santa Ana sucker would be mitigated to a level of less than significant with implementation of Mitigation Measure BIO-7. Refer also to Response to Comment 020 above.

Response to Comment P4.

The Draft EIR analyzes all reasonably foreseeable impacts of the Project at a level sufficient to permit construction of the Project. The Draft EIR also functions as a Program EIR pursuant to CEQA Guidelines Section 15168, in that it evaluates a broad range of implementation options to accomplish SBMWD's Project Objectives (i.e., selection of various alternative groundwater recharge facilities and conveyance alignments). As such, the Draft EIR has been prepared to satisfy the principal CEQA Guidelines Sections 15120 through 15132 (Contents of Environmental Impact Reports) and 15168 (Program EIR); refer to Draft EIR page 2.0-1.

Response to Comment P5.

SBMWD may seek federal and State financial assistance for the proposed Project from the Federal Water Pollution Control Act Clean Water State Revolving Fund (SRF), which is administered by the SWRCB on behalf of the U.S. Environmental Protection Agency. In addition to CEQA, the SWRCB requires all projects being considered under the SRF program to prepare supplemental documentation demonstrating compliance with certain federal environmental protection laws, including the Federal Endangered Species Act (Section 7), the National Historic Preservation Act (Section 106), and the General Conformity Rule for the Clean Air Act, among others; refer to Draft EIR page 4.1-1. Collectively, the SWRCB refers to these requirements as "CEQA-Plus." This EIR addresses compliance with applicable federal laws and has been prepared in accordance with the Environmental Review Process Guidelines for State Revolving Fund Loan Applicants (SWRCB 2004) to address SWRCB's supplemental requirements. The SWRCB, as a responsible agency for the Project, was included in the scoping and review process for this EIR, and will consider the analysis and conclusions of this EIR, including the CEQA-Plus requirements, prior to any SRF loan authorization. As noted on Draft EIR page 2.0-2, SBMWD may pursue a separate NEPA document at a later date should additional federal funding or regulatory permits require NEPA compliance.

Response to Comment P6.

The commenter notes a discrepancy in the volume of tertiary discharge proposed to be reduced under the Petition for Change (23.8 MGD) and the volume of tertiary discharge proposed to be reduced under the proposed Project (17.9 MGD). SBMWD has reduced these volumes based on NOP scoping efforts, as well as through participation in the recent recycled water stakeholder meetings for the Regional Recycled Water Concept Study.

The commenter also notes that Appendix 10.1 does not include the comments to the Petition for Change, but rather the comments on the EIR/EIS Notice of Preparation. This comment is duly noted. The Draft EIR has been revised to clarify the location of the comments to the Petition for Change. This clarification can be seen reflected below and in Section 3.0, *Errata to the Draft EIR*.

Section 2.4, *Notice of Preparation/Early Consultation* is revised as follows:

> 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).[20] The Petition for Change proposes the "reuse of recycled water in [SBWMD'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*~~.

Response to Comment P7.

The commenter asserts that SBMWD should prepare a joint EIR/EIS document for the proposed Project in compliance with CEQA Guidelines Section 15222 (Preparation of Joint Documents). Refer to Response to Comment P5.

Response to Comment P8a.

The commenter notes that Section 2.6.2, *Trustee, Responsible and Cooperating Agencies* should indicate the various encroachment permits the Project would require from local agencies affected by Project implementation. Draft EIR page 2.0-7 has been revised to clarify which local agencies would potentially issue encroachment permits for the proposed Project, depending on the conveyance scenario selected. This clarification can be seen reflected below and in Section 3.0 *Errata to the Draft EIR*.

> **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

[20] 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.

- 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

Response to Comment P8b.

The commenter asserts a concern that the Project could conflict with the Western Judgment by reducing potential deliveries to the Riverside Narrows. SBMWD is not a party to the Western Judgment and has no obligations under the judgment; SBMWD would continue to meet its contractual obligation to discharge a minimum of 16,000 acre feet per year to the Santa Ana River. See response to comment K7.

Response to Comment P8c.

The commenter notes that Draft EIR Section 3.1 should specify how much the Project would reduce RIX discharge, and notes a discrepancy in the volume of tertiary discharge proposed to be reduced under: Table 1.0-1, *Summary of Project Components* (17.9 MGD); Section 1.7, *Summary of Alternatives Evaluated, Alternative 6* (23.3 MGD); and the Petition to Change (23.8 MGD). Please refer to Response to Comment P2 above.

Response to Comment P8d.

The commenter notes that Section 3.1.2, *Environmental Setting* does not address the environmental setting as it applies to Santa Ana sucker, San Bernardino kangaroo rat, or any other species such as Least Bell's vireo or Southwestern willow flycatcher. The Project Description provides a general description of the physical setting for the Project. Detailed information about the environmental setting for each environmental resource is provided in the specific resource chapters. Information about the environmental setting as it pertains to biological resources, including the Santa Ana sucker, San Bernardino kangaroo rat and other species, such as Least Bell's vireo and Southwestern willow flycatcher, are located in Draft EIR Section 4.4, which includes a detailed discussion on the sensitive species determined to have the potential to occur within the Project boundaries based on habitat requirements, availability and quality of habitat, and known distributions.

Response to Comment P8e.

Refer to Response to Comment P2 above.

Response to Comment P8f.

Refer to Response to Comments P2, P6, and O20 above.

Response to Comment P8g.

The commenter notes that the Draft EIR does not specify a Project Objective concerning the Santa Ana sucker or other species downstream of the RIX Facility. The protection of fish is not generally an objective for any water Project. Nonetheless, it is an important regulatory requirement that a project is developed in such a way that protection is provided. As such, the Draft EIR incorporates several Mitigation Measures to ensure that the Project's impacts to aquatic life, including the Santa Ana sucker and other species

downstream of the RIX Facility, are less than significant; refer to Draft EIR Section 4.4, *Biological Resources* as well as Response to Comment L10 above.

Response to Comment P9.

Refer to Response to Comment O20 above.

Response to Comment P10a.

The Draft EIR incorporates a comprehensive and programmatic approach to evaluate the various implementation options in compliance with CEQA Guidelines Section 15168 (*Program EIR*). As noted in the Draft EIR, the proposed conveyance system scenarios incorporate a large number of existing pipelines and other conveyance facilities which may be used for the proposed Project, many of which are sited in existing public rights-of-way or easements within roadways and other developed areas, thereby reducing the environmental impacts of the installation and operation of these facilities.

The commenter also notes that the Draft EIR considers different basins than those proposed under the Petition for Change, and omits consideration of the Devil Canyon Basins or Sweetwater Basins. Through continued Project refinement, it was determined that Clean Water Factory Project would not consider nor evaluate the Devil Canyon Basins or Sweetwater Basins, which were previously identified as potential storage options in the Petition for Change. As such, the Draft EIR does not evaluate the environmental impacts associated with these basins. SBMWD disagrees with the commenter's assertion that the Chino Basins are not sufficiently evaluated in the Draft EIR. As described above, in compliance with CEQA Guidelines Section 15168, the programmatic nature of the Draft EIR is intended to provide an adequate level of analysis such that SBMWD could pursue any combination of the three recharge options and proceed with regulatory permitting and construction. Recharge in the Chino Basin could not occur without approval of the Inland Empire Utilities Agency (IEUA), which has the primary responsibility for approving such recharge. If the Chino Basin were selected for groundwater recharge, it would be the responsibility of the IEUA as lead agency to assess the potential impacts of accepting water supplies produced under the proposed Project, if needed, before any recharge with recycled water from the Clean Water Factory could occur. This is standard practice for supply wheeling between agencies. That analysis is beyond the scope of the Draft EIR. The identification of the potential use of recycled water from the Clean Water Factory for recharge in the Chino Basin in the Clean Water Factory EIR does not commit SBMWD to a course of action with respect to discharge in the Chino Basin, and sufficient information is provided in the EIR SBMWD to make an environmentally informed decision on the Project.

Response to Comment P10b.

The commenter asserts that the Draft EIR inadequately describes the 100 possible combinations of Conveyance Scenarios with Pipeline Alignment Option, Conveyance Facility Site Options, and SBWRP improvement options. As described in Section 3.2.2, Conveyance and Storage Systems, the final pipeline alignments selected for the Clean Water Factory Project will be determined at the time of the permitting and final design process and the alignment options incorporate variations which would allow the use of existing pipelines where possible. With respect to potential impacts, the Draft EIR assumes a "worst case" analysis using 87,700 linear feet as the maximum value for conveyance pipeline length; refer to Draft EIR page 3.0-12.

Response to Comment P10c.

The commenter expresses concern that the offsite advanced treatment is not analyzed for Conveyance Scenario 5 and notes that Conveyance Scenario 5 and Conveyance Scenario 6 are identical in Table 3.0-3, *Summary of Conveyance Components and Scenarios*. The commenter is correct in stating that Table 3.0-3 does not identify a difference between both Conveyance Scenarios 5 and 6, as both scenarios involve very similar characteristics. The specific differences between Conveyance Scenarios 5 and 6 are described in detail in Draft EIR Appendix 10.2.4, *Preliminary Design Report*. As described on page 3-3 of the report, Conveyance Scenario 5 would include a recycled water storage tank and pump station capable of serving direct use customers near the SBWRP, as well as northern direct use customers, recharge basins, and an advanced treatment plant all along Pipeline 5-1. Conveyance Scenario 6 would include a recycled water storage tank and pump station which would only serve direct use customers near the SBWRP and a portion of direct use northern customers along Pipeline 6-1 (RBF Consulting and Black & Veatch 2012). Refer to Draft EIR Appendix 10.2.4 for a detailed discussion of these two conveyance scenarios.

The commenter also expresses concern that the individual alignment options proposed under the Project are not visible on Exhibits 3.0-4 through 3.0-6. The individual alignments selected for the proposed Project are the result of the *Recycled Water Planning Investigation Report*, which evaluates a wide range of water reuse alternatives including conveyance systems, and the *Preliminary Design Rep*ort, which further evaluates recommended conveyance, reuse, and recharge options for the proposed Project; refer to Draft EIR Appendix 10.2.4 and 10.2.5. The characteristics of each alignment were considered in the environmental review process. As a Program-Level document, the Draft EIR provides sufficient information concerning the individual alignments to support an environmentally informed decision about whether or not to proceed with a specific, or combination of, individual alignment(s).

The commenter also states that the Draft EIR fails to evaluate the future connection of the RIX Facility to the Chino Basin and IEUA's non-potable system. The potential connection of the RIX Facility to an existing recharge basin within the Chino Basin and the IEUA's non-potable system is described in Draft EIR page 3.0-12 and analyzed in the Recycled Water Planning Investigation Report as well as the Preliminary Design Report; refer to Draft EIR Appendix 10.2.4 and 10.2. 5. SBMWD affirms that the Draft EIR's programmatic analysis concerning the individual alignment options (other than what is described in the EIR) is adequate for making an environmentally informed decision about whether or not to proceed with the connection between the RIX Facility to the Chino Basin and the IEUA's non-potable system.

Response to Comment P10d.

The potential pump station/storage sites A through F are identified in Draft EIR Exhibit 3.0-5; please refer to the yellow boxes labeled A through F depicted on the graphic. The commenter is correct in stating that Exhibit 3.0-5 identifies only three of the four potential conveyance alignments; this is why the exhibit is titled "Northerly Portion." The fourth and final conveyance system alternative is depicted on Exhibit 3.0-6, *Conveyance System Alternatives (East-West Pipelines)*. Regarding the two potential areas identified for Pump Station/Storage Reservoir Sites (intermediate location or at a northern location, depending on the conveyance scenario selected), two general areas have been selected to accommodate the seven potential pump station/storage sites identified for the proposed Project based on their general location (intermediate location or northern location). These locations were selected based on the findings of the Preliminary Design Report, which investigated recommended conveyance, reuse, and recharge locations; refer to Appendix 10.2.5. As explained in Appendix 10.2.5, the intermediate locations were identified at a point approximately halfway between the SBWRP to the Recharge Basins with an elevation approximately

half way between the SBWRP elevation (1,000 feet, above mean sea level [amsl]) and the Recharge Basins elevation (1,470 feet, amsl). The four northern locations were selected based on their proximity to the Recharge Basins. Impacts at each of these locations were evaluated and described in the Draft EIR and mitigated as appropriate.

Response to Comment P11.

The commenter argues that the Draft EIR should evaluate the potential environmental impacts of the 936 acres of direct use applications which could use the recycled water produced under the proposed Project. As described previously, the programmatic nature of the Draft EIR is intended to provide an adequate level of analysis such that SBMWD could pursue any combination of the direct use sites and proceed with regulatory permitting and construction. Draft EIR page 3.0-13 describes the types of sites where direct reuse may occur (e.g., golf courses, parks, schools, nurseries, cemeteries, public uses and Caltrans facilities) and the types of very minor facility modifications that may be required at direct reuse sites (e.g., installation of additional plumbing fixtures, maintaining irrigation buffers, posting signs). The Project would replace the use of potable water with highly treated wastewater that meets all regulatory requirements for direct reuse, which in and of itself would not be expected to have any adverse impacts. As described on Draft EIR page 4.7-26, all direct use sites would be required to meet the water quality objectives of the State Water Resources Control Board Division of Drinking Water and Santa Ana Regional Water Quality Control Board to ensure Project operations have no significant environmental effect on hydrology and water quality. The types of minor facility modifications that may be required (such as installation of dual plumbing or signage) likely will have no environmental impact and it is reasonable to assume they may be exempt from future CEQA review. Nevertheless, the Draft EIR acknowledges that any required site improvements needed for direct reuse of water may be subject to future review under CEQA.

Response to Comment P12a.

SBMWD disagrees with the commenter's assertion that the Draft EIR fails to evaluate the Project's specific impacts to the recharge basins, and also fails to avoid, or minimize potential impacts to the recharge basins through mitigation measures. Draft EIR Sections 4.1 through 4.11 each incorporate an analysis of the potential construction-related and operational impacts of diverting product water to the recharge basins for percolation into the groundwater; also refer to Response to Comments P4, P10a and P10c, above. It is noted that additional detail was included in the Draft EIR for several areas. For example, the Habitat Assessment incorporates a site-specific analysis of the Waterman Basins and East Twin Creek Spreading Grounds; refer to Draft EIR Appendix 10.4, *Habitat Assessment*. In regards to the commenter's concern that Section 3.1.2, *Environmental Setting* does not identify sensitive habitat areas occurring at the recharge basin; refer to Draft EIR Section 4.4.5, *Sensitive Biological Resources*, which incorporates a detailed discussion on the sensitive species determined to have the potential to occur within the Project boundaries based on habitat requirements, availability and quality of habitat, and known distributions.

Response to Comment P12b.

The Draft EIR provides sufficient information about the physical characteristics and location of each pipeline alignment to evaluate impacts. The application of the various buffers was incorporated into the pipelines widths described in Table 3.0-4 and considered in the environmental analysis in determining the potential for adverse effects. A map depicting the 50-foot and 25-foot wide construction corridors is not necessary for the Draft EIR's programmatic analysis of the various pipeline alignments.

Response to Comment P12c.

The commenter raises a concern about the potential for the Project's proposed use of jack and bore tunneling and directional drilling to affect burrowing species. As described in Section 4.4, *Biological Resources*, the alignment options proposed for the Project are not anticipated to support sensitive burrowing species. The Draft EIR identifies that construction and operation actives at the Waterman Basins and East Twin Creek Spreading Grounds area have the potential to impact sensitive burrowing species, including Coast horned lizard, Northwestern San Diego pocket mouse, and San Bernardino kangaroo rat (Note: focused surveys for San Bernardino kangaroo rat in 2015 were negative). However, impacts to these sensitive species would be reduced through implementation of Mitigation Measure BIO-8, revised Mitigation Measure BIO-8 (see Section 3.0, *Errata to the Draft EIR*), and BIO-9 through BIO-11; refer to Draft EIR page 4.4-75 and Response to Comment L10 above.

Response to Comment P12d.

The commenter argues that the booster pump stations and reservoir sites must be selected and analyzed as part of the Draft EIR, and that the Draft EIR does not incorporate enforceable mitigation requiring site selection to consider avoidance of sensitive receptors, preference for existing disturbed or developed sites, and absence of sensitive receptors. These facilities are identified and evaluated at a program level in the Draft EIR. Site selection criteria are identified on page 3.0-17 of the Project Description, and the types of impacts that could occur from these conveyance facilities are adequately described in the Draft EIR's discussion of potential construction and operation impacts. Mitigation measures identified in the Draft EIR are expected to be adequate to reduce any potential site-specific impacts to less than significant. If at the time of site selection sensitive receptors would not be avoided, or Draft EIR mitigation measures would not be adequate to reduce impacts to less than significant, additional CEQA review may be required.

Response to Comment P12e.

The commenter lists the equipment and staging areas identified under Section 3.3, *Project Construction* and expresses doubt that the proposed Project would only utilize a single staging area during Project construction activities. The Draft EIR does not suggest that a single staging area would be used to accommodate Project construction activities, and the Project Description explains that staging would be located within existing facilities or pipeline construction corridors and would avoid sensitive areas. Further, several Mitigation Measures have been incorporated into the Draft EIR as necessary in order to avoid and/or reduce impacts due to Project staging activities; refer to Mitigation Measure AES-1, AQ-1, and HAZ-8. As such, SBMWD affirms that the Draft EIR adequately identifies and, where necessary, mitigates impacts related to construction staging areas.

Response to Comment P13a.

Refer to Response P2, which clarifies the proposed discharge reduction. The commenter is incorrect in stating the SBWRP's proposed phased discharge reduction would occur over five phases spanning 25 years. There are two points of discharge discussed throughout the Draft EIR: discharges occurring at the SBWRP and discharges occurring at the RIX Facility. In regards to the SBWRP's current and proposed operational parameters, the Project would reduce secondary effluent from the SBWRP to the RIX Facility from approximately 22 MGD (current flow) to between 4 to 7 MGD over a period of 15 to 20 years; refer to Section 3.2.1, *RIX Phased Discharge Reduction*. In regards to the RIX Facility's operational parameters, the RIX Facility currently discharges approximately 31.3 MGD into the Santa Ana River, and the proposed Project would reduce this discharge to a minimum flow of 13.4 MGD over a period of 15 to 20 years. If the discharge reduction were to occur more gradually, as identified by the commenter, any potential impacts would be lower than those identified in the Draft EIR.

Response to Comment P13b.

The commenter argues that the Chino Basin groundwater basin and pipeline alignment are not fully analyzed under CEQA. As described in Section 3.0, *Project Description*, treated water may be conveyed from the RIX Facility through new conveyance pipelines to existing Inland Empire Utilities Agency (IEUA) recharge basins in the Chino Basin for recharge via surface spreading. Because this is an existing facility, any recharge would have to occur within the basin's existing operating capacity and parameters. As discussed on p. 3.0-34 of the Draft EIR, the maximum recharge potential, effective area, infiltration rates, and maintenance requirements for the Chino Basin would be determined once final siting has been determined, and if needed, would require evaluation and approval, consistent with the Chino Basin Recharge Master Plan. Refer also to Response to Comment P10c above.

Response to Comment P13c.

The commenter argues that the agreement between SBMWD and San Bernardino County Flood Control District (SBCFCD) to utilize their flood control facilities should have been incorporated into the Draft EIR. The Draft EIR recognizes than an agreement between SBMWD and SBCFCD would be necessary prior to Project implementation in Section 3.4, *Operations and Maintenance* and Table 3.0-9, *Anticipated Agreements, Permits and Approvals for the Project*. As such, it is anticipated that SBCFCD will use the EIR in drafting an agreement defining the operational and maintenance requirements of the Waterman Basins and East Twin Creek Spreading Grounds.

Response to Comment P13d.

The commenter argues that the Draft EIR notes conflicting underground retention time data. SBMWD disagrees with the commenter's assertion that the Draft EIR notes conflicting underground retention data. Treated water must meet the required retention time for groundwater before it can be pumped from the groundwater basin. Retention time is determined on a case-by-case basis, and the Division of Drinking Water (DDW) requires groundwater modeling analysis in order to determine retention times and buffering requirements for new indirect potable reuse projects. As described on Draft EIR page 3.0-35, the recycled water produced under the proposed Project would be retained underground within the aquifer for a minimum of six months prior to its extraction as a drinking water supply. In compliance with 22 CCR Section 60320.124(b), within the first three months of this six-month period, SBMWD would be required to demonstrate that the minimum two-month underground retention time to the closest downgradient drinking well has been met.

Response to Comment P14.

As described in the text preceding Table 3.0-7, 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. Regarding the potential cumulative wastewater discharge reduction, refer to Response to Comment O20 above.

Response to Comment P15.

The commenter claims that Table 4.1-1, *Cumulative Projects Summary* and Exhibit 4.1-1, *Cumulative Projects* do not include the SNRC or Rialto Project. As described on Draft EIR page 4.1-6, Table 4.1-1 and Exhibit 4.1-1 depict proposed preliminary covered activities from the *Final Phase 1 Report: Upper Santa Ana River Habitat Conservation Plan*, prepared in March 2014. However, it is noted that there are other potential cumulative projects in the Upper Santa Ana River watershed, including various development projects, infrastructure, and other facilities traversing along or across the River, which are subject to the regulatory review process of multiple agencies and programs, as discussed further in Draft EIR Sections 4.4, *Biological Resources*, and 4.7, *Hydrology and Water Quality*. The Sterling and Rialto projects are considered in the Regional Recycled Water Concept Study described in the Draft EIR Section 4.1.3 (Cumulative Impact Analysis) discussion of regional water supply projects. Refer also to Response to Comment O20 above.

Response to Comment P16.

