COACHELLA VALLEY WATER DISTRICT

Final Subsequent Program Environmental Impact Report
Coachella Valley Water Management Plan Update

SCH No. 2007091099

JANUARY 2012

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Water Consult
Engineering and Planning Consultants

COACHELLA VALLEY WATER MANAGEMENT PLAN
2010 UPDATE

Final
Subsequent Program Environmental Impact Report
SCH No. 2007091099

Prepared by:

Coachella Valley Water District

P.O. Box 1058
Coachella, California 92236
(760) 398-2651

Steve Robbins
General Manager-Chief Engineer

Patti Reyes
Planning and Special Program Manager

With Assistance from MWH Americas, Inc.
and Water Consult, Inc.

January 2012

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This document, together with the separately bound Draft SPEIR, constitute the Final SPEIR for the Coachella Valley Water Management Plan Update.

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Section 12
Additions and Corrections

The following items are corrections to minor errors, updates to or amplifications of statements in the Draft SPEIR. Text inserts are shown as underlined and deletions are shown in ~~overstrike~~ format. No significant new information is presented.

1. Table 1-2 is hereby modified as shown on the following pages.

2. The last paragraph on Page 3-7 is modified as follows:

Based upon these scenarios, between ~~292,000~~ 302,000 and ~~453,000~~ 464,000 AFY of additional water supplies (over present) and conservation would be required to meet projected demands in 2045 while providing 10 percent supply buffer, eliminating groundwater overdraft and improving the salt balance of the basin. These supplies represent needs under average hydrologic conditions. The QSA invalidation was based on the lack of quantification for the State's monetary share of Salton Sea mitigation. The QSA parties are working to resolve the issues that resulted in invalidation and are committed moving forward with the QSA. Therefore, the range of additional future supply need is assumed to be ~~292,000~~ 302,000 to ~~325,000~~ 336,000 AFY.

3. Table 3-2 on Page 3-8 is replaced with the following:

Table 12-2
Future Water Supply Scenarios Considered in 2010 WMP Update

Supply Scenario	Delta Conveyance	QSA Valid	Additional Supply Required in 2045 (AFY)
1	Yes	Yes	302,100
2	No	Yes	335,500
3	Yes	No	430,100
4	No	No	463,500

MWH and Water Consult, 2010.

4. The last sentence of the second paragraph of **Section 3.1.5.1 – Water Conservation** on Page 3-9 is modified as follows:

In addition to water conservation included in the baseline water demand projections, the 2010 WMP Update includes at least ~~106,200~~ 117,300 AFY of additional water conservation by 2045. This amount could increase to 147,000 AFY.

5. The last paragraph on Page 3-12 is modified as follows:

As described in **Section 3.1.3,** given uncertainties in the California water supply picture, the average amount of additional imported supply required is in the range of ~~45,000~~ 50,000 to 80,000 AFY. The higher value assumes successful implementation of the BDCP and Delta conveyance facilities while the lower value is based on reduced future SWP reliability (to 50 percent). Of this amount, up to 35,000 AFY would be required to meet future demands in the Indio and Coachella portions of planning area east of the San Andreas fault. Should development in this area occur at a lesser level, less additional water will be required. The amount of additional transfers required do not include additional water needs for the Mission Creek-Garnet Hill water management area which is the subject of a separate water management plan.

6. Table 3-3 page 3-23 is hereby modified as follows:

Table 3-3
2010 WMP Update – Implementation Plan

Plan Element	Responsible Entity(ies)	Completion Year	Environmental Impact Potential
Water Conservation Program			
1. Adopt 2009 CVWD/CVAG Landscape Ordinance or equivalent that meets State requirements	CVWD, ~~DWA,~~ water purveyors, cities, Riverside County	Ongoing	Overall beneficial impact on groundwater volumes; reduction in percolation to groundwater over existing irrigation practices (Section 6); reduced energy use (Section 8)
2. Establish urban water conservation baseline	CVWD, DWA, other urban water purveyors	~~2011~~ Completed	No impacts – study only

7. Southern California Association of Governments (SCAG) Regional Transportation Plan Goal 6 (RTP G6) was not included in the Draft SPEIR and is hereby added to Table 8-2, page 8-11. RTP G6 is "Encourage land use and growth patterns that complement our transportation investments." Under the Statement of Consistency with Coachella Valley 2010 Water Management Plan Update, the response is: "Not Applicable: CVWD has no authority over or responsibility for transportation systems or for land use and growth planning." Therefore, this addition involves no new significant impacts or mitigation measures.

SCAG Growth Vision Principle 3.3 (GV P3.3) is included in the SPEIR Table 8-2, page 8-18. The following statement is hereby added: "CVWD facilities siting considers only water, wastewater and flood control service requirements, regardless of race, ethnicity or income class." Therefore, this addition involves no new significant impacts or mitigation measures.

8. The last sentence on page 6-49 and the top of page 6-50 is hereby modified as follows: "Areas where shallow groundwater levels are at or near the ground surface may adversely impact the operation of individual, ~~and~~ small community and reservation wastewater systems that use septic tanks and leach fields."

9. On page 8-62 paragraph 5 is hereby modified as follows: "For the 2010 WMP Update, the movement of recharge water was also evaluated by running the Coachella Valley groundwater model using updated input conditions. The groundwater model estimates, as under the 2002 Plan, water quality changes from recharge with Colorado River water would affect the groundwater supply of the Torres-Martinez tribe in the East Valley in wells near the recharge facilities and the wells of the Agua Caliente tribe in the West Valley (**Figure 8-2**). The impact on affected water quality in the Basin, in a relative sense, was considered to be potentially significant, as described in Section 6, Groundwater Resources, because salinity would increase. Specifically, the tribes' wells, and all other basin wells, will experience increased salinity over time because of groundwater pumping, use within the basin, and evapotranspiration that leaves behind the salt in the water. Any use of imported water, whether for direct delivery or recharge, brings additional salt to the Valley that would increase the rate of basin salinization." However, it must be noted that a degradation in water quality alone does not necessarily equate to a "substantial interference with the beneficial use or ownership of ITAs." Here, even though there would be an increase in salinity, the resulting water quality would still meet primary health-based water quality standards, and the tribes would be able to use this water for residential, commercial, industrial, and agricultural land uses. Thus, the Project's impact on the beneficial use of ITA, while adverse, would still be less than significant." These additions and corrections involve no new significant impacts or mitigation measures.

10. The following is hereby inserted on page 8-69, following ITA-1, in Section 8.9.4 Mitigation Measures:

The analysis of impacts from the Proposed Project indicates that primary health-based drinking water quality standards will not be exceeded due to the Project and therefore the impacts will be less than significant. Mitigation measure ITA-1 is primarily included as a backup measure to assure that health-based drinking water quality is protected if unforeseen circumstances arise.

11. Labeling of tribal lands on SPEIR Figures 8-2 and 8-3, pages 8-65 and 8-67, respectively, is hereby modified (see revised figures on the following pages). The rectangular area of land immediately south of the word "Cabazon," should be labeled "29 Palms," and that designation should appear in the legend. The section shown immediately northwest of Mecca should be labeled "Cabazon." These additions and corrections involve no new significant impacts or mitigation measures.

12. Mitigation measure ITA-2 is hereby modified as follows to be inclusive of all individual and small community wastewater systems. ITA-2 is hereby renamed GW-3, deleted from page 8-69 and inserted in page 6-63 following mitigation measure GW-2. The text is hereby revised as follows:

~~**ITA-2**~~ **GW-3**: Should shallow groundwater rise as a result of implementation of the Water Management Plan, rather than the result of especially high precipitation, to the extent that the function of septic tanks or ~~cesspits~~ leach fields of individuals or small communities, including those on tribal land is impaired, CVWD will work with the affected ~~tribe~~ entities to connect them ~~the affected tribal community~~ to the CVWD sewage collection system. Connection to the CVWD system is voluntary on the part of the affected tribe. If a tribe wants to connect to the CVWD ~~service area~~ system but is outside its service area boundaries, CVWD could annex the tribal land unless the tribal land is within another agency's service area (i.e., ~~Salton Sea Community Services District~~ City of Coachella or Valley Sanitary District). To date, affected tribes have indicated interest in connections to CVWD's systems.

These additions and corrections involve no new significant impacts or mitigation measures.

Table 1-2 (Continued)
Summary of Proposed Project Impacts and Mitigation Measures
(Replace page 1-21)

Category	Impact Discussion	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
Air Quality (continued)	• Pollutant emissions from operation of Valley facilities: pumping stations, combustion engines from equipment and vehicles, treatment facilities, etc.	Potentially Significant	Second tier CEQA documents will contain operations-related mitigation to further reduce less than significant impacts: • Maintain operations equipment in proper tune. • Select operations equipment (including pumps and motors) considering low-emission factors and energy efficiency. • Pumping stations will have electric power.	Less than Significant
	• Air pollutant emissions from energy generation to power Valley facilities including desalination if implemented. • Air pollutant emissions from energy generation for water importation may exceed state thresholds; emissions on the grid may be outside SCAQMD air basin.	Potentially Significant; not mitigable by CVWD	• CVWD will expand use of alternative fuels for its operations. • CVWD will coordinate with SCE and IID on long-term future energy demands. • SCE, ~~and~~ IID and other electricity providers on the grid will mitigate emissions from their systems.	Less than Significant with Mitigation by others
	• Sensitive receptors (schools, hospitals, residences, etc.) may be affected by construction and operational air pollutant emissions.	Potentially Significant	• Locations of sensitive receptors will be identified in second tier documents. • Second tier CEQA documents shall also state that emissive wastewater treatment and other facilities will be enclosed and have odor control devices, as necessary.	Less than Significant

Table 1-2 (Continued)
Summary of Proposed Project Impacts and Mitigation Measures
(Insert after page 1-25)

Category	Impact Discussion	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
Groundwater Levels and Drainage	• Rising shallow groundwater levels could affect the functioning of septic tanks and leach fields that serve individuals, small communities and reservations.	Potentially Significant	• Should shallow groundwater levels rise as a result of implementation of the WMP, rather than the result of especially high precipitation, to the extent that the function of septic tanks or leach fields is impaired, CVWD will work with the affected individual, small community or tribe to connect them to the CVWD sewage collection system. Connection to the CVWD system is voluntary on the part of an affected tribe.	Less Than Significant with Mitigation
Groundwater Levels and Drainage	• Shallow groundwater levels will rise as a result of the proposed project. The existing agricultural drain system will require maintenance and replacement to ensure continued land drainage. As urban development occurs in locations susceptive to shallow perched groundwater, the existing drainage system will need to be replaced.	Potentially Significant	• CVWD will replace and rehabilitate its existing agricultural drains as part of its ongoing operation and maintenance responsibilities. • CVWD is working on legislation to for urban drainage districts in the East Valley, to be funded by developers • Developers will be responsible for the construction of new drains in urbanizing areas through funding the operation of drainage districts.	Less than Significant with Mitigation

Table 1-2 (Continued)
Summary of Proposed Project Impacts and Mitigation Measures
(Replace page 1-28)

Category	Impact Discussion	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
Indian Trust Assets	• ~~No~~ Less than significant impact on ITA land ownership or beneficial use • ~~Reduced depth to water~~ Increased water levels in producing wells. • Recharged water in East Valley predicted to affect the TDS of nearby Torres-Martinez wells, but not substantially affect ITA beneficial use. • Current and future recharge in West Valley predicted to affect the TDS of Agua Caliente wells, but not substantially affect ITA beneficial use. • No other tribal wells affected.	Less than Significant for land ownership and beneficial use ~~Potentially~~ Less than Significant for groundwater quality effects on beneficial use of ITA Beneficial Effect for reduced depth to water	• Should additional recharge with Colorado River water under the Proposed Project cause any Torres Martinez or Agua Caliente domestic drinking water well to exceed any recognized health-based drinking water quality standard, CVWD and DWA will work with the tribes to bring the drinking water supply of the tribes into compliance by providing domestic water service to the tribes from CVWD's or DWA's respective domestic water system or by providing appropriate well-head treatment.	~~Potentially~~ Less than Significant ~~for groundwater quality~~ (Mitigation included as additional protection)
Traffic, Access and Transportation	• Construction could temporarily interfere with emergency evacuation routes.	Potentially Significant	• Second tier CEQA documents will require that emergency service providers (fire, police, and ambulance) be provided with construction contact names, locations, and schedules and traffic plans, if applicable, prior to the start of construction.	Less than Significant

13. The following references are hereby added to Appendix A:

DWR. 2011. California Statewide Groundwater Elevation Monitoring (CASGEM) Program. Available: http://www.water.ca.gov/groundwater/casgem/

GEI, in association with CH2MHILL, MWH and Dahl Consultants. 2011. SWP Extension Project Development Plan, Draft Final Phase 2 Report (unpublished). Prepared for CVWD, DWA, Metropolitan, Mojave Water Agency and San Gorgonio Pass Water Agency, April 2011.

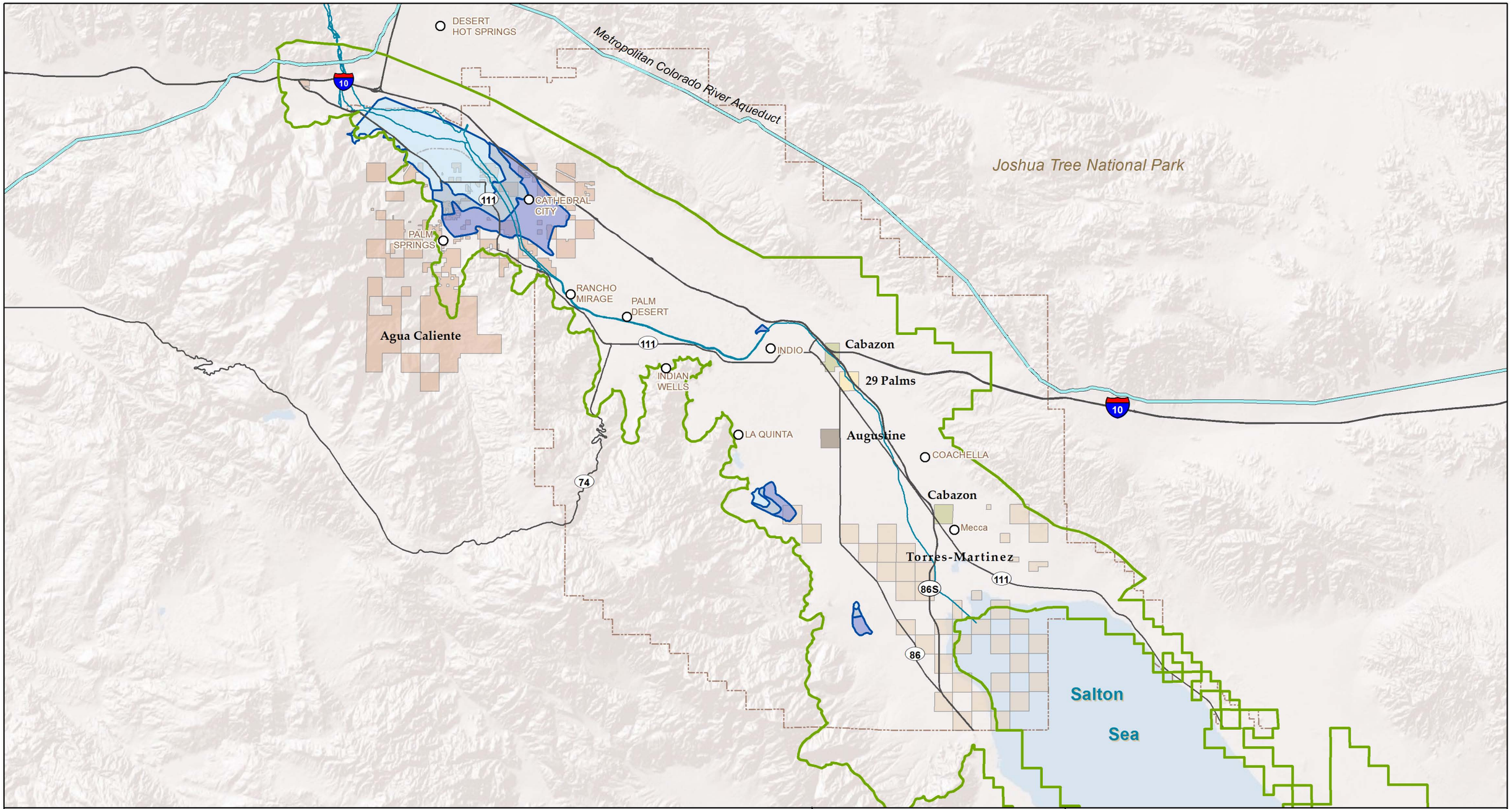
Malcolm Pirnie. 2008a. Phase 2 Draft Surface Water Treatment Process Evaluation Report. Prepared for CVWD. July 2008.

-----. 2008b. Feasibility Study for Full-Scale Brackish Groundwater Treatment Facility. Prepared for CVWD, October, 2008.

Metropolitan, 2010c. Regional Urban Water Management Plan, November 2010.

Superior Court of California. 2010. Judge Roland Candee's judgment on the QSA (Judicial Council Proceeding No. 43530, February 11, 2010.

Hasencamp, et al., pers. comm. 2011. Personal communication with Bill Hasencamp, Joe Vanderhorst, Michael Yu of Metropolitan Water District of Southern California, November 1, 2011.