Draft EIR page 4.2-16 does not state that pipelines from the SBWRP to the Waterman Basins and East Twin Creek Spreading grounds would be "in lieu" of the pipeline to the Chino Basins. The use of the word "Alternately" with reference to the possible construction of pipelines from to the Chino Basin was not meant to suggest the various options were exclusive. As reiterated multiple times throughout the Draft EIR, the "Project" itself includes multiple "alternatives," in that it includes various options that could be implemented in some combination using a phased approach, based on operation considerations and financial/funding considerations, as well as final facility design and siting determinations

The impact analysis considers the potential impacts of the maximum amount of construction and the Project as described in the Project Description.

The commenter correctly identifies an inconsistency in the text at Draft EIR page 4.2-16, which states that the pipelines to the Chino Basin would run from the SBWRP. As described in the Project Description (Draft EIR page 3.0-12 and Exhibit 3.0-6 and 3.0-7), pipelines to the Chino Basin would run from the RIX Facility. Page 4.2-16 has been corrected below and in Section 3.0, *Errata to the Draft EIR*:

> **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.
>
> Construction of the pump stations and storage reservoirs would occur on properties up to 0.5-acres in size, adjacent to the conveyance pipeline alignments, would require limited grading with construction of underground piping to connect with proposed pipelines and structural foundation. Project-related construction will be localized to the booster pump/reservoir sites, and due to the relatively small size of the sites, there would be no significant impacts to aesthetics and scenic resources.

Response to Comment P17a.

The greenhouse gas (GHG) significance thresholds are clearly described in Draft EIR Section 4.3.3 as well as within the GHG emissions impact analysis. CEQA gives lead agencies discretion to develop their own significance thresholds (refer to CEQA Guidelines Section 15064.7). In *Citizens for Responsible Equitable Environmental Development v. City of Chula Vista*, 197 Cal. App. 4th 327 (2011), the Court upheld that a CEQA lead agency has discretion in setting appropriate significance thresholds for GHG emissions and climate change per the CEQA Guidelines. The analysis within the Draft EIR was conducted in accordance with CEQA Guidelines Section 15064.4(b)(1), which requires a lead agency to consider the extent to which a project may increase or reduce GHG emissions compared to the existing environmental setting.

The determination by a Lead Agency of whether a project may have a significant effect on the environment calls for careful judgment, based to the extent possible, on scientific and factual data. CEQA Guidelines Section 15064.7(b) states that thresholds must be supported by substantial evidence, which is defined in the CEQA statute to mean "facts, reasonable assumptions predicated on facts, and expert opinion supported by facts." The GHG emissions threshold used in the Draft EIR is based on substantial evidence provided by the South Coast Air Quality Management District (SCAQMD) *Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold* (October 2008), as well as updated data provided by the ongoing GHG CEQA Significance Threshold Working Group. Although these thresholds are not adopted for projects where the SCAQMD is not the lead agency, they represent the best available data specific to the project area and region and SBMWD appropriately used its discretion in adopting this threshold of significance for the Draft EIR. Further, Draft EIR Section 4.3 incorporates mitigation to reduce Project-related GHG emissions to below the 10,000 MTCO2eq/year or the applicable significance threshold at the time of each construction phase; refer also to Revised Mitigation Measure GHG-1 in Section 3.0, *Errata to the Draft EIR*.

The Draft EIR was prepared in accordance with CEQA Guidelines section 15064.4, which specifies three factors to consider, "among others," when assessing the significance of GHG emissions: (1) the extent to which the Project may increase GHG emissions as compared with the existing environmental setting, (2) whether the Project's emissions exceed the significance threshold, and (3) the extent to which the Project complies with the regulations and requirements adopted to implement a statewide, regional or local plan for reduction or mitigation of GHG emissions.

As described in the Draft EIR, nominal mobile source emissions would occur from periodic maintenance activities as well as minor increases in employee trips and deliveries associated with the expanded wastewater treatment facilities. However, these activities would be part of SBMWD's normal routine since they would occur at existing SBMWD locations (e.g., SBWRP, recharge sites, etc.) and would not significantly increase vehicle fleet operations. The SBMWD fleet is also required to comply with SCAQMD Rules 1191 (Clean On-Road Light- and Medium-Duty Public Fleet Vehicles) and 1196 (Clean On-Road Heavy-Duty Public Fleet Vehicles). As these vehicle trips would already be part of existing SBWMD operations, minor increases (if any) would not change magnitude of emissions identified in the impact analysis and would not change the conclusions of the Draft EIR or mitigation measures.

Response to Comment P17b.

The SCAQMD does not provide separate significance thresholds for cumulative emissions because the nature of air emissions is largely a cumulative impact. Project criteria pollutant emissions disperse throughout the Basin and are not confined to one area. As a result, no single project is sufficient in size to, by itself, result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. SCAQMD developed thresholds of significance based on the level above which a project's individual emissions would result in a cumulatively considerable contribution to the Basin's existing air quality conditions. As such, when considering project criteria pollutant emissions, a project's incremental impact (i.e., threshold exceedance) would also be cumulatively considerable (i.e., a project that exceeds the SCAQMD operational thresholds would also result in a cumulative impact). Conversely, projects that do not exceed the SCAQMD thresholds would not conflict with the SCAQMD's ability to achieve attainment and would not be cumulatively considerable.

Response to Comment P17c.

Refer to the Response to Comment 17b, above.

Response to Comment P17d.

The comment incorrectly indicates that the Project would lead to additional growth, but does not provide a factual basis for this claim. As noted in Section 3.1.4, *Project Objectives*, the purpose of the Project is to reduce SBMWD's dependence on imported water and establish a safe, reliable, sustainable source of potable water in light of current and potential future drought conditions. The Project would also replenish groundwater basins and maximize the availability of recycled water. As described in the 2010 UWMP, SBMWD finds that it does not have sufficient water supply to satisfy service area demands. As such, it is not anticipated that the Clean Water Factory Project would necessarily induce growth, but would instead accommodate the existing service area water needs identified in the 2010 UWMP. Refer also to Draft EIR page 5.0-1 for an expanded discussion concerning the Project's potential for growth-inducing impacts.

Response to Comment P17e.

As noted on Draft EIR page 4.3-29, Tier 4 certified equipment is generally available. 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, which is not considered economically feasible within the scope of a single construction Project.

Response to Comment P17f.

Refer to Response to Comment 17b, above. The SCAQMD thresholds of significance were developed based on the level above which a Project's individual emissions would result in a cumulatively considerable contribution to the Basin's existing air quality conditions. Emissions that do not exceed the thresholds would not be cumulatively considerable as they would not conflict with the SCAQMD's ability to achieve/maintain attainment of the Ambient Air Quality Standards.

Response to Comment P17g.

The text indicating that the Project would result in a less than significant impact regarding federal de minimis levels is a typographical error. This typographical error occurs in a heading and would not change the findings or analysis conclusion, which identifies a significant impact. This impact has been reduced to a less than significant level through the adoption of additional mitigation. Refer to Response to Comment C13 and in Section 3.0, *Errata to the Draft EIR*.

Response to Comment P17h.

As described in the Draft EIR, the 10,000 MTCO2eq per year industrial threshold was been selected as the significance threshold as it is most applicable to the proposed Project. This threshold was selected based on the size of the Project and SCAQMD's proposed tiered approach. It should be noted that the 10,000 MTCO2eq per year threshold is used in addition to the qualitative thresholds of significance set forth in section VII of Appendix G to the CEQA Guidelines. The amortization of construction emissions is an industry accepted method for combining short-term construction GHG emissions with long-term annual operational emissions. This is due to the fact that GHG emissions are evaluated on an annual basis, and construction emissions occur for a brief period and then cease. Because impacts from construction activities occur over a relatively short-term period of time, they contribute a relatively small portion of the overall lifetime project GHG emissions. In addition, GHG emission reduction measures for construction equipment are relatively limited. Therefore, the SCAQMD recommends that construction emissions be amortized over a 30-year project lifetime, so that GHG reduction measures will address construction GHG emissions as part of the operational GHG reduction strategies. The amortization of construction GHG emissions is based on the SCAQMD's *Interim GHG Significance Threshold Staff Proposal* as well as the GHG CEQA Significance Threshold Stakeholder Working Group #13.

Refer to the Response to Comment 17a, above, regarding the Project-related operational vehicle trips. Operational vehicle trips associated with the Project would already be part of existing SBWMD operations, minor increases (if any) would not change magnitude of emissions identified in the impact analysis and would not change the conclusions of the Draft EIR or mitigation measures.

The proposed RIX Facility wastewater discharge reduction is depicted in Table 3.0-7 of the Draft EIR. As discussed on page 4.3-45, the RIX Facility currently discharges 34.3 MGD and with full implementation of the Project, RIX wastewater discharge would be reduced to 13.4 MGD (a difference of 20.9 MGD). The rate and volume of reduction in the RIX discharge would be proportionate to the increase in production at the SBWRP and the reduction in tertiary treatment at the RIX Facility would offset energy consumption at the SBWRP.

Response to Comment P17i.

Mitigation Measure GHG-1 pertains to energy consumption during operations of the facility and would be implemented prior to operations. The measure commits SBMWD to implement mitigation that will result in net emissions below the threshold of significance and identifies a menu of feasible options that may be selected to meet the emission reduction requirement. Additionally, Mitigation Measure GHG-1 includes timing mechanisms and allows for a phased implementation schedule prior to each construction phase. The timing and verification mechanisms of the mitigation measures will also be identified in the Mitigation Monitoring and Reporting Program. Therefore, the mitigation measures are fully enforceable per CEQA Guidelines Section 15126.4(a)(2). Nonetheless, Mitigation Measure GHG-1 has been modified to provide additional information about how compliance will be demonstrated

The following text on page 4.3-47 of the Draft EIR shall be revised as follows in the Final EIR:

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 $MTCO_2eq/yr$ 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 consultant experienced in the preparation of such plans Reduction Plan will 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.

- 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 $MTCO_2eq/yr$ 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.

Response to Comment P17j.

The secondary impacts associated with potential mitigation in the form of onsite solar energy generation was analyzed in the Draft EIR. The analysis in the Draft EIR states that the SBMWD would either avoid or need to mitigate adverse impacts to biological resources. The impacts to biological resources referenced in the comment are primarily related to large-scale solar projects in rural/undeveloped desert areas where birds and other avian species mistake a reflective solar facility for a water body. As such, it has become standard practice to design solar panels to help avian species realize that solar arrays are not water. Additionally, the availability of habitat in the area surrounding the Project site would also draw biological species away from the Project site. Draft EIR page 4.3-22 states that SBMWD is considering future projects to minimize energy consumption, including the use of renewables, but those projects were not considered in the analysis of potential impacts, which was the case. The solar project mitigation would reduce impacts of the Project as analyzed, which for purposes of the impact assessment were not assumed to have otherwise been reduced through use of renewable energy sources. The Draft EIR thus estimates and provides mitigation for the maximum potential impact from Project energy use.

Response to Comment P17k.

This comment disputes the GHG analysis in the Draft EIR, but does not provide any evidence or reasoning to support their contradictory conclusion. Impact Statement 4.3-7 is based on checklist item VII(b) CEQA Guidelines Appendix G, which asks if the Project would conflict with an applicable plan, policy, or regulation for the purpose of reducing the emissions of greenhouse gases. The Draft EIR addresses the Project's consistency with the County's GHG Plan as well as Executive Order S-3-05, Executive Order B-30-15, and AB 32 GHG reduction goals and the AB 32 Scoping Plan and Update. The analysis also notes that the proposed Project would also implement Mitigation Measure GHG-1 to ensure that emissions do not exceed the 10,000 $MTCO_2eq/yr$ GHG threshold to avoid significant impacts.

Response to Comment P17l.

The construction assumptions are clearly depicted in the tables on the first page of Appendix 10.3 (Air Quality and Greenhouse Gas Modeling). As depicted in Appendix 10.3, the emissions modeling assumed 4,972 haul truck trips. Furthermore, contrary to the comment, grading and paving was modeled. As depicted in Appendix 10.3, 391 days of paving was conservatively modeled during construction of the conveyance facilities. Additionally, 10 days of paving was modeled during the construction of the pump stations and reservoirs and five days of paving was modeled during construction of the Water Reclamation Plant Improvements. The modeling also includes grading phases to account for 269,185 cubic yards of excavation and backfill for the conveyance pipelines and 39,775 cubic yards of soil excavation and export for the reservoirs, 4,412 cubic yards for cut/fill for the reservoir foundations and piping. Furthermore, the modeling included cut and fill of 250,000 cubic yards for the recharge site improvements. The assumptions used in the modeling are conservative and based on worst case scenarios

Response to Comment P18.

The commenter incorrectly assumes that the Draft EIR's analysis is flawed since the Habitat Assessment did not include focused-surveys. The commenter also notes confusion as to what the "'survey area' boundary areas are" since the Draft EIR "didn't specify them." Based on known species distribution and suitability assessments conducted for the Project footprint, focused surveys were not warranted for Least Bell's vireo and Southwestern willow flycatcher. Least Bell's vireo is known to occupy the riparian

vegetation along the Santa Ana River below the RIX Facility and can be assumed to be present. However, these same areas are not generally suitable for Southwestern willow flycatcher, since the species require a more complex canopy structure in riparian habitat than Least Bell's vireo. Focused surveys for sensitive plant including Parry's spineflower, Slender-horned spineflower, and Santa Ana River woolly star were done within suitable habitats within the Project footprint, including Alignment 1, but were not warranted downstream of the RIX Facility. No sensitive plants were observed during the sensitive plant surveys; refer to Draft EIR page 4.4-11. It should be noted that SBMWD would conduct focused surveys for all sensitive riparian plant and animal species, including Parry's spineflower, Slender-horned spineflower, Santa Ana River woolly star, and San Bernardino kangaroo rat, within suitable habitat as part of determining baseline conditions for the Adaptive Management Plan. These surveys would occur prior to the start of any ground disturbing activities or flow reductions. Refer also to revised Mitigation Measure BIO-7 in Section 3.0, *Errata to the Draft EIR*.

Response to Comment P19.

Table 4.4-2 has been corrected to show that there are 77.4 acres of Riversidean alluvial fan sage scrub (RAFSS) habitat present on the Project site. Specifically, 14.3 acres are undisturbed intermediate RAFSS habitat found on the slopes of the Waterman Basins and 63.1 acres are disturbed intermediate RAFSS habitat found within the southern portions of the basins. Table 4.4-2 has also been amended to show that two patches of Southern riparian scrub habitat, totaling 3.9 acres, were found within the Waterman Basins and East Twin Creek Spreading Grounds. Neither plant community will be directly impacts by Project development. Both plant communities are temporarily and indirectly impacted by fluctuating inundation and drying periods associated with existing use of the basins and spreading grounds.

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.**~~ **Present.** Suitable habitat exists in the Waterman Basins.
Southern Cottonwood Willow Riparian Forest	CDFW Sensitive Habitat	Dominated by cottonwood (*Populus* ssp.) and willow (*Salix* 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	CDFW Sensitive Habitat	Riparian zones dominated by small trees or shrubs, lacking taller riparian trees.	~~No~~ Yes	~~**Absent.**~~ **Present.** Suitable habitat exists in the Waterman Basins and East Twin Creek Spreading Grounds.

Response to Comment P20.

The commenter states that Draft EIR Section 4.4.4 does not specify where birds were observed in the Project area. The sentence noted by the commenter serves as the introduction to the section, and outlines that bird species were observed throughout the Project area. The paragraph continues by outlining the most frequently identified species from the field study. Further, specific technical information is provided in the Habitat Assessment, Refer to Draft EIR Appendix 10.4.

Response to Comment P21.

A comprehensive habitat assessment was conducted within the Project footprint to determine where suitable habitat occurred for the above listed species. Focused surveys were done within the Waterman Basin based on the presence of potentially suitable habitat, as well as based on communications with biologists from SBCFCD. Focused surveys were negative for all of these species and these species are presumed absent from the Project site. As part of implementing the Project, the City will also be implementing an adaptive management process for establishing baseline conditions, providing biological monitoring and for implementing an adaptive management strategy that will respond to any noted changes or adverse impacts from the proposed Project; refer to revised Mitigation Measure BIO-7 in Section 3.0, *Errata to the Draft EIR*. As noted, the Project will be conducted in small, discrete phases of flow reduction that will provide the opportunity to carefully monitor and track changes early and often in the process so that effective changes can be made to avoid or minimize potential impacts for the Project.

Response to Comment P22.

The commenter notes concerns pertaining to the Draft EIR's conclusion that Project implementation would not compromise USFWS Primary Constituent Elements (PCEs) or critical habitat. SBMWD recognizes that the Draft EIR does not incorporate a comprehensive analysis pertaining to PCEs. This is largely due to the fact that many PCEs are difficult to define, difficult to measure, cannot be supported by existing data, or any combination of the three. Recognizing this, the Draft EIR proposes Mitigation Measure BIO-7 (Adaptive Management Plan). One of the benefits of the Adaptive Management Plan is that these PCEs can be refined and quantified. Detailed information pertaining to PCEs (other than what is currently described in the Draft EIR and its technical appendices) is not necessary for SBMWD to make an environmentally informed decision about whether or not to approve the Project. Refer also to revised Mitigation Measure BIO-7 (see Section 3.0, *Errata to the Draft EIR*), which has been updated to better describe specific performance measures and implementation strategies for the Adaptive Management Plan.

The commenter also opines that the Draft EIR does not demonstrate that the Santa Ana River would retain the minimum flows necessary for Santa Ana sucker survival following Project implementation. Santa Ana sucker survival would not depend on a single minimum flow but instead a range of flows. Unfortunately, this range of flows is unknown at this time The Draft EIR evaluates potential impacts to Santa Ana sucker

based on a detailed technical evaluation of the Project's potential to change Santa Ana River habitat characteristics known to be important to the sucker, based on the best available information. Sufficient evidence and analysis is provided to support the Draft EIR's determination that impacts as mitigated would not be significant.

Response to Comment P23a.

The commenter notes concerns pertaining to the Project's impacts to Santa Ana River flow and consequential impacts to Santa Ana sucker. SBMWD recognizes that the Project's impacts pertaining to reduction of flow volume could result in adverse impacts to Santa Ana sucker. As such, the Draft EIR proposes Mitigation Measure BIO-7 (Adaptive Management Plan). Mitigation Measure BIO-7 requires SBMWD to prepare and implement and Adaptive Management Plan for the Project's potential operational impacts to Santa Ana sucker. Revised Mitigation Measure BIO-7 (see Section 3.0, *Errata to the Draft EIR)*, along with the balance of the mitigation measures proposed, are sufficient to ensure Project-related impacts to the Santa Ana River and the special-status species it supports are less than significant. Refer also to Response to Comment L10 above.

As for the Project's impacts to temperature and turbidity, the Draft EIR does not incorporate a Project-specific analysis on the Project's effects to Santa Ana River water temperature or clarity. However, the Draft EIR explains the basis for its determination that Project implementation should not affect the clarity or turbidity of the Santa Ana River, and that water temperatures in the RIX Facility flow should not be affected by the proposed Project; refer to Draft EIR pages 4.4-30 and 4.4-71. In compliance with CEQA Guidelines Section 15168 requirement, detailed information pertaining to this turbidity and temperature range (other than what is currently described in the Draft EIR and its technical appendices) is not necessary for SBMWD to make an environmentally informed decision about whether or not to approve the Project.

Response to Comment P23b.

Regarding the availability of gravel and cobble substrate necessary for Santa Ana sucker, it is noted that available data is limited for this critical habitat feature. The USFWS study mentioned by the commenter is included in the record of proceedings for the Draft EIR. SBMWD acknowledges the importance of the habitat immediately downstream of RIX, and that the initiation of RIX operations provided an important, high-quality, artificially-produced habitat for the Santa Ana sucker. It should be noted that the Draft EIR does not suggest that substrate is in decline. In fact, coarser substrates have readily been available in the upstream reaches of the Santa Ana River (Study Reach 1) since the RIX Facility began operations in 1996; refer to Draft EIR page 4.4-28. The Draft EIR provides evidence and analysis to show that the Project will not have a substantial adverse effect on the availability of gravel and cobble substrate. Also see Response to Comments E4b and I5g.

Response to Comment P23c.

The commenter asks questions regarding the MBC 2000 study and notes concerns related to biological impacts related to storm flows. The commenter also asserts that the Project has not evaluated what changes would occur to storm flows in combination with the Riverside Project.

The MBC 2000 study indicated that riparian habitat could be adversely affected by reduced discharges into the Santa Ana River, but further concluded that the expected impacts would be very small in comparison to the much larger, observed reduction in riparian habitats as a result of scour associated with

storm events. The linear riparian areas found along the braided channels in the Santa Ana River are frequently removed during larger storm events but become re-established along the banks of the new braided channel. This process is an integral part of natural changes experienced by the riparian systems found in the Santa Ana River. Monitoring and tracking these natural changes, as well as, any potential changes that could result from the reduced discharge associated with the Clean Water Factory, will be a component of the Adaptive Management Plan that is being developed as part of the City's commitment to the long-term management of the Santa Ana River, including the long-term sustainability of the riparian habitats.

SBMWD understands that there are numerous projects proposed for the Upper Santa Ana River watershed, including the City of Riverside's proposed Riverside North Aquifer Storage and Recovery Project (RNASR Project), which is located upstream of the RIX Facility. Draft EIR Section 4.4 discusses the Project's potential cumulative environmental impacts in combination with the RNASR Project. As concluded on Page 4.4-80, the proposed RNASR Project would not involve additive effects that, when considered with the Clean Water Factory Project, would substantially impact biological resources, including those related to Santa Ana River flows. As noted by the commenter, to the extent the RNASR Project would capture flood flows, it could further reduce cumulative impacts to willow woodland vegetation.

Response to Comment P23d.