Key to Features

- Cities
- Aqueduct
- Highways
- Study Area
- CVWD

Tribal Land

- Agua Caliente
- Augustine
- 29 Palms
- Cabazon
- Torres-Martinez
- 1973-2009 Recharge Plume
- 2009-2020 Recharge Plume
- 2020-2045 Recharge Plume

N

0 2.75 5.5 Miles

Document: \Coachella Valley WD\WMP Update\14 Electronic Files - Modeling\GIS\Projects TribalLands.mxd

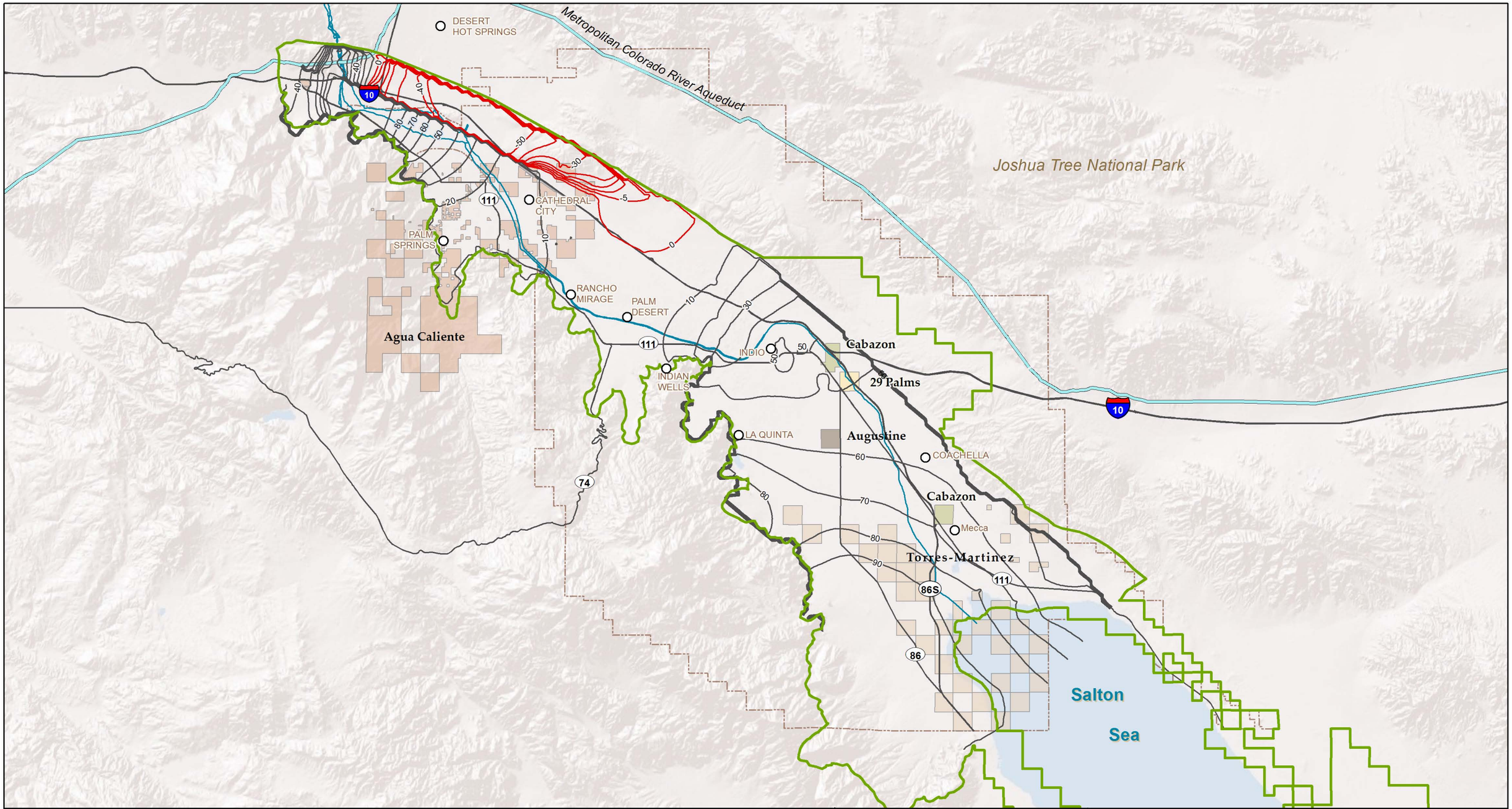
Date: November 2011

Source: DWR, ESRI, County of Riverside

Tribal Lands Potentially Affected by Recharge

Figure 8-2

MWH



Key to Features

- Cities
- Aqueduct
- Highways

Change in Ground Water (2009-2045)

- Negative values (in feet) indicate where ground water levels have declined
- Positive values (in feet) indicate where ground water levels have increased

- Study Area
- CVWD

Tribal Land

- Agua Caliente
- Augustine
- 29 Palms
- Cabazon
- Torres-Martinez

N

0 2.5 5 Miles

Document: \Coachella Valley WD\WMP Update\14 Electronic Files - Modeling\GIS\Projects GWChange.mxd

Date: November 2011

Source: DWR, ESRI, County of Riverside

Change in Ground Water Elevation in Tribal Lands

Figure 8-3

MWH

Section 13
Comments Received and Reponses to Comments

13.1 WRITTEN COMMENTS RECEIVED ON THE DRAFT SPEIR

The following lists the seven entities that provided comments on the Draft Subsequent Environmental Impact Report (SPEIR) for the Coachella Valley Water Management Plan Update. This section presented each comment letter followed by the CVWD responses to each comment letter.

The CEQA public comment period was August 9 through September 22, 2011. Six comments were received during the comment period. In addition, the State Clearinghouse provided a letter indicating the comment period had closed. The U.S. Bureau of Indian Affairs comment letter was dated September 28, 2011 and received after the comment period was closed. CVWD has elected to prepare a response.

Written Comments Received on the Draft SPEIR

Comment Letter Number	Name	Agency/Entity	Page
1	Ben R. Johnson, Planning and Development Supervisor	Strategic Planning Bureau Riverside County Fire Department	13-1-1
2	Dave Singleton Program Analyst	Native American Heritage Commission	13-2-1
3	Jacob Lieb, Manager Environmental and Assessment Services	Southern California Association of Governments	13-3-1
4	Thomas J. Davis, Chief Planning and Development Director	Agua Caliente Band of Cahuilla Indians	13-4-1
5	Scott Morgan, Director	State Clearinghouse	13-5-1
6	Robert Eben, Superintendent	U.S. Bureau of Indian Affairs	13-6-1
7	Christopher S. Harris Acting Executive Director	Colorado River Board	13-7-1

13.2 ORAL COMMENTS RECEIVED AT THE PUBLIC MEETING ON THE SPEIR

A public meeting on the Draft SPEIR was held on September 7, 2011 at CVWD Headquarters, Palm Desert, CA. The Public Meeting notice was included in the Notice of Availability for the Draft SPEIR. There were five attendees at the public meeting, in addition to CVWD staff and consultants, all from the Cabazon Tribe of Mission Indians.

All comments were made by members of the Cabazon Band. All comments were responded to at the meeting by Patti Reyes, CVWD, David Ringel, MWH and Janet Fahey, MWH. No additional responses are deemed necessary.

1. Tribal Chairman Roosevelt asked about private well metering and tribal water use. Patti Reyes explained that CVWD has staff that work with private pumpers to gain the participation in the Replenishment Assessment Program, but that the purpose of the meeting today and the Coachella Valley Water Management Plan is to look at total water needs of the Valley now and in the future.

2. Chairman Roosevelt asked for an explanation of what subsidence is for his younger tribal members. David Ringel explained how soils can collapse when water in soil is withdrawn, causing the overlying materials to fall and affect the foundations or buildings and other infrastructure.

3. Chairman Roosevelt asked if CVWD will try to limit water use. Patti explained that the goal of the Water Management Plan is to ensure enough water is available for future use for the entire planning area.

4. Chairman Roosevelt asked if Salton Sea levels will decrease. Janet Fahey explained that sea levels are projected to decrease rapidly with the cessation of supplemental water inputs from Imperial Irrigation District. As the sea level declines, more shoreline will be exposed, creating a potential for dust emissions. The Water Management Plan will mitigate for its contribution to projected air quality effects (if maximum desalination is implemented) by participation in the QSA 4-step program. Janet also explained that most of the decrease in flow to the sea is from the south end (Imperial Valley); the Coachella Valley contributes only about 6 percent of the total inflow.

5. Chairman Roosevelt asked how much brine would be created by desalinating drain water. David explained that approximately 20 percent of the desalinated water becomes brine, so if maximum desalination is implemented (85,000 acre-feet per year, AFY) about 15,000 to 20,000 AFY would become brine requiring disposal—unless a zero discharge method is employed. Brine management techniques would be evaluated with the desalination project in the future

6. Chairman Roosevelt was interested in possible reuses of the brine, especially if dried to a solid. Several possibilities were discussed and may be revisited in the future. David explained that the Torres Martinez tribe was interested in developing brackish wetlands adjacent to the Salton Sea using the brine.

RIVERSIDE COUNTY FIRE DEPARTMENT

IN COOPERATION WITH
THE CALIFORNIA DEPARTMENT OF FORESTRY AND FIRE PROTECTION

John R. Hawkins ~ Fire Chief
210 West San Jacinto Avenue ~ Perris, CA 92570
(951) 940-6900 ~ www.rvcfire.org

PROUDLY SERVING THE UNINCORPORATED AREAS OF RIVERSIDE COUNTY AND THE CITIES OF:

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LA QUINTA
MENIFEE
MORENO VALLEY
PALM DESERT
PERRIS
RANCHO MIRAGE
RUBIDOUX CSD
SAN JACINTO
TEMECULA
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BOARD OF SUPERVISORS:

BOB BUSTER
DISTRICT 1

JOHN TAVAGLIONE
DISTRICT 2

JEFF STONE
DISTRICT 3

JOHN BENOIT
DISTRICT 4

MARION ASHLEY
DISTRICT 5

August 11, 2011

Ms. Patti Reyes
Coachella Valley Water District
P.O. Box 1058
Coachella, CA 92236

RE: RCFD response to Draft Subsequent Program EIR, Water Management Plan

Ms. Reyes,

RCFD is in receipt of your Notice of Document Availability for the above referenced project. Thank you for the opportunity to review this EIR. RCFD believes all impacts have been adequately addressed as they pertain to fire and EMS services and has no further comments.

The California Fire Code outlines fire protection standards for the safety, health, and welfare of the public. These standards will be enforced by the Fire Chief.

If I can be of further assistance, please contact me at 951.940.6308 or ben.johnson@fire.ca.gov .

Thank you,

Ben R. Johnson, AICP
Planning & Development Supervisor
Strategic Planning Bureau

1. **Response to: Ben Johnson, Planning & Development Supervisor, Riverside County Fire Department**

Comment noted. Thank you.

STATE OF CALIFORNIA Edmund G. Brown, Jr., Governor

NATIVE AMERICAN HERITAGE COMMISSION
915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-6251
Fax (916) 657-5390
Web Site www.nahc.ca.gov
ds_nahc@pacbell.net

REC'D SEP 1 2011 CVWD

ORIG/EML: P REYES
M JOHNSON
L STOWE
S BIGLEY
J BARRETT
FILE: 0643.511

August 29, 2011

Ms. Patti Reyes, Planning and Special Program Manager
Coachella Valley Water District
P.O. Box 1058
Coachella, CA 92258

Re: SCH# 2007091099; CEQA Notice of Completion; draft Subsequent Environmental Impact Report (SEIR) for the **"Summary of Coachella Valley Water Management Plan 2010 Update"** located in the Coachella; Riverside County, California.

Dear Ms. Reyes:

The Native American Heritage Commission (NAHC), the State of California 'Trustee Agency' for the protection and preservation of Native American cultural resources pursuant to California Public Resources Code §21070 and affirmed by the Third Appellate Court in the case of EPIC v. Johnson (1985: 170 Cal App. 3rd 604). The NAHC wishes to comment on the proposed project.

This letter includes state and federal statutes relating to Native American historic properties of religious and cultural significance to American Indian tribes and interested Native American individuals as 'consulting parties' under both state and federal law. State law also addresses the freedom of Native American Religious Expression in Public Resources Code §5097.9.

The California Environmental Quality Act (CEQA – CA Public Resources Code 21000-21177, amendments effective 3/18/2010) requires that any project that causes a substantial adverse change in the significance of an historical resource, that includes archaeological resources, is a 'significant effect' requiring the preparation of an Environmental Impact Report (EIR) per the CEQA Guidelines defines a significant impact on the environment as 'a substantial, or potentially substantial, adverse change in any of physical conditions within an area affected by the proposed project, including ...objects of historic or aesthetic significance." In order to comply with this provision, the lead agency is required to assess whether the project will have an adverse impact on these resources within the 'area of potential effect (APE), and if so, to mitigate that effect. The NAHC Sacred Lands File (SLF) search resulted as follows: **Native American cultural resources were not identified** within one-half mile of the 'area of potential effect (APE). Note: the absence of recorded Native American cultural resources does not preclude their existence. The CVWD jurisdiction lies in a very culturally sensitive area.

The NAHC "Sacred Sites," as defined by the Native American Heritage Commission and the California Legislature in California Public Resources Code §§5097.94(a) and 5097.96. Items in the NAHC Sacred Lands Inventory are confidential and exempt from the Public Records Act pursuant to California Government Code §6254 (r).

5 SCANNED

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2-1 Early consultation with Native American tribes in your area is the best way to avoid unanticipated discoveries of cultural resources or burial sites once a project is underway. Culturally affiliated tribes and individuals may have knowledge of the religious and cultural significance of the historic properties in the project area (e.g. APE). We strongly urge that you make contact with the list of Native American Contacts on the attached list of Native American contacts, to see if your proposed project might impact Native American cultural resources and to obtain their recommendations concerning the proposed project. Pursuant to CA Public Resources Code § 5097.95, the NAHC requests that the Native American consulting parties be provided pertinent project information. Consultation with Native American communities is also a matter of environmental justice as defined by California Government Code §65040.12(e). Pursuant to CA Public Resources Code §5097.95, the NAHC requests that pertinent project information be provided consulting tribal parties. The NAHC recommends *avoidance* as defined by CEQA Guidelines §15370(a) to pursuing a project that would damage or destroy Native American cultural resources and Section 2183.2 that requires documentation, data recovery of cultural resources.

2-2 Furthermore, the NAHC is of the opinion that the current project remains under the jurisdiction of the statutes and regulations of the National Environmental Policy Act (e.g. NEPA; 42 U.S.C. 4321-43351). Consultation with tribes and interested Native American consulting parties, on the NAHC list, should be conducted in compliance with the requirements of federal NEPA and Section 106 and 4(f) of federal NHPA (16 U.S.C. 470 *et seq*), 36 CFR Part 800.3 (f) (2) & .5, the President's Council on Environmental Quality (CSQ, 42 U.S.C 4371 *et seq.* and NAGPRA (25 U.S.C. 3001-3013) as appropriate. The 1992 *Secretary of the Interiors Standards for the Treatment of Historic Properties* were revised so that they could be applied to all historic resource types included in the National Register of Historic Places and including cultural landscapes. Also, federal Executive Orders Nos. 11593 (preservation of cultural environment), 13175 (coordination & consultation) and 13007 (Sacred Sites) are helpful, supportive guides for Section 106 consultation. The aforementioned Secretary of the Interior's *Standards* include recommendations for all 'lead agencies' to consider the historic context of proposed projects and to "research" the cultural landscape that might include the 'area of potential effect.'

2-3 Confidentiality of "historic properties of religious and cultural significance" should also be considered as protected by California Government Code §6254(r) and may also be protected under Section 304 of he NHPA or at the Secretary of the Interior discretion if not eligible for listing on the National Register of Historic Places. The Secretary may also be advised by the federal Indian Religious Freedom Act (cf. 42 U.S.C., 1996) in issuing a decision on whether or not to disclose items of religious and/or cultural significance identified in or near the APEs and possibility threatened by proposed project activity.

Furthermore, Public Resources Code Section 5097.98, California Government Code §27491 and Health & Safety Code Section 7050.5 provide for provisions for accidentally discovered archeological resources during construction and mandate the processes to be followed in the event of an accidental discovery of any human remains in a project location other than a 'dedicated cemetery'.

To be effective, consultation on specific projects must be the result of an ongoing relationship between Native American tribes and lead agencies, project proponents and their contractors, in the opinion of the NAHC. Regarding tribal consultation, a relationship built around regular meetings and informal involvement with local tribes will lead to more qualitative consultation tribal input on specific projects.

If you have any questions about this response to your request, please do not hesitate to contact me at (916) 653-6251.

Sincerely,

Dave Singleton
Program Analyst

Cc: State Clearinghouse

Attachment: Native American Contact List

California Native American Contact List
Riverside County
August 29, 2011

Cabazon Band of Mission Indians
David Roosevelt, Chairperson
84-245 Indio Springs Cahuilla
Indio , CA 92203-3499
(760) 342-2593
(760) 347-7880 Fax

Torres-Martinez Desert Cahuilla Indians
Ernest Morreo
PO Box 1160 Cahuilla
Thermal , CA 92274
maxtm@aol.com
(760) 397-0300
(760) 397-8146 Fax

Los Coyotes Band of Mission Indians
Shane Chapparosa, Spokesperson
P.O. Box 189 Cahuilla
Warner , CA 92086
loscoyotes@earthlink.net
(760) 782-0711
(760) 782-2701 - FAX

Santa Rosa Band of Mission Indians
Mayme Estrada, Chairwoman
P.O. Box 609 Cahuilla
Hemet , CA 92546
srbcioffice@yahoo.com
(951) 658-5311
(951) 658-6733 Fax

Ramona Band of Cahuilla Mission Indians
Joseph Hamilton, Chairman
P.O. Box 391670 Cahuilla
Anza , CA 92539
admin@ramonatribe.com
(951) 763-4105
(951) 763-4325 Fax

Augustine Band of Cahuilla Mission Indians
Mary Ann Green, Chairperson
P.O. Box 846 Cahuilla
Coachella , CA 92236
hhaines@augustinetribe.
(760) 398-6180
760-369-7161 - FAX

Torres-Martinez Desert Cahuilla Indians
Mary Resvaloso, Chairperson
PO Box 1160 Cahuilla
Thermal , CA 92274
(760) 397-0300
mresvaloso@torresmartinez.
org
(760) 397-8146 Fax

Morongo Band of Mission Indians
Michael Contreras, Cultural Heritage Prog.
12700 Pumarra Road Cahuilla
Banning , CA 92220 Serrano
(951) 201-1866 - cell
mcontreras@morongo-nsn.
gov
(951) 922-0105 Fax

This list is current only as of the date of this document.
Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is applicable for contacting local Native Americans with regard to cultural resources for the proposed SCH#2007091099; CEQA Notice of Completion; draft Subsequent Environmental Impact Report (SEIR); for the Summary of Coachella Valley Water Management Plan 2010 Update of the Coachella Valley Water District; Riverside County, California.

California Native American Contact List
Riverside County
August 29, 2011

Torres-Martinez Desert Cahuilla Indians
Diana L. Chihuahua, Vice Chairperson, Cultural
P.O. Boxt 1160 Cahuilla
Thermal , CA 92274
dianac@torresmartinez.
760) 397-0300, Ext. 1209
(760) 272-9039 - cell (Lisa)
(760) 397-8146 Fax

Cabazon Band of Mission Indians
Judy Stapp, Director of Cultural Affairs
84-245 Indio Springs Cahuilla
Indio , CA 92203-3499
markwardt@cabazonindia

(760) 342-2593
(760) 347-7880 Fax

Agua Caliente Band of Cahuilla Indians THPO
Patricia Tuck, Tribal Historic Perservation Officer
5401 Dinah Shore Drive Cahuilla
Palm Springs, CA 92264
(760) 699-6907

ptuck@augacaliente-nsn.gov
(760) 699-6924- Fax

Augustine Band of Cahuilla Mission Indians
Karen Kupcha
P.O. Box 846 Cahuilla
Coachella , CA 92236
(760) 398-6180
916-369-7161 - FAX

Cahuilla Band of Indians
Luther Salgado, Sr., , Chairperson
PO Box 391760 Cahuilla
Anza , CA 92539
tribalcouncil@cahuilla.net
915-763-5549

This list is current only as of the date of this document.
Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is applicable for contacting local Native Americans with regard to cultural resources for the proposed SCH#2007091099; CEQA Notice of Completion; draft Subsequent Environmental Impact Report (SEIR); for the Summary of Coachella Valley Water Management Plan 2010 Update of the Coachella Valley Water District; Riverside County, California.