U.S. Fish and Wildlife Service has designated critical habitat for Southwestern willow flycatcher, Least Bell's vireo, Santa Ana sucker and San Bernardino kangaroo rat, along portions of the Santa Ana River. The proposed Project could result in the loss or adverse modification of critical habitat for each of these species. However, the loss of critical habitat for Southwestern willow flycatcher and Least Bell's vireo are tied to the natural and dynamic changes that were noted above (also see Response to Comment 23c above), for riparian habitats found in the Santa Ana River. Monitoring and identifying changes in the riparian habitats that provides critical habitat for these two riparian bird species, that are not an integral part of natural changes experienced by the riparian systems found in the Santa Ana River, will be an important component of the Adaptive Management Plan that will be part of the long-term management of the Santa Ana River. San Bernardino kangaroo rat habitat occurs primarily on the bench habitats found above the banks of the Santa Ana River and outside the immediately riverine habitats and instream habitats found in the Santa Ana River. These bench habitats are also an integral part of the Santa Ana River ecosystem, and the monitoring and management of them will be part of the adaptive management process, as well as the long-term management of the Santa Ana River and associated wildlife habitats. Santa Ana sucker habitat is part of the instream aquatic habitats found in the Santa Ana River and will be included in the adaptive management and long-term management processes that are being developed as part of the Clean Water Factory project. Since there will be a federal wetland permit required for Clean Water Factory, any identified loss or adverse modification to critical habitat must be addressed and mitigated during the Section 7 Consultation between the US Army Corps of Engineers and USFWS (See Mitigation Measure 8).

Focused studies were conducted in those areas that would be lost as the result of Project construction. Focused studies determine the presence or absence of a species within the surveyed area. They do not provide an analysis of the potential changes in habitats or the implications of those changes to plant and wildlife species potentially present. Instead, models were developed to determine potential changes to hydrologic conditions in the Santa Ana River, the potential for resulting changes in wildlife habitats, and to assess impacts to species as a result of these changes. Based on the modeling, it was determined that

there would not be significant changes in hydrologic conditions and wildlife habitats until Phase 3, in approximately 15 years. Further, as part of proposed mitigation for this project, adaptive management and long-term management programs are proposed, and will not only monitor and track changes in hydrologic flows, instream and aquatic habitat condition, and adjacent riparian habitats, but will also provide a continual assessment of changing conditions, and define any needed corrections in order to ensure the long-term viability of the Santa Ana River, its instream, aquatic and riparian habitats that support Santa Ana sucker, and numerous other species living in or associated with the Santa Ana River.

Also, see Response to Comment P18 above.

Response to Comment P23e.

The Draft EIR plainly analyzes the Project's potential environmental impacts to wildlife movement corridors; refer to Draft EIR page 4.4-78. As explained in Impact Statement 4.4-4, the analysis of impacts to riparian habitat determined that impacts would be insignificant and would not affect wildlife movement opportunities along the Santa Ana River.

Response to Comment P24.

The commenter opines that SBMWD should have obtained a Biological Opinion in compliance with the Endangered Species Act prior to completion of the Draft EIR. SBMWD disagrees with the commenter's notion that Section 7 and Section 9 consultation should be completed prior to distribution of the Draft EIR. SBMWD is not required to initiate consultation, or obtain a Biological Opinion, prior to completing its CEQA process for the Project, and it is not customary for that to occur prior to public review of the Draft EIR. Draft EIR Section 4.4 includes detailed information about the Project's potential adverse effects on listed species, as well as an analysis of the Project's compliance with Section 7 and Section 9 of the federal Endangered Species Act. Further, revised Mitigation Measure BIO-8 requires that SBMWD obtain incidental take authorization under the federal Endangered Species Act prior to initiating Project activities. As is customary, this process will be initiated outside of the CEQA process. The Draft EIR thus contains sufficient information to support the SBMWD and responsible agencies' decision making regarding the Project.

Response to Comment P25a.

The commenter indicates that the Project Phasing does not account for the potential loss of flows which would occur following implementation of the City of Rialto's proposed wastewater treatment facility and identifies a discrepancy in stated flows from that facility. As described above, 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. As such, the Draft EIR analyzes what is considered a cumulative worst-case condition for potential future wastewater treatment plant discharge reductions in the study reaches based on the limit of acceptable potential impacts to biological resources. Flows from wastewater treatment plants vary from day to day and due to a variety of conditions, including drought conditions, mandatory conservation, and economic factors. The minor difference in the flow of the Rialto facility identified by the commenter does not affect the adequacy of the Draft EIR's cumulative impact analysis. Refer also to Response to Comment O20 above.

Response to Comment P25b.

SBMWD recognizes the differences in modeling between the proposed Project and the SNRC; the two projects contain a number of different Project features, locations, and infrastructure, and the modeling approach used was not the same as such the analysis conducted contains results that are not identical to the SNRC Project. In fact, the modeling approach used in the EIR was more comprehensive than similar studies that have been conducted for other proposed projects in that it included a quantitative estimate of impacts to Santa Ana sucker habitat using the PHABSIM approach instead of a qualitative assessment. This provides a testable hypothesis that is a starting point for the Adaptive Management Plan, which is also incorporated into the EIR. These variations in methodology and Project components and methodology, while they do result in slightly different modeling outcomes, do not invalidate the Project modeling and analysis. See Response to Comment P27i regarding the Recovery Plan.

Response to Comment P25c.

The commenter notes that the Low Flow Study prepared for the Draft EIR appears markedly different from hydrology studies prepared for the SNRC impacts to the Santa Ana River. Refer to Response to Comment P25b above. The Draft EIR presents a range of information about projected changes in width by Project phase and study reach; while on average width will not change by more than 10 percent in Reaches 1 and 3 through all phase phases and through the first four phases in Reach 2, the commenter is correct that the Draft EIR does show minimum and maximum changes outside that range in several circumstances.

Response to Comment P25d.

The Draft EIR acknowledges that the PCEs define minimum requirements; the Draft EIR impact analysis was not based solely on whether the Project would result in conditions lower than those specified in the PCEs. The Draft EIR includes an extensive discussion of the Project's effect on substrate, including the relationship between flow velocity and substrate, and demonstrates that there would be no significant impact to this important habitat component.

Response to Comment P25e.

The commenter argues that the Draft EIR contradicts itself in stating that "The proposed reduction in discharges from RIX […] would not substantially alter the existing drainage pattern of the river because in flows within an inset, or low flow channel, through the Project site for most, if not all, of its course downstream" and then later stating a 41% change in average velocity from the baseline to Phase 5 in Reach 1; refer to Table 4.4-7, *Modelled Velocities in Feet per Second, Percentage of Change from Baseline*. From this comment, it appears that the commenter may have confused the Draft EIR's discussion regarding impacts to river planform or flow regime with the Draft EIR's findings for impacts to water velocity. A change in velocity does not necessarily dictate a similar change in drainage pattern. There is no inconsistency between the Draft EIR's findings regarding drainage patterns and water velocity.

Response to Comment P26a.

The commenter requests an explanation of how substrate data was incorporated into the modeling of Santa Ana sucker habitat in the Santa Ana River and questions the basis for the Draft EIR's determination regarding the significance of habitat changes. Santa Ana sucker habitat was modeled using existing data available at the time of the study. Information on coarse substrate availability was limited; only several

years of data regarding the downstream extent of available coarse substrate existed. Thus, habitat suitability was scaled by each Santa Ana River reach, based on the extent of coarse substrate, as described on page 35 of the Low Flow Study. This was the only method by which the EIR technical experts could evaluate the relationship between habitat quality and coarse substrates, given the limited available data. SBMWD disagrees with the assertion that any impact to Santa Ana sucker habitat is a significant impact. The evidence demonstrates a history of wide variability in habitat and fish populations, and there is not a direct or definitive correlation between changes in habitat and fish populations. As noted in Response to Comment L9, existing Santa Ana sucker populations vary over 40%. See response L9 for information responsive to the question whether a 10% change of habitat is within the range of natural variability. Regarding the comment about the significance of a 10-25% reduction in available habitat, page 38 of the GEI low-flow report states the following: "Changes in adult WUA between 10 and 25 percent were deemed unlikely to result in 'substantial or potentially substantial' changes to Santa Ana Suckers". The low-flow report used adult WUA in the interest of making conservative estimates, because adult habitat is far more limited in the Santa Ana River than juvenile habitat. The low-flow report's conclusion of "unlikely to result in changes" was interpreted as "no impact" in the EIR.

The choice of a 10 – 25% habitat loss as insignificant or minor was based on two decades of expert experience conducting environmental analysis under CEQA and NEPA. From a scientific standpoint, especially with regard to water projects that occur under variable conditions, an EIR or an EIS amounts to a very elaborate and carefully constructed hypothesis, and post-project monitoring data are sparse enough that most of these "hypotheses" rarely, if ever, tested. As a result, there is a near-absence of studies in the scientific literature linking population response to flow changes. This is why the Adaptive Management Plan approach is supported.

The EIR experts have worked to reduce uncertainty and the risk of invalid results in the Clean Water Factory EIR; however, the lack of scientific study linking population response to flow changes resulted in the experts being able to provide only their best estimate of what the Project effects will be. This is why the EIR experts recommended the Adaptive Management Plan for mitigation: to address this uncertainty. These thresholds would be tested as part of the Project's Adaptive Management Plan described in Mitigation Measure BIO-7, which provides monitoring, study and response actions designed to ensure that impacts to Santa Ana sucker from discharge-related habitat changes would not be significant.

The EIR experts have make a good faith effort to estimate impacts, based on their experience and the best available evidence; the EIR's choice of significance thresholds and impact determinations is supported by substantial evidence.

Response to Comment P26b.

The commenter misstates and misquotes the EIR's discussion of the Low Flow Study and alleges that the Low Flow Study modeling for Reaches 2 and 3 does not account for low flow conditions or storm flows.

The Draft EIR did not attempt to discredit the Low Flow Study. Moreover, the EIR did not state that "the actual reductions would be less likely than the modeled predictions," as misquoted by the commenter. Rather, Draft EIR 4.4-62 explains that the *extent of* actual reductions in habitat would *likely be less* than modeled predictions. Specifically, the Draft EIR states, "For Study Reaches 2 and 3, the actual reductions would likely be less than the modeled predictions . . ." and provides evidence and analysis to support that determination. With regard to the extent of substrate, Draft EIR page 4.4-31 describes that there is considerable variability year to year in the availability of coarse substrate. The Draft EIR at page 4.4-62

explains the basis for the assertion that actual impacts are likely to be less than those modeled, including the fact that the "modeling is based on a static channel, where change in hydraulic characteristics and habitat availability are based only on reduction in flows from the RIX Facility. In reality, the Santa Ana River is a very dynamic river with winter floods capable of scouring away riparian vegetation and islands, relocating the active channel and redistributing substrate. Thus it is likely that the channel should adapt to reduction in flows from RIX and will be periodically reset from flooding events." The EIR analysis thus clearly accounts for both low flow conditions and storm flows.

The commenter also asserts that the Draft EIR analysis does not consider potential changes to storm flows from the City of Riverside's proposed RNASR Project, which is located upstream of the RIX Facility. Draft EIR Section 4.4 incorporates a detailed discussion pertaining to the Project's potential cumulative environmental impacts in combination with the RNASR Project. As concluded on Draft EIR page 4.4-80, the proposed RNASR Project would not involve additive effects that, when considered with the Clean Water Factory Project, would substantially impact biological resources, including those related to Santa Ana River flows.

Finally, the commenter mischaracterizes the Draft EIR, stating that the Draft EIR says that "Reach 3 has at the same time none and then more coarse substrate so that 'impacts to juvenile WUA would be expected to be less than predicted in the model.'" Presumably the commenter is referring to the analysis on Draft EIR pages 4.4-61 through 4.4-62. There, the Draft EIR explains that "the greater negative impact designations in the later phases are largely associated with reduction in depth, which would indicate that depth is an important habitat variability in influencing sucker abundance." (Draft EIR p. 4.4-61). The Draft EIR goes on to explain the basis for the conclusion that actual impacts to juvenile Santa Ana sucker habitat would be less than predicted in the model, including the fact that Reach 3 has conditions, including depth and coarse substrate, that could not be accounted for in the model, because the modeling of those reaches was not based on actual field measurements. Because Reach 3 is deeper than the conditions reflected in the model, conditions with the Project would be deeper, and thus impacts to sucker would be less than predicted. The hypothesis that the width of this sand bed channel would adjust to lower flows and that depths (and therefore Santa Ana sucker habitat availability) would likely be greater than the modeled estimates would be tested as part of the Adaptive Management Plan.

Response to Comment P26c.

The commenter mischaracterizes the Draft EIR's explanation of the modeled reduction in available habitat as an impact of greater than 10% to Santa Ana sucker and asserts the Project will result in a decline in Santa Ana sucker. The commenter offers no evidence or analysis to support this argument. The Draft EIR acknowledges the potential for Project-related reductions in sucker habitat to have an adverse effect on Santa Ana sucker. While the precise effect to Santa Ana sucker population cannot be definitively predicted, the EIR provides evidence and analysis, based on the best available information about Santa Ana sucker habitat requirements and response to changing conditions, to support its determination that the impacts with mitigation proposed in the Draft EIR will not be significant (i.e., substantial and adverse). This evidence includes the fact that habitat conditions in the Santa Ana River are affected by a number of factors that result in high variability from year to year. In addition to evidence showing high variability in habitat conditions, the evidence shows that Santa Ana sucker populations vary by more than 40% under historic conditions, and that sucker have shown an ability to adapt to variability in habitat conditions. (See, e.g., Draft EIR pp. 4.4-27 through 4.4-28, 4.4-31, and 4.4-70 through 4.4-71.) To address the uncertainty in how habitat and sucker will respond to Project-related changes, the Draft EIR included Mitigation Measure BIO-7 (Adaptive Management Plan), which would ensure the Project's potential

impacts to Santa Ana are less than significant. Refer also to Response to Comment L10 above for a discussion regarding additional mitigation to ensure that impacts to Santa Ana sucker are less than significant. Refer to D4e, L10, O10 and P26d for more discussion concerning the Project's Adaptive Management Plan, as well as revised Mitigation Measure BIO-7 (see Section 3.0, *Errata to the Draft EIR*). Regarding the cumulative impacts on the Santa Ana sucker, see Response to Comment H22 above.

Response to Comment P26d.

The commenter criticizes the Draft EIR for failing to include an Adaptive Management Plan prior to its circulation. In fact, a preliminary Draft Adaptive Management Plan entitled "Clean Water Factory Adaptive Management Plan" is provided on page 30 of the Low Flow Study; refer to Draft EIR Appendix A. A significant amount of relevant but preliminary data has recently been presented by USGS but is not yet available for use regarding existing hydrologic conditions in the Santa Ana River, habitat requirements for the Santa Ana sucker, and sediment transport. A more robust version of the Adaptive Management Plan will be prepared following EIR certification to reflect data for native fish habitat suitability modeling and trends in discharge and infiltration in sucker-occupied reaches below the RIX Facility, including more recent USGS data, if available. As part of the Adaptive Management Plan process, performance measures would be developed and monitored in conjunction with sucker response. Mitigation Measure BIO-7 includes the commitment to develop an Adaptive Management Plan that will mitigate impacts so they are not significant. Mitigation Measure BIO-7 specifies the SBMWD's commitment to monitor change and respond so that the Project does not result in adverse effects to the Santa Ana suckers or their habitat and clearly specifies the types of actions that can be taken, if needed, each of which meets CEQA's definition of mitigation. Refer also to Response to Comments L10, O8 and O10 above, as well as revised Mitigation Measure BIO-7 (see Section 3.0, *Errata to the Draft EIR*).

Response to Comment P26e.

The comment is based on selective choice of minimal discharge scenarios by the RIX Facility. The RIX Facility is capable of discharging up to 64 mgd, on any day. At this rate of discharge, sand would be removed from the combined study Reaches 1 and 2 in 0.9 days, and at a RIX Facility discharge rate of 29 mgd would restore biological baseline conditions in Reach 1 within 5.8 days, and remove sand from the combined study Reaches 1 and 2 in 9.6 days. While the Project would reduce discharge overall below this maximum rate, it would not eliminate the ability for the RIX Facility to discharge at 64 mgd when needed to remove accumulated sand. Revised Mitigation Measure BIO-7 (see Section 3.0, *Errata to the Draft EIR)* would be implemented, as required, to reduce sandy deposition, using discharge rates up to 64 mgd. The required discharge that would need to be released would depend on the habitat needs of the fish at that time, and consideration would be given to relevant life stages of affected Santa Ana sucker, as part of the Adaptive Management Program's long-term monitoring. The flexibility to discharge at variable range of rates up to 64 mgd would allow for flexibility in RIX facility operations to be protective of Santa Ana sucker life stages, and Mitigation Measure BIO-7's commitment to develop and implement an Adaptive Management Plan that avoids adverse impacts to the Santa Ana sucker will ensure that impacts are less than significant.

It is possible that the covering of cobbles by fine sediments could potentially affect the Santa Ana sucker by temporarily depriving it of its food source. The magnitude of this negative effect depends on the duration of the burial and the rapidity with which recolonization of periphyton and macroinvertebrates occurs after the cobbles are re-exposed. The Santa Ana sucker must be adapted to this disturbance in some capacity, as fine sediments would periodically have covered cobble substrates in the Santa Ana River

prior to settlement and urbanization. However, there are no available data that show the rate at which periphyton and macroinvertebrates recolonize re-exposed cobbles, the typical duration of cobble burial under "natural" or pre-settlement conditions, or the response of the Santa Ana sucker to this disturbance. More information on acceptable durations of cobble burial could be addressed with simple field experiments and literature reviews under the Adaptive Management Plan.

Judging from the available literature, it is doubtful that the recolonization rates of primary producers or macroinvertebrates have been measured after a disturbance (such as burial of cobble substrate during a storm) in the Santa Ana River. In Western Great Plains streams, with similar sand/gravel substrates, recolonization can occur on the time scale of days/weeks for all trophic levels, so it's possible that even if it took 6 to 10 days for the removal of a "sediment blanket", the primary food source of the Santa Ana sucker could reappear around 14 days post-deposition. Whether or not the majority of the Santa Ana sucker population can survive this long without eating is open to conjecture at this point. As noted above, this question could be answered with a combination of simple experiments and literature reviews and covered under the Adaptive Management Plan.

Response to Comment P27a.

The commenter disagrees with the Draft EIR's determination of a less than significant impact for Impact Statement 4.4-1. The Draft EIR provides substantial evidence and analysis to support its determination that the Project with proposed mitigation will not have a substantial adverse impact on sensitive species. See responses to previous comments.

Response to Comment P27b.

As elaborated on page 4.4-66, the Draft EIR incorporates an analysis restricted to the species that, based on habitat requirements and known distribution, are expected to have a moderate or high potential to occur at the Project site. Only one special-status plant species was identified during a California Natural Diversity Database (CNDDB) and California Native Plant Society (CNPS) search: Parry's spineflower, which was found to occur within the Waterman Basin in 1993. The Habitat Assessment incorporates the results of focused surveys for Parry's spineflower which were conducted within the Waterman Spreading Grounds from June to August 2015 based on known distribution and a previous CNDDB record of this species within the Spreading Grounds from 1993. As explained in the Habitat Assessment, sensitive plant surveys were not conducted elsewhere within the Project site due to lack of suitable habitat. The surveys of the Project site for Parry's spineflower were negative, and potential habitat conditions are marginal due to ongoing maintenance activities; for these reasons the species is assumed to be absent and no significant impact would occur. Refer to Response to Comment O11 as well as Draft EIR Appendix 10.4, *Habitat Assessment*, for an expanded discussion on the Project site's potential to support Parry's spineflower.

Response to Comment P27c.

The commenter opines that Mitigation Measures BIO-2 and BIO-3 would be ineffective at reducing the Project's potential impacts to Parry's spineflower. SBMWD does not agree with this comment and maintains that these mitigation measures will reduce impacts to sensitive plants to a less than significant level. Mitigation Measure BIO-1 contains the commitment to implement a program designed to ensure that workers are able to identify and avoid sensitive plant species, which would include Parry's spineflower. As explained in the Draft EIR and Response to Comments O11 and P27b above, Parry's spineflower is unlikely to be present on site; Mitigation Measure BIO-1 will further reduce the potential for adverse impacts. As explained in the Draft EIR, Mitigation Measure BIO-2 will prevent the spread of non-native weed seeds, which will help reduce potential impacts to any sensitive plant species that may be on site or in adjacent areas at the time of construction.

Response to Comment P27d.

The commenter notes concerns pertaining to the EIR's lack of specificity concerning future preconstruction trapping for San Bernardino kangaroo rat. As described on Draft EIR page 4.4-26, the closest CNDDB record of the species is on the San Bernardino International Airport approximately 1.9 miles east of the Project boundary. However, the SBIAA does not support San Bernardino kangaroo rat any longer as the site no longer supports its preferred habitat (Riversidean alluvial fan sage scrub) and is no longer subject to the hydrological processes necessary for this habitat. San Bernardino kangaroo rat have also been documented at the Waterman Basins. Trapping for San Bernardino kangaroo rat in the Waterman Basins was conducted in 2014, and no San Bernardino kangaroo rat were trapped. Nonetheless, SBMWD would be required to conduct a pre-construction small mammal trapping study of the Waterman Basins and East Twin Creek Spreading grounds and initiate consultation with the USFWS and/or CDFW the species are present, and comply with all permit conditions imposed on the Project as a result of consultation. Trapping will be conducted according to established wildlife agency protocols. Consultation under the federal and state endangered species acts is a formal process designed to avoid significant adverse impacts to protected species. The process results in authorization to proceed only if the permittee agrees to comply with conditions identified by the agencies with expertise and regulatory authority to ensure protection of the species. The requirement to consult with appropriate regulatory agencies if San Bernardino kangaroo rat are located on site and the commitment to comply with conditions imposed as a result of consultation are sufficient to ensure that any potential impacts to the species will be less than significant. Refer to Response to Comment L10 above.

Response to Comment P27e.

Draft EIR page 4.4-68 acknowledges the potential for Least Bell's vireo to be present and does not suggest that the fact that a single Least Bell's vireo was sighted at the Waterman Basin means that more might not be present at any given time. The Draft EIR proposes a suite of mitigation measures that address potential impacts to this species, including Mitigation Measures BIO-1, BIO-4, BIO 5, and BIO-6. Mitigation Measure BIO-5 specifies that construction should not occur within "the avian breeding season," which it identifies as "generally January 1 through September 30." This general description does not mean that surveys and mitigation will not be conducted at the appropriate time based on the potential for individual species presence, regardless of whether that occurs outside of the generally identified window. The measure goes on to provide that "If construction occurs during the avian breeding season, a qualified biologist shall conduct a preconstruction nesting bird clearance survey in all work areas and all areas within 500 feet of the general construction zone. This shall occur no more than one week prior to

construction." Mitigation Measure BIO-6 further provides that with respect to impacts to Least Bell's vireo, "If construction is scheduled to occur during the avian breeding season, a qualified biologist shall perform protocol nesting bird surveys for LBVI in suitable habitat prior to the start of construction." By linking the survey and mitigation commitment to the avian breeding season, rather than a specific time period, the measure adequately mitigates potential for impacts to all species potentially present in the construction area. The determination when young have fledged, or nests abandoned, would be made by a qualified biologist through implementation of the Mitigation Monitoring and Reporting Program. Potential impacts to Least Bell's vireo habitat are adequately addressed by Mitigation Measure BIO-7, which includes a requirement to monitor and mitigate for any flow-related impact to Santa Ana River riparian habitat. See also Response to Comment L10 above and revised Mitigation Measure BIO-8 (see Section 3.0, *Errata to the Draft EIR*). Regarding the potential for impacts to Southwestern willow flycatcher, the Southwestern willow flycatcher Critical Habitat Santa Ana Management Unit, encompasses an area of the Santa Ana River beginning at Tippecanoe Avenue and extending southwest to the county line (70 FR 60886 61009). No Southwestern willow flycatcher were observed during surveying efforts for the Draft EIR's Habitat Assessment. Nonetheless, as discussed in the Draft EIR, the phased reduction in flows from the RIX Facility could impact the available foraging area for this species. Mitigation Measure BIO-7, which proposes a rigorous hydrologic and biological monitoring program for the upper reaches of the Santa Ana River, and includes effects to riparian habitat, Mitigation Measure BIO-8, which requires incidental take authorization for any adverse effects to protected species (which would guard against critical habitat impacts), along with Mitigation Measures BIO-4, BIO-6, BIO-9, BIO-10, and BIO-11, would ensure the Project's potential impacts to Southwestern willow flycatcher are less than significant.

The population of Least Bell's vireo in Prado Basin has expanded significantly in recent years, extending its population into the upper reaches of the Santa Ana River, including the Project site. LBVI is, and will continue to be, present within portions of the Clean Water Factory Project site. The mitigation measures developed for this project, in particular Mitigation Measures BIO-7 and BIO-8, are responsive to the recovery and expansion of Least Bell's vireo in the Santa Ana River as integral part of the various wildlife instream and riparian habitat associated with the Santa Ana River and provide a foundation for adaptive management and long-term management processes needed to ensure the long-term survival and continued growth the Least Bell's vireo population, as well as the Southwestern willow flycatcher population, found along the Santa Ana River.

Response to Comment P27f.

SBMWD disagrees with the commenter's argument that San Bernardino kangaroo rat could be adversely affected from reduced RIX Facility discharge. As explained on Draft EIR page 4.4-69, as well as the supporting Habitat Assessment, San Bernardino kangaroo rat do not occur downstream of the RIX Facility. This is largely due to the marginal habitat that is available for them in these areas. Mitigation Measures BIO-1, BIO-3, and BIO-4 address the potential for adverse impacts from construction and operations and are adequate to ensure that impacts to San Bernardino kangaroo rat are less than significant. See also Response to Comments L10 and P27d above.

Response to Comment P27g.

The Habitat Assessment explains that no burrowing owls were observed within or adjacent to the Project site and that the Project site has a low potential to support the species due to marginal habitat available; refer to Habitat Assessment Appendix A, *Sensitive Habitats and Potentially Occurring Sensitive Plant and*

Wildlife Species. Based on this evidence, SBMWD determined that Project implementation did not have the potential to result in a significant impact to burrowing owl.

Response to Comment P27h.

The commenter notes confusion whether Project operation would result in a 7% or 9.5% loss of Santa Ana sucker habitat at the end of Phase 1 and a 13.7% or 17.3% loss at the end of Phase 2. The estimates of 9.5 and 17.3 percent habitat loss refer to juvenile Santa Ana Sucker habitat in Reach 3 under phases 1 and 2, respectively. Estimated habitat losses for juveniles range from 1.9 to 9.5 percent in Phase 1 and from 4.6 to 17.3 in Phase 2, depending on the reach. Estimated juvenile habitat losses are detailed in Table 4.4-9.

Estimated habitat losses for adults range from 2.7 to 11.2% in Phase 1 and from 6.8 to 20.5% in Phase 2, depending on the reach. Estimated adult habitat losses are detailed in Table 4.4-8. Estimated habitat losses for juveniles range from 1.9 to 9.5 percent in Phase 1 and from 4.6 to 17.3 in Phase 2, depending on the reach. Estimated juvenile habitat losses are detailed in Table 4.4-9.

The statement in the Draft EIR read "habitat conditions can vary substantially from year to year due to the dynamic nature of the river and climate, fish and other species living within this harsh environment must be able to adapt to these changes in the river and their habitat." This statement refers to the fact that some species normal life cycle includes being exposed to harsh and changing conditions such as periodic but severe flooding during the winter months as well as drought conditions and the drying up or loss of water from the riverbed during the summer months. In order to survive these harsh environmental conditions, Santa Ana sucker has evolved characteristics that allow the population to respond to these conditions, such as high fecundity. Although large portions of a population could be lost during a flood or drought period, when favorable conditions return, the remaining can rapidly breed and repopulate the river.

Naturally, there is variability in the responses with river reach and the life stage of the fish, given that the reaches are geomorphically distinct and that fish habitat requirements vary with life stage. Because of this, there is potential for confusion when summarizing these responses in the text of the EIR. Tables have been added to the EIR to clarify the percent changes by reach and life stage with each phase.

SBMWD agrees that the Santa Ana sucker has been impacted by human modifications to the point that its geographic range is restricted. Yet, the fact that the species has survived in this highly modified, impacted urban stream, in worse conditions than it does now, for decades, demonstrates that it is adaptable. Fishes native to desert rivers tend to have sufficient plasticity to weather unpredictable environmental fluctuations, and some of these characteristics seem to have allowed the Santa Ana sucker to persist in an environment that has been modified dramatically with the urbanization of San Bernardino and Riverside counties.

Response to Comment P27i.

SBMWD understands that the Santa Ana sucker is subject to a Recovery Plan. The model predicts that the Project's potentially significant adverse effects to Santa Ana sucker would occur during the final three phases of flow reduction, depending on the life stage of the sucker and specific reach of the Santa Ana River affected; refer to Draft EIR Tables 4.4-8 and 4.4-9. However, any significant adverse effects would be avoided or mitigated to a level of less than significant through compliance with revised Mitigation

Measure BIO-7 (Adaptive Management Plan), revised Mitigation Measure BIO-8 (requires consultation under ESA; requires incidental take authorization; see Section 3.0, *Errata to the Draft EIR)*. SBMWD continues to participate through their partnership with the Upper Santa Ana River Habitat Conservation Plan (HCP) and the Santa Ana sucker Conservation Team, which function to improve current conditions for the sensitive species and habitat the Santa Ana River supports. Collectively, the proposed mitigation and participation in the HCP will ensure the Project impacts do not jeopardize efforts to ensure the recovery of the Santa Ana sucker.

The Draft EIR does not assume that a reduction in habitat of less than 10% in each phase would have less than significant impacts. As described in the EIR and Low Flow Study, the Project uses changes in amount of useable habitat based on percent change from baseline conditions. Changes less than 10% are considered unlikely to result in any effects to Santa Ana sucker habitat as the change would not be measurable or of perceptible consequence within the range of natural variability; refer to Low Flow Study page 21 and Response to Comments L9, L11, and I9b above. Based on this, and additional considerations discussed at length in the Draft EIR, the Draft EIR determined that a total change of less than 10% from baseline would have no impact, and a total reduction of 25% or less would not have a significant (substantial adverse) impact. The model predicts where, in the course of the proposed phased discharge reduction, those levels would be exceeded. SBMWD's decision to present the information about the effects of discharge reduction in five phases was intended to demonstrate how habitat would change over time and does not mean that the proposed mitigation would only be implemented at five year intervals. It was not feasible or necessary to provide estimates of habitat reduction at a more specific scale to understand the type or significance of potential impacts, or to develop effective mitigation. The proposed mitigation does not rely on 5 year increments for triggers but rather would be implemented adaptively and continuously based on the actual observed effects of the gradual reduction in discharge. Thus, as specified in Mitigation Measure BIO-7, at any point in the course of Project implementation adaptive management measures, including increasing the amount of discharge from the RIX Facility, could be taken if appropriate and necessary to avoid significant impacts to Santa Ana sucker or other potentially affected special status species.

Response to Comment P27j.

The commenter expresses concern that the Project's Adaptive Management Plan would not be developed until 15 years after the commencement of Project operations. This concern is unfounded. In fact, the first sentence of Mitigation Measure BIO-7 plainly states that SBMWD shall develop and implement an Adaptive Management Plan prior to any Project-related reduction in RIX Facility discharge that will result in greater than 10% reduction in Santa Ana sucker habitat; refer to Draft EIR page 4.4-72. Because the model predicts changes greater than 10% for adult Sana Ana sucker weighted usable habitat would occur in Phase 1, the Adaptive Management Plan will be developed prior to implementation of Phase 1; refer to Draft EIR page 4.4-59. As described under Response to Comment P23a, a significant amount of relevant but preliminary data has recently been presented by USGS but is not yet available for use regarding existing hydrologic conditions in the Santa Ana River, habitat requirements for the Santa Ana sucker, and sediment transport. If available, these data may be used in the preparation of a more robust and impact-specific Adaptive Management Plan. As part of the Adaptive Management Plan process, specific performance criteria would be developed and monitored in conjunction with sucker response. As such, SBMWD affirms that revised Mitigation Measure BIO-7 (see Section 3.0, *Errata to the Draft EIR*), along with the balance of the mitigation measures proposed, are sufficient to ensure Project-related impacts to the Santa Ana River and the special-status species it supports are less than significant.

Response to Comment P27k.

Regarding the comment that the Adaptive Management Plan should have been developed prior to Draft EIR distribution; please refer to Response to Comment P27J above. Regarding the specificity of the Adaptive Management Plan, see Response to Comment D4e. The comment also asks for an explanation of Mitigation Measure BIO-7's use of 38.4 cfs as a threshold for implementation of the Adaptive Management Plan. Mitigation Measure BIO-7 (see Section 3.0, *Errata to the Draft EIR)* has been revised and no longer applies this metric.

Response to Comment P27l.

As noted in Mitigation Measure BIO-8 (Draft EIR p. 4.4-74), SBMWD will consult with the USFWS under section 7 of the ESA regarding potential effects to federally listed species, which will necessarily include the Southwestern willow flycatcher and Least Bell's vireo. Also see revised Mitigation Measure BIO-8 in Section 3.0, *Errata to the Draft EIR*. Refer also to Response to Comments L10 and P24 above.

Response to Comment P27m.

The commenter notes concern regarding the discrepancies between the loss of wetted width identified for the proposed Project and the loss of wetted width identified for the SNRC. Refer also to Response to Comments P25b and P25c above. The Draft EIR for the Clean Water Factory Project was based on a highly technical and sophisticated Low Flow Study that evaluated numerous characteristics including stream depth, channel width, and velocity to determine how the Project was likely to affect these characteristics. SBMWD is not directly involved in the SNRC project and thus does not have substantial insight on that proposed Project or the SNRC lead agency's choice of methodology for analyzing the impacts of that project. SBMWD recognizes the discrepancies between the low flow modeling prepared for the Clean Water Factory Project and the SNRC. Nonetheless, SBMWD understands that the SNRC project did not evaluate that project's potential effects to the Santa Ana River habitat to the same scale or level of detail as the Clean Water Factory Draft EIR, which could explain the different results obtained. In contrast to the SNRC Draft EIR, the Clean Water Factory Draft EIR is supported by extensive and sophisticated modelling and analysis undertaken over a number of years. In contrast, the SNRC Draft EIR relied on a much less sophisticated and less specific level of analysis and study.

The commenter also argues that the Draft EIR fails to explain how Mitigation Measures BIO-9 through BIO-11 would address the loss of operational impacts to Santa Ana sucker and species downstream of the RIX Facility. The commenter seems to have confused the Mitigation Measures proposed for impacts to non-listed special status species with the mitigation proposed for Santa Ana sucker; refer to Draft EIR page 4.4-75. As explained several times above, the Project's potential operational impacts to Santa Ana sucker and species downstream of the RIX Facility would be fully mitigated through implementation of BIO-7, and revised BIO-8 (see Section 3.0, *Errata to the Draft EIR*). Also refer to the responses above.

Response to Comment P27n.

The commenter is incorrect that the Draft EIR states the Arroyo chub has been observed "near RIX." As discussed on Draft EIR pages 4.4-74 through 4.4-75, the species has been observed 3 miles downstream of the RIX Facility and the area immediately downstream of the RIX Facility is not expected to provide substantial habitat for the Arroyo chub because it prefers sandier substrate than the heavy gravel and cobble substrate found between the RIX Facility and Riverside Avenue. For the reasons discussed in the

Draft EIR, the Project would not substantially change the quality of habitat downstream of the RIX Facility and thus would not be expected to have a substantial adverse effect on Arroyo chub. Regarding the adequacy of the Adaptive Management Plan, see Response to Comment O8 above. Regarding the adequacy of Section 7 consultation to avoid significant impacts to listed species, as noted previously, consultation under the federal and state endangered species acts is a formal process designed to avoid significant adverse impacts to protected species. The process results in authorization to proceed only if the permittee agrees to comply with conditions identified by the agencies with expertise and regulatory authority to ensure protection of the species. The requirement to consult with appropriate regulatory agencies regarding potential impacts to listed species, which would include the Arroyo chub, and the commitment to comply with conditions imposed as a result of consultation are sufficient to ensure that any potential impacts to Arroyo chub will be less than significant. A specific commitment that the Project will not proceed prior to obtaining any necessary incidental take authorization is included in revised Mitigation Measure BIO-8; see Section 3.0, *Errata to the Draft EIR*.

Response to Comment P27o.

The commenter notes concerns relating to the Draft EIR's analysis of impacts to non-listed wildlife. The commenter is correct in stating that yellow warbler was observed. However, the commenter is incorrect is assuming that the Draft EIR's analysis is flawed since the Habitat Assessment did not include focused-surveys for Northwestern San Diego pocket mouse, Rosy boa, California horned Lark, Western yellow bat, Los Angeles pocket mouse, and Coast horned lizard. The Draft EIR recognizes that direct impacts to these species could occur within the Waterman Basins and East Twin Creek Spreading Grounds, thus, the Draft EIR proposes Mitigation Measures BIO-5, BIO-9, BIO-10 and BIO-11. Mitigation Measure BIO-5 would either require avoiding construction during avian nesting season or require preconstruction surveys, and nest protection actions, thereby reducing impacts to avian species to less than significant. Mitigation Measure BIO-9 would ensure that all construction occurs between dawn and dusk, to avoid disturbance to nocturnal wildlife. Mitigation Measure BIO-10 would require the minimization of construction-related noise in areas adjacent to riparian habitat in order to avoid or reduce impacts to wildlife. Mitigation Measure BIO-11 would require that Best Management Practices are incorporated in areas 100-feet from riparian habitat to avoid or minimize impacts related to sedimentation control, erosion control, spill prevention and cleanup, and hazardous materials. SBMWD affirms that implementation of Mitigation Measures BIO5, BIO-9, BIO-10, and BIO-11 are adequate to ensure the Project would not have a substantial adverse effect on sensitive species.

Response to Comment P28.

The commenter reiterates concerns pertaining to how Mitigation Measure BIO-7 would reduce the Project's impacts to Santa Ana River riparian habitat or other sensitive natural communities, since the Adaptive Management Plan has not been finalized. Please refer to Response to Comments D4e, L10, P26d, and P27n above. SBMWD affirms that revised Mitigation Measure BIO-7, in combination with revised Mitigation Measure BIO-8 (see Section 3.0, *Errata to the Draft EIR*), as well as BIO-9, BIO-12, and BIO-13, would reduce the Project's potential impacts to riparian habitat or other sensitive natural communities to a less than significant level.

Response to Comment P29.

The commenter disagrees with the Draft EIR's determination that the Project's impacts to wildlife corridors, particularly for Santa Ana sucker, would be less than significant with mitigation. Impact 4.4-4

indicates that Project operations could impact the Santa Ana River's function as a wildlife corridor through the loss or wetted width, and directs the reader to Impact Statement 4.4-1, which includes an in-depth analysis of the Project's potential impacts to Santa Ana sucker; refer to Draft EIR page 4.4-78. Thus, SBMWD affirms that the Draft EIR incorporates an analysis of the Santa Ana River's function as a wildlife corridor and spawning site for Santa Ana sucker, and stands by the Draft EIR's determination of less than significant with mitigation incorporated. Refer also to Response to Comment P23e above.

Response to Comment P30.

The commenter disagrees with the determination of less than significant for Impact 4.4-6 (Conservation Planning). The Project site is not affected by an existing habitat conservation plans or natural community conservation plans addressing the Santa Ana River, and no impacts are expected to occur downstream within the Santa Ana River within Riverside County. Thus, SBMWD affirms the Draft EIR's conclusion that less than significant impacts would occur. CEQA does not require an analysis of a project's consistency with unadopted plans, including prospective habitat conservation plans.

Response to Comment P31a.

The commenter disagrees with the cumulative approach taken under Section 4.4.9, *Cumulative Impacts*. SBMWD recognizes that the City of San Bernardino General Plan EIR and County of San Bernardino General Plan EIR address the cumulative impact of overall City and regional buildout. Contrary to the commenter's assertion, Section 4.4.9 does not focus solely on cumulative impacts to Santa Ana sucker. In fact, the cumulative impacts discussion clearly state that "This cumulative impact section, therefore, focuses on potential cumulative impacts to the *Santa Ana River* and Santa Ana sucker habitat downstream of RIX" (emphasis added); refer to Draft EIR page 4.4-79. This holistic approach is further defined in the Section 4.4.9 discussion of the habitat conservation plans that SBMWD currently participates in, including the Upper Santa Ana River HCP and the Santa Ana sucker Conservation Plan. The Upper Santa Ana River HCP is proposed to improve current conditions for sensitive species within the River while meeting the water supply needs of the Upper Santa Ana River Watershed. Both of these programs are aimed at providing long-term comprehensive protection for biological resources and in-stream and riparian habitats found within the Santa Ana River and wash habitats. Additionally, the protections provided by Mitigation Measures BIO-7, BIO-8, and BIO-12 (requiring a comprehensive Adaptive Management Plan and consultation with state and federal wildlife resource agencies), will ensure that the Project's contribution to cumulative impacts to sensitive species is not considerable. Thus, SBMWD affirms that the cumulative analysis provided in Section 4.4.9 provides adequate information necessary for making an environmentally informed decision about whether or not to proceed with the proposed Project. Revised Mitigation Measures are provided in Section 3.0, *Errata to the Draft EIR*.

Response to Comment P31b.

The commenter argues that the Draft EIR should evaluate the RNASR impacts should be evaluated since they could have an effect on species that are dependent on more water reaching past the RIX Facility such as Santa Ana sucker, Arroyo chub, Least Bell's vireo, and Southwestern willow flycatcher. As noted above, 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. As such, the Draft EIR analyzes what is considered a cumulative worst-case condition for potential future wastewater treatment plant discharge reductions in the study reaches based on the limit of acceptable potential impacts to biological resources. As explained on pages 4.4-79 through 4.4-80 of the Draft EIR, the RNASR project has a different operational profile than

the Clean Water Factory Project and is not expected to have additive effects; nevertheless, any impacts to background conditions from the RNASR project would be accounted for in the ongoing adaptive management process required by revised Mitigation Measure BIO-7 (see Section 3.0, *Errata to the Draft EIR*), which could lead to changes in RIX Facility operations (such as increased discharge or pulse flows) if needed to avoid significant impacts. For this reason, SBMWD affirms that the Draft EIR's cumulative worst-case conditions account for the RNASR's potential flow reduction impacts to the Santa Ana River and its associated habitat and species.

Response to Comment P31c.

The commenter asserts that Table 4.4-4, *Flow Volume (CFS) Model Assumptions for Each RIX Phase*, does not account for other projects within the Santa Ana River which could also reduce flows to the Santa Ana River. As described in Response to Comment P31b above, the Draft EIR, including Table 4.4-4, analyzes what is considered a cumulative worst-case condition for potential future wastewater treatment plant discharge reductions in the study reaches based on the limit of acceptable potential impacts to biological resources. See also Response to Comment O20. The Project's potential cumulative impacts to downstream portions of the Santa Ana River would be addressed as part of the Adaptive Management Plan (revised Mitigation Measure BIO-7 (see Section 3.0, *Errata to the Draft EIR*); and through Mitigation Measures BIO-8. Thus, SBMWD assures the commenter that downstream vegetation and habitat would adequately be covered through compliance with proposed mitigation. See also Response to Comment L10.

Response to Comment P31d.