2. Response to: Dave Singleton, Program Analyst, Native American Heritage Commission

2-1 CVWD has conducted periodic meetings with the Coachella Valley tribes over the past several years on a variety of topics, and has ongoing relationships with all of them. CVWD concurs that avoidance is the best approach to potential impacts on cultural resources and will continue to consult with the Valley tribes, the Native American Heritage Commission, the State Historic Preservation Officer, and local sources on cultural resources and perform cultural resources analyses as specific project sites are identified in the implementation of the Water Management Plan Update.

2-2 CVWD respectfully disagrees that the project is subject to NEPA, because the project is not being carried out by a federal agency, has no federal funding, and requires no federal permits or approvals. When specific sites are identified for proposed project elements, the National Register of Historic Places and Sacred Lands File and other applicable information sources will be consulted for each element's area of potential effect (APE). NEPA compliance for individual projects will be completed if any elements are proposed to be sited on federal land.

2-3 Additional comments are noted. CVWD cultural resources analyses respect the confidentiality of resources locations and mitigation measures routinely address accidentally discovered resources and discovery of human remains in compliance with applicable government codes.

SOUTHERN CALIFORNIA

ASSOCIATION of GOVERNMENTS

Main Office

818 West Seventh Street
12th Floor
Los Angeles, California
90017-3435

t (213) 236-1800
f (213) 236-1825

www.scag.ca.gov

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Energy & Environment
Margaret Clark, Rosemead

Transportation
Paul Glaab, Laguna Niguel

August 31, 2011

Ms. Patti Reyes
Coachella Valley Water District
P.O. Box 1058
Coachella, CA 92236
(760) 398-2651

RE: SCAG Comments on the Draft Environmental Impact Report for the Coachella Valley Water Management Plan 2010 Update [SCAG No. I20110089]

Dear Ms. Reyes:

Thank you for submitting the **Draft Environmental Impact Report for the Coachella Valley Water Management Plan 2010 Update [SCAG No. I20110089]** to the Southern California Association of Governments (SCAG) for review and comment. SCAG is the authorized regional agency for Inter-Governmental Review of Programs proposed for federal financial assistance and direct development activities, pursuant to Presidential Executive Order 12372 (replacing A-95 Review). Additionally, pursuant to Public Resources Code Section 21083(d) SCAG reviews Environmental Impacts Reports of projects of regional significance for consistency with regional plans per the California Environmental Quality Act (CEQA) Guidelines, Sections 15125(d) and 15206(a)(1). SCAG is also the designated Regional Transportation Planning Agency and as such is responsible for both preparation of the Regional Transportation Plan (RTP) and Federal Transportation Improvement Program (FTIP) under California Government Code Section 65080 and 65082. As the clearinghouse for regionally significant projects per Executive Order 12372, SCAG reviews the consistency of local plans, projects, and programs with regional plans. This activity is based on SCAG's responsibilities as a regional planning organization pursuant to state and federal laws and regulations. Guidance provided by these reviews is intended to assist local agencies and project sponsors to take actions that contribute to the attainment of regional goals and policies.

SCAG staff has reviewed this project and determined that the proposed project is regionally significant per California Environmental Quality Act Guidelines, Sections 15125 and/or 15206. The proposed Water Management Plan Update includes address change in water supply reliability and in the environment for the planning period of 2010 - 2045. The proposed project seeks to meet current and future study area water demands, manage overdraft, manage water quality and minimize environmental impacts.

We have evaluated this project based on the policies of SCAG's Regional Transportation Plan (RTP) and Compass Growth Vision Principles that may be applicable to your project. The RTP and Compass Growth Visioning Principles can be found on the SCAG web site at: http://scag.ca.gov/igr. The attached detailed comments are meant to provide guidance for considering the proposed project within the context of our regional goals and policies. We also encourage the use of the SCAG List of Mitigation Measures extracted from the RTP to aid with demonstrating consistency with regional plans and policies. Please send a copy of the Final Environmental Impact Report (FEIR) 3-1 ONLY to SCAG's main office in Los Angeles for our review. If you have any questions regarding the attached comments, please contact Pamela Lee at (213) 236-1895. Thank you.

Sincerely,

JACOB LIEB, Manager
Environmental and Assessment Services

COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE COACHELLA VALLEY WATER MANAGEMENT PLAN 2010 UPDATE [SCAG NO. I20110089]

PROJECT LOCATION

The study area for the proposed project is defined as the Coachella Valley floor and underlying groundwater basins, extending from north of the community of Whitewater on the northwest to the Salton Sea at the southeastern end and to the San Jacinto and Santa Rosa Mountains on the west. Encompassing an area of 1.2 million acres, the Coachella Valley floor is surrounded by the San Bernardino, San Jacinto, and Santa Rosa Mountains.

PROJECT DESCRIPTION

The Coachella Valley Water District (CVWD) provides water, wastewater and flood control services in the Coachella Valley. The CVWD has prepared an Update to the 2002 Coachella Valley Water Management Plan to address changes in water supply reliability and in the environment since publication of the 2002 Plan. The planning period is 2010 – 2045 and seeks to meet current and future study area water demands, manage overdraft, manage water quality and minimize environmental impacts.

The 2010 Water Management Plan (WMP) Update identifies ways and means of meeting future water needs through incorporating a flexible approach to meeting future needs through combinations of plan elements. Summary of the 2010 WMP Update elements are listed below:

- **Water conservation.** Urban, agricultural and golf. Example urban measures are water efficient plumbing and landscape water use audit programs.
- **Additional water sources.** Increasing surface supplies for the Valley from outside sources, exchanges, dry-year purchases, water development projects, stormwater capture and desalination.
- **Source Substitution**. Providing recycled water or Canal water or other sources to additional urban, golf and agricultural users to reduce groundwater pumping.
- **Groundwater recharge.** Constructing and operating recharge basins and facilities to augment stored groundwater and increase recharge.
- **Monitoring and data management.** Monitoring and evaluation of subsidence and groundwater levels and quality to provide the information needed to manage the Valley's groundwater resources.

CONSISTENCY WITH REGIONAL TRANSPORTATION PLAN

Regional Growth Forecasts

The Draft Environmental Impact Report (DEIR) should reflect the most recently adopted SCAG forecasts, which are the 2008 RTP (May 2008) Population, Household and Employment forecasts. The forecasts for your region, subregion, and city are as follows:

Adopted SCAG Regionwide Forecasts[1]

	2010	2015	2020	2025	2030	2035
Population	19,418,344	20,465,830	21,468,948	22,395,121	23,255,377	24,057,286
Households	6,086,986	6,474,074	6,840,328	7,156,645	7,449,484	7,710,722
Employment	8,349,453	8,811,406	9,183,029	9,546,773	9,913,376	10,287,125

Adopted Gateway Cities CVAG Subregion Forecasts[1]

	2010	2015	2020	2025	2030	2035
Population	507,318	590,368	712,462	827,009	929,522	1,045,814
Households	174,485	202,268	241,275	281,289	317,209	354552
Employment	196,475	220,121	244,519	267,606	289,564	315289

Adopted Riverside County Forecasts[1]

	2010	2015	2020	2025	2030	2035
Population	617,241	710,478	854,662	988,192	1,104,571	1,243,632
Households	195,391	225,127	274,912	318,088	357,579	401,356
Employment	144,184	181,733	220,862	260,399	300,196	337,791

1. The 2008 RTP growth forecast at the regional, subregional, and city level was adopted by the Regional Council in May 2008.

SCAG Staff Comments:

Page 8-4 indicates that the DEIR population, household and employment analyses were based on 2008 RTP Regional Growth Forecasts.

The **2008 Regional Transportation Plan (RTP)** also has goals and policies that are pertinent to this proposed project. This RTP links the goal of sustaining mobility with the goals of fostering economic development, enhancing the environment, reducing energy consumption, promoting transportation-friendly development patterns, and encouraging fair and equitable access to residents affected by socio-economic, geographic and commercial limitations. The RTP continues to support all applicable federal and state laws in implementing the proposed project. Among the relevant goals and policies of the RTP are the following:

Regional Transportation Plan Goals:

RTP G1 *Maximize mobility and accessibility for all people and goods in the region.*
RTP G2 *Ensure travel safety and reliability for all people and goods in the region.*
RTP G3 *Preserve and ensure a sustainable regional transportation system.*
RTP G4 *Maximize the productivity of our transportation system.*
RTP G5 *Protect the environment, improve air quality and promote energy efficiency.*
RTP G6 *Encourage land use and growth patterns that complement our transportation investments.*
RTP G7 *Maximize the security of our transportation system through improved system monitoring, rapid recovery planning, and coordination with other security agencies.*

SCAG Staff Comments:

Where applicable, SCAG staff finds that the proposed project partially meets consistency with Regional Transportation Plan Goals. RTP Goals G1, G2, G3, G4, and G7 are not applicable in that the proposed project is not a transportation project.

SCAG staff finds that the proposed project generally meets consistency with RTP G5. Per page 8-40 CVWD encourages energy efficiency by providing customers incentives through its Energy Rewards Rebate Program offered for qualifying energy efficient appliances and building improvements and maximizing energy efficiency of large equipment within CVWD's operations.

3 -2 SCAG staff cannot determine consistency with RTP G6 based on the information provided in the DEIR.

COMPASS GROWTH VISIONING

The fundamental goal of the **Compass Growth Visioning** effort is to make the SCAG region a better place to live, work and play for all residents regardless of race, ethnicity or income class. Thus, decisions regarding growth, transportation, land use, and economic development should be made to promote and sustain for future generations the region's mobility, livability and prosperity. The following "Regional Growth Principles" are proposed to provide a framework for local and regional decision making that improves the quality of life for all SCAG residents. Each principle is followed by a specific set of strategies intended to achieve this goal.

Principle 1: Improve mobility for all residents.

GV P1.1 *Encourage transportation investments and land use decisions that are mutually supportive.*
GV P1.2 *Locate new housing near existing jobs and new jobs near existing housing.*
GV P1.3 *Encourage transit-oriented development.*
GV P1.4 *Promote a variety of travel choices*

SCAG Staff Comments:

SCAG staff finds that the proposed project partially meets consistency with Principle 1. Principles GV P1.2, GV P1.3 or GV P1.4 are not applicable in that the proposed project has no jurisdiction regarding the development of housing and jobs or transit.

3-3 SCAG staff cannot determine consistency with GV P1.1 based on the information provided in the DEIR.

Principle 2: Foster livability in all communities.

GV P2.1 *Promote infill development and redevelopment to revitalize existing communities.*
GV P2.2 *Promote developments, which provide a mix of uses.*
GV P2.3 *Promote "people scaled," walkable communities.*
GV P2.4 *Support the preservation of stable, single-family neighborhoods.*

SCAG Staff Comments:

SCAG staff finds that the proposed project meets consistency with Principle 2 in that the proposed project is not applicable. The CVWD does not have jurisdiction over regional or local land use or development patterns.

Principle 3: Enable prosperity for all people.

GV P3.1 *Provide, in each community, a variety of housing types to meet the housing needs of all income levels.*
GV P3.2 *Support educational opportunities that promote balanced growth.*

GV P3.3 *Ensure environmental justice regardless of race, ethnicity or income class.*
GV P3.4 *Support local and state fiscal policies that encourage balanced growth*
GV P3.5 *Encourage civic engagement.*

SCAG Staff Comments:

SCAG staff finds that the proposed project meets consistency with Principle 3 where applicable. Principles GV P3.1, GV P3.4 are not applicable in that the proposed project and lead agency have no authority over regional or local land use or development patterns.

SCAG staff finds the proposed project meets consistency with GV P3.2. Per pages 3-9 – 3-10, CVWD has ongoing public education and training efforts to promote water conservation, water recycling and water management.

3 -4 SCAG staff cannot determine consistency with GV P3.3 based on the information provided in the DEIR.

In regards to GV P3.4, the proposed project meets consistency. CVWD is actively involved in civic organizations and has held several public meetings regarding the 2010 WBP Update and SPEIR (Page 1-7).

Principle 4: Promote sustainability for future generations.
GV P4.1 *Preserve rural, agricultural, recreational, and environmentally sensitive areas*
GV P4.2 *Focus development in urban centers and existing cities.*
GV P4.3 *Develop strategies to accommodate growth that uses resources efficiently, eliminate pollution and significantly reduce waste.*
GV P4.4 *Utilize "green" development techniques*

SCAG Staff Comments:

Where applicable, SCAG staff finds that the project is consistent with Principle 4. GV P4.1 is not applicable in that the proposed project is not located in a rural, agricultural, recreational, or environmentally sensitive area.

The proposed project meets consistency with GV P4.2, as it is located within the jurisdictions of the cities of Palm Springs, Cathedral City, Rancho Mirage, Indian Wells, Palm Desert, Coachella, Indio and La Quinta in proximity to already developed areas. (Page 1-4)

In regards to GV P4.3 and GV P4.4, the proposed project will establish sustainability policies such as water and energy conservation through rate and curtailment programs as well as use of cleaner technologies. Also, CVWD headquarters will meet LEED Gold criteria to further promote 'energy savings, water efficiency, CO_2 emissions reduction, and stewardship of resources and sensitivity to their impacts. (Page 8-40)

CONCLUSION

3-5 Where applicable, the proposed project generally meets consistency with SCAG Regional Transportation Plan Goals and also meets consistency with Compass Growth Visioning Principles.

3-6 All feasible measures needed to mitigate any potentially negative regional impacts associated with the proposed project should be implemented and monitored, as required by CEQA. We recommend that you review the SCAG List of Mitigation Measures for additional guidance, and encourage you to follow them,

where applicable to your project. The SCAG List of Mitigation Measures may be found here: http://www.scag.ca.gov/igr/documents/SCAG_IGRMMRP_2008.pdf

When a project is of statewide, regional, or area wide significance, transportation information generated by a required monitoring or reporting program shall be submitted to SCAG as such information becomes reasonably available, in accordance with CEQA, Public Resource Code Section 21081.7, and CEQA Guidelines Section 15097 (g).

3. Response to: Jacob Lieb, Manager, Environmental and Assessment Services Southern California Association of Governments

3-1 CVWD will send a copy of the Final SPEIR to SCAG's main office in Los Angeles, as requested.

3-2 RTP G6 was not included in the Draft SPEIR, but will be addressed in the Final SPEIR additions and corrections section as an addition to Table 8-2. RTP G6 is "Encourage land use and growth patterns that complement our transportation investments." Under the Statement of Consistency with Coachella Valley 2010 Water Management Plan Update, the response is: "Not Applicable: CVWD has no authority over or responsibility for transportation systems or for land use and growth planning. Land use and growth planning are the responsibility of the county of Riverside and the Coachella Valley municipalities" Therefore, this addition involves no new significant impacts or mitigation measures.

3-3 GV P1.1 is addressed in the Draft SPEIR in Table 2, bottom of page 8-17.

3-4 GV P3.3 is included in the Draft SPEIR Table 8-2. The response will be amended in the Final SPEIR additions and corrections section as an addition to Table 8-2 to add that "CVWD facilities siting considers water, wastewater and flood control service requirements, regardless of race, ethnicity or income class." Therefore, this addition involves no new significant impacts or mitigation measures.

3-5 The general consistency of the proposed Project with SCAG RTP goals and consistency with Compass Growth Visioning Principles is noted.

3-6 The citation of SCAG recommended mitigation measures is noted, as is the requirement of transportation information generated by a required monitoring or reporting program. Traffic will be considered in the construction and operation of individual project elements; no areawide transportation analysis is needed for the water management plan project.

The MMRP for the proposed Project therefore shall state: "Transportation information that results from a project-specific MMRP shall be submitted to SCAG periodically as results become reasonably available, over the course of project construction and operation, in accordance with CEQA, Public Resources Code Section 21081.7, and CEQA Guidelines Section 15097(g). Where transportation impacts are less than significant, mitigation of transportation impacts will not be provided in the MMRP. Tiered CEQA documents shall consider elements of the MMRP, Section 7 Table 1, in the SCAG 2008 RTP Final PEIR."

AGUA CALIENTE BAND OF CAHUILLA INDIANS

PLANNING & DEVELOPMENT DEPARTMENT
CONSTRUCTION DIVISION • ECONOMIC DEVELOPMENT DIVISION
PLANNING & NATURAL RESOURCES DIVISION • TRIBAL HISTORIC PRESERVATION OFFICE

September 20, 2011

Ms. Patti Reyes
Coachella Valley Water District
P.O. Box 1058
Coachella, CA92236

RE: 2010 Water Management Plan Update Draft Subsequent Program EIR

Dear Ms. Reyes:

The Agua Caliente Band of Cahuilla Indians (Tribe) has reviewed the Subsequent Program EIR (SPEIR) for the 2010 Water Management Plan Update (WMP) and offers comments that we hope will be helpful to CVWD in ensuring that the SPEIR and 2010 WMP Update are documents that provide an accurate analysis of environmental impacts and provide meaningful strategies to preserve and protect water resources in the Valley. For purposes of our review of the SPEIR, please also refer to the Tribe's letter commenting on the Draft WMP dated January 31, 2011.

The SPEIR states the purpose of the 2010 Water Management Plan Update as:
"The original and ongoing purpose of the project is to address the state of overdraft in the Coachella Valley groundwater basin, and thereby reduce potentially significant adverse effects of overdraft:

- *groundwater storage reduction,*
- *decline in groundwater levels,*
- *land subsidence, and*
- *degradation in groundwater quality."*

As with the Draft WMP, the Tribe generally does not believe that the District in the SPEIR has provided a credible analysis of the effects of continued overdrafting of the aquifer, and of the assessment of long term changes that need to be made to water consumption and usage in the Valley to arrest these downward trends. The Tribe recognizes that the District has made some forward strides, but the simple fact is that much more needs to be done. Future decades will include increase pressures for water use and only amplify the necessity for more significant measures, The need for more change in consumptive patterns will only be hastened and made more elusive, as the dependability of supplies from either State Water Project or Colorado River sources face additional uncertainty in the coming years.