The commenter disagrees that the Draft EIR mitigation measures would sufficiently reduce the Project's cumulatively considerable impacts to Santa Ana River flows as well as Santa Ana sucker and other fish species. As noted in Section 4.4.9, *Cumulative Impacts*, the Project would reduce cumulatively considerable impacts to Santa Ana River flows through implementation of Mitigation Measure BIO-7, which would require the implementation of an Adaptive Management Plan which would be implemented in response to potential adverse conditions resulting from flow reductions. Mitigation Measure BIO-14 would further reduce cumulative impacts of flow reduction by substantially reducing the frequency and effect of existing discharge interruptions at RIX caused by power outages and facility maintenance. SBMWD affirms that, in combination with revised Mitigation Measure BIO-7 and BIO-8 (see Section 3.0, *Errata to the Draft EIR*), as well as Mitigation Measure BIO-14, would ensure that the Project's contribution to cumulative impacts to Santa Ana River flows, habitat and species would not be cumulatively considerable. See also Response to Comment L10.

Response to Comment P32a.

The commenter asserts that the proposed Project would further impair water quality due to reduced flows from the RIX Facility. Water quality changes are not anticipated by the proposed Project, only a reduction in flow from the RIX Facility. The proposed Project is limited to reductions in flows; however, this is not anticipated to impair water quality as it would not concentrate pollutants in the Santa Ana River; it would reduce flows (and consequently pollutants) at a similar rate.

Response to Comment P32b.

The commenter identifies that Draft EIR page 4.7-23 notes that "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 […]" but fails to incorporate reasons below.

The statement in the Draft EIR was intended to refer to the discussion of cumulative impacts at Draft EIR pages 4.7-38 through 4.7-40, which explains the Draft EIR's conclusion that the volume of discharge reduction proposed by the Clean Water Factory Project and analyzed in the EIR is considered to represent the cumulative worst-case condition for potential future wastewater treatment plant discharge reductions in the Study Reaches. However, for clarity, Draft EIR page 4.7-23 is been modified as reflected below and in Section 3.0, *Errata to the Draft EIR*:

> **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.

Response to Comment P32c.

The commenter notes concern that, in conflict with the Project Objective to reduce dependency on imported supplies, the Project would use water originating from the State Water Project (SWP) in order to dilute groundwater recharge of tertiary treated water to California Division of Drinking Water (DDW) requirements. The volume of SWP supplies necessary to dilute tertiary treated groundwater to DDW requirements would be substantially less than compared to the volume of SWP supplies the Clean Water Factory Project would reduce from existing imported supplies (up to 17.9 MGD). As such, even with the use of dilution water from the SWP, the Project would reduce the dependency on SWP and other imported supplies, and improve reliability of potable water production even in periods of reduced SWP deliveries.

Regarding the question about how the water for recharge would have a combined TDS of 233 mg/L and nitrate of 2.45 mg/L, these dilutions were achieved through the addition of 2 MGD of recycled water for direct use customers and 5 mgd of recycled water for groundwater combined with advanced treated water and State Water Project supplies. As described on page 1-4 of the *Clean Water Factory Project Recycled/Advanced Water Conveyance System Engineering Analysis*, the low TDS of the dilution water and nitrate blends with the higher TDS of the recycled water and nitrate to meet the basin objectives (RBF Consulting and Black & Veatch July 2012).

Response to Comment P32d.

The commenter argues that since the Project's Adaptive Management Plan would not be implemented until 15 years from Project implementation, it would not reduce the change in flows associated with the reduction of RIX Facility effluent to insignificant levels; refer to Draft EIR Impact 4.7-3. The Draft EIR explains why, from a hydrologic perspective, the Project would not have a significant impact on Santa Ana River drainage pattern or hydrology. The Draft EIR (see, e.g., pp. 4.4-70 through 4.4-71) explains that the hydrology of the Santa Ana River is highly variable. As explained on Draft EIR page 4.7-35, the existing capacity of the Santa Ana River has the capacity to accommodate low flows and storm flows, and for this reason, implementation of the proposed Project would have a negligible impact on flows within the Santa Ana River in regards to drainage patterns. The Draft EIR acknowledges that these minor hydrologic effects could have significant impacts to wildlife and habitat, and Mitigation Measure BIO-7 would reduce those effects to less than significant. Regarding the timeframe for implementing the AMP; refer to Response to Comments P27j and L10 above. Refer also to revised Mitigation Measure BIO-7 in Section 3.0, *Errata to the Draft EIR*.

Response to Comment P32e.

The commenter states that if both the Rialto and SNRC projects are implemented, the reduction in flow would result in a remaining capacity of 9 to 11 cfs for the operation of the Project. The existing mitigation measures, BIO-7, indicates that the Adaptive Management Plan must be implemented prior to any Project-related reduction that would reduce Santa Ana sucker habitat by 10%, as predicted by the Project Low Flow Study. Mitigation BIO-7 affords adequate protection to the Santa Ana sucker by requiring that the Adaptive Management Plan is implemented when Project flows warrant mitigation (i.e., the 10% reduction threshold discussed in Response to Comment P27j). Regarding the cumulative impact of other projects that would reduce discharge to the Santa Ana River, see Response to Comment O20. In the event that the Rialto and/or Sterling Projects were implemented and reduced discharge to the Santa Ana River, the Project would modify its reductions to account for this loss in discharge, so that there would be no net cumulative effect beyond that discussed in the Draft EIR. Regarding the Upper Santa Ana River HCP, SBMWD is an active participant in the HCP and supports its completion. Nevertheless, completion of the HCP is not necessary to understand or mitigate the Project's impacts to the Santa Ana River habitat and sensitive species; refer to Response to Comment L10. The commenter asserts its belief the Draft EIR mitigation is not adequate and suggests that other feasible mitigation is available but does not provide any information to support these assertions, thus no further response can be provided.

Response to Comment P33.

The Draft EIR pages 4.11-10 through 4.11-12 provide substantial evidence and analysis to support its determination that construction of the conveyance system and facility upgrades would not result in significant impacts to transportation. These include the fact that the very small number of vehicle trips associated with construction of these facilities would not be large enough to adversely affect traffic operation or congestion (and thus would not adversely affect levels of service in the City's General Plan), and any potential impacts would be further reduced through implementation of the required traffic management plan required by Mitigation Measure TRA-1. Haul trips were estimated and included in both the traffic and air quality/GHG impact analyses; refer to Table 4.11-3 at Draft EIR page 4.11-12.

Response to Comment P34.

The commenter argues that a new supply of potable water would increase potential growth in the area and Section 5.1, Growth Inducing Impacts, should acknowledge this. As described in Section 5.3, *Obstacles to Growth*, although the Project does not involve an expansion of the SBWRP beyond its existing rated capacity, the provision of a more reliable water supply source does remove an obstacle to growth, and, as such, would potentially indirectly induce growth. Nonetheless, because Project implementation would accommodate existing SBMWD service area needs identified in the 2010 San Bernardino Valley Regional Urban Water Management Plan, it would not induce substantial population growth. Refer also to Response to Comments I3e and P17d above.

The commenter also notes that Section 5.5, *Significant Unavoidable Environmental Effects* does not acknowledge impacts to Santa Ana sucker as significant. SBMWD affirms that the Project would not result in significant and unavoidable impacts to Santa Ana sucker; corrections have been made to the Draft EIR to clarify that impacts are less than significant. Refer to Response to Comment C11.

Response to Comment P35a.

The commenter notes that Draft EIR varies in describing impacts to Santa Ana sucker. SBMWD acknowledges that there is an error in the Executive Summary with the inclusion of the Santa Ana sucker in Section 1.6 as a Significant and Unavoidable impact; please refer to Response to Comment C11 for clarification.

Response to Comment P35b.

The commenter is correct in stating that the No Project Alternative would avoid the identified significant and unavoidable local and regional air quality impacts which would occur under the proposed Project and are described in detail in Draft EIR Section 4.3, *Air Quality and Greenhouse Gas Emissions*. Draft EIR page 6.0-7 has been revised and the document will now read as follows:

> *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.

Response to Comment P35c.

The SBMWD Board will consider whether to adopt the Project, or any of the EIR alternatives, including Alternative 3, following certification of the EIR.

Response to Comment P35d.

SBMWD disagrees with the commenter's assertion that the analysis of impacts for the Alabama Street Effluent Pipeline and Redlands Recharge Basin is lacking. As described under Alternative 4, several technical reports have been prepared in support of the analysis of the Alabama Street Effluent Pipeline and Redlands Recharge Basin; refer to Appendix 10.9, Geotechnical and Geologic Hazard Evaluation; Appendix 10.10.1, Habitat Assessment for the Alabama Street Effluent Pipeline/Redlands Basin Alignment Option for the Clean Water Factory Project; and Appendix 10.10.2, Cultural Resources Assessment for the Alabama Street Effluent Pipeline. In addition, information pertaining to the Redlands Recharge Basin was gathered from East Valley Water District's Recycled Water Feasibility Study, prepared in October 2014. Sufficient information is provided to satisfy CEQA's requirements for analysis of alternatives. Regarding the ability to meet Project objectives, as explained on Draft EIR page 6.0-18, to the extent Alternative 4 would direct some or all of the recharge water to the Redlands Basin, it would not contribute to the groundwater pumped by SBMWD for potable supply and thus would not reduce SBMWD's dependence on imported water and establish a reliable, sustainable source of potable water to the same degree as the proposed Project, if at all. If only the pipeline variations of Alternative 4 serving the same recharge basins proposed under the Project were approved, then that version of Alternative 4 would reduce reliance on imported water to the same extent as the proposed Project.

Response to Comment P35e.

The determination that Alternative 5 (Imported Water Supply) would result in higher energy use than the proposed Project is based on the well-recognized very high energy requirements of pumping imported and conveying water from faraway locations such as Northern California hundreds of miles to the San Bernardino basin, including pumping requirements to deliver water over mountain ranges.[21] (Pacific Institute 2013). Although the specific energy requirements associated with recharging groundwater within local basins were not calculated for the EIR, it is reasonable to assume that any energy use associated with these efforts would be substantially less than that required to deliver water many hundreds of miles farther. Alternative 5 differs from the No Project Alternative because the No Project Alternative assumes the continued use of groundwater as the primary water source even though imported water requirements would increase over time (refer to Draft EIR p. 6.0-4), while Alternative 5 assumes the primary water source would be imported water, to replace groundwater (rather than just supplement it). Because Alternative 5 would avoid the potentially significant impacts of the Project, and would have fewer impacts than any of the alternatives evaluated in the Draft EIR, even though there would be tradeoffs in terms of potentially higher energy use, the Draft EIR determined it is environmentally superior to the other alternatives. It is important to note that this conclusion is based on the assumption, explained in the Draft EIR at page 6.0-22, that other impacts associated with delivery of imported water have been adequately mitigated through the environmental review and permitting processes for the various water export projects.

Response to Comment P35f.

The commenter argues that Alternative 7 (Hybrid Alternative) does not incorporate substantial evidence that lends itself to its selection as an environmentally superior alternative. The Hybrid Alternative would combine components proposed under Alternative 3 (Reduced Capacity Alternative) and Alternative 6 (In

[21] Pacific Institute, *Key Issues for Seawater Desalination in California: Energy and Greenhouse Gas Emissions*, page 8, May 2013.

Lieu Water Supply Alternative). As described on Draft EIR page 6.0-24, the effects of this combined alternative is evaluated in the discussions provided under Alternative 3 and Alternative 6; refer to Draft EIR page 6.0-9 and 6.0-22. As such, SBMWD affirms that this alternative has been adequately analyzed in compliance with CEQA Guidelines Section 15126.6 requirements, and no further analysis is required.

Response to Comment P35g.

The commenter argues that Alternative 8 (Regional Partnership) is not discussed in depth. As described under Alternative 8, selection of this alternative would involve no changes to the Clean Water Factory Project, although implementation of this alternative may reduce the need for SBMWD to pursue some of the pipeline conveyance and recharge options described in the EIR. To the extent that Alternative 8 resulted in construction and operation of both the SNRC and the Clean Water Factory, overall impacts (construction and operational) could be greater than under the proposed Project, depending on when construction of treatment facilities occurs, and/or occur over a longer period of time. Impacts are not likely to be reduced under this alternative.

Response to Comment P36.

The commenter argues that the Project would induce substantial population growth as it would remove a barrier to growth in contrast to the conclusions drawn under Section 7.6, *Population, Housing, Socioeconomics and Environmental Justice*. The Clean Water Factory Project would be implemented to accommodate the growth already anticipated in existing planning studies and documents. The Clean Water Factory Project would not include housing of any type and would draw construction workforce from the existing regional labor pool thus would not directly induce population growth. The Project does not increase the SBMWD's overall wastewater treatment capacity but rather increases the level of treatment for a portion of the already permitted capacity. As described under Section 5.3, *Population and Housing Growth*, because the Project would accommodate, but not exceed, service area water needs identified in the 2010 San Bernardino Valley Regional Urban Water Management Plan, which was based on the population growth projections provided by participating water agencies consistent with regional plans, it would not induce substantial population growth.

The commenter also argues that the traffic, air quality, and noise impacts identified for the proposed Project would result in impacts to minority populations and that the Draft EIR has not adequately mitigated these impacts. As explained in the Draft EIR, while impacts to minority populations would occur as a result of construction, they would not occur to a greater extent than to the general population residing within proximity to construction areas and thus would not disproportionately affect minority populations. The Draft EIR incorporates several mitigation measures which have been crafted to sufficiently avoid the Project's potential significant environmental impacts pertaining to traffic, air quality, and noise; refer to Draft EIR Sections 4.3, *Air Quality and Greenhouse Gas Emissions*, 4.9, *Noise*, and 4.11, *Transportation and Circulation*. Additionally, Project implementation would be required to demonstrate compliance with the relevant Project design features and existing laws, ordinances, and regulations pertaining to these environmental impact areas, which are described in detail in the Draft EIR Sections 4.3, 4.9, and 4.11.

Response to Comment P37a.

The commenter notes disagreement with a summary statement on page 23 of the Low Flow Study that summarizes the hydrology and sedimentation within the Santa Ana River. As stated throughout the Low

Flow Study, winter floods can reset or reshape the Santa Ana River channel and that channel size may adjust to lower base flows, because the Santa Ana River channel contains a high proportion of sand. This statement was based on a review of existing sediment transport studies and is not contrary to the assertion that storm-driven high flows result in deposition. Sediment transport in the Santa Ana River is complex, and as such, this summary provides a short narrative of some of the sedimentation trends within the Santa Ana River. This sentence is not intended to serve as an all-encompassing analysis of the Santa Ana River hydrology and sedimentation process; as such, it has been supported by the analysis that follows it.

The Project modeling and Draft EIR analysis (4.4-62 through 4.4-65) considered the potential for RIX discharge reductions to affect the amount of sand blanket that is deposited over the cobble substrate. Runoff from storm events can cause both erosion and deposition depending on the stage of the flood hydrograph. In the downstream reaches of rivers with dams and detention basins, stream bed erosion is typical during the peak flow period of the hydrograph. During these peak-flow periods, the stream flow sediment is deficient due to the impoundment of sediment by the upstream dams, and the excess flow energy causes general scour of the downstream reaches (referred to as “hungry waters effect”). In the later stages of the hydrograph, residual sediment transport, (typically bedload derived from antecedent bed and bank erosion occurring further upstream), can deposit over downstream substrate previously exposed by scour during the peak flow period. The use of higher levels of RIX Facility discharges to reduce sand deposition would only occur during the post-storm period when the hydrograph has declined to base flow levels; and certainly would not be invoked during the peak flow periods when the river bed might be eroding from the “hungry waters effect.” The need for and timing of any “pulse flows” would be based on observed habitat conditions as identified through the continuous monitoring and response required by the Adaptive Management Plan.

Response to Comment P37b.

The commenter asserts that the use of extrapolated data does not provide sufficient evidence to support the conclusions in the EIR related to sedimentation. For the EIR analysis, the data that is used in the EIR was the best available at the time of the low-flow study; the only way to obtain specific data would have been to implement the Project. The analysis using this data was very clear about the assumptions and limitations of the study. The EIR experts made reasonable assumptions based on the available facts related to hydrology and sedimentation in reaching their conclusions about Project effects, which constitutes substantial evidence under CEQA. Further, the most scientifically defensible habitat models were the depth-only models, because sediment and velocity data were limited enough that they could not be included in a quantitative analysis.

Response to Comment P37c.

As noted by the commenter, even with the reduced discharge proposed by the Project, existing deep areas and local areas of scour that are preferred by the Santa Ana sucker would remain in Reach 1. For these reasons, contrary to the commenter’s assertion, the Project would not adversely modify the critical habitat of the Santa Ana sucker or negatively affect its recovery.

Response to Comment P37d.

As discussed in the Draft EIR and available literature, Santa Ana sucker inhabit a wide range of habitat characteristics. More recent provisional data[22] suggest that deeper water is preferred and that the depths used by Santa Ana sucker in the Saiki et al. study were not ideal. Because the Santa Ana sucker is adapted to a variable environment, the evidence suggests its habitat requirements are somewhat flexible. No single study has established an "ideal" habitat depth for Santa Ana sucker; rather conclusions about habitat suitability are drawn based on observations under a range of habitat conditions. It is also important to note that under existing conditions, due to climate and other factors, Santa Ana River depths vary considerably throughout the course of the year. Moreover, there is a difference between "not ideal" and "not suitable." Before the RIX plant began operations, the majority of the habitat in the Santa Ana River was not ideal for the Santa Ana sucker, but it was useable in some capacity, as evidenced by the continued existence of the species. The Draft EIR evaluated the Project's effects on depth and provided substantial evidence to demonstrate that the Project would not reduce overall depths to an extent that any particular reach of the river could not be utilized by Santa Ana sucker.

Response to Comment P38.

The commenter requests notification of when the Final EIR is available and when SBMWD will consider approval of the proposed Project. Blum Collins has been incorporated into the Project's public notification list and will continue to be notified regarding the proposed Project. SBMWD thanks you for your participation in Environmental Impact Report Public Review period.

[22] Wright, S. and T. Minear. 2016. Santa Ana River native fish habitat suitability modeling. Presentation for Habitat Conservation Plan meeting, 5/31/2016, Sacramento, CA.

COMMENT LETTER Q: VARIOUS

McCallum, Amanda

Comment Letter Q

From: Silvia Gelmini <silviagelmini82@gmail.com>
Sent: Friday, June 03, 2016 12:21 AM
To: John Claus
Subject: Santa Ana River Needs Ample Water for Wildlife

Dear Mr. Claus,

I'm writing to urge you to reconsider your proposal to divert more than two-thirds of treated water away from the Santa Ana River -- a move that will likely doom the Santa Ana sucker fish population already teetering on the brink of extinction in the river. It's crucial to use water efficiently in Southern California due to the ongoing drought and climate change. However, the survival of native wildlife that struggle with these very same challenges must be considered too.

The proposed mitigations and adaptive management cannot adequately ensure that enough water will remain in the river to support the fish or the riparian habitat that the endangered southwestern willow flycatcher and least Bell's vireo rely on for successful breeding. 1

None of the alternatives adequately address balancing the needs of the imperiled wildlife, downstream users and the health of the largest river in Southern California. I urge the city to revise the environmental impact report to include alternatives that do so. If the city elects not to follow this course of action, then I urge it to adopt the "no action" alternative in the final "environmental impact report."

Sincerely,

Silvia Gelmini
19 rue Henri Chevreau
Paris, ot 75020
FR

1

RESPONSE TO COMMENT LETTER Q: VARIOUS

Preamble

SBMWD received approximately 1,916 email comments generated by a Center for Biological Diversity web form. Commenters could complete the form using pre-written comments, and add their contact information. As a result, these comments are substantially similar in content, and a representative comment letter has been provided for illustrative purposes.

The name, and location associated with each of these comments is detailed in Appendix B, Table B-1.

The majority of the comments are from southern California, and of those, the majority are from Los Angeles County. The balance of the comments are, in rough order of abundance, as follows: comments from Riverside and San Bernardino Counties, comments from San Diego and Orange Counties, comments from central and northern California, comments from countries in Europe, comments from Australia.

Response to Comment Q1.

The commenter notes concern regarding the Project's impacts to the Santa Ana sucker population. Project impacts to the Santa Ana sucker are fully evaluated in the Draft EIR Section 4.4 on Biological Resources, and are supported by a series of hydrologic and flow studies. The Low Flow Study of the Santa Ana River between the Rialto Drain and the MWD Crossing (Low Flow Study), prepared by Michael Baker International, presents the results of several technical studies completed to analyze the potential operational impacts from the RIX Phased Discharge Reduction on the Santa Ana sucker. The Low Flow Study also presents a phased approach (incorporated into the Draft EIR as Mitigation Measure BIO-7), which would ensure that potential impacts to the Santa Ana sucker are monitored and reduced concurrent with discharge reduction. Beyond the impacts to the Santa Ana sucker, the phased approach proposed for the Project and evaluated in the Low Flow Study and Draft EIR would provide opportunities to analyze initial, more limited (less than significant) impacts and develop appropriate and meaningful minimization measures that respond specifically to the observed effects of the phased reduction and fully mitigate the Project's potential impacts to aquatic resources. Refer also to Response to Comment L10 above.

Response to Comment Q2.

The commenter claims that the Mitigation Measures and Adaptive Management Plan cannot ensure that the Santa Ana River will have enough water to support Santa Ana sucker or the riparian habitat which supports Southwestern willow flycatcher and Least Bell's vireo. A significant amount of relevant but preliminary data has recently been presented by USGS but is not yet available for use regarding existing hydrologic conditions in the Santa Ana River, habitat requirements for the Santa Ana sucker, and sediment transport. If available, these data may be used as part of the impact-specific Adaptive Management Plan to address Santa Ana River flows and potential impacts to riparian habitats. As part of the Adaptive Management Plan process, performance measures would be developed and monitored in conjunction with sucker response. As such, SBMWD affirms that revised Mitigation Measure BIO-7 (see Section 3.0, *Errata to the Draft EIR*), along with the balance of the mitigation measures proposed, are sufficient to ensure Project-related impacts to the Santa Ana River and the special-status species it supports are less than significant. Refer also to Response to Comments D4e and L10 above.