It is important that we work together to address these challenges and it must start with candid discussions based on sensible projections. It is in this cooperative spirit that the Tribe provides the following more detailed comments and our specific concerns:

5401 DINAH SHORE DRIVE, PALM SPRINGS, CA 92264
760/699/6800 • AGUACALIENTE-NSN.GOV

4-1 **A. The Tribe disagrees with statements made in the document that the WMP has no impact on Indian Trust Asset land ownership and use.**

On Page 1-28 the statement is made that there is "*No impact on ITA land ownership or use.*" Later in the document on Page 8-60 it is noted that "*The CVWD considers that the Proposed Project would have a significant impact on Indian Trust Assets if it substantially interfered with the beneficial use or ownership of ITAs in the Coachella Valley.*"

It is the Tribe's position that continued water mining that significantly reduces water supply to Indian Trust Assets and that degrades water quality IS a significant impact in that such actions restrict the ability of Tribal and allottee land holders to establish new beneficial uses on their trust land. Water quality degradation directly affects the ability of the Tribe and allottees to fully use trust land that is directly impacted by reduced water supply and degraded water quality, regardless of whether that water meets any "*recognized health-based water quality standard.*" Candidly, we do not see how one could conclude otherwise. Of course, poor quality water and water that costs more to pump because of overdraft directly affect the economic value of ITA.

P8-60: *"The Riverside County Superior Court entered a decree, which determined the rights of the various claimants, on December 9, 1938. (In the Matter of the Determination of the Relative Rights, Based upon Prior Appropriation, of the Various Claimants to the Waters of the Whitewater River and its Tributaries, in San Bernardino and Riverside Counties, California (Super. Court. Riverside County, 1938, Case No. 18035). The decree stipulates that up to 4.8 cfs of surface flow diverted from Tahquitz Creek through the Agua Caliente Ditch and 6 cfs from Andreas Creek via the Andreas Creek Pipeline can be used on the Agua Caliente Indian Reservation for domestic, stock watering, power development and irrigation purposes. The claims to groundwater rights were not adjudicated in the 1938 Judgment."*

This statement is partly accurate, but greatly understates the Tribe's senior and continuing ownership interest in groundwater underlying its Reservation lands. The United States asserted, as trustee for the Tribe, substantial claims to groundwater underlying the Agua Caliente Reservation, for multiple uses. Although the Tribe's claims were not adjudicated in 1938, the court having determined that it lacked jurisdiction to adjudicate *any* groundwater claims in the basin, the Tribe nonetheless holds groundwater rights under federal law. The Tribe (and the United States) asserts a continuing ownership interest in this resource, a protectable interest, despite these rights not yet having been quantified and decreed. These additional principles should be added to the SPEIR.

P6-3: *"Native American tribes assert unquantified reserved water rights pursuant to federal law and the Winters doctrine, which refers to the U. S. Supreme Court decision in the case. Two landmark U.S. Supreme Court cases, Winters v. U.S. (1908) and U.S. v. Rio Grande Dam & Irrigation Co.(1899), established several key principles: 1) federally reserved lands have a right to use sufficient water to fulfill the "primary purpose" of the reservation, and 2) these water rights cannot be destroyed by state water law or by water users acting in accordance with state law (Parr & Parr, 2009)."*

The Tribe also asserts that federal reserved water rights include rights to groundwater, and that these rights are senior in priority to water rights established under state law, inasmuch as they date to aboriginal usage and occupancy, as well as to the date of the creation of the

Reservation. Courts have squarely held that the federally-reserved water rights of a tribe (and derivatively allottees) under the Winters doctrine extend to groundwater, as well as surface water. See, e.g., U.S. v. Washington, 375 F.Supp. 2d 1050, 1068, n. 8 (W.D. Wash., 2005). These additional principles should be added to the SPEIR.

A statement is made at the bottom of page 8-63 regarding future water levels:
"Implementation of the present Proposed Project will elevate groundwater levels beneath certain ITA lands. The projected changes in groundwater levels throughout the Coachella Valley between 2009 and 2045 are shown in Figure 8-3. Groundwater levels are projected to increase as much as 100 feet in the deep aquifer under ITA lands. In the West Valley, groundwater levels beneath lands of the Aqua Caliente are projected to rise about 20 to 50 feet by 2045".

The Proposed Project relies on imported SWP and Colorado River water to elevate groundwater levels. Given the continuing drought that affects the Colorado River Basin and given the latest challenge to the QSA, it is self-evident that such projection of future water levels is based on overly optimistic reliability assumptions. The Tribe disagrees with the implied assumption that the QSA or a functional equivalent will be in place in the future, thus assuring a steady flow of Colorado River water. With respect to SWP water, on page 4-29 of the 2010 WMP Update, a statement is made that Bay-Delta planning activities will restore SWP deliveries to 77% of Table A amounts. The WMP assumes that the Valley will receive, on average, 50% of its SWP allocation[1]. This assumption on which the Proposed Project is built is also overly optimistic. In the future, it seems that with ongoing issues surrounding the Bay-Delta, additional SWP water supplies will be reduced at best and completely eliminated at worst. Accordingly, it is unrealistic and inappropriate to state with such apparent certainty that the groundwater levels will in fact improve when that is far from certain and indeed conditions may degrade. The coming decades may see further declines in the groundwater levels. These are serious environmental impacts that need to be accurately characterized in the SPEIR, but which currently are not.

4-2 **B. The Tribe disagrees with the characterization of a slower rate of basin overdraft as a "Beneficial Effect."**

The continuing overdraft has been facilitated by what appears to be very limited monitoring and assessment of the aquifer. As in the 2002 WMP, on page 3-23 of the SPEIR, Groundwater level/quality monitoring and subsidence monitoring are listed as "*Near Term Projects to Meet Water Management Needs.*" Further, on page 3-22, seven new projects are noted as "*should be implemented*".

The Tribe continues to be gravely concerned about CVWD and DWA's lack of progress in creating a timely, transparent and relevant monitoring program. These Agencies have mined water in the Coachella Valley for 74 years and have done so, it appears, without a robust data/monitoring program to enable groundwater resources responsibly. It is the Tribe's position that the lack of a comprehensive groundwater monitoring plan and a lack of a centralized groundwater database are actions that have resulted in environmental impacts as they speak directly to the Agencies' use of a limited water resource. As it did in 2002, the Tribe continues to strongly encourage the Agencies to make data and monitoring its highest priority.

[1] WMP p. 4-19

Table 1-2 on Page 1-25 [Table 1-2]: A decrease in overdraft/water levels changing at a slower rate than current conditions is considered a *Beneficial Effect*. The Tribe disagrees with this characterization and only views *complete* elimination of the overdraft as a true beneficial effect. While the Tribe lauds the Agencies' efforts to identify and deliver outside sources of water, overdraft of the aquifer is a recognized environmental impact and it is widely held that these water imports alone have never been enough to fully replace the high quality water being mined from the aquifer.

The SPEIR on Page 5-42 notes: "*Implementation of the 2010 WMP Update would control and eliminate long-term groundwater overdraft, resulting in recovery of groundwater levels in the basin.*" It is not clear as to where in the document there are facts to support this claim. When would this recovery occur? Would it improve both the West and East Valley or just one? Please identify the specific empirical evidence and authorities used to support this statement.

On Page 6-11 this statement is made: "*Basin overdraft, however, has reversed the direction of the subsurface flow in some portions of the basin.*" Please explain how this significant impact was evaluated and identified as part of a "Beneficial Effect". Does this affect the West Valley? The lack of publicly available data combined with this statement creates the impression that the true impacts of groundwater mining are in fact a detrimental impact.

On Page 6-7 statements about the size of the aquifer are made: "*In 1964, the DWR estimated that the Coachella Valley groundwater basin contained a total of approximately 39.2 million acre-feet (AF) of water in the first 1,000 feet below the ground surface; much of this water originated as runoff from the adjacent mountains. Of this amount, approximately 28.8 million AF of water was stored in the Whitewater River subbasin. However, the amount of water in the subbasin has decreased over the years due to pumping to serve urban, rural and agricultural development in the Coachella Valley at a rate faster than its rate of recharge.*" Has CVWD/DWA conducted more recent studies (in 48 years) of the size and character of the groundwater basin? If so, the Tribe requests the Agencies make all data available to the public. If not, then it appears that the Agencies have been mining groundwater without sufficient data to determine actual impacts to the aquifer—mining with substantial impacts to the aquifer.

The Tribe is troubled by comments on Page 6-39 regarding insufficient infrastructure: "*A comparison was made between anticipated groundwater elevation in 2015 and 2035 for the Proposed Project and the 2002 WMP and PEIR. This comparison indicated that groundwater elevations from about Thermal to the Whitewater Recharge Facility would be between 5 and 110 ft lower with the 2010 WMP Update than with the 2002 WMP. This decline is a result of delayed implementation of the MVP and Levy facility projects, coupled with reduced SWP Exchange water availability as a result of drought and delivery issues in the Delta.*" Please explain why, with the assumed influx of fees from developers during the recent economic upswing/housing boom, these projects weren't implemented in a timely fashion. With some of the most rock-bottom water rates in Southern California and the ability to reasonably generate revenue to cover these costs, it seems short-sighted that they weren't implemented then.

4-3 **C. The Tribe believes that overdrafting the aquifer IS a growth inducing impact and that CVWD has a direct impact over future development in the Coachella Valley.**

As noted on Page 1-36: "*Substantial growth is projected in the Valley and can be accommodated by the Proposed Project through 2045.*" This statement is simply false and we fear demonstrates an alarmingly perilous perspective. Ongoing mining of the aquifer to accommodate future growth is not sustainable. Continuing to overdraft the aquifer to support projected growth with only vague long-term ideas to stop the overdraft is a growth inducing action. CVWD has the ability to implement stronger conservation ordinances that directly reduce the impact on water resources.

As noted on Page 3-4: "*In the absence of this ordinance and other on-going conservation measures, water demands in the Valley would be nearly 1,040,000 AFY by 2045.*" And on Page 3-11: "*Projections indicate that continued implementation of these measures in conjunction with the State's 2010 CALGREEN Building Code requirements will result in per capita water use reduction of nearly 40 percent compared to the baseline per capita use defined in SBx7-7.*"

How much more water could be conserved through an even stronger ordinance?

4-4 **D. The Tribe is concerned with how the document characterizes the reduction in groundwater quality as a potentially significant impact but offers no feasible solution and notes that a Statement of Overriding Considerations will likely be adopted by CVWD.**

In several places in the SPEIR the issue of feasibility of various projects and mitigation measures is mentioned. For example:

Page 1-26: Net annual salt inputs increase in West Valley, potentially significant, "*No feasible measures are currently available to reduce TDA in recharge water.*"

Page 5-24: "*In addition, for purposes of this project, CVWD considers that a significant impact would occur if the Proposed Project resulted in:*

- *Diversion of additional water from the Colorado River that could not be provided through the existing infrastructure and operational practices of the Coachella Canal.*"

Page 6-55: "*By 2020, implementation of the 2010 WMP would increase the average West Valley TDS increment to 8.6 mg/L/yr. This is a potentially significant interim impact for the West Valley. By 2045, the West Valley TDS increment would increase to 9.5 mg/L/yr…Therefore, the impact is potentially significant in the West Valley.*"

P6-57: "*Since the salinity (TDS) of SWP Exchange water is expected to average about 630 mg/L over the Proposed Project planning period, it is anticipated that groundwater within the area influenced by recharge activities could reach this level of salinity. This is a potentially significant impact.*"

P6-61: "*Although the groundwater salinity is expected to increase, no designated beneficial uses of groundwater would be compromised; that is, the groundwater would continue to meet quality requirements for agricultural, industrial and municipal uses, the Basin Plan identified designated beneficial uses for Valley groundwater. The Basin Plan identifies no specific numerical groundwater quality objectives for Coachella Valley groundwater basins. Much agriculture and many golf courses in the Coachella Valley already use and have used Colorado*

River water successfully as their sole source for irrigation water. With respect to municipal use, there are no primary or health-based standards for total dissolved solids or salinity in drinking water (DPH, 2008)."

Page 1-44: "*1.15 SIGNIFICANT, IRREVERSIBLE ENVIRONMENTAL CHANGES WHICH WOULD BE CAUSED BY THE PROPOSED PROJECT SHOULD IT BE IMPLEMENTED*
Local degradation of groundwater quality near existing and proposed recharge basins from recharge of Colorado River water is considered a significant irreversible environmental change. In the absence of this recharge, however, the infiltration of agricultural drainage water and sea water intrusion would have greater, significant irreversible impacts on groundwater quality."

The Tribe raised water quality concerns in 2002 and was ignored. In the Ninth Circuit, it is clear that a tribe's federally-reserved water rights extend to water quality, not only to water quantity. See U.S. v. Gila Valley Irrigation District., 920 F. Supp. 1444, 1448 (D. Ariz., 1996). It is troubling to see that water quality degradation has continued and is still considered a significant impact. It appears that CVWD has, as it did in 2002, opted to define feasibility based on its willingness to forego spending money to treat the Colorado River water it brings in to the Valley to replace high quality groundwater that it mines unabated. The financial cost of new facilities to treat poor quality Colorado River water is an important part of a rational, long-term solution but should not be used to justify a Statement of Overriding Considerations under CEQA.

The Tribe, in its 2002 letter, presented alternatives to the 2002 WMP and estimates of the cost of water. The three (3) alternatives were:

- construction of a pipeline to bring SWP water directly to the Valley
- build desalinization facilities to treat canal water
- dual use of the Colorado River Aqueduct to bring SWP water to the Valley

In the nine (9) years since the 2002 WMP was adopted by CVWD, not one of these alternatives appear to have been adequately studied so as to rule out their feasibility. The justifications presented in the 2010 WMP for why the first two options won't work are based solely on financial considerations. The third alternative suggested by the Tribe in its 2002 letter has, as far as we are aware, been ignored.

4-5 **E. CVWD continues to present conflicting information about the feasibility of bringing SWP water to the Valley and continues to mischaracterize the quality of SWP water.**

At several points in the document conflicting statements are made regarding the feasibility of a direct pipeline to the Valley for State Water Project water:

Page 1-41: 1.10.3 Alternatives Considered for Reducing Groundwater Quality Impacts
"A recent study of direct importation for basin recharge of lower-salinity SWP water, the State Water Project Extension Feasibility Analysis, remains in draft form and its feasibility is not determined. This approach also has significant environmental impacts and significant costs in addition to those of the Proposed Project. Therefore, it is not considered to be a viable alternative."

In Section 6.5.4.1 it states: "*the possibility of a future SWP extension into the Coachella Valley is being examined again…but its technical, financial, institutional and environmental feasibility are still highly uncertain and it is not part of the 2010 WMP Update considerations.*"

Please clarify as to whether any feasibility analysis has been completed by CVWD, or any other entity. If an analysis has not been completed, then how can its viability already be determined? The Tribe would like a complete analysis of this project available for public review in 2012. In our 2002 letter, the Tribe presented an option for constructing a new pipeline to bring SWP water to the Valley. In that letter, we suggest a route for the pipeline that would minimize impacts and result in costs to CVWD of $0.001 per gallon. Without a robust technical study of this concept, how can CVWD dismiss it as not a viable option? It is troubling that such an analysis has not been undertaken over the last 9 years when the Tribe first proposed this concept.

4-6 **F. Mitigation Measures**

Mitigation Measure ITA-1 requires that CVWD or DWA work with the Tribe to provide domestic water service to the Reservation should water quality levels exceed *"recognized health-based water quality standards"*. The Tribe prefers that both agencies increase their vigilance in monitoring water quality across the Valley via a much improved monitoring program (see previous comments) instead of falling back on a mitigation measure that would force tribes into expensive connections to the Agencies' legacy systems.

Conclusion

This process offers us an opportunity to work together to address these long-standing issues which will be vital to our collective future. There are many unanswered questions and there is much more that we have to do to responsibly manage this critical resource. Agua Caliente urges both CVWD and DWA to join with us in a conversation to ensure that we take such necessary and affirmative steps to preserve and wisely use our water resources.

Thank you for the opportunity to comment on the SPEIR. If you have any questions, I can be reached at 760-699-6800.

Very truly yours,

Thomas J. Davis, AICP
Chief Planning & Development Officer
AGUA CALIENTE BAND
OF CAHUILLA INDIANS

C: Tribal Council

4. Response to: Thomas J. Davis, Chief Planning and Development Officer, Agua Caliente Band of Cahuilla Indians

4-1 A. "The Tribe disagrees with statements made in the document that the WMP has no impact on Indian Trust Asset land ownership and use."

Impacts to ITA

The comment letter contends that continued water "mining" that significantly reduces water supply to Indian Trust Assets and that degrades water quality is a significant impact in that such actions restrict the ability of tribal and allottee land holders to establish new beneficial uses on their trust land. It is assumed that the term "mining" as used in the comment means the continued long-term withdrawal of groundwater in excess of natural and artificial recharge. CVWD agrees that continued "mining" of the groundwater basin is undesirable. The WMP goal is to eliminate long-term overdraft, and not to continue "mining" the basin, and the SPEIR demonstrates that long-term water levels will increase (SPEIR section 6.4.2, pages 6-36 to 6-50). However, that does not mean there will not be periods when extraction from the basin temporarily exceeds natural and artificial recharge. Water levels are expected to rise in the long-term, and periods of increasing and decreasing water levels will occur as the result of hydrologic variation in the supplies used to recharge the basin. CVWD and DWA strive to recharge as much water as possible when it is available with full knowledge that there will be periods when supplies are reduced due to drought. Thus, the 2002 WMP and the 2010 WMP Update identify actions to be taken over the next 35 years to halt overdraft and manage the basin in a sustainable manner. CVWD and DWA have made significant investments to acquire additional water supplies over the past eight years that put the Valley on a path toward sustainability. Given that long-term groundwater levels will increase under the 2010 WMP Update, CVWD expects there would be an improvement to Indian Trust Assets' water supply.

With regard to impacts to Indian Trust Assets due to increased salinity/TDS from Colorado River water being recharged into the Basin, it should first be noted that the Tribe's letter does not identify which current or anticipated beneficial uses of groundwater the Tribe believes are or may be adversely affected by the quality of the recharge water. This water meets water quality standards for municipal, agricultural, and industrial uses, and primary health-based standards for drinking water (SPEIR, at page 6-62). In fact, many cities in the Southwest, including Las Vegas, Phoenix, Tucson, and the Imperial Valley cities use Colorado River water as a major portion if not their sole source of water supply.

With reference to mitigation measure ITA-1, which states that violations of health-based standards due to the 2010 WMP Update will require the District to either provide connections its water distribution system or providing appropriate well-head treatment (SPEIR, at 8-69), the SPEIR conservatively describes this decrease in water quality as being a significant and

unavoidable impact, it will be still be fit for human consumption according to federal and state standards specifically adopted to protect human health. Given that the quality of this water is suitable for human consumption, there is no basis for the commenter's statement that water quality degradation from the 2010 WMP Update will affect the ability of the Tribe and its allottees to "fully" use trust land or affect its ownership. In addition, the projected increase in groundwater levels resulting from Plan implementation will result in lower, not higher, pumping costs compared to current conditions.

Because of the nature of the basin, with water use exceeding recharge, salinity will increase basin wide over time, even if no additional Canal water is recharged, because of ongoing water uses and evapotranspiration. Therefore, an increase in salinity in tribal wells (and all others in the Valley) will occur in any case. With recharge, the rate of increase in salinity would occur at a slightly faster rate near recharge facilities. Increased salinity associated with recharge is considered in the SPEIR to be a significant impact on water quality, but it does not interfere with ITA water use or ownership.

Tribal Water Rights

The commenter makes several statements as to the nature of the Tribe's water rights as per the federal *Winters* doctrine and also the effect of the 1938 Judgment made by the Riverside County Superior Court in the adjudication of water rights in this area. The SPEIR acknowledges, without response, that the Tribe and the United States as Trustee for the Tribe have asserted certain water rights claims. The commenter's comments on these subjects are noted; the 2010 Water Management Plan Update and the SPEIR do not address water rights. Nothing in the 2010 WMP Update is intended to interfere with the legal status of the Tribe's water rights or disturb the order of priority of water rights holders within the Basin. These are legal matters and are not properly the focus of this SPEIR. Beyond such acknowledgement, the District believes it is inappropriate to address such claims in a CEQA document. Therefore, it is sufficient to note that the SPEIR concludes that health-based water quality standards would continue to be observed and, as outlined above, the Tribe will still be able to use its water rights to supply beneficial uses on trust lands.

Colorado River and the QSA

The comment letter asserts that given the continuing drought that affects the Colorado River Basin and the challenge to the QSA, the WMP projection of future water supplies is overly optimistic. The Tribe disagrees that the QSA or functional equivalent will be in place in the future.

The 2010 WMP Update's assumptions are well supported. First, as stated on page 5-18 *ff* of the Draft SPEIR, the Colorado River is managed and operated in accordance with the *Law of the*

River. California's Colorado River allocation is 4.4 million acre-ft/yr (AFY). Under the current priority system and in accordance with the 1968 Colorado River Basin Project Act (82 Stat. 885 *ff*), in years when there is insufficient Colorado River water to meet the needs of the Lower Basin States (California, Nevada and Arizona), diversions for the Central Arizona Project are to be reduced sufficiently to deliver 4.4 million AFY to the water rights holders, contractors and reservations in California. In addition, as a result of its higher priority, CVWD would not experience a reduction in deliveries until Metropolitan Water District of Southern California (Metropolitan) deliveries (550,000 AFY) are eliminated. Thus, in the very unlikely situation in which the entire QSA effort collapses, CVWD will continue to receive a large share of California's 4.4 million AFY allotment. The U.S. Bureau of Reclamation's interim guidelines for shortage sharing provide additional protection through at least 2026.

Second, progress is continually being made with regard to the QSA. Oral arguments for the appeal hearing on Judge Candee's QSA ruling (Superior Court of California, 2010) were heard on November 21, 2011; a decision is possible by early 2012. CVWD expects that Judge Candee's ruling will be overturned and has been actively working with the other QSA signatories to resolve the issues associated with the State's financial obligations for QSA mitigation costs. Even if the QSA is not reinstated in its current form, California must continue to limit its Colorado River water use to 4.4 million AFY. CVWD would continue to receive Colorado River water under the existing agreements in place before the adoption of the QSA in 2003. In the absence of the QSA, the amount of Colorado River water received would again depend on priority, rather than be a defined quantity, but CVWD, once again, will continue to receive water under such a worst case scenario. If the amount is less than the lowest level of 385,000 AFY planned for in the 2010 WMP Update, the plan would be modified.

While the Tribe may disagree with CVWD's assumptions regarding whether the QSA or a functional equivalent will be in place in the future, the analysis of future groundwater levels is used to estimate the amount of recharge water, coupled with water conservation and other water management elements, that will be required to meet the projected future water demands while eliminating long-term overdraft. The intent of the WMP Update is to provide a flexible approach that can adapt to changing future development and water supply conditions. The evidence does not support that any of these contingencies will occur, but if SWP and Colorado River water supplies are less available or reliable in the future than assumed in this plan, CVWD and DWA have the ability under the plan to either: 1) implement additional water conservation measures to reduce demands and pumping, or 2) acquire additional water supplies from other sources as outlined in the WMP Update. If future water demands are less than projected, then less recharge water will be needed to balance the basin and stabilize or recover water levels. Future plans and their elements will be subject to full CEQA analysis and review at the time they are proposed.

SWP Reliability

The comment letter incorrectly states the planning assumptions for SWP reliability used in the Plan. On page 4-29, the Draft WMP states:

There currently are no published data or information regarding the effect that the BDCP and DHCCP will have on SWP delivery reliability. Consequently, *it is assumed for planning purposes that, if successful*, [emphasis added] these programs will restore SWP average delivery reliability to the pre-Wanger decision levels of 77 percent of Table A Amounts. This assumption is consistent with planning assumptions being made by Metropolitan (Metropolitan, 2010a and 2010b). The WMP Update evaluates *both low (50 percent) and high (77 percent) reliability* [emphasis added] in determining future water needs for the Valley.

The potential future reliability of SWP deliveries <u>if</u> the BDCP is successful is assumed, pending more detailed analysis by DWR. The WMP Update does not rely on this assumption alone but evaluates a range of additional imported water that will need to be acquired depending on the Delta outcome. If this additional water cannot be acquired from SWP sources, then CVWD and DWA will need to pursue other options, possibly including desalination of ocean water and subsequent exchange. Such a significant change in conditions would likely trigger an update to the WMP and additional CEQA compliance.

A future reliability factor of 50 percent of SWP Table A Amounts, as a long term average, is used in the WMP Update if the BDCP is not successful. This factor is 17 percent *more conservative* than the SWP reliability of 60 percent of Table A Amounts published in DWR's Final 2009 SWP Delivery Reliability Report. The District disagrees with the Tribe's assertion that future SWP deliveries will be further reduced to some undefined level or eliminated at worst, since these conditions are considered highly unlikely by the DWR, the operator of the SWP.

If, at a future time, either or both imported sources' water deliveries were expected to decrease to significantly below currently anticipated levels, CVWD would revise the WMP accordingly and change the mix of elements to reflect the new reality. Again, the new WMP and its elements would be subject to full CEQA analysis and review at that time.

4-2 "B. The Tribe disagrees with the characterization of a slower rate of basin overdraft as a 'Beneficial Effect.'"

The District respectfully asserts that reduction, as well as elimination, of an existing on-going adverse condition is a beneficial effect. Additionally, the District believes that the term "mining" is misleading, since it suggests that water is withdrawn without any view toward its replacement, which is not the case in the WMP Update. Replacing all water pumped to date in excess of

recharge is not a goal of the WMP and is not required under CEQA, which considers existing conditions as its analytical baseline. CVWD has never implied that historical imports were sufficient to eliminate overdraft or that all historically pumped water would be replaced. The WMP Update relies on a combination of water conservation, new water supply development, sources substitution and groundwater recharge to reduce/eliminate existing and future overdraft (SPEIR Section 1.3 Project Goals and Objectives and Section 1.6 Project Description). The objective of the WMP Update is to address an existing condition, which is the statutory baseline for CEQA analysis, not to replace water pumped in the past.

The comment states that overdraft has been facilitated by limited monitoring and assessment of the aquifer. With respect to the request for "creation of a timely, transparent and relevant monitoring program," to document groundwater conditions in the basin, the District has had an extensive groundwater monitoring program in place for more than 60 years. The District's program currently monitors more than 500 wells at least three times per year. It was the results of CVWD's basin-wide, on-going well monitoring that clearly identified a serious decline in groundwater levels in the West and East Valleys before 1993, which spurred the preparation of the first WMP. CVWD groundwater monitoring data are published in the CVWD Annual Engineer's Report prepared in conjunction with the Replenishment Assessment Charge (RAC). CVWD publishes hydrographs for two example wells in the West Valley and 14 wells in the East Valley (CVWD, 2010a, and 2010b). Data for a minimum of 10 additional West Valley wells will be presented in future reports. The District also will be participating in the state's California Statewide Groundwater Elevation Monitoring (CASGEM) program (DWR, 2011), submitting groundwater elevation data for 45 wells twice per year starting in January 2012. Other Valley water agencies are also participating in this program. CASGEM data will be available to the public. The District agrees that development of a comprehensive groundwater level database for the Coachella Valley, which would be comprised of all available monitoring data, including on tribal wells, would be beneficial for providing a more complete picture of groundwater conditions. A monitoring program is an element of the Proposed Project (WMP section 6.8.4, page 6-42) and is so identified in the SPEIR (section 1.6.2, page 1-8; Table 1-1, page 1-12; section 3.3.1.1, page 3-22; and Table 3-3 page 3-30 and 3-31). Each water supplier is responsible for data collection from its wells, including groundwater quality information. In addition, the Coachella Valley Integrated Regional Water Management Plan (IRWMP) (CVWRMG, 2010, Section 9) proposed development of a Data Management System (DMS) for groundwater data, "as appropriate and publicly available," from public and private water purveyors.

The recovery of groundwater levels resulting from Plan implementation, as indicated on SPEIR page 5-42, is described in detail in SPEIR Section 6.4.2 (page 6-36 *ff*). Projected elimination of overdraft in the 2002 WMP and in the 2010 WMP Update is based on application of the peer-reviewed Coachella Valley groundwater model developed for the 2002 WMP by Dr. Graham

Fogg (see SPEIR Section 6.2.4 and Appendix D). The model was revisited and then re-run for the present WMP Update to reflect current and anticipated future planning conditions in the basin. The model input data were based on groundwater production records, well monitoring data and existing documents on Valley hydrogeology. Hydrographs showing historical monitoring and model simulation results for nine representative wells are presented on Figure 6-14. Evaluation of basin size, capacity and hydrostratigraphy was part of the original groundwater model development and was based on previous basin documentation and past and current well data. As discussed in SPEIR Section 6.2.4 and Appendix D, the model developed for the 2002 WMP produced excellent agreement between measured and simulated groundwater levels and drain flow for the data period 1936–1996, upon which it was based and which was used for calibration. The model was found to be accurate for groundwater elevations to within plus or minus 20 feet. For the present WMP Update, the 1997-2009 period was used as a verification period. When rerun and compared to recent data for preparation of the WMP Update, the model was generally found to follow historic groundwater levels within the same range. Based on existing well monitoring data, basin wells already have shown a recovery in water elevations; artesian conditions already have been restored in portions of the East Valley (SPEIR Figure 6-14 page 6-43 and Figure 6-16, page 6-51).

The Tribe's comment misconstrues the reversal of deep aquifer flow away from instead of towards the Salton Sea as being an impact of the Proposed Project. As part of the Environmental Setting, Page 6-11 of the SPEIR states: "Historically, some groundwater migrated out of the Lower aquifer, flowing into the area beneath the Salton Sea. Basin overdraft, however, has reversed the direction of the subsurface flow in some portions of the basin." The deep aquifer flow reversal occurring near the Salton Sea is described as part of the existing conditions, caused by existing overdraft. It is not an impact of either the 2002 WMP or the current WMP Update. The flow reversal is limited to a small portion of the East Valley near the Salton Sea and does not affect the West Valley. Again, the District does not "mine" the groundwater basin; as discussed above, the objectives of the WMP and WMP Update are to reduce/eliminate existing and projected overdraft of the basin.

DWR Bulletin 108 (1964) remains the most comprehensive study of basinwide hydrogeologic characteristics to date. CVWD keeps track of the overdraft annually in the Engineers' Report and water levels are measured three times per year to track the rate and location of groundwater level changes. The District also plans to work through the IRWMP process to develop a shared groundwater database with the other four public water agencies in the Valley and other stakeholders who choose to participate. The District encourages the tribes to participate and share their data as well.

The comment letter questions the progress of implementation of WMP elements and the use of developer fees to fund these projects. Since 2002, the District has implemented many elements

of the 2002 WMP, which included water conservation, acquisition of new water supplies, Phase 1 of the Mid-Valley Pipeline and the Martinez Canyon and Thomas E. Levy groundwater replenishment facilities. WMP Update Table 2-2, Status of the 2002 Water Management Plan Implementation, presents the extensive progress made to implement the WMP since 2002. Since 2002, CVWD and DWA have invested more than $240 million in water acquisitions, conservation, construction of new facilities and monitoring to reduce overdraft and manage the basin. The following provides a summary of these major investments by program element:

Program Element	Status	Expenditure Since 2002
Water Conservation – Agriculture, domestic and golf	On-going	$14,500,000
Water Supply Development		
Quantification Settlement Agreement	On-going	$36,000,000
SWP Table A Acquisition	Completed	$88,800,000
Source Substitution		
Mid-Valley Pipeline Phase 1	Completed	$44,700,000
Groundwater Recharge		
Thomas E. Levy Recharge Facility	Completed	$44,400,000
Martinez Canyon Pilot Recharge Facility	Completed	$7,700,000
Surface and Groundwater Monitoring	On-going	$6,800,000
Total Expenditures		$242,900,000

Because of the significant financial and technical resources required to implement these projects, CVWD has not been able to implement them as rapidly as desired. Nevertheless, the District is committed to implementing the WMP Update and its elements over the planning period to achieve the Proposed Project's stated goals and objectives.

The Tribe's comment suggests that developer fees and water rates should be used to fund WMP projects. Since 1978, with the passing of Proposition 13, capital construction costs for new domestic water facilities have been borne by developers through the District's Water System Backup Facilities Charge (WSBFC). The WSBFC was created as a funding mechanism for the construction of backup water facilities. A component of WSBFC, the "Supplemental Water Supply Charge" or SWSC was created as a funding mechanism for the purchase of rights for supplemental water supplies to ensure domestic water availability for new development projects. Typically, developers of new projects will construct the on-site pipelines and deed ownership to the District for future operation and maintenance. The District will subsequently build the necessary off-site "back-up" facilities, such as wells, treatment facilities, booster stations,

reservoirs and large diameter transmission mains, which are funded by the developer through the WSBFC. In addition, the purchase of long-term water supplies needed to provide domestic water to a new project is also funded through the SWSC component of the WSBFC. This component is based on the District's inflation-adjusted cost of acquiring new imported water supplies and considers the expected reliability of those supplies. The WSBFC is assessed on all new development and redevelopment projects within the District's service area. A similar charge generates capital funds for construction of new wastewater collection and treatment facilities required to support new development.

The use of developer fees is restricted by the 1987 Mitigation Fee Act (Government Code §§ 66000-66025). This act requires public agencies to: 1) establish a nexus between a development project and the public improvement to be financed by the fee, 2) segregate the fee revenue to avoid comingling of capital fees and general funds, 3) make findings regarding the on-going need for any fees not expended or committed within five years of collection, and 4) refund any fees for which the above findings cannot be made. CVWD must apply any developer fees whether for water acquisition or construction of water, sewer or flood control facilities to the appropriate fund and cannot use those funds for any other purpose. CVWD has used a portion of the developer fees for the purchase of additional SWP Table A Amounts. However, other WMP projects such as the Mid-Valley Pipeline and the Thomas E. Levy Recharge Facility must be funded by the District's Reserves. The cost of these projects is recovered over time through water sales to the project customer or through the District's RAC. With regard to the use of water rates to fund WMP programs, California Proposition 218 (passed in 1996) restricts the District from establishing water rates that do not reflect the cost of service. In addition, Proposition 218 requires that any proposed increase in water rates be subject to public vote. CVWD expects to implement new water conservation programs in the future and the cost of those programs would be funded by water rates when those programs are implemented. However, the District is not able to arbitrarily increase water rates simply to encourage water conservation.

The District's record demonstrates that it has made significant strides in a number of areas with a definite and realistic goal of overcoming overdraft, both of which are beneficial effects. The District respectfully disagrees with the Tribe's comment and believes that the SPEIR adequately addresses these issues. The District maintains that implementation of the WMP Update will have beneficial effects on the Coachella Valley.

4-3 "C. The Tribe believes that overdrafting the aquifer IS a growth inducing impact and that CVWD has a direct impact over future development in the Coachella Valley."

The District respectfully disagrees that overdrafting the aquifer is growth inducing. On the contrary, overdrafting the aquifer is ultimately a growth-limiting effect. In addition, ongoing "mining" of the aquifer is not what is proposed, since the principal focus of the WMP is to

overcome overdraft by replacing water that is withdrawn or by reducing withdrawal. The WMP is by nature growth-accommodating, rather than growth-inducing, since approval of growth in the Coachella Valley is under the authority of Riverside County and the Valley cities. CVWD does not have direct control over future development. The District expects that development will continue to be approved by these agencies and will occur. Should growth occur at a different pace than projected in the WMP Update and SPEIR, the Plan has the flexibility to adapt to those changing conditions while still meeting the objective of water supply sustainability. The District would only pump that amount of water that is actually needed at one time, and hence District groundwater production is governed by growth that is directed by other forces and in fact already exists at the time water is pumped.

The District respectfully disagrees that the WMP contains "vague, long-term ideas." Specifically defined elements of the WMP include conservation (which is ongoing, including the passing of a Landscape Ordinance and implementation of tiered water budget-based domestic water rates), desalination of drain water (for which the District has completed a pilot project), ongoing implementation of water recycling, specifically identified recharge projects, and past and ongoing specific water transfers, etc. (see SPEIR Section 3 Project Description). The WMP Update is a 35-year plan, which must be evaluated programmatically, as allowed and encouraged under CEQA for long-term areawide plans. Additional CEQA compliance will be prepared, and will tier off the WMP Update SPEIR, as sites for individual plan elements are identified. The WMP Update and SPEIR present a short term and a long-term implementation plan with a schedule for completion of the Plan elements (SPEIR Table 3-3 and pages 3-33 and 3-34). The Plan will be updated periodically as the environment or the Plan change.