Response to Comment Q3.

The commenter also claims that the Project's Alternatives are insufficient in addressing the needs of imperiled wildlife, downstream users, and overall Santa Ana River health. EIR Section 6.0, *Alternatives* presents eight alternatives to the proposed Clean Water Factory Project that would reduce dependence on imported water and establish a reliable, sustainable source of clean water and that are capable of substantially lessening or avoiding one or more of the Project's potential significant impacts. Alternatives considered include the following:

- Alternative 1: No Project Alternative
- 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

SBMWD affirms that, in compliance with CEQA Guidelines Section 15126.6, the EIR presents a range of reasonable alternatives to the Project capable of feasibly obtaining the majority of the Project objectives while substantially lessening or avoiding any of the significant effects of the Project. As concluded in Section 4.4, *Biological Resources*, the Project would result in less than significant impacts to biological resources with mitigation incorporated. As impacts to biological resources are less than significant, SBMWD is not required to incorporate a Project Alternative capable of reducing the already less than significant impacts identified. Nevertheless, the Draft EIR evaluated several alternatives that would have a lesser effect on the Santa Ana sucker, including Alternatives 2, 3, 5 and 6. Refer to EIR Section 6.0 for an expanded discussion of these alternatives. In addition, a new alternative, has been added to the Draft EIR. See Section 3.0, *Errata to the Draft EIR*, for a description of Alternative 9—Flow Mitigation Alternative.

COMMENT LETTER R: SANTA ANA REGIONAL WATER QUALITY CONTROL BOARD

COMMENT LETTER R

California Water Boards

Edmund G. Brown Jr., Governor

Matthew Rodriquez, Secretary for Environmental Protection

Santa Ana Regional Water Quality Control Board

August 5, 2016

Mr. John A. Claus
Director, Water Reclamation
City of San Bernardino Municipal Water Department
399 Chandler Place
San Bernardino, CA 92408

DRAFT ENVIRONMENTAL IMPACT REPORT, CLEAN WATER FACTORY PROJECT, CITY OF SAN BERNARDINO MUNICIPAL WATER DEPARTMENT – SCH# 2014111012

Dear Mr. Claus:

Staff of the Regional Water Quality Control Board, Santa Ana Region (Regional Board) has reviewed the Draft Environmental Impact Report (DEIR) for the San Bernardino Municipal Water District's (SBMWD or 'City') proposed Clean Water Factory Project (Project) and has outlined our understanding of the Project as discussed in the DEIR and the potential direct, indirect and cumulative impacts that may result from full project implementation. 1a

Our comments are presented below. In short, we believe that the Adaptive Management Plan (AMP) approach to mitigation of potential impacts of the Project on biological resources and beneficial uses is prudent and reasonable, provided that the Plan is responsive to the concerns and recommendations of relevant regulatory agencies, including the Regional Board, California Department of Fish and Wildlife (CDFW), and the US Fish and Wildlife Service (USFWS). Additional comments concerning the AMP are provided below. 1b

As discussed below, we believe that the DEIR relies on modeling assumptions concerning continuing waste discharges to the Santa Ana River by the Cities of Colton and Rialto that may be, or likely are, invalid. Therefore, the cumulative impacts analyses should be revisited, taking into account the full range of discharge scenarios by other parties. It is inappropriate to rely on permitting actions by regulatory analyses to address potential cumulative impacts, or to assert that such permits will render such impacts less than significant, as the DEIR appears to assume. Regulatory agency actions must be informed by comprehensive cumulative impacts analyses and the identification of mitigation measures that can and will be implemented. 1c

We understand that the Project would improve tertiary treatment and "advanced treatment" at two regional wastewater treatment facilities, in order to provide recycled water to direct-use customers and groundwater recharge basins while reducing the current rate of permitted discharges of treated water to the Santa Ana River. 1d

Current Conditions

Per the DEIR, the SBMWD conveys 22 million gallons per day (mgd) of secondary-treated effluent from the San Bernardino Water Reclamation Plant (SBWRP, 399 Chandler Place, San Bernardino; regulated by Regional Board Waste Discharge Requirements (WDRs), Order No. R8-2012-0051, NPDES No. CA0105392) to the Regional Tertiary Treatment Rapid Infiltration and Extraction Facility (RIX facility ; regulated by Regional Board Order No. R8-2013-0032, NPDES No. CA8000304) 2

WILLIAM RUH, CHAIR | KURT V. BERCHTOLD, EXECUTIVE OFFICER

3737 Main St., Suite 500, Riverside, CA 92501 | www.waterboards.ca.gov/santaana

located in south Colton. The City of Colton Water Reclamation Facility (regulated by Regional Board Order No. RB-2012-0050, NPDES No. CA0105236) contributes an additional 5.3 mgd to the flows entering the RIX Facility.

At the RIX Facility, the combined wastewater is treated by conventional filters and the resultant treated wastewater is infiltrated into the local groundwater table that underlies the RIX facility. This infiltrated groundwater is extracted along with native groundwater (termed 'over-extracted' groundwater in the DEIR) and the mixed water is disinfected by ultraviolet light. his tertiary equivalent treated wastewater is then discharged into the adjacent Santa Ana River (SAR), Reach 4, according to conditions of adjudicated agreement and the above-referenced permits. The RIX Facility discharger and joint powers agency, The Colton/San Bernardino Regional Tertiary Treatment and Water Reclamation Authority (RIX Authority; operated by SBMWD), is permitted to treat up to 40 mgd of secondary treated influent flow, then discharge up to 64 mgd of combined effluent and groundwater into the SAR. DEIR p.3.0-6 indicates that the current total discharge from the RIX Facility is 31.3 mgd (sum of the above-referenced 22 mgd from the City of San Bernardino, 5.3 mgd from the City of Colton, and, we infer, 4.0 mgd of over-extracted or 'native' groundwater) [1].

2 cntd.

The Western Judgment, entered simultaneously with the Orange County Judgment, settled water rights within the upper Santa Ana River watershed to ensure that those resources would be sufficient to meet the flow obligations in the lower Santa Ana River watershed set by the Orange County Judgment (*Western Municipal Water District of Riverside County v. East San Bernardino County Water District, Superior Court of Riverside County*, Case No. 78426 [April 17, 1969]). The Orange County Judgment imposes a physical solution that requires parties in the upper Santa Ana River watershed to deliver a minimum quantity of water to points downstream including Riverside Narrows and Prado Dam. DEIR p.3.0-4 states that although SBMWD is not a party to the Western Judgment and Orange County Judgment, as a condition of dismissal from the Judgment the City has agreed to discharge a minimum of 16,000 acre-feet per year (af/y) to the SAR from its treatment facilities as a result of those judgements[2]. Minimum flow values (flow limitations) are not included in the Regional Board Orders listed above.

Proposed Project

1) Up to 17.9 mgd (27.7 cfs/20,052 af/y) of secondary effluent would be retained for tertiary treatment directly at SBWRP in lieu of sending the effluent to the RIX facility for treatment and ultimate discharge to the SAR.

3

[1] Conversion of the above mentioned values for comparison to the other units is as follows: 40 mgd of secondary effluent permitted for treatment by the RIX facility is equivalent to 61.9 cubic foot per second (cfs) or approximately 44,853 acre-foot per year (af/y); 64 mgd of combined infiltrated effluent and native groundwater after UV treatment that can be discharged to the SAR is equivalent to 99 cfs or approximately 71,735 af/y, which indicates that a maximum of 24 mgd/37.1 cfs/26,919 af/yr of over-extracted or native groundwater can be pumped for discharge to the SAR in addition to the infiltrated treated effluent. Currently (as of October 2013), the RIX facility is discharging a total of 31.3 mgd/48.4 cfs/31,101 af/y to the SAR, which consists of 22 mgd/34 cfs/24,654 af/y of secondary effluent from SBMWD, 5.3 mgd/8.2 cfs/5,954 af/y of secondary effluent from the City of Colton, and an inferred 4 mgd/6.2 cfs/4,493 af/y of over-extracted groundwater. Current discharges therefore, amount to approximately 51% of the permitted discharge to the SAR from the RIX facility.

[2] The DEIR p.3.0-4 footnote explains that although the City of San Bernardino is not a party to the Western and Orange County Judgements, "*as a condition of dismissal the City agreed…to perform on its April 10, 1969 agreement with the San Bernardino Valley Municipal Water District (Valley District) to continue discharging at least 16,000 acre-feet of effluent each year from the City's treatment plants on the Santa Ana River. The Western Judgement requires that Valley District shall keep that 1969 agreement with the City in place. In any event, even with the Clean Water Factory Project fully implemented, a substantial quantity of treated wastewater and extracted groundwater will continue to be discharged from the RIX Facility to the Santa Ana River, and in excess of the 16,000 acre-foot annual amount required under the City's 1969 agreement with Valley District.*"

2) This reduction of flow from SBWRP to the RIX Facility would be phased in over the next 25 years in five-year increments until 2035[3].

3) The SBWRP would be upgraded to provide enhanced tertiary treatment to fulfill its permitted capacity of 33 mgd (51.3 cfs/37,000af/y) for future demands, beyond the 22 mgd (34 cfs/24,654 af/y) of secondary treated wastewater currently sent on to the RIX Facility. The upgrades would include:

   - Tertiary infiltration/ disinfection of 5 mgd (7.7 cfs/5,588 af/y) to provide a source of Title 22 water for potential direct use customers (i.e., parks, golf courses and other irrigation users) within the SBMWD service area;
   - Advanced treatment of 15 mgd (23.2 cfs/16,802 af/y) by any of five options, then conveyance to the north for groundwater recharge in the Waterman Basins, East Twin Creek Spreading Grounds, and Devil Canyon/ Sweetwater Basins, all of which overlie the Bunker Hill A Groundwater Management Zone (GMZ) within the SBMWD Service Area; for discharge at the SBWRP's permitted outfall (Discharge Point 001, at the confluence of the SAR, Reach 5 and East Twin Creek (overlies Bunker Hill B GMZ); and for sales outside of the SBMWD Service Area); and
   - Treatment improvements to reduce concentrated brine and/or increase product water available for recharge.

4) The Project would also potentially add processes to the RIX Facility for disinfection and recycling, augmenting the existing tertiary treatment infrastructure. A system of multiple pipeline alignments would be constructed from both the RIX and SBWRP facilities to deliver this recycled effluent to sites within and outside of the SBMWD Service Area. DEIR p.3.0-8, Table 3.0-1 states that treated water may be conveyed "*through new conveyance pipelines to an existing Inland Empire Utilities Agency (IEUA) non-potable system for direct use by local municipal facilities and other recycled water users" and "to existing IEUA recharge basins in the Chino Basin.*"

The proposed tertiary treated water to be generated directly from SBWRP for the first time would be a blended product, having a Total Dissolved Solids (TDS) concentration of 233 milligrams per liter (mg/L) and a Nitrate-Nitrogen (NO3-N) concentration of 2.45 mg/L (DEIR p. 4.7-39, the only DEIR reference found). These concentrations would conform to the Bunker Hill A, and Bunker Hill B GMZ water quality objectives.

3 cntd.

RWQCB Staff Comments

We note that because of the varying units used in the DEIR, Regional Board staff spent an inordinate amount of time converting flow volumes to or from mgd, cfs, and af/y in order to understand the proposed project and its potential impacts on the SAR. Depending on the number of decimals used (Regional Board staff rounded to 1 decimal point for mgd and cfs before converting to af/y), values may vary especially for units of af/y. We recommend that the Final EIR limit the units used or provide the appropriate conversions. The presentation of these values should be consistent. Additionally, we recommend that the Final EIR for the Project address the following comments :

4

1. As designated in the Basin Plan and as listed in Order No. R8-2013-0032 for the RIX Facility, the designated beneficial uses (BUs) of the Santa Ana River, Reach 4 (from Mission Boulevard in Riverside to the San Jacinto Fault south of SBWRP), are Groundwater Recharge (GWR), Water Contact Recreation (REC1), Non-Contact Water Recreation (REC2), Warm Freshwater Habitat

5

[3] Section 3.2.1, RIX Phased Reduction, of the DEIR states that the reductions will occur over a period of 15-20 years.

(WARM), and Wildlife Habitat (WILD)[4]. The same BUs apply to the Santa Ana River, Reach 5 (adjacent to the SBWRP facility), with the addition of the Rare, Threatened, or Endangered Species (RARE) beneficial use. RARE applies where waters support habitats necessary for the survival and successful maintenance of plant or animal species designated under state or federal law as rare, threatened, or endangered (Region 8 Basin Plan). 5

2. Although RARE has not yet been added to the Basin Plan designations for SAR Reach 4, Order No. R8-2012-0051 for SBMWD, Finding O (p.9), adds "*This Order requires compliance with effluent limits, receiving water limits, and other requirements to protect the beneficial uses of waters of the state. The Discharger is responsible for meeting all requirements of the applicable Endangered Species Act*" [federal and state ESA and their listings]. To meet this responsibility sufficient water flows must be maintained adjacent to and downstream from the RIX Facility outfall to meeting the habitat requirements of the Santa Ana sucker (*Catostomus santaanae*; listed as a federally threatened species)[5] in one of its prime habitat locations in the SAR (DEIR p.4.4-27) from Mission Boulevard to the Rialto Drain. 6

3. The DEIR recognizes (p.1.0-27) that the Project's proposed diversion of effluent from discharge to the Santa Ana River would lessen the total volume of surface supply to SAR Reach 4, thereby impacting BUs downstream from the RIX Facility outfall. Regional Board staff believes that DEIR Section 1.9 correctly identifies that the Project poses potential adverse effects on water supply, water quality, and sensitive aquatic species, particularly the Santa Ana sucker (SASU), as an area of controversy still to be resolved per CEQA Guidelines Sections 15123(b)(2) and (3). To address the Project's proposed phased reduction of flow into SASU habitat, the DEIR contains five studies (p. 4.4-4), which are summarized in Appendix 10.5 to the DEIR, *Low Flow Study of the Santa Ana River- Rialto Drain and the MWD Crossing* or "Low-Flow Study" (Michael Baker International, March 2016). 7

4. The Low Flow Study reviews the modeled proposed RIX Discharge Phased Reduction Scenarios and the different analyses and modeling conducted to assess flow and habitat conditions in the SAR under each proposed phase of the reduction in discharge to the RIX facility. The reduction in discharge is anticipated to occur in five phases over a 25-year period (until 2035). Each phase of the reduction will be implemented gradually over a 5 year period before the next phase of reduction is begun. Table 1, taken from the Low Flow Study, shows the estimated reductions that will occur at the end of each phase: 8a

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[4] The RIX Facility overlies, and its discharge infiltrates, to the Riverside A Groundwater Management Zone (GMZ; Order No. R8-2004-0001). The beneficial uses of all GMZs conceptually affected by the Project (Riverside A, Bunker Hill A, Bunker Hill B, and from east to west throughout the Chino Basin from the Riverside area: Chino-East, Chino-South, Chino-3, Chino-2, Chino-1) are Municipal and Domestic Supply (MUN), Agricultural Supply (AGR), Industrial Service Supply (IND), and Industrial Process Supply (PROC).

[5] Board staff believe that with consistent flows, habitat in Reach 4 may be improved for the Arroyo chub (*Gila orcutti*; a state Species of Special Concern, addressed by Mitigation Measure BIO-7, DEIR p.4.4-75), the least Bell's vireo (*Vireo bellii pusillus*; federally and state endangered), and/or the southwestern willow flycatcher (*Empidonax traillii extimus;* federally endangered); the latter two are addressed by MM-BIO-4, -6, -7, -8, -9, -10, and -11, on DEIR p.4.4-74.

Table 1: Proposed RIX Discharge Phased Reduction Scenarios[1]

	Baseline[2]	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Zero[3]
RIX	53.0	44.9	38.4	32.2	26.3	20.8	0
Rialto Drain	9.5						
Model SAR Input	62.5	54.4	47.9	41.7	35.8	30.3	9.5

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 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.

8a cntd.

The modeled flows in the SAR for each phased reduction scenario do not consider the following:

i. All 5 Phased Reduction Scenarios assume that the City of Colton will continue to send their secondary effluent of 8.2 cfs (5.3 mgd) to the RIX facility for the life of the project. However, given the current trend for wastewater facilities to make improvements so that they can recycle as much of their treated wastewater as practicable for their own re-use, there is no guarantee that Colton will continue to send their discharge to RIX in perpetuity. 8b

ii. All 5 Phased Reduction Scenarios also assume that the City of Rialto will continue to discharge their treated effluent to the Rialto Drain (Rialto Channel) of 9.5 cfs (6.1 mgd) for the life of the project. However, the City of Rialto has filed a Petition for Change to reduce their discharge to the Rialto Drain to zero, retaining and re-using 100% of their treated effluent. 8c

iii. The baseline discharge used in Table 1 above is 9% higher than the "current" RIX discharge (as of 2013) used in the DEIR of 48.4 cfs, which already puts the discharge from RIX into the Phase 1 reduction scenario, and the SAR flows into Phase 2 if the City of Rialto is successful in reducing their discharge to zero. 8d

iv. If the City of Rialto reduces their current discharge to the Rialto Drain of 9.5 cfs to zero, even if the total discharge from the RIX continues at its current level (which is not a conservative assumption) this would result in a reduction in flows to the SAR to 38.9 cfs or less, which would immediately move the river as a whole into Phase 4 of the flow reduction scenarios. 8e

v. The San Bernardino Valley Municipal Water District's (Valley District) planned Sterling Natural Resources Center would intercept at least 9 cfs (6 mgd) and up to 15 cfs (10 mgd) of wastewater for local re-use that would otherwise have been discharged to the City of San Bernardino's treatment facilities, further reducing the amount of wastewater that the City can re-use rather than sending the wastewater to RIX for treatment and ultimately, discharge to the SAR as required under their agreement with the Valley District. 8f

vi. In addition, the modeled phased reduction scenarios shown in Table 1 above, assume that the discharge to RIX from the City of Colton and the discharge from the City of Rialto to the Rialto Drain are constant; this is highly unlikely.. The model should look at trends in the discharges from these facilities over at least the last 5 years and use the lowest flow data as a conservative estimate of the contributions of these discharges that will ultimately help support flows in the SAR. The model should also include a 8g

"worst case scenario" in which these discharges are reduced to zero. The modeling assumptions should be informed by plans/projections provided by the Cities.

vii. The proposed reduction scenarios do not take into account the current and potential future drought conditions that have already resulted in reductions in flows to the SAR nor do they address declines in the local water table as a result of the drought, which supports flows in the river downstream of the RIX discharge. 8h

viii. The final Phase 5 reduction scenario results in a discharge from RIX of approximately 15,012 af/y, which would appear to potentially violate SBMWD's April 10, 1969 agreement with the Valley District to provide at least 16,000 af/y of effluent discharges to the SAR from its facilities. 8i

ix. Current data included in the City's Self-Monitoring Reports (SMRs), which are uploaded to the California Integrated Water Quality System (CIWQS) database, show a distinct declining trend in both influent flows to the RIX facility and the RIX discharge to the SAR from 2013 through 2015. Though rainfall was slightly higher during the 2015-2016 Water Year, Southern California is still in extreme drought conditions and that trend is likely to be exacerbated by the predicted La Niña conditions during the 2016-2017 Water Year and climate change. While Regional Board staff understands that for the purpose of completing the DEIR the City limited the data set it used in the DEIR, the modeling of the Phased Reductions overestimates both the current RIX discharge and the future discharges from RIX and the City of Rialto to the SAR 8j

According to Regional Board staff calculations using the reported SMR data available in CIWQS, the lowest daily discharge at the RIX facility recorded to date occurred on May 11, 2015. This discharge of 39.2 cfs included 37.8 cfs of influent flows to RIX plus an inferred additional 1.4 cfs of over-extracted groundwater. The average discharge for May 2015 was 42.4 cfs, with an average influent flow of 39.9 cfs, and an extrapolated average of 2.5 cfs in over-extracted groundwater. Even the maximum discharge for May of 45.6 cfs was lower than the "current" average discharge of 48.4 cfs from 2013 that is used in the DEIR (by ~6%). The average or mean monthly discharge from RIX during May 2015 is significantly lower than the baseline discharge used in the Phased Reduction model of 53 cfs (by ~20%). February, March and April of 2015 were also characterized by similarly low discharges from the RIX facility.

5. The Low Flow Study also includes discussion of GEI's (2014) analysis of the potential impacts from the RIX Phased Discharge Reduction on both juvenile and adult Santa Ana suckers (SASU). For each Phased Reduction Scenario, GEI evaluated the potential for impacts to SASU based on the modeled changes in hydrologic conditions and as a result of changes in the amount of useable habitat (WEI 2014b)[6]. Changes in the amount of useable habitat based on percent change from baseline were used as the evaluation tool. Changes of less than 10% were described as having "no impact" as they were unlikely to result in any effects to SASU habitat, the change would not be measurable or of perceptible consequence, and it fell within the range of natural variability. Changes from 10 to 25% were described as having a "less than significant impact" as they were potentially measureable, but not substantial impacts that likely fell within the range of natural variability. Changes greater than 25% were described as having "potentially significant impact." as these changes were measurable, substantial or potentially substantial, and fell outside the range of natural variability. GEI's assessment is summarized in the Low Flow Study in Table 9, below: 9a

[6] Copies of the GEI and WEI reports are not included in the appendices to the DEIR that were available on the City's website.

Table 9: Impact designations based on changes in habitat for Santa Ana suckers in the Santa Ana River. All "Less than Significant" and "Potentially Significant" impacts are considered negative. (Table from GEI 2014)

9a cntd.

Phase (SAR cfs)	Reach 1	Reach 2	Reach 3
Phase 1 (54)	No Impact	Less than Significant	Less than Significant
Phase 2 (48)	No Impact	Less than Significant	Less than Significant
Phase 3 (42)	Less than Significant	Potentially Significant	Potentially Significant
Phase 4 (36)	Less than Significant	Potentially Significant	Potentially Significant
Phase 5 (30)	Potentially Significant	Potentially Significant	Potentially Significant

(NOTE: The study reaches are different than the Basin Plan designated reaches for the SAR. Most of Study Reaches 1 and 2 are in SAR Reach 4, and a small portion of Study Reach 2 and all of Study Reach 3 are in SAR Reach 3.

Regional Board staff has the following comments and concerns regarding the GEI CEQA findings for potential impacts to the SASU that may result from the Project, and the WEI studies that were used in part, as the basis of these findings:

i. As can be seen in Table 9, Potentially Significant impacts to SASU begin to occur in Study Reaches 2 and 3 in the SAR at Phase 3 and in all three Study Reaches in Phase 5. According to the Low Flow Study, GEI concluded that their impact assessment was likely overly conservative. However, as previously discussed extensively in comment #3 above, the modeling scenarios did not consider reductions in discharges from facilities other than the SBMWD even though the DEIR and the Low Flow Study acknowledge that *"...the Clean Water Factory is the first in a series of water related projects that have the potential to affect instream and riparian habitats associated with the SAR."* (Low Flow Study p. 30). Nor did the modeling scenarios adequately consider reductions in influent flows to RIX or declines in the local water table that supports flows in the SAR downstream of the RIX as a result of drought conditions, potentially increased pumping to increase the over-extracted groundwater component of the RIX discharge to make up for decreases in effluent inputs, and climate change. Regional Board staff therefore believe the impact assessment is likely under-conservative. 9b

ii. The Low Flow Study also concludes that these reductions are expected to have negligible effects on SASU habitat through Phase 2, and likely, Phase 3 based on the fact that SASU juveniles and adults would still have sufficient "weighted usable area," (WUA) or square footage of channel with enough depth to swim, feed, and reproduce. However, the depths estimated as part of the WUA by WEI (2014a) are compared to the average depth documented by Saiki et al. (2007) of 0.7 ft that supported SASU in the SAR within 0.1-0.5 km upstream and downstream of the MWD pipeline crossing (DEIR's Study Reach 3). As discussed in more detail below, the Saiki et al. (2007) report concluded that compared to SASU collected from the San Gabriel River, SASU collected from the SAR were on average in poorer condition and fewer age classes were represented. 9c

6. The Saiki et al. (2007) study compared SASU occurrence, abundance, habitat, and body condition between 3 sites: the east fork of the San Gabriel River (SGR), the SAR near the MWD pipeline crossing (MWD) and the SAR near the Imperial Highway bridge (IMP). No SASU were 10a

found at the IMP site. The report documented the following regarding SASU in the SAR at the MWD study location relative to the SGR site: 10a cntd.

- 82% of the SASU were caught (via electrofishing) in stands of emergent aquatic vegetation (e.g., cattails and bulrush) and 17% were caught within submerged riparian vegetation (e.g., roots, branches, overhanging grasses)
- 48% of the fish captured were native species (approximately 12% SASU and 36% arroyo chub) and 52% were non-native species (primarily Western mosquitofish). (Greater than 99% of the fish caught in the SGR were native species including SASU [16%], speckled dace [46%] and rainbow trout [38%].)
- Only 1-2 age classes of SASU were found at the SAR MWD site compared to 3 age classes at the SGR site
- SASU collected from the SAR MWD site exhibited lower body condition than those collected from the SGR site[7]

Based on the findings of the Saiki et al. (2007) report, we have the following comments/concerns regarding habitat requirements for the SASU and potential impacts to SASU as a result of the proposed flow reductions evaluated by the GEI and WEI technical studies as summarized in the Low Flow Study:

i. The Saiki et al. (2007) study captured the greatest number of SASU in areas of abundant emergent aquatic macrophytes indicating the importance of this habitat; the technical studies acknowledge that the proposed flow reductions will likely negatively impact riparian habitat in the SAR; 10b

ii. With an average depth of 0.7 ft documented by Saiki et al. (2007) at the SAR MWD location, body condition of the SASU were found to be lower and fewer age classes were represented than documented for the SGR, indicating that depth of water is important for sucker reproduction, life cycle, and health. The Low Flow study acknowledges that "*For all three [study] reaches, [the modeling indicated that] adult WUA decreased with decreasing flow, due to associated decrease in depth*"; 10c

iii. Changes in water quality that may result from implementation of the Project (e.g., increased temperature and total dissolved solids, decreased dissolved oxygen) and what effect they may have on SASU fecundity, life cycle and health were not assessed; 10d

iv. Potential impacts on SASU reproduction including suitable habitat and substrate for egg laying and larval survival were not considered; only impacts to juveniles and adult SASU were assessed; and 10e

v. Potential increases in predation of all SASU life stages (eggs, larvae, juveniles and adults) by non-native fish (e.g., largemouth bass) and wildlife (e.g., birds, raccoons) due to increased accessibility and reduced refugia a as a result of the reduction in flows also does not appear to have been considered as a potential impact by any of the technical studies. 10f

Regional Board staff concludes that given the findings in the Saiki et al. (2007) study and the ESA status of the SASU, even a 10% reduction in flows in the SAR could result in a potentially significant impact to both the SASU and its critical habitat. 10g

7. The Low Flow Study recommends that an Adaptive Management Plan (AMP) be created and implemented for monitoring Santa Ana sucker response to changing ecological conditions during 11a

[7] The Saiki et al. (2007) report states the following:

"On average, suckers also exhibited lower body condition at MWD than at SGR. Although beyond the scope of our study, we suspect that the lower body condition in suckers from MWD resulted from an inadequate food supply, relatively warm water temperatures, and other potentially stressful situations."

the 25 years of phased reductions (DEIR p.4.4-71-73; Mitigation Measure BIO-7). Regional Board staff support the development and implementation of an AMP to monitor and protect the in-stream and adjacent riparian habitat within the area of the Santa Ana River that may be directly impacted by the Project (SAR Reaches 4 and 5). The AMP should be prepared in consultation with the U.S Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW). The AMP must be sufficiently flexible to allow for increased discharges or other adequate measures when needed to maintain SASU and other instream resources in good condition. Regional Board staff notes the following issues regarding the AMP/BIO-7 proposed responses to variations in river/habitat conditions, and recommended baseline monitoring and ecological performance standards, etc. (p. 4.4-73 of the DEIR): 11a cntd.

i. The proposed AMP includes a response measure that will provide supplemental water to support local thermal refuge for SASU when water temperatures exceed 85 degrees. What is the basis for this trigger, where in the river will the trigger be applied, is it protective of all SASU life stages including eggs and larvae, and what would be the source of the supplemental water? The Saiki et al. (2007) report noted that one potential reason for the relatively poorer body condition of the SASU in the SAR as compared to the San Gabriel River was the warmer temperatures present in the SAR. 11b

ii. The last two response actions appear to contradict each other:

- *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.* 11c

Regional Board staff would support increasing flows or using supplemental water to maintain or enhance the extent and health of the riparian habitat in the SAR but would not accept declines in the current habitat such that exotic weed management is needed, especially habitat classified as critical habitat for the SASU, Southwestern Willow Flycatcher and other threatened and endangered or sensitive species dependent on this habitat.

iii. For characterization of baseline conditions, at a minimum, total dissolved solids and dissolved oxygen also need to be measured in addition to temperature. 11d

iv. In addition, annual variations in temperature, including minimum and maximum temperatures and duration of extreme temperatures that have or may occur during sensitive life stages of the SASU should be assessed, not just annual average temperature. This assessment should also consider increases in temperature that are anticipated as a result of climate change and how those temperature increases may impact water quality as well as SASU reproduction and survival. 11e

v. At the bottom of DEIR p.4.4-73, it states that *"The AMP will remain in effect for as long as the RIX discharge, as a result of 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."* This indicates that the AMP will remain in effect as long as the RIX discharge remains within Phases 2 through 5 or decreases beyond the anticipated discharge during Phase 5. As stated under our comment #3, above, current discharges from the RIX facility are already in Phase 1 of the proposed flow reduction scenarios. The baseline studies in the AMP should be implemented as soon as possible and the AMP should remain in effect as long as the RIX discharge remains reduced or until it can be adequately demonstrated that the reduced flows are not resulting in adverse impacts to the SASU and its habitat. 11f

vi. Even with monitoring implemented at 38.4 cfs, the DEIR p.1.0-27 identifies a significant unavoidable impact to the SASU (as required to be reported by CEQA), despite full implementation of the AMP (mitigation measures BIO-7, BIO-14, etc.). This indicates that additional modifications to the Project must be identified and considered. Empirically, 11g

substantial flow volume is necessary in Reach 4 for riparian habitat management, recognizing that the SAR is a losing stream in Reach 4 and a gaining stream downstream near Reach 3 (at approximately the SR-60 freeway).

vii. As noted on page 4.4-70 of the DEIR under Mitigation Measures, potential impacts to the SASU from the proposed phased reductions in the discharge to the SAR from the RIX facility may "*...include the long-term loss of in-stream habitats due to reduced water availability, reduction of exposed gravel beds due to reduced water velocity and associated sand transport, increased water temperature, increased stress, reduced fitness and reduced survivorship of eggs, and loss and/or degradation of riparian habitat along the Santa Ana River due to a reduction in water*". In Regional Board staffs' opinion, the AMP as currently envisioned falls well short of what is needed to ensure that the SASU and its critical habitat are not adversely impacted by the proposed reductions in flow from the RIX facility. 11h

8. During RIX shutdown periods (Low Flow Study p.4 Table 1), discharge to the SAR would rely solely on 9.5 cfs (6.1 mgd) discharged by the City of Rialto from the Rialto Drain (located 1200 feet upstream from RIX). However, as Regional Board staff has pointed out previously in this comment letter, the City of Rialto has filed a Petition for Change with the State Water Resources Control Board (SWRCB) to reduce their discharge to the Rialto Drain to zero. Regional Board staff believes that flows from future tertiary discharges at SBWRP or some other reliable source of water, at a rate to be agreed upon, should supplement discharges from RIX so that some extent of surface flow connecting Santa Ana sucker habitat may be maintained all year between SBWRP and RIX, in SAR Reaches 5 and 4. Additional discussion and information are needed to determine what levels of flows, temperature and other water quality parameters are needed in the SAR to provide optimum, not minimal habitat for the SASU, especially under current and future drought conditions. This needs to be addressed through a consensus of SBMWD staff, RIX Authority staff, Regional Board staff, the Cities of Colton and Rialto, the SWRCB Division of Water Rights, the CDFW, the USFWS, the U.S. Army Corps of Engineers, and input from habitat conservation staff of San Bernardino and Riverside Counties and the U.S. Geological Survey Ecosystems Mission Area. 12

9. On page 4.4-81 of the DEIR it notes that "*... the natural resources within the Upper Santa Ana River may be adversely affected by a variety of other factors, collectively adding to the potential for significant cumulative impacts. These factors include the potential for reduced storm flows due to continuing or future drought conditions, as well as additional Santa Ana River storm flow diversions beyond those listed in the Upper Santa Ana River HCP. The overall amount of water entering the system will likely decline over time as local agencies seek more aggressive and creative means to capture, recharge and reuse local run off and treated wastewater as a long term planning tool in response to drought conditions and growing populations.*"

   The document continues by stating that the SBMWD is a member of the Upper Santa Ana River HCP and that the proposed Project is a "covered" Project under this Plan. However, it also notes that "*Planning is underway for restoration activities that will offset the potential impacts of groundwater supply and other regional Projects included in the HCP although the Plan is in early stages and no environmental documents have been produced, to date*" [underline added]." Elsewhere, the document indicates that finalization of the Plan is likely several years away and it is not clear whether or not the City plans to begin construction and implementation of the Project before the Plan is finalized. 13

   Regional Board staff strongly believe that completion of the Upper Santa Ana River HCP Plan is crucial to the protection of the SAR and we believe it would be prudent to await that Plan before implementing the Clean Water Factory project so that all cumulative impacts from the list of the 53 proposed projects currently identified in Table 4.1.1 of the DEIR (page 4.1-11) can be adequately

considered and responsibility for those impacts and/or benefits fairly apportioned among the different project proponents. 13 cntd.

10. Also on page 4.4-81, the DEIR states that without full implementation of the HCPs and other conservation programs aimed at providing long-term comprehensive protection for biological resources and in-stream and riparian habitats found within the Santa Ana River and wash habitats, the incremental impact of other projects listed in DEIR may significantly impact biological resources. The document then states that "*…it is expected that all projects with adverse impacts in the Santa Ana River will meet obligations to address those impacts with both the state and federal wildlife agencies during the regulatory process. It is also expected that acquisition of permits from the applicable regulatory agency will require appropriate measures to offset incremental and cumulative impacts to sensitive species and habitat in the watershed.*"

    Regional Board staff agrees generally that permits and requirements issued by relevant regulatory agencies can be expected to include appropriate measures to address biological impacts. However, it is inappropriate to rely on these regulatory actions for the purposes of CEQA analysis and resolution of potentially significant adverse impacts. Rather, permits/other regulatory requirements must be informed by thorough consideration of appropriate mitigation measures that can and will be implemented. This consideration is properly conducted in the CEQA analyses of the Project. Regional Board staff strongly recommend that the SBMWD work proactively with the other agencies proposing similar projects or other types of water supply/re-use projects, to determine, in advance, what flow is needed in the SAR to support and improve the critical habitats for the SASU and other endangered or sensitive species, how to best manage water needed to reduce the region's reliance on imported water while still maintaining the Western and Orange County agreements for the groundwater basins in the Upper Santa Ana River watershed, and to collectively and objectively assess and prioritize those projects before implementing the proposed Clean Water Factory Project. 14

11. Page 4.4-82 of the DEIR states that "*…as a compensatory mitigation measure to offset potential Project-related cumulatively considerable biological resource impacts on the study reaches of the Santa Ana River immediately downstream of the RIX discharge location, the Project would implement upgrades to reduce the impact of RIX shutdowns…SBMWD has committed to various RIX enhancements at the request of USFWS. This EIR, as noted in BIO-14 below, commits SBMWD to the implementation and ongoing funding of these and other measures noted below. SBMWD has committed to the following measures to minimize potential adverse effects associated with periodic temporary RIX shutdowns:*

    Measure 1 - Accelerating the RIX UV System Rehabilitation Project, from a 5-year Capital Improvement Program (CIP) project, to a single-year CIP project, as soon as possible.

    Measure 2 – Expansion and Retrofit of RIX Test Wells into Production Wells (RIX Well Retrofit Project).

    Measure 3 - Contracting with the Riverside-Corona Resource Conservation District (RCRCD) to collect and relocate suckers during scheduled shutdowns.

    Regional Board staff supports the City's plans to upgrade the RIX facility to decrease maintenance and power outage related shutdowns and to provide flows during emergency shutdowns to avoid stranding SASU and other fish by converting the test wells in the RIX expansion area to production wells, provided that the groundwater aquifer can support this use without negatively impacting other beneficial uses or downstream groundwater-supported flows in the SAR. However, these mitigation measures will not alleviate the '*Project-related cumulatively considerable biological resource impacts*' to the SAR as they are being implemented to address an ongoing problem that is a result of the lack of a back-up system to maintain flows from RIX to the SAR when the facility requires maintenance or a power outage occurs. These proposed 15

mitigation measures do not address the long-term impacts of the Clean Water Factory Project and cannot as such be considered mitigation under CEQA. 15 cntd.

12. In summarizing Board staff reaction to the proposed Project, we note a contrast between the DEIR statements 1) characterizing SBMWD's sole reliance on the collective Bunker Hill Groundwater Basin to meet the water supply needs of its service area (p.3.0-5), yet 2) petitioning to market future "surplus recycled water to water agencies outside the SBMWD service area" (p. 3.0-6). We strongly recommend that before water is considered to be a surplus commodity to supply basins outside of SBMWD's Service Area, SBMWD should first ensure that the Bunker Hill A and B GMZs are replenished, all other means of storage that could potentially supply the SBMWD service area have been considered and implemented where appropriate,, and that an agreement has been reached with the resource agencies and the Cities of Rialto and Colton on the amount of tertiary flows (and secondary flows when the permitted 20:1 dilution factor exists) that will be discharged to the SAR from both the SBWRP and RIX facilities to enhance and protect the critical habitat needed to support the sensitive species that reside in the area,. We believe that it would be ill-advised, given present and future drafting demands on the Bunker Hill Groundwater Basin during present cycles of drought, for SBMWD to divert treated water for outside sale from San Bernardino and SAR Reach 4 at the likely expense of SBMWD's referenced obligations (Service Area and SAR flows). 16

13. Regional Board staff understands the reasons for past and present SBMWD requests for phased reductions of flow to the SAR, and supports the proposed upgrade of infrastructure to tertiary treatment. We believe that over time, sufficient water and money will be saved for SBMWD operations by the conveyance of tertiary water through a smaller system of pipelines restricted to the SBMWD Service Area, instead of the subregional pipeline and pump system to the west as projected by the Project (Exhibit 3.0-7). If near-term tertiary upgrade succeeds, and constant water supply for the greater San Bernardino area may be assured in future years, then conveyance to other groundwater basins may be considered later (with possible water rights attendant for each agency receiving transfer). 17

14. Regional Board staff also notes that the Low Flow Study and the SBMWD's Petition for Change (2010) are inconsistent in stating what the final reduction in flows from the RIX facility to the SAR will be at full implementation of the proposed Project. Table 1 in the Low Flow Study indicates that the final flow from RIX at full implementation of Phase 5 will be 13.4 mgd/20.8 cfs (approximately 15,012 af/y), and the 2010 Petition for Change (as discussed in the DEIR on page 2.0-3) stated that final flows from RIX will be reduced to 11.9 mgd/18.4 cfs (approximately 13,332 af/y). The City needs to clearly and consistently identify what the final proposed reductions in flows for the RIX facility to the SAR will be if the proposed Project is fully implemented. 18

Regional Board staff conclude that the DEIR and the proposed Phased Reduction Scenario Modeling discussed in the Low Flow Study are not complete and do not (1) realistically assess the potential project impacts to the beneficial uses in the SAR, in particular, impacts to SASU and its critical habitat, and (2) fail to adequately consider cumulative impacts from the multiple water supply/re-use projects in the watershed. We are concerned that the DEIR appears to rely on regulatory actions to address potentially significant adverse impacts rather than identifying specific mitigation plans and actions that can and will be implemented, and thus can be relied upon by regulatory agencies in determining appropriate regulatory actions. Regional Board staff encourages SBMWD to work with all of the relevant water supply and wastewater agencies to ensure that the flows in the SAR are sufficient to not only support but improve critical habitat for the SASU and the other endangered and sensitive species that depend on these flows. 19

If you have any questions regarding our comments, please contact me at (951) 782-4995 or Terri.Reeder@Waterboards.ca.gov, or Milasol Gaslan, Chief of our Permitting and Compliance Section at (951) 782-4419, or Milasol.Gaslan@Waterboards.ca.gov. 20

Sincerely,

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RESPONSES TO COMMENT LETTER R: SANTA ANA REGIONAL WATER QUALITY CONTROL BOARD

Response to Comment R1a.

San Bernardino Municipal Water Department (SBMWD) appreciates and values your comments as part of the Environmental Impact Report participation process. This comment provides general introductory and background information. Responses to specific comments are provided below; no further response is required.

Response to Comment R1b.

The commenter commends the Adaptive Management Plan approach to mitigating the Project's potential impacts to biological resources, as long as the Adaptive Management Plan is "responsive to the concerns and recommendations of relevant wildlife agencies […]." The Clean Water Factory Project has been designed in cooperation and coordination with resource agencies, including the California Department of Fish and Wildlife (CDFW), United States Fish and Wildlife Service (USFWS), and the Regional Board; refer to Draft EIR Section 2.6.2, *Trustee, Responsible and Cooperating Agencies*. Refer to the responses below to specific comments on the Adaptive Management Plan.

Response to Comment R1c.

This comment serves as the introduction to the commenter's statements on hydrology modeling. No further response is warranted; refer to the discussion below.

Response to Comment R1d.

The commenter provides a brief summary of the Project description. No further response is required.

Response to Comment R2.

The commenter provides a brief summary of the Project description and Western Judgment. No further response is required.

Response to Comment R3.

The commenter provides a brief summary of the Project description. No further response is required.

Response to Comment R4.

The *Draft EIR* and *Petition for Change for Owners of Waste Water Treatment Plants* submitted to the SWRCB are different documents suited to different purposes, and rely on differing information. As a result, there are differences between the baseline data used within the EIR, and the information contained in the *Petition for Change*. The table below outlines the discharge from the RIX facility in cubic feet per second (CFS), million gallons per day (MGD) and acre-feet per year (AFY) for the baseline discharge, as well as the proposed reduction and remaining flows from the RIX facility.

Table 2.0-2: RIX Discharge Reduction

Discharge Units[1]	CFS	MGD	AFY
Petition for Change Baseline Discharge	55.2358	35.7	39,989
Proposed RIX Discharge Reduction			
Baseline	53	34.3	38,421
Phase 1	44.9	29	32,484
Phase 2	38.4	24.8	27,780
Phase 3	32.2	20.8	23,299
Phase 4	26.3	17	19,042
Phase 5	20.8	13.4	15,010
Total Proposed Reduction	32.2	20.9	23,411
Remaining Rix Discharge	20.8	13.4	15,010

Notes:

CFS=cubic feet per second, MGD=million gallons per day, AFY=acre-feet per year

1. The existing RIX discharge noted in the "Petition for Change for Owners of Waste Water Treatment Plants" was calculated as of 2010, as such the baseline data used for the Project analysis, recorded in the fall of 2010, contains different flow levels due to seasonal variations and climate changes in the Project region.

Response to Comment R5.

SBMWD acknowledges these beneficial uses of the Santa Ana River Reach 4 and 5, including the addition of the Rare, Threatened, or Endangered Species (RARE) beneficial use. As indicated in the comment, RARE applies where waters support habitats necessary for the survival and successful maintenance of plant or animal species designated under state or federal law as rare, threatened, or endangered (Region 8 Basin Plan).