The Tribe questions the degree of water conservation achieved and proposed in the WMP Update. The degree of conservation proposed in the WMP Update is based on meeting the statewide "20 by 2020" requirements for existing customers and to implement the requirements of the state 2010 CALGREEN Building Code and the District's Landscape Ordinance for new development as a minimum. In addition, CVWD would continue to invest in conservation measures to achieve greater savings than the state-mandated minimums. Based on analyses performed for the WMP Update, CVWD estimates that per capita water use in 2045 will be nearly 40 percent less than current usage levels (see WMP Update, pg 6-7). The acceptable degree of conservation may change in the future; the Plan is adaptable to changing conditions. For example, recent large developments (e.g. Travertine Point and Kohl Ranch), when completed, will more than meet current state "20 by 2020" conservation goals. The District believes that the degree of conservation proposed, implemented together with the other elements of the WMP Update, presents a long term sustainable plan (see SPEIR section 3.1.5.1).

While additional conservation could theoretically be implemented that would further reduce water demands, such conservation would require more fundamental changes in the culture and

economy of the Coachella Valley. Whether additional conservation could potentially avoid all water importation cannot be determined at this time, and would depend on how conservation is implemented in all sectors and by all users. Should CVWD and DWA not be able to obtain additional supplies to meet demands, a decision may need to be made regarding future growth in the Valley.

Therefore, the District is working, through implementation of the 2002 WMP and the 2010 WMP Update, to accommodate growth projected by others and to manage responsibly the water resources in the Coachella Valley.

4-4 "D. The Tribe is concerned with how the document characterizes the reduction in groundwater quality as a potentially significant impact but offers no feasible solution and notes that a Statement of Overriding Considerations will likely be adopted by CVWD"

With regard to impacts on the Tribe's water rights, please see the discussion under Response to Comment 4-1, *supra*.

The SPEIR does conclude that the 2010 WMP Update would result in a significant impact with regard to water quality related to Indian Trust Assets, due to increased groundwater salinity from the water to be recharged under the 2010 WMP Update. The impetus for this significance conclusion was the fact that salinity would increase over existing conditions; however, it should be noted that the levels predicted under the 2010 WMP Update still meet health-based water quality standards and thus are available for beneficial use by the Tribe and for all other users in the Coachella Valley.

The letter goes on to state that "The financial cost of new facilities to treat poor quality Colorado River water is an important part of a rational, long-term solution but should not be used to justify a Statement of Overriding Considerations under CEQA." The District refers to State CEQA Guidelines Section 15093 Statement of Overriding Considerations, which requires the CEQA lead agency to balance economic, legal, social, technological and other benefits against unavoidable environmental risks in considering whether to approve a project. "If the specific economic, legal, social, technological or other benefits, including region-wide or statewide environmental benefits, of a proposed project outweigh the unavoidable adverse environmental effect, the adverse environmental effects may be considered 'acceptable.' "

The relevance of the letter's reference to page 5-24 is not clear. The referenced statement is a CEQA-required significance criterion that is used to determine whether a significant impact would occur relative to changes in Coachella Canal flows and has no bearing on groundwater quality.

The commenter's statement that the infeasibility of treating Colorado River water is used to justify the Statement of Overriding Considerations is not correct. Infeasibility does not play a role in justifying the approval of a project in spite of its significant and unavoidable impacts; rather, it is the project's benefits that are balanced against its significant and unavoidable impacts when a lead agency adopts a Statement of Overriding Considerations. The concept of mitigation or alternatives to the project being "infeasible" goes towards establishing that a significant impact of the project is in fact "unavoidable" (in other words, there is not sufficient feasible mitigation available to reduce the impact to less than significant). Only when this is established is the weighing of benefits against significant and unavoidable impacts in a Statement of Overriding Considerations necessary.

The commenter states that it is concerned that various means of avoiding the groundwater quality impact discussed above were not "adequately studied so as to rule out their feasibility," and specifically identifies the use of a new aqueduct to directly provide SWP water to the District, the construction of desalination facilities to treat canal water, and the "dual use" of the Colorado River Aqueduct to bring SWP water to the District. This is not correct. As discussed in SPEIR Section 6.5.4, the District investigated but found no financially feasible solutions to the salinity issue at this time. Section 10 of the SPEIR evaluates alternatives considered to reduce salinity impacts of recharge: the SWP Extension (Section 10.4.1) and Canal water desalination (10.4.2). These alternatives are revisited below.

SWP Extension to the Coachella Valley

The first alternative evaluated was construction of the SWP Extension. CVWD, DWA, Metropolitan, San Gorgonio Pass Water Agency and Mojave Water Agency commissioned a feasibility study of extending the SWP to the Coachella Valley in 2006 (GEI, *et al*., 2011). The SWP Extension feasibility study initially evaluated four potential conveyance alignments: 1) a Lucerne Valley alignment originating on the East Branch of the California Aqueduct near Hesperia and running through Yucca Valley, 2) a North Pass alignment originating at the SWP Devil Canyon Afterbay in San Bernardino and paralleling Interstate 10, 3) a South Pass alignment originating at Lake Perris and paralleling State Route 60 and Interstate 10, and 4) a San Jacinto alignment originating at Lake Perris and tunneling through the San Jacinto Mountains. Following completion of the initial evaluation in 2007, two potential alignments were selected for more detailed evaluation — a 90-mile-long Lucerne Valley alignment and a 40-mile-long Modified North Pass alignment that utilized Metropolitan's Inland Feeder. For each alignment, two different project sizes were considered: a small project entailing delivery capacity for CVWD and DWA only with water delivery over 11 months per year and a large project including capacity for CVWD, DWA and other contractors along the alignment with water delivery over 9 months per year. The alignments were evaluated equally and neither alignment was selected as the proposed project.

Environmental constraints for both alignments were found to be numerous and substantive (for example, it is not certain that a Morongo Canyon alignment reach would be permitted, even if tunneled). A full EIR and NEPA EIS will be required for the project and neither process has commenced; in addition, a federal lead agency has not been identified.

The total capital cost of the Lucerne Valley project was estimated to range from $900 million to $1.2 billion for the small project and $1.1 to $1.4 billion for the large project in 2009 dollars, with a $7.5 million per year (2009 dollars) operation and maintenance (O&M) cost. The capital cost allocation to CVWD and DWA was estimated at $1.06 billion for the small project and $1.2 billion for the large project using the mid-point of the capital cost estimates. Annual O&M costs including expected power generation revenue ranged from -$0.4 million for the small project to $7.5 million for the large project. For the Modified North Pass alignment, the estimated total capital cost in 2009 dollars was $774 to $981 million for the small project and $881 million to $1.13 billion for the large project. Annual O&M costs of $26.2 million for the small project and $19.1 million for the large project. The CVWD and DWA construction cost share of the Modified North Pass alignment was estimated at $878 million for the small project and $897 million for the large project using the mid-point of the capital cost estimates.

Cost allocation is frequently performed on the basis of proportionate capacity in each pipeline reach. For the Lucerne Valley alignment, the cost allocated to CVWD and DWA was estimated to range from $77 million to $89 million per year. For the Modified North Pass alignment, the cost allocated to CVWD and DWA was estimated to range from $77 million to $87 million per year. CVWD's share of this cost would range from $55 million to $64 million per year, while DWA's share would be 22 million to $26 million per year.

To put these costs in perspective, for 2010, CVWD's total annual income was $208 million of which $79.2 million was derived from water sales and $18.2 million from replenishment assessment income. Property taxes generated $64.1 million. In comparison, DWA's total annual income was about $50 million. Since the cost of implementing the SWP Extension could only be placed on water users or property tax payers, the project could require some combination of a 70-80 percent water rate increase, a 100-130 percent property tax increase or a 300-350 percent replenishment assessment increase. It is likely that similar increases would be experienced by DWA. Therefore, the cost to implement either SWP Extension alignment would pose a substantial financial burden on CVWD, DWA and their customers. Given the current economic conditions of the Coachella Valley, it seems unlikely that the citizens would support such a substantial investment at this time. For example, a typical golf course using 1,000 AFY of water would see its replenishment assessment increase from about $112,000 a year to $432,000 a year.

The viability of the Modified North Pass alignment also depends on Metropolitan allowing use and purchase of available Inland Feeder capacity; no commitment has been made to date. A number of additional issues affecting the project feasibility remain unresolved.

- Reliability of the SWP conservation facilities is an unresolved constraint to the SWP Extension project. SWP Conservation Facilities are basically those facilities that generate the yield of the SWP, and include Lake Oroville, San Luis Reservoir, and a portion of the California Aqueduct from the Delta to San Luis Reservoir. Prior to construction of improvements to the East Branch and the SWP Extension, the reliability of the SWP conservation facilities will need to have been improved to a level similar to that project in the 2005 SWP Delivery Reliability report to justify such an investment.
- Capacity in the California Aqueduct north of the bifurcation into the East Branch and West Branch is a potential constraint to the SWP Extension.
- The Pearblossom Pumping Plant on the East Branch of the California Aqueduct has less capacity than required to supply the SWP Extension project along with other contractors' needs.
- The capacity of the Inland Feeder may not be adequate to make deliveries to the Modified North Pass Alignment as well as meet Metropolitan's needs. Further analysis is needed to determine the anticipated available capacity in future years.
- The governance structure for the design, construction and operation of the project has not yet been determined. Such a structure is necessary to secure bond funding for the project.
- Feasibility will also be affected by the results of future stakeholder and public agency outreach.
- Participation of the project partners will depend on whether their individual needs for supplemental water can be met by the proposed project, which depends on which alignment ultimately is selected.

The SWP Extension feasibility report is in final draft form and is expected to remain in that form for the foreseeable future. The SWP Extension project is currently on hold pending resolution of the feasibility constraints identified above, resolution of the Bay Delta Conservation Plan and the potentially participating agencies' ability to finance the project. Based on the significant cost impact of the project, the SWP Extension is considered financially infeasible at this time. In SPEIR Section 3.3, it is identified as an element for possible inclusion in future updates to the WMP.

Desalination of Colorado River Water

The second alternative, desalination of Canal or SWP Exchange water prior to recharge, was evaluated in the WMP Update and found to have potentially significant impacts in addition to impacts of the WMP Update, particularly potential biological and cultural resources effects,

energy demand, greenhouse gas emissions and brine disposal by methods to be determined. In addition, while the treatment process is technically feasible, the feasibility of brine disposal methods has not been sufficiently evaluated and presents a potentially significant environmental and permitting constraint. Moreover, the issue is not just willingness to spend money. No alternative will be built if the lead agency and the rate payers cannot afford it, if it is economically infeasible and if it has unacceptable impacts on the service area.

CVWD performed a reconnaissance-level evaluation of desalinating Canal water prior to recharge at the Whitewater facility and at the three East Valley facilities – Levy, Martinez and Indio. To bracket the desalination options at Whitewater, two options were considered, one where the capacity is limited to the average recharge (90,000 AFY capacity) with any additional water bypassed without treatment and one where all recharge water is desalinated (180,000 AFY capacity). Both of these options assume location of a treatment facility near Metropolitan's CRA to minimize the impact of TDS on the groundwater basin between the CRA and recharge facility. The East Valley facilities were assumed to operate at a continuous recharge rate as indicated in the WMP Update. Using costs from a CVWD-funded investigation of Colorado River water treatment (Malcolm Pirnie, 2008a), the cost of treatment was estimated as presented in the Table below to achieve: 1) a 500 mg/L TDS target based on the California recommended secondary drinking water standard for TDS and 2) a 250 mg/L TDS target based on the general water quality of the Lower aquifer. The costs of desalination treatment are also compared with the cost of the SWP Extension and several combination options involving both the SWP Extension and treatment of recharge water in the East Valley.

Previous estimates of treatment costs have excluded the cost of brine disposal. Brine flows from recharge water desalination are estimated to range from 7.4 mgd to 55 mgd, depending on the TDS target and the treatment capacity. Although the Malcolm-Pirnie studies evaluated a wide variety of potential brine disposal options, discharge to wetlands near the Salton Sea showed the most promised. Previous studies have also did not include the cost to obtain replacement water to offset the amount of water lost to brine disposal. This evaluation includes these additional costs.

This evaluation shows that the cost to construct treatment at Whitewater could range from $68 million for the smaller facility with a 500 mg/L target to $508 million for the larger facility with a 250 mg/L target. These costs are exclusive of brine conveyance and disposal. Total annual costs including amortized capital, O&M and replacement water costs would range from $15 million to $71.4 million per year depending on the TDS target and the design capacity.

In addition, CVWD evaluated the cost to treat Colorado River water prior to recharge at the Thomas E. Levy Groundwater Replenishment Facility near La Quinta and the proposed recharge facilities at Martinez and Indio. As with the Whitewater options, two TDS targets were

considered: 500 mg/L and 250 mg/L. The capital cost (also exclusive of brine conveyance and disposal) would be $117 million to achieve the 500 mg/L target, while the capital cost to achieve the 250 mg/L target would be $237 million. Amortized capital, O&M and replacement water costs are estimated to be $22.6 million and $47.9 million per year, respectively, for the two water quality targets.

To estimate an order of magnitude cost for brine conveyance and disposal, it is assumed that a brine line could be constructed roughly parallel to the Whitewater River channel from Whitewater to the Salton Sea, with branches to collect brine from Indio and Martinez as shown on the attached figure. Such a brine line system would be more than 66 miles long with diameters ranging from 12 to 30 inches for the smallest option and from 12 to 54 inches for the largest option. Based on current pipeline installation costs (assuming use of high density polyethylene pipe-HDPE), the brine line construction could add $158 million to more than $288 million to the capital cost of a recharge water desalination program. Assuming 1 percent per year for O&M, the annual cost of the brine line would be $1.4 million to $2.2 million per year. The capital cost of a separate brine line to serve East Valley recharge desalters would add $67 million to $79 million to the program cost. Whether discharge of brine to the Salton Sea via wetlands would be permitted is uncertain at this time. Previous evaluations of lined evaporation ponds and zero liquid discharge approaches show comparable or higher costs than those presented here (Malcolm Pirnie, 2008b).

Comparison of Desalination and SWP Importation Options

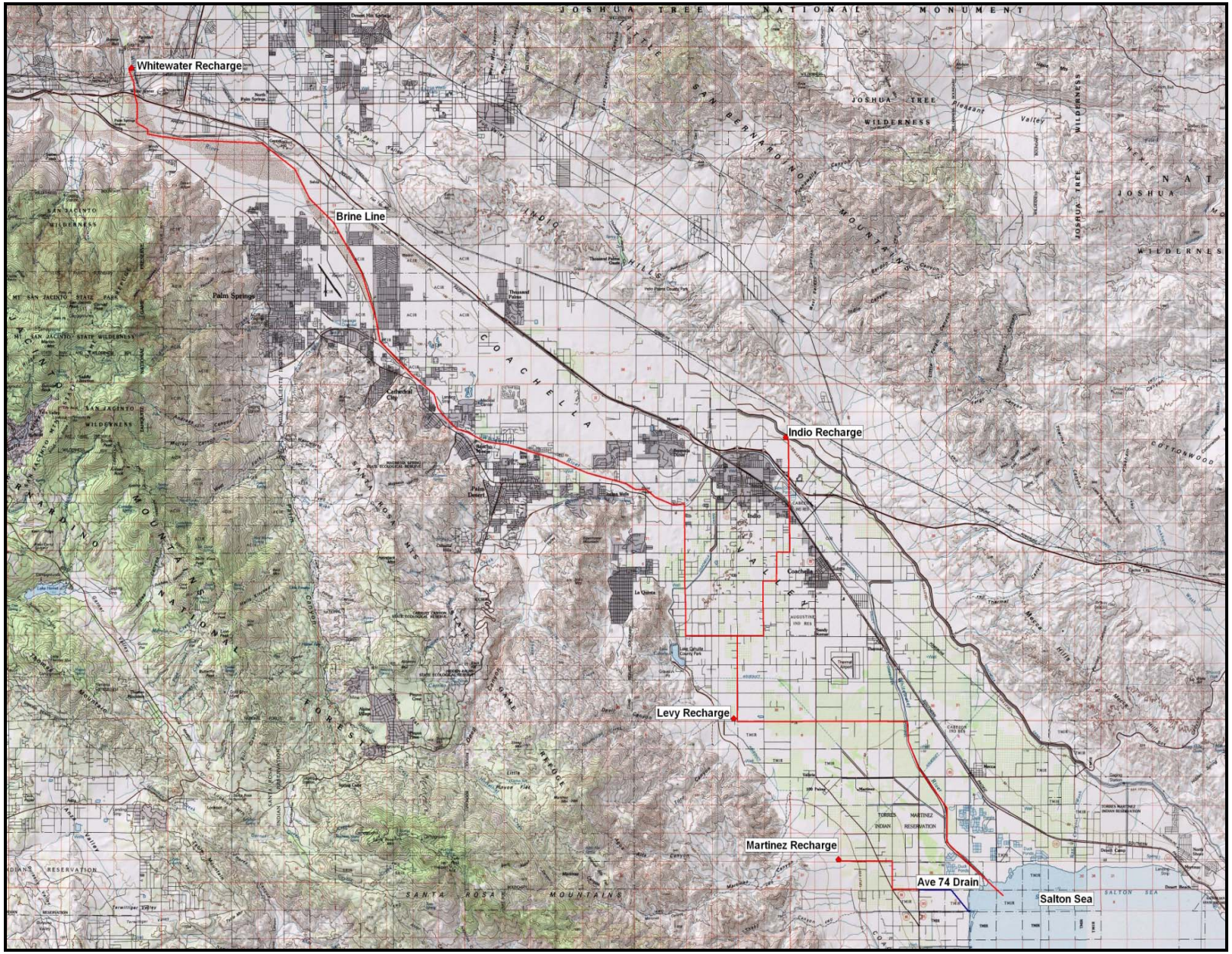
Location	TDS Target-mg/L	Avg Annual Delivery-AFY	Plant Capacity-mgd	Capital Cost	O&M Cost-$/yr	Total Annual Cost $/yr	Average Groundwater Production-AFY	Average RAC Impact - $/AF	Existing Avg RAC $/AF	Percent RAC Increase
Desalination-1										
Whitewater River	500	85,000	22.6	$ 68,000,000	$ 8,100,000	$ 15,000,000				
Levy	500	40,000	20.3	$ 62,000,000	$ 6,100,000	$ 12,200,000				
Martinez	500	20,000	10.1	$ 35,000,000	$ 3,300,000	$ 6,700,000				
Indio	500	10,000	5.1	$ 20,000,000	$ 1,800,000	$ 3,700,000				
Brine System				$ 158,000,000	$ 1,600,000	$ 13,300,000				
Total				$ 343,000,000	$ 20,900,000	$ 50,900,000	257,000	$198	$90	220%
Desalination-2										
Whitewater River	500	100,000	173.2	$ 376,000,000	$ 7,800,000	$ 37,500,000				
Levy	500	40,000	20.3	$ 62,000,000	$ 6,100,000	$ 12,200,000				
Martinez	500	20,000	10.1	$ 35,000,000	$ 3,300,000	$ 6,700,000				
Indio	500	10,000	5.1	$ 20,000,000	$ 1,800,000	$ 3,700,000				
Brine System				$ 197,000,000	$ 2,000,000	$ 16,500,000				
Total				$ 690,000,000	$ 21,000,000	$ 76,600,000	257,000	$298	$90	332%
Desalination-3										
Whitewater River	250	85,000	62.9	$ 192,000,000	$ 26,100,000	$ 45,400,000				
Levy	250	40,000	39.3	$ 128,000,000	$ 14,200,000	$ 26,300,000				
Martinez	250	20,000	19.7	$ 70,000,000	$ 7,500,000	$ 14,000,000				
Indio	250	10,000	9.8	$ 39,000,000	$ 4,000,000	$ 7,600,000				
Brine System				$ 230,000,000	$ 2,200,000	$ 19,200,000				
Total				$ 659,000,000	$ 54,000,000	$ 112,500,000	257,000	$438	$90	487%
Desalination-4										
Whitewater River	250	100,000	194.6	$ 508,000,000	$ 28,100,000	$ 71,400,000				
Levy	250	40,000	39.3	$ 128,000,000	$ 14,200,000	$ 26,300,000				
Martinez	250	20,000	19.7	$ 70,000,000	$ 7,500,000	$ 14,000,000				
Indio	250	10,000	9.8	$ 39,000,000	$ 4,000,000	$ 7,600,000				
Brine System				$ 288,000,000	$ 2,700,000	$ 23,800,000				
Total				$1,033,000,000	$ 56,500,000	$ 143,100,000	257,000	$557	$90	620%
SWP Extension Only										
SWP Extension	330	100,000		$ 817,000,000	$ 12,000,000	$ 71,300,000	165,000			
Total				$ 817,000,000	$ 12,000,000	$ 71,300,000	165,000	$432	$112	386%