Response to Comment R6.

SBMWD acknowledges that it is responsible for meeting its obligations under the Endangered Species Act. In addition, sufficient flows need to be maintained to meet the habitat requirements of the Santa Ana sucker.

Response to Comment R7.

The commenter notes that page 1.0-27 of the Draft EIR correctly identifies significant and unavoidable impacts to Santa Ana sucker. SBMWD acknowledges that there is an error in the Executive Summary with the inclusion of the Santa Ana sucker in Section 1.6 as a Significant and Unavoidable impact; please refer to Response to Comment C11 for clarification.

Response to Comment R8a.

This comment serves as the introduction to the commenter's statements on the modeled flows presented in Low Flow Study Table 1, *Proposed RIX Discharge Phased Reduction Scenarios*. No further response is warranted; refer to the discussion below.

Response to Comment R8b.

The commenter indicates that the modeled flows presented in Low Flow Study Table 1 cannot assume the City of Colton will continue to send 8.2 cfs (5.3 MGD) of secondary effluent to the RIX Facility for the Project lifetime. SBMWD acknowledges that Colton may reduce discharge in the future, and that may affect the volume of discharge reduction associated with the project.

Response to Comment R8c.

The commenter indicates that the modeled flows presented in Low Flow Study Table 1 cannot assume the City of Rialto will continue to send 9.5 cfs (6.1 MGD) of treated effluent to the Rialto Drain for the Project lifetime, as the City of Rialto has filed a Petition for Change to reduce its discharge to the Rialto Drain to zero. In the event that the Rialto Project was implemented and reduced discharge to the Santa Ana River, the Project would modify its reductions to account for this loss in discharge, so that there would be no net cumulative effect beyond that discussed in the Draft EIR. Refer to Response to Comment P25a above.

Response to Comment R8d.

The commenter indicates that the baseline discharge presented in Low Flow Study Table 1 is 9% higher than "current" (2013) RIX Facility discharges cited in the Draft EIR (48.4 cfs). Refer to Response to Comment R4 above.

Response to Comment R8e.

The commenter suggests that the phased discharge reduction presented in Low Flow Study Table 1 would be nullified if the City of Rialto reduces their current discharge to the Rialto Drain of 9.5 cfs to zero. Refer to responses to Comments R8c and P25a above.

Response to Comment R8f.

The commenter explains that the San Bernardino Valley Municipal Water District's (Valley District) planned Sterling Natural Resources Center would reduce the amount of wastewater available for the proposed Project. Refer to Response to Comment O20 above.

Response to Comment R8g.

The commenter argues that the modeled phased discharge reductions presented in Low Flow Study Table 1 cannot assume a constant discharge from the City of Colton and City of Rialto. Instead, the commenter suggests that the model is revised to "look at trends in discharges from these facilities over the last 5 years and use the lowest flow data as a conservative estimate of the contributions of these discharges that will ultimately help support flows in the SAR." The commenter also suggests the model incorporate a "worst case scenario" where discharges from the City of Colton and Rialto are reduced to zero. Refer to Response to Comment P25a above.

Response to Comment R8h.

The commenter argues that the phased reduction scenarios presented in Low Flow Study Table 1 do not account for current and future drought conditions. SBMWD disagrees with this assertion as the dates selected to represent the Project baseline were selected based on their potential to represent normal and

low-flow conditions and best capture the range of effects expected from Project implementation, including potential drought conditions. See Response to Comment I4b for additional discussion of drought conditions. Given the necessity for this Project to help remediate projected municipal water supply shortfalls, it is imperative that Project planning continue using available databases, and be allowed to adjust to future conditions through the proposed Adaptive Management Plan identified under revised Mitigation Measure BIO-7. See revised Mitigation Measure BIO-7 in Section 3.0, *Errata to the Draft EIR*.

Response to Comment R8i.

The commenter argues that the final Phase 5 Reduction Scenario presented in Low Flow Study Table 1 results in a discharge volume which would violate SBMWD's April 10, 1969 agreement with Valley District to provide 16,000 AFY. SBMWD has a condition of dismissal from the water rights adjudication that resulted in the Orange Country Judgment agreed to the physical solution ordered under that judgment and to perform on its 1969 agreement with Valley District to continue discharging at least 16,000 acre feet per year of effluent from SBMWD's treatment plants to the Santa Ana River. In addition, SBMWD's obligation under its agreement with Valley District to discharge 16,000 AFY to the Santa Ana River can be met with discharge from either or both of its wastewater treatment plants; also see responses to Comments K7 and I2e.

Response to Comment R8j.

The commenter argues that the Draft EIR should have used the lowest daily discharge for the RIX Facility recorded to date for its hydrologic modeling (May 11, 2015). The data used to establish the RIX Facility discharge baseline are based on the best available information at the time of the NOP. This data will be used to prepare a robust Adaptive Management Plan which supplements the models presented in the Draft EIR. As part of implementing the Project, SBMWD will also be implementing an adaptive management process for establishing baseline conditions, providing biological monitoring and for implementing an adaptive management strategy that will respond to any noted changes or adverse impacts from the proposed Project; refer to revised Mitigation Measure BIO-7 in Section 3.0, *Errata to the Draft EIR*. See also Response to Comment I4b.

Response to Comment R9a.

This comment serves as the introduction to the commenter's statements on the modeled flows presented in GEI's 2014 study. The comment also alleges that the GEI and WEI reports were not included in the PDF copy of Draft EIR Appendices included on SBMWD's website. The GEI and WEI reports are incorporated as Appendices A, B, C, and D of the Low Flow Study, and were available (and continue to be available) on SBMWD's website at http://www.sbcity.org/water/cwf_project_appendices/default.asp. Refer to the hyperlinks designated "Appendix 10.5_CWF Low Flow Study_Part A," "Appendix 10.5_CWF Low Flow Study_Part B," and "Appendix 10.5_CWF Low Flow Study_Part C." No further response is warranted; refer to the discussion below.

Response to Comment R9b.

The commenter argues that the potentially significant impacts identified for Santa Ana sucker beginning in Reaches 2 and 3 of the Santa Ana River at Phase 3 and in all three Study Reaches in Phase 5 are invalid as they do not account for reductions in discharges from other facilities. Refer to responses to Comments P25a and O20 above.

Response to Comment R9c.

This comment serves as the introduction to the commenter's statements on the depths estimated as part of the weighted useable area (WUA) by WEI. No further response is warranted; refer to the discussion below.

Response to Comment R10a.

This comment summarizes the findings of the Saiki et al. 2007 study (Saiki study), in particular Santa Ana sucker locations at the MWD site and SGR site. No response is warranted.

Response to Comments R10b through 10g.

Based on inferences raised as a result of the Saiki study, the comments raise a number of concerns regarding potential impacts to Santa Ana sucker. SBMWD acknowledges these concerns and agrees that these components will be reasonably considered as part of the monitoring and study to be implemented a part of Adaptive Management Plan, such as degree and effects of impacts on: riparian habitat, water depth, water quality, larval survival, and predation related to decrease in refugia.

The Saiki Study, and other studies, including several conducted by GEI over the last 25 years, have studied the distribution and habitat requirements of the Santa Ana sucker. The PHABSIM modeling study by GEI that is summarized in the Low Flow Study provides a detailed analysis of Santa Ana sucker habitat requirements, including those listed by the Saiki report. It documents the availability of those habitat features in the Santa Ana River based on the PHABSIM model in order to analyze impacts from flow reductions as a result of the Clean Water Factory Project, to Santa Ana sucker and its critical habitat. The Low Flow Study concludes that the Clean Water Factory Project is not expected to result in potentially significant impacts to Santa Ana sucker and its critical habitat until Phase 3, after a period of 15 years of the proposed project. Further, as part of proposed mitigation for this Project, adaptive management and long-term management programs are proposed that will not only monitor and track changes in hydrologic flows, instream and aquatic habitat condition and adjacent riparian habitats but will also provide a continual assessment of changing conditions and define any needed corrections in order to ensure the long-term viability of the Santa Ana River, its instream, aquatic and riparian habitats that support Santa Ana sucker and numerous other species living in or associated with the Santa Ana River.

The commenter indicates that the Draft EIR did not address how "changes in water quality that may result from implementation of the Project (e.g., increased temperature and total dissolved solids, decreased dissolved oxygen)" would impact Santa Ana sucker fecundity, life cycle, and health. Water quality changes are not anticipated by the proposed Project, only a reduction in flow from the RIX Facility. The proposed Project is limited to reductions in flows; however, this is not anticipated to impair water quality as it would not concentrate pollutants in the Santa Ana River; it would reduce flows (and consequently pollutants) at a similar rate. Refer to Response to Comments L16 and P23a for a discussion on the Project's anticipated impacts to Santa Ana River temperature and turbidity.

The commenter also claims that the Draft EIR did not consider the Project's potential impacts on Santa Ana sucker reproduction, such as suitable habitat or substrate for egg laying and larval survival. The Santa Ana sucker's normal life cycle includes being exposed to harsh and changing conditions such as periodic but severe flooding during the winter months as well as drought conditions and the drying up or loss of water from the riverbed during the summer months. In order to survive these harsh environmental

conditions, Santa Ana sucker has evolved characteristics that allow the population to respond to these conditions, such as high fecundity. Although large portions of a population could be lost during a flood or drought period, when favorable conditions return, the remaining population can rapidly breed and repopulate the river. Further, revised Mitigation Measure BIO-7 requires preparation of an Adaptive Management Plan which monitors current and future biologic conditions, changes in substrate, and hydrologic conditions; refer to Section 3.0, *Errata to the Draft EIR*. Further, as mentioned in the preceding paragraph, the reduction in flow from the RIX Facility is not anticipated to impact Santa Ana River water quality. The species' high fecundity, revised Mitigation Measure BIO-7, and the Project's preservation of Santa Ana River water quality would result in Project-related impacts to Santa Ana sucker reproduction that are less than significant.

The commenter claims that the technical studies did not consider the "potential increases in predation of all SASU life stages (eggs, larvae, juveniles and adults) by non-native fish (e.g., largemouth bass) and wildlife (e.g., birds, raccoons) due to increased accessibility and reduced refugia" as a result of reductions in RIX Facility discharge. As mentioned previously, Santa Ana sucker have evolved characteristics, such as high fecundity, to respond to extreme life cycle conditions (i.e., extreme drought and water loss during the summer months). The Project's proposed Adaptive Management Plan will be designed to monitor annual changes in Santa Ana sucker distribution and population densities, and to respond to any documented Project-related change that exceeds the expected baseline range of variability developed for the species' or their habitat. The species' tolerance of extreme environmental conditions and high fecundity, in combination with revised Mitigation Measure BIO-7, would result in less than significant impacts.

Response to Comment R11a.

This commenter supports of the development and implementation of the Adaptive Management Plan (Mitigation Measure BIO-7), and notes that the Adaptive Management Plan should be prepared in consultation with the USFWS and CDFW. Refer to Response to Comment R1b above. The Adaptive Management Plan identifies a range of potential actions that could be taken in response to observed conditions under Project operations and identifies increased discharge as one option.

Response to Comment R11b.

Mortality has been associated with high water temperatures (91 degrees Fahrenheit) in the Santa Ana River.[23] While Santa Ana suckers are capable of withstanding elevated water temperatures, their lethal upper temperature limit is unknown.[23] The addition of cooler well water is reasonably likely to be of benefit the species. Well water would be added from locations adjacent or upstream of RIX. The proposed Adaptive Management Program includes providing supplemental water to provide local thermal refuge for Santa Ana sucker when water temperatures exceed 85 degrees. The Adaptive Management Plan will provide monitoring of river conditions, as well as the distribution off Santa Ana sucker throughout the river. During dry summer months, portions of the river can dry up, leaving Santa Ana sucker stranded in ponded areas. Providing supplemental water may be able to maintain flows within those portions of the Santa Ana River known to support Santa Ana sucker. Further, the supplemental water will be able to

[23] U.S. Fish and Wildlife Service. 2014. Draft Recovery Plan for the Santa Ana sucker. Pacific Southwest Region, Sacramento, California.

reduce temperatures in shallow areas of the river experiencing low flows, allowing ambient summer conditions to heat isolated pockets of habitat. This measure is consistent with Saiki.

Response to Comment R11c.

SBMWD acknowledges concerns regarding weed management and functional decline in native riparian plant communities. The proposed use of supplemental water is expected to maintain and enhance the extent and health of riparian habitat in the Santa Ana River. The use of supplemental water would not negatively impact critical habitat designated for Santa Ana sucker, Southwestern willow flycatcher, or other federally listed species as implied. The discussion of exotic weed control focuses on the presence of tree of heaven and caster bean that often invade riparian habitat. Monitoring would be done to ensure the continued health and viability of the riparian habitat. Exotic weed control would only be implemented if, and when, there is a problem noted. The Adaptive Management Plan will endeavor to investigate any underlying cause and work to correct that issue, particularly if there is any contribution due to reduced discharge from RIX.

Response to Comment R11d.

The commenter argues that total dissolved solids and dissolved oxygen needs to be measured in addition to temperature to determine baseline conditions for the Adaptive Management Plan. This comment is duly noted. SBMWD will consider this information during preparation of the Adaptive Management Plan.

Response to Comment R11e.

The commenter suggests that "annual variations in temperature, including minimum and maximum temperatures and duration of extreme temperatures that have or may not have occurred during sensitive life stages of the Santa Ana sucker should be assessed, not just annual average temperature." The commenter also requests the assessment consider increases in temperature that are expected as a result of climate change and how those temperature increases would affect water quality and Santa Ana sucker reproduction and survival. These comments are duly noted. SBMWD will consider this information during preparation of the Adaptive Management Plan.

Response to Comment R11f.

The commenter argues that the baseline studies for the Adaptive Management Plan should be implemented as soon as possible, as current RIX Facility discharges already reflect Phase 1 of the Phased Discharge Reduction. The commenter requests the Adaptive Management Plan remains effective "as long as the RIX discharge remains reduced or until it can be adequately demonstrated that reduced flows are not resulting in adverse impacts to Santa Ana sucker and its habitat." Mitigation Measure BIO-7 has been revised: it no longer applies 38.4 cfs as a threshold for implementation of the Adaptive Management Plan; rather it provides that the Adaptive Management Plan will be implemented prior to any Project-related reduction in RIX discharge and remain in place for so long as there are reductions in discharge directly attributable to the Project. See Section 3.0, *Errata to the Draft EIR.*

Response to Comment R11g.

The commenter identifies that Draft EIR page 1.0-27 significant and unavoidable impacts to Santa Ana sucker despite implementation of Mitigation Measure BIO-7 (Adaptive Management Plan). SBMWD acknowledges that there is an error in the Executive Summary with the inclusion of the Santa Ana sucker

in Section 1.6 as a Significant and Unavoidable impact; please refer to Response to Comment C11 for clarification. Note also that Mitigation Measure BIO-7 (see Section 3.0, *Errata to the Draft EIR)* has been revised and no longer applies 38.4 cfs as a threshold for implementation of the Adaptive Management Plan.

Response to Comment R11h.

The commenter argues that the Adaptive Management Plan presented in the Draft EIR "falls well short of what is needed to ensure that the Santa Ana sucker and its critical habitat are not adversely impacted by the proposed reductions in flow from the RIX facility." SBMWD acknowledges the importance of having an Adaptive Management Plan in place. That said, the demand for a finished adaptive management plan prior to permitting is not necessarily in keeping with what should be a collaborative effort between SBMWD and various stakeholders to preserve the Santa Ana sucker in a fully-managed urban stream. Refer to Responses to Comment D4e, I6e, and I6f above.

Response to Comment R12.

The commenter argues that "flows from future tertiary discharges at SBWRP or some other reliable source of water, at a rate to be agreed upon, should supplement discharges from RIX so that some extent of surface flow connecting Santa Ana sucker habitat may be maintained all year between SBWRP and RIX, in SAR Reaches 5 and 4."

The commenter also notes that additional consultation between SBMWD staff, RIX Authority staff, Regional Board, Cities of Colton and Rialto, the SWRCB Division of Water Rights, CDFW, USFWS, and U.S. Army Corps of Engineers, and relevant habitat conservation staff of San Bernardino and Riverside Counties and the U.S. Geological Survey Ecosystems Mission Area is necessary to determine optimal (as opposed to minimal) flow levels, temperature, and other water quality parameters necessary for Santa Ana sucker. Measure 2, described on Draft EIR page 4.4-82, would ensure that flows from RIX are never reduced to zero, by implementing a supplemental well project that would discharge groundwater to the Santa Ana River during times of RIX facility shutdown. And as described above, Mitigation Measure BIO-7 requires SBMWD to prepare an Adaptive Management Plan in consultation with several trustee, responsible, and coordinating agencies in order to mitigate Project-impacts to the Santa Ana sucker to a less than significant level. Flows do not need to be maintained at an "optimal" level to ensure that impacts to the Santa Ana sucker are less than significant, especially considering that "optimal" levels in theory could be higher than baseline conditions. Further, the Draft EIR includes Mitigation Measure BIO-8, which commits the SBMWD to engage in consultation under the federal Endangered Species Act, a process that is designed to ensure protection of listed species and their habitat, and obtain incidental take authorization prior to any reduction in discharge from the Project. For the reasons listed above, SBMWD affirms that revised Mitigation Measure BIO-7 and Mitigation Measure BIO-8 are adequate in reducing Project impacts to Santa Ana sucker to less than significant.

See revised Mitigation Measures BIO-7 and BIO-8 in Section 3.0, *Errata to the Draft EIR*.

Response to Comment R13.

The commenter requests the Project implementation is delayed until completion of the Upper Santa Ana River Habitat Conservation Plan (HCP) such that cumulative impacts can be adequately addressed and "responsibility for those impacts and/or benefits fairly apportioned among the different project

proponents." SBMWD is an active participant in the HCP and supports its completion. Nevertheless, completion of the HCP is not necessary to understand or mitigate the Project's impacts to the Santa Ana River habitat and sensitive species; refer to Response to Comment L10. In addition, approval of the Project will facilitate implementation of the monitoring stages of the Adaptive Management Plan, a key aspect of Project implementation related to protection of the Santa Ana sucker.

Response to Comment R14.

The commenter suggests that the Draft EIR's assumption that cumulative development would be required to meet obligations to address potentially significant impacts to the Santa Ana River and its associated biological resources is inappropriate for the purposes of CEQA and resolution to potentially significant impacts. Instead, the commenter suggests SBMWD consult with other agencies in advance to determine "what flow is needed in the SAR to support and improve the critical habitats for Santa Ana sucker and other endangered or sensitive species, how to best manage water needed to reduce the region's reliance on imported water while still maintaining the Western and Orange County agreements for the groundwater basins in the Upper Santa Ana River watershed, and to collectively and objectively assess and prioritize those projects before implementing the proposed Clean Water Factory Project." Refer to Response to Comment O20. The assumption that cumulative development would be required to meet obligations to address potentially significant impacts to the Santa Ana River and its biological resources is further supported by commitments of other entities within the region to mitigate the reduction in discharge to the Santa Ana River that would result from their own recycled water projects. Examples include the recent commitments by the San Bernardino Valley Municipal Water District and East Valley Water District, in resolving protests to the Sterling Natural Resource Center wastewater change petition, to work with the City of Rialto to construct a reservoir tank at the top of the Rialto channel that will store excess wastewater and discharge it to the Santa Ana River to mitigate flow reductions, and to obtain incidental take coverage from the U.S. Fish and Wildlife Service and California Department of Fish and Wildlife prior to taking any action to reduce discharges to the Santa Ana River.

Response to Comment R15.

The commenter commends Mitigation Measure BIO-14's commitment to upgrade the RIX Facility in order to decrease maintenance and power outage-related shutdowns and to provide flows during emergency RIX Facility shutdowns. However, the commenter argues that Mitigation Measure BIO-14 would not mitigate the Project's cumulatively considerable biological resource impacts to the Santa Ana River as this measure is "being implemented to address the ongoing problem that is a result of the lack of a back-up system to maintain flows from RIX to the SAR when the facility requires maintenance or a power outage occurs." SBMWD affirms that the improvements identified under Mitigation Measure BIO-14 will substantially improve conditions for the Santa Ana sucker and other species that depend on continuous flow in the Santa Ana River. As described on Draft EIR page 4.4-84, Mitigation Measure BIO-14, along with other EIR mitigation measures and Project Design Features, as well as SBMWD's ongoing commitment and participation in the HCP, are sufficient in mitigating the Project's cumulative contribution to biological resources. Refer to Response to Comment O20.

Response to Comment R16.

The commenter recommends that SBMWD ensure that the Bunker Hill Groundwater Basin A and B GMZs are replenished, and consider and implement where applicable all other means of storage that could potentially supply the SBWMD service area, and execute an agreement with the resource agencies and

the Cities of Rialto and Colton on the amount of flows that will be discharged into the Santa Ana River to enhance and protect sensitive biological resources. This comment is noted. SBMWD will consider this information during Project deliberations.

Response to Comment R17.

The commenter opines that SBMWD would save water and money through selection of a conveyance system restricted to the SBMWD service area versus the conveyance system required for the IEUA recharge basins option. This comment is noted. SBMWD will consider this information during Project deliberations.

Response to Comment R18.

The commenter notes a discrepancy for the final reduction in flows from the RIX Facility to the Santa Ana River proposed to be reduced under: Table 1 in the Low Flow Study (13.4 MGD) and the Petition to Change (11.9 MGD). Please refer to Response to Comment R4 above.

Response to Comment R19.

This comment serves as the conclusion to the commenter's letter, and as such summarizes the key points of the submitted letter. Responses to specific comments have been provided and no further response is warranted.

Response to Comment R20.

This comment provides general contact information. Responses to specific comments are provided above; no further response is required.