Comparison of Desalination and SWP Importation Options (continued)

Location	TDS Target-mg/L	Avg Annual Delivery-AFY	Plant Capacity-mgd	Capital Cost	O&M Cost-$/yr	Total Annual Cost $/yr	Average Groundwater Production AFY	Average RAC Impact - $/AF	Existing Avg RAC $/AF	Percent RAC Increase
SWP Extension and Desalination-1										
SWP Extension	330	100,000		$ 817,000,000	$ 12,000,000	$ 71,300,000				
Levy	500	40,000	20.3	$ 62,000,000	$ 6,100,000	$ 12,200,000				
Martinez	500	20,000	10.1	$ 35,000,000	$ 3,300,000	$ 6,700,000				
Indio	500	10,000	5.1	$ 20,000,000	$ 1,800,000	$ 3,700,000				
Brine System				$ 67,000,000	$ 800,000	$ 5,900,000				
Total				$1,001,000,000	$ 24,000,000	$ 99,800,000	257,000	$388	$90	432%
SWP Extension and Desalination-2										
SWP Extension	330	100,000		$ 817,000,000	$ 12,000,000	$ 71,300,000				
Levy	250	40,000	39.3	$ 128,000,000	$ 14,200,000	$ 26,300,000				
Martinez	250	20,000	19.7	$ 70,000,000	$ 7,500,000	$ 14,000,000				
Indio	250	10,000	9.8	$ 39,000,000	$ 4,000,000	$ 7,600,000				
Brine System				$ 79,000,000	$ 800,000	$ 6,700,000				
Total				$1,133,000,000	$ 38,500,000	$ 125,900,000	257,000	$490	$90	545%

Basis of Estimates:

- Size of desalination facilities based on average recharge water deliveries with a 20% peaking factor. Capacity based on mass-balance of treated and bypassed water to achieve desired TDS target. Average CRA TDS = 640 mg/L, average Canal water TDS = 767 mg/L per Reclamation projections (Reclamation, 2007).
- Capital and operations and maintenance (O&M) costs of desalination based on cost data from Malcolm-Pirnie, 2008a. Updated to 2010 cost levels using ENR construction cost index and sized based on treatment capacity
- SWP Extension costs based on lowest cost option – Modified North Pass Alignment, Small Project serving CVWD and DWA only as presented in Final Draft SWP Extension Project Development Report (GEI, et al., 2011). Assumes 93 percent of the cost is allocated to Whitewater River Subbasin and 7 percent to Mission Creek Subbasin.
- Brine system assumes construction of HDPE pipeline to convey brine flows by gravity from treatment sites located near each recharge facility to Salton Sea. Whitewater facility is assumed to be located near CRA turnout. Brine from Martinez facility is discharged to Avenue 74 drain.
- Capital costs are amortized at 6 percent for 30 yrs.
- Pipeline O&M costs are assumed to be 1 percent of construction costs.
- Total annual costs consist of amortized capital, O&M and replacement water for brine discharge at $300/AF.
- Average groundwater production is for period 2021 through 2045 based on WMP Update unpublished data files for Proposed Project. For the SWP Extension Only option, the average production is for the West Valley only.
- Average Replenishment Assessment Charge (RAC) Impact assumes all costs of SWP importation or desalination are recovered through increased RAC charges on pumping.
- Existing RAC charge is the production-weighted average of the 2011-12 RAC adopted by DWA for the West Valley ($82/AF); CVWD for the West Valley ($108/AF) and CVWD for the East Valley $31/AF.



Schematic of Potential Coachella Valley Brine System

Based on the foregoing analysis, the capital cost to treat Colorado River water prior to recharge including brine disposal could range from $343 million to achieve a 500 mg/L target while treating most but not all of the water at Whitewater to about $1.03 billion to achieve a 250 mg/L target treating all recharge water. The economic impact of implementing a desalination program is significant as shown in the table above. The smallest desalination program would more than triple the average replenishment assessment in the Valley, while the largest program would increase the average replenishment assessment by a factor more than seven times current charge. While the effect of such an increase on the customers of large water purveyors such as DWA and CVWD would be somewhat dampened by other costs, the impact on smaller producers like golf courses and farmers would be substantial and would likely result in a severe economic impacts. Therefore, in light of the high cost and the uncertainty associated with brine disposal permitting, desalination of recharge water is considered to be financially infeasible at the present time.

In addition, Section 8.1.4.2 of the 2010 WMP Update states that "an evaluation of the potential effects of Colorado River recharge will be conducted in conjunction with the salt/nutrient plan" to be submitted to the State Water Resources Control Board by 2014 to meet SWRCB Recycled Water Policy requirements. The Tribe, as well as CVWD, DWA, other Valley water agencies and stakeholders, will have an opportunity to participate in the preparation of that basin-wide plan on how salinity and nutrients should be managed and monitored.

Dual Use of Colorado River Aqueduct

The comment letter stated that CVWD had ignored a potential third alternative for delivering SWP water to the Valley and referred to its letter commenting on the 2002 PEIR. In that earlier letter, the Tribe put forth a third approach—the use of the Metropolitan Colorado River Aqueduct (CRA) to bring SWP water to the Coachella Valley. The 2002 comment letter and District's response appear in the 2002 final PEIR Section 13 – Comments and Responses in the Final PEIR and are attached. At the time the 2002 PEIR was being finalized, Metropolitan was approached with this suggestion and concluded that reversing the flow in the CRA was not feasible, given its own aqueduct operations and maintenance requirements and the fact that the aqueduct was designed for gravity, non-pressurized flow to the west.

CVWD has revisited this approach for this SPEIR and Metropolitan was contacted again as part of the responses to comments on the Draft SPEIR (Hasencamp, *et al*., pers. comm., 2011). The following presents an update to the 2002 response regarding dual use of the CRA to delivery SWP water to the Coachella Valley.

The commenter suggested dual use of the Metropolitan's Colorado River Aqueduct (CRA) for conveying SWP water to the Coachella Valley. Under this concept, a pipeline and pumping station would be constructed to convey SWP water from Lake Perris to the CRA near the western portal of the San Jacinto Tunnel. During periods when the CRA is not in use, SWP water would be pumped into the CRA to flow in the reverse direction to the Coachella Valley and delivered at the Whitewater turnout.

Evaluation of this option is based on several considerations. Based on discussion with Metropolitan engineers, the CRA is always in use for conveying Colorado River water to Southern California (except for short periods when maintenance is performed). The design flowrate of the CRA is 1,800 cubic feet per second (cfs) (about 1.3 million AFY) toward the west and typical full flow operation is at 1,605 cfs (Hasencamp, *et al*., pers. comm., 2011). Metropolitan is currently delivering approximately 1.25 million AFY of Colorado River water. Although Metropolitan's current firm deliveries from the Colorado River are about 660,000 AFY, Metropolitan is developing and implementing plans to maintain as close to full deliveries as possible. These projects include the water transfers under the QSA, Palo Verde land fallowing, several interstate and desert storage projects, recovery of Water stored in Lake Mead and use of surplus Colorado River water when available. During 2010, Metropolitan delivered 1,090,000 AFY of Colorado River water to its service area. Metropolitan's 2010 Regional Urban Water Management Plan indicates full utilization of the CRA for the next 25 years (Metropolitan, 2010). Although CRA deliveries to Metropolitan have been reduced in 2011 due to high SWP water availability, Metropolitan has continued to operate the aqueduct on a continuous basis except for maintenance shutdowns (Hasencamp, *et al*., pers. comm., 2011).

CVWD and DWA currently have a combined SWP Table A Amounts of 194,100 AFY. At DWR's current estimated SWP reliability of 60 percent of Table A, CVWD and DWA would expect to receive 116,460 AFY on average. To deliver an average annual SWP flow of 116,460 AFY (194,100 AFY maximum annual) to CVWD and DWA, several factors must be considered including the SWP contractual limitations, conveyance from the SWP to the CRA, ability to move water through the CRA and spreading ground capacity.

The SWP contract limits peak month flow to 1.32 times the average annual flow. This effectively limits CVWD's and DWA's maximum delivery from the SWP to 354 cfs (194,100 AFY × 1.32 ÷ 724 AFY/cfs). As shown in the table below, CVWD and DWA would require 166 days of CRA operation at this maximum contractual flowrate to receive their average annual deliveries. This would restrict Metropolitan's use of its own aqueduct to 199 days per year and limit deliveries to 710,000 AFY (57 percent of current). Delivery of the full Table A allocation to CVWD and DWA would require 277

days of operation, limiting Metropolitan to 89 days per year or 317,000 AFY (25 percent of current). Clearly, this approach would not be acceptable to Metropolitan as it would not provide sufficient time to deliver Metropolitan's Colorado River water needs.

Water Delivery Constraints based on SWP Contract

	CVWD and DWA Average SWP Delivery	CVWD and DWA Maximum SWP Delivery
CVWD and DWA SWP Capacity – cfs	354	354
CVWD and DWA Annual SWP Supply – AFY	116,460	194,100
Time to Deliver Average SWP supply – days per year	166	277
Remaining Time for Metropolitan Operation – days per year	199	89
Metropolitan Delivery design flow – cfs	1,800	1,800
Metropolitan Annual Delivery -AFY	710,000	317,000

If the SWP conveyance limitation could be waived and CVWD and DWA could deliver their full Table A Amount at the CRA maximum design capacity (1,800 cfs), 55 days of reverse operation would be required. This would limit Metropolitan's operation to 310 days per year and a maximum flow of 1,107,000 AFY, 89 percent of its intended operation.

The nearest locations to deliver SWP water to the CRA are from the SWP Santa Ana Valley Pipeline or from Metropolitan's Inland Feeder. The SWP Santa Ana Valley Pipeline (SAVP) was designed to convey 444 cfs from the Devil Canyon Afterbay in San Bernardino to Lake Perris. Water from the SAVP would be required to convey water to a pumping station that would lift water to the CRA. CVWD and DWA acquired 138 cfs of capacity rights in the Santa Ana Valley Pipeline under the terms of the 2003 Exchange Agreement with Metropolitan that transferred 100,000 AFY of SWP Table A Amount to CVWD and DWA. Metropolitan retained the remaining capacity in this pipeline. Thus, CVWD and DWA do not have sufficient capacity in the Santa Ana Valley Pipeline to meet their conveyance needs. In addition, the SAVP provides the sole source of water the Metropolitan's Mills Water Treatment Plant in Riverside, so reduction in SAVP water deliveries to supply CVWD and DWA would not be acceptable. Consequently, an additional conveyance facility must be considered.

Metropolitan completed construction of the Inland Feeder, which has a capacity of about 1,000 cfs. The Inland Feeder conveys SWP water from Devil Canyon Afterbay to Diamond Valley Lake and allows Metropolitan to make full use of its capacity in the East Branch of the California Aqueduct. CVWD and DWA do not have capacity rights in Inland Feeder. Metropolitan conducted an Inland Feeder capacity availability study for

the SWP Extension to the Coachella Valley feasibility study. The capacity investigation indicated that unused Inland Feeder capacity may be available about 55 percent of the time, but the available capacity would exceed 300 cfs only 22 percent of the time. The average available capacity is estimated to be 172 cfs, which would deliver 124,500 AFY if available for an entire year. While this may be sufficient to deliver CVWD's and DWA's average SWP supply, it is unclear whether the timing of capacity availability would coincide with SWP water availability and whether there would be sufficient capacity when needed to deliver CVWD's and DWA's full Table A allocation. Even more significant is whether Metropolitan would even consider allowing CVWD and DWA to use that capacity given its own needs.

The next potential capacity limitation is the Whitewater Spreading Facility. This facility has a maximum recharge capacity of 300,000 acre-ft in a single year (based on operational experience in the mid-1980s) or a continuous flowrate of 415 cfs. This flowrate does not include any allowance for recharge basin maintenance. For short term periods, the spreading facility has been able to recharge up to 700 cfs, with flows averaging 560 cfs for four months. The following table summarizes water deliveries at Whitewater for the maximum annual flow and short-term sustained flow conditions and estimates the number of days remaining and the annual deliveries for Metropolitan. All of these delivery scenarios result in significant reductions to Metropolitan's CRA deliveries.

Water Delivery Constraints Based on Whitewater Spreading Facility

	CVWD and DWA Average SWP Delivery		CVWD and DWA Maximum SWP Delivery	
	Maximum Annual Flow	Short-term, sustained Flow	Maximum Annual Flow	Short-term, sustained Flow
Whitewater Spreading Facility Capacity – cfs	415	560	415	560
CVWD and DWA Annual SWP Supply – AFY	116,460	116,460	194,100	194,100
Days to Deliver Average SWP supply	142	105	235	175
Remaining Days for Metropolitan Operation	223	260	130	190
Metropolitan Delivery design flow – cfs	1,800	1,800	1,800	1,800
Metropolitan Annual Delivery -AFY	796,100	928,200	464,100	678,300

While expansion of the recharge basins may be possible, historical operation in the mid-1980s and for 2010-11 indicated that water levels would rise close to the ground surface at these high recharge rates. If the water levels reach the ground surface, recharge rates

would decline significantly, reducing the recharge capacity. Thus, expansion may be limited by hydrogeologic constraints. In addition, environmental impacts from construction of new recharge basins, such as loss of dune sand replenishment for fringe-toed lizard habitat, may be difficult to resolve. All land surrounding the recharge basins has been designated as a conservation area by the Coachella Valley Multi-Species Habitat Conservation Plan. Expansion of the recharge facilities is not a covered activity, so a major plan amendment would be required to allow and expansion.

Finally, it is uncertain whether the existing CRA pipeline could structurally withstand the added pressure required for reverse flow. The CRA was designed in the 1930s for gravity, unpressurized flow. This means that the CRA was designed with a hydraulic gradeline that closely approximates the ground surface elevation. Little allowance was provided for pressurization. In addition, the San Jacinto Tunnel, which accounts about 14 miles of the distance to the Whitewater turnout, leaks significant amounts of water and may not have the structural integrity to handle the additional pressure (over 100 ft) required to force water to the Coachella Valley. Increased pressure would cause leakage from the tunnel into the surrounding mountains with unknown effects. Since it is the sole source of Colorado River water for the Southern California metropolitan area, shutting down the tunnel for extended periods of time to accomplish structural modifications would present significant operational problems for Metropolitan.

Based upon these considerations, there are significant technical and operation issues associated with this alternative. CVWD discussed this approach with the management of Metropolitan who indicated to CVWD that they would not consider such a proposal (Hasencamp, *et al*., pers. comm., 2011).

Note also, that the Plan seeks to minimize the additional importation of Colorado River water for recharge though increased conservation, maximizing local water use through desalination of drain water and through recycling. The District has already achieved an 18.4 percent reduction in per capita water use through conservation, and the CVWD Landscape Ordinance has reduced allowable landscape irrigation from 1.5 AFY/customer to 0.6 AFY/customer. In addition, the present Plan includes half the recharge at the proposed Martinez Canyon recharge facility planned in 2002. A small recharge facility is proposed in Indio, to be carried out by the city.

Therefore, after consideration of these three approaches, the District has concluded that there is no feasible mitigation for groundwater quality impacts (salinity) at this time.

4-5 "E. CVWD continues to present conflicting information about the feasibility of bringing SWP water to the Valley and continues to mischaracterize the quality of SWP water."

The District does not view the information on SPEIR page 1-41 and Section 6.5.4.1 as contradictory. CVWD and other water agencies conducted a feasibility analysis of bringing SWP water to the Valley is discussed in 4-4 above. A draft report was prepared in early 2011 (GEI, *et al*., 2011).

The Tribe's letter does not explain or provide evidence to support the statement that CVWD mischaracterizes the quality of SWP water. SWP Exchange water quality is discussed in SPEIR Sections 5.3.3.2 and 10.4.1. SWP water quality information presented is from the DWR, operator of the SWP and from Metropolitan Water District's monitoring at Silverwood Lake.

Therefore, the District does not view the information on the feasibility of the SWP extension to be contradictory. The statement concerning SWP quality characterization is noted but is not explained or supported.

4-6 "F. Mitigation Measures"

As above, the District agrees that an expanded monitoring and reporting program, one that also includes data from tribal wells, would be useful for gaining a more complete picture of the Valley water resources; it is part of the WMP Update implementation plan. Monitoring is an important first step toward identifying whether a problem exists, but in and of itself is not mitigation.

The tribes generally do not provide groundwater quality data. The Torres Martinez tribe has reported that they provide data to the state, but the District has not been able to locate it; the Twenty-nine Palms tribe sent some information to EPA STORET on one monitoring well and several surface water sites. The District does not monitor tribal wells. The District therefore assumes that tribal wells are monitored by the individual tribes in keeping with USEPA requirements and that exceedances of applicable water quality standards are reported. The existing mitigation measure does not and cannot require the tribes to connect to local water or wastewater agencies' systems. To date, some Coachella Valley tribes have indicated interest in connecting to existing water distribution systems and sewer systems, however; CVWD currently is working with them and the Indian Health Service to obtain grants and other monies to effect this infrastructure. It should also be remembered that mitigation measure ITA-1 suggests the installation of wellhead treatment facilities in case water quality exceeds primary health-based water quality standards.

Conclusion

As demonstrated in the past five years of WMP Update and SPEIR preparation and through multiple meetings with the Tribe, the District has always been willing to meet with the Tribe and discuss issues of mutual interest. The District agrees that there is much more to be done to manage Coachella Valley water resources and their uses. That is the intent of the 2010 WMP Update, which is a necessary first step and road map for these future actions. CVWD remains interested in coordination with the tribal councils and their staffs on issues of mutual benefit.

Attachment to WMP Update SPEIR Response to Comment No. 4 Agua Caliente Tribe of Cahuilla Indians

2002 Coachella Valley Water Management Plan Program EIR
Comment No. 15 Law Offices of Art Bunce, dated August 8, 2002
Subject: Agua Caliente Band of Cahuilla Indians' Comments for CVWD Water Management Plan – Water Quality Perspectives

2002 PEIR Comment No. 15-21, pages 8 and 9

<u>Option 3 – Dual Use of the Colorado River Aqueduct</u>

We recognize that criticizing a plan is easy but accomplishes little without a constructive alternative. We offer the following additional alternative that we believe may provide an even more cost effective means of bringing high quality SWP water into the Coachella Valley. We have neither the time nor the resources to evaluate this option in the rigorous manner it deserves, and therefore we request that it be thoroughly reviewed by CVWD in response to our comments.

The existing Colorado River Aqueduct crosses the Coachella Valley, bringing water from the Colorado River to Lake Matthews, south of Riverside, California. A pipeline that is an extension of the California Aqueduct System is under construction to carry SWP water to the new Domenigoni (East Side) Reservoir, and crosses the Colorado River Aqueduct in the vicinity of San Jacinto. Option 3 involves using the Colorado River Aqueduct to bring SWP water into the Coachella Valley by temporarily/periodically reversing the flow in the Colorado River Aqueduct between San Jacinto and the Whitewater River turnout. This would involve the following:

- Constructing a water transfer facility where the Colorado River Aqueduct and California Aqueduct pipeline cross, including a pumping plant and temporary water storage facility. The purpose of this facility would be to transfer water from the pipeline into the Colorado River Aqueduct, and provide the power needed to pump this water to the Whitewater River outlet of the Aqueduct. The Whitewater River turnout is at about the same elevation as the San Jacinto end of the pipeline, so the power costs should be minimal.

- Since the Aqueduct normally delivers water westward, operation of the Option would be intermittent, when the Aqueduct is not otherwise in use. Intermittent use would require higher flow rates than continuous use, and therefore the structure at the Whitewater River turnout of the Aqueduct would probably need to be enlarged to handle the increased rate of flow. The spreading grounds may also need to be enlarged.

- A pipeline to convey this water to the Low Valley should also be scoped–out.

The advantages of this option include:

1. Delivery of high quality SWP water to the Coachella Valley.

2. No new pipelines are necessary to convey the water into the Coachella Valley (though a new pipeline from Whitewater to the Lower Vale may be a cost-effective means of conveying high quality water to the Lower Valley).

Disadvantages of this optic include;

1. Some re-engineering of the Aqueduct and new pipeline would be needed.

2. The flow at the Whitewater River turnout would be increased and intermittent, and may require enlargement of these structures.

We do not have the means of evaluating the costs of this Option, but we believe it could be the least expensive and least disruptive of the options. This option should be rigorously evaluated.

Final PEIR Response to Comment 15-21

15-21 The commenter provided an interesting option for conveying SWP water to the Coachella Valley by dual use of the Metropolitan's Colorado River Aqueduct (CRA). Under this concept, a pipeline and pumping station would be constructed to convey SWP water from Lake Perris to the CRA near the western portal of the San Jacinto Tunnel. During periods when the CRA is not in use, SWP water would be pumped into the CRA to flow in the reverse direction to the Coachella Valley.

Evaluation of thi8s option is based on several considerations. The CRA is always in use for conveying Colorado River water to Southern California (except for short periods when maintenance is performed). The design flowrate of the CRA is 1,800 cfs (about 1.3 million acre-ft/yr) toward the west. Metropolitan is currently delivering approximately 1.25 million acre-ft/yr of Colorado River water. Although Metropolitan's current firm deliveries from the Colorado River is about 660,000 acre-ft/yr, Metropolitan is developing and implementing plans to maintain as close to full deliveries as possible. These projects include the water transfers under the QSA, Palo Verde land fallowing, several interstate and desert storage projects and surplus Colorado River water for the next 15 years.

To deliver an average annual SWP flow of 103,000 acre-ft/yr (174,200 acre-feet/yr maximum annual) to CVWD and DWA, several factors must be considered including the SWP contractual limitations and spreading ground capacity. The SWP contract limits peak month flow to 1.32 times the average annual flow. This effectively limits the maximum supply from the SWP to 318 cfs as described in Section I.1. At this maximum contractual flowrate, 164 days of operation would be required to make average annual deliveries. This would restrict Metropolitan's use of its own aqueduct to 201 days per year and limit deliveries of 718,000 acre-ft/yr (57 percent of current). Delivery of the maxi8mum amount of water to CVWD and DWA would limit Metropolitan to 89 days per year or 317,000 acre-ft/yr (25 percent of current). Clearly this approach would not be acceptable to Metropolitan.

If the SWP contractual peaking limitation can be waived, a higher flowrate may be possible. The next capacity limitation is the Whitewater Spreading Facility which has a maximum recharge

capacity of 300,000 acre-ft in a single year (based on operation experience) or a continuous flowrate of 415 cfs. This flowrate does not include any allowance for recharge basin maintenance. Delivery of the average CVWD and DWA SWP recharge water supply at the maximum recharge rate of 415 cfs requires a 126 day operating period. Reversal of flow for this period of time would effectively limit Metropolitans' operations to 239 days per year. This would limit Metropolitan to a maximum annual delivery of 854,000 acre-ft/yr (43 percent of current). While expansion of the recharge basin may be possible, historical operation in the mid-1980s indicated that water levels would rise close to the ground surface at these high rates. Thus expansion may be limited by hydrogeologic constraints. In addition, environmental impacts from construction of new recharge basins, such as loss of dune sand replenishment for fringe-toed lizard habitat, may be difficult to resolve.

The SWP Santa Ana Pipeline was designed to convey 444 cfs from the Devil Canyon Afterbay in San Bernardino to Lake Perris. The capacity of this pipeline is insufficient to meet Metropolitan's needs in Riverside and San Diego counties. Metropolitan is currently constructing the Inland Feeder, which will have a capacity of 1,000 cfs when it is completed in 2007. The Inland Feeder will allow Metropolitan to make full use of its capacity in the East Branch of the California Aqueduct. CVWD and DWA do not have capacity rights in either of these pipelines and obtaining such capacity would be difficult.

Finally, the existing CRA pipeline probably cannot take the added pressure for reverse flow. The CRA was designed in the 1930s for falling hydraulic gradient. This means that the CRA was designed for a hydraulic gradient that closely approximates the ground surface elevation. Little allowance was provided for pressurization. In addition, the San Jacinto Tunnel, which accounts about 14 miles of the distance to the Whitewater turnout leaks significant amounts of water and may not have the structural integrity to handle the additional pressure (over 100 ft) required to force water to the Coachella Valley. Since it is the sole source of Colorado River water for Southern California, shutting down the tunnel for extended periods of time to accomplish structural modifications would present significant operational problems for Metropolitan.

Based upon these considerations, there are significant technical and operation issues associated with this alternative. Discussion of this approach with the management of Metropolitan has indicated to CVWD that they would not consider such a proposal.

STATE OF CALIFORNIA

Governor's Office of Planning and Research

State Clearinghouse and Planning Unit

Edmund G. Brown Jr.
Governor

Ken Alex
Director

REC'D SEP 22 2011 CVWD

September 20, 2011

ORIG/EML: P REYES
EML: L STOWE
M JOHNSON
S BIGLEY
J BARRETT
FILE: 0643.511
G.Gil

Patti Reyes
Coachella Valley Water District
85-955 Avenue 52
Coachella, CA 92236

Subject: Coachella Valley Water Management Plan 2010 Update
SCH#: 2007091099

Dear Patti Reyes:

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 September 19, 2011, 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."

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 TENTH STREET P.O. BOX 3044 SACRAMENTO, CALIFORNIA 95812-3044
TEL (916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

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Document Details Report
State Clearinghouse Data Base

SCH# 2007091099
Project Title Coachella Valley Water Management Plan 2010 Update
Lead Agency Coachella Valley Water District

Type EIR Draft EIR

Description The proposed project is an update to the Coachella Valley Water Management Plan prepared in 2002 and seeks to meet current and future study area water demands through 2045, manage overdraft, manage water quality, and minimize environmental impacts. Proposed Project elements are water conservation, acquisition of imported supplies, increased recycled water use, drain water desalination, groundwater recharge, and source substitution.

Lead Agency Contact

Name Patti Reyes
Agency Coachella Valley Water District
Phone (760) 398-2651 ext 2270 **Fax**
email
Address 85-955 Avenue 52
City Coachella **State** CA **Zip** 92236

Project Location

County Riverside, Imperial, San Diego
City
Region
Lat / Long
Cross Streets Various
Parcel No. Various
Township Variou **Range** **Section** **Base** SBB&M

Proximity to:

Highways I-10, Hwy 11, Hwy 74
Airports Palm Springs, Thermal, Bermuda
Railways UPRR
Waterways Whitewater River, Coachella Valley Stormwater Channel
Schools Various
Land Use LU: Urban, Agricultural, Golf Course
Z: Various
GPLU: Various

Project Issues Agricultural Land; Air Quality; Archaeologic-Historic; Drainage/Absorption; Flood Plain/Flooding; Geologic/Seismic; Noise; Population/Housing Balance; Public Services; Septic System; Vegetation; Water Quality; Water Supply; Wetland/Riparian; Wildlife; Growth Inducing; Landuse; Cumulative Effects

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Reviewing Agencies Resources Agency; Colorado River Board; Department of Fish and Game, Region 5; Department of Fish and Game, Region 6; Department of Parks and Recreation; Department of Water Resources; California Highway Patrol; Caltrans, District 8; Caltrans, District 11; CA Department of Public Health; State Water Resources Control Board, Division of Water Rights; Regional Water Quality Control Board, Region 7; Native American Heritage Commission

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Date Received 08/05/2011 **Start of Review** 08/05/2011 **End of Review** 09/19/2011

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

STATE OF CALIFORNIA Edmund G. Brown, Jr., Governor

NATIVE AMERICAN HERITAGE COMMISSION
915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-6251
Fax (916) 657-5390
Web Site www.nahc.ca.gov
ds_nahc@pacbell.net

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STATE CLEARING HOUSE

August 29, 2011

Ms. Patti Reyes, Planning and Special Program Manager
Coachella Valley Water District
P.O. Box 1058
Coachella, CA 92258

Re: SCH# 2007091099; CEQA Notice of Completion; draft Subsequent Environmental Impact Report (SEIR) for the **"Summary of Coachella Valley Water Management Plan 2010 Update"** located in the Coachella; Riverside County, California.

Dear Ms. Reyes:

The Native American Heritage Commission (NAHC), the State of California 'Trustee Agency' for the protection and preservation of Native American cultural resources pursuant to California Public Resources Code §21070 and affirmed by the Third Appellate Court in the case of EPIC v. Johnson (1985: 170 Cal App. 3rd 604). The NAHC wishes to comment on the proposed project.

This letter includes state and federal statutes relating to Native American historic properties of religious and cultural significance to American Indian tribes and interested Native American individuals as 'consulting parties' under both state and federal law. State law also addresses the freedom of Native American Religious Expression in Public Resources Code §5097.9.

The California Environmental Quality Act (CEQA – CA Public Resources Code 21000-21177, amendments effective 3/18/2010) requires that any project that causes a substantial adverse change in the significance of an historical resource, that includes archaeological resources, is a 'significant effect' requiring the preparation of an Environmental Impact Report (EIR) per the CEQA Guidelines defines a significant impact on the environment as 'a substantial, or potentially substantial, adverse change in any of physical conditions within an area affected by the proposed project, including ...objects of historic or aesthetic significance." In order to comply with this provision, the lead agency is required to assess whether the project will have an adverse impact on these resources within the 'area of potential effect (APE), and if so, to mitigate that effect. The NAHC Sacred Lands File (SLF) search resulted as follows: **Native American cultural resources were not identified** within one-half mile of the 'area of potential effect (APE). Note: the absence of recorded Native American cultural resources does not preclude their existence. The CVWD jurisdiction lies in a very culturally sensitive area.

The NAHC "Sacred Sites,' as defined by the Native American Heritage Commission and the California Legislature in California Public Resources Code §§5097.94(a) and 5097.96. Items in the NAHC Sacred Lands Inventory are confidential and exempt from the Public Records Act pursuant to California Government Code §6254 (r).

Early consultation with Native American tribes in your area is the best way to avoid unanticipated discoveries of cultural resources or burial sites once a project is underway. Culturally affiliated tribes and individuals may have knowledge of the religious and cultural significance of the historic properties in the project area (e.g. APE). We strongly urge that you make contact with the list of Native American Contacts on the attached list of Native American contacts, to see if your proposed project might impact Native American cultural resources and to obtain their recommendations concerning the proposed project. Pursuant to CA Public Resources Code § 5097.95, the NAHC requests that the Native American consulting parties be provided pertinent project information. Consultation with Native American communities is also a matter of environmental justice as defined by California Government Code §65040.12(e). Pursuant to CA Public Resources Code §5097.95, the NAHC requests that pertinent project information be provided consulting tribal parties. The NAHC recommends *avoidance* as defined by CEQA Guidelines §15370(a) to pursuing a project that would damage or destroy Native American cultural resources and Section 2183.2 that requires documentation, data recovery of cultural resources.

Furthermore, the NAHC is of the opinion that the current project remains under the jurisdiction of the statutes and regulations of the National Environmental Policy Act (e.g. NEPA; 42 U.S.C. 4321-43351). Consultation with tribes and interested Native American consulting parties, on the NAHC list, should be conducted in compliance with the requirements of federal NEPA and Section 106 and 4(f) of federal NHPA (16 U.S.C. 470 *et seq*), 36 CFR Part 800.3 (f) (2) & .5, the President's Council on Environmental Quality (CSQ, 42 U.S.C 4371 *et seq.* and NAGPRA (25 U.S.C. 3001-3013) as appropriate. The 1992 *Secretary of the Interiors Standards for the Treatment of Historic Properties* were revised so that they could be applied to all historic resource types included in the National Register of Historic Places and including cultural landscapes. Also, federal Executive Orders Nos. 11593 (preservation of cultural environment), 13175 (coordination & consultation) and 13007 (Sacred Sites) are helpful, supportive guides for Section 106 consultation. The aforementioned Secretary of the Interior's *Standards* include recommendations for all 'lead agencies' to consider the historic context of proposed projects and to "research" the cultural landscape that might include the 'area of potential effect.'

Confidentiality of "historic properties of religious and cultural significance" should also be considered as protected by California Government Code §6254(r) and may also be protected under Section 304 of he NHPA or at the Secretary of the Interior discretion if not eligible for listing on the National Register of Historic Places. The Secretary may also be advised by the federal Indian Religious Freedom Act (cf. 42 U.S.C., 1996) in issuing a decision on whether or not to disclose items of religious and/or cultural significance identified in or near the APEs and possibility threatened by proposed project activity.

Furthermore, Public Resources Code Section 5097.98, California Government Code §27491 and Health & Safety Code Section 7050.5 provide for provisions for accidentally discovered archeological resources during construction and mandate the processes to be followed in the event of an accidental discovery of any human remains in a project location other than a 'dedicated cemetery'.

To be effective, consultation on specific projects must be the result of an ongoing relationship between Native American tribes and lead agencies, project proponents and their contractors, in the opinion of the NAHC. Regarding tribal consultation, a relationship built around regular meetings and informal involvement with local tribes will lead to more qualitative consultation tribal input on specific projects.

If you have any questions about this response to your request, please do not hesitate to contact me at (916) 653-6251.

Sincerely,

Dave Singleton
Program Analyst

Cc: State Clearinghouse

Attachment: Native American Contact List

5. Response to: Scott Morgan, Director, State Clearinghouse

No response to State Clearinghouse letter is necessary. A response to the attached letter from the Native American Heritage Commission, which the District also received directly, is presented as comment and response No. 1 in this section.

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
BUREAU OF INDIAN AFFAIRS
Southern California Agency
1451 Research Park Drive, Suite 100
Riverside, California 92507-2154
Telephone (951) 276-6624 Telefax (951) 276-6641

IN REPLY REFER TO:
Water Resources

ORIG/EML: P REYES
EML: L STOWE
J BARRETT
M JOHNSON
S BIGLEY
G GIL
FILE: 0643.511

REC'D SEP 29 2011 CVWD

SEP 28 2011

Coachella Valley Water District
P.O. Box 1058
Coachella, Ca 92236

Attention: Mr. Steve Robbins, General Manager, Chief Engineer

Subject: Coachella Valley Water Management Plan 2010 Update, Administrative Draft, Subsequent Program Environmental Impact Report SCH No. 2007091099

Dear Mr. Robbins,

The following comments and concerns are provided regarding the Coachella Valley Water Management Plan 2010 /Update, Administrative Draft, Subsequent Program Environmental Impact Report SCH No. 2007091099 (SPEIR).

The Bureau of Indian Affairs, Pacific Region, Southern California Agency, (BIA) saw very few comments, outreach or analysis within the draft text sections of the SPEIR, describing tribal related issues and lands for advanced review. We congratulate the Coachella Valley Water District (CVWD) for soliciting tribal concerns and interests regarding water management in the Coachella Valley in the recent past with their outreach meetings, educational presentations and discussions regarding tribal involvement in the Coachella Valley planning area and wonder why Native American concerns were not documented or recommendations provided within the Water plan update or the SPEIR to address federally reserved trust water resources. It was mentioned that the basin which is the planning area for these reports has not been adjudicated. Recommendations for preserving and formulating shared interests in the basin are not discussed adequately within the context of the SPIER.

There are several issues regarding the Coachella Valley Groundwater Basin that are of concern as it relates to land held in trust by the United States for the Indian tribes that reside in the Coachella Valley. Below is a list of some of these concerns.

6-1 1. Tribes occupying land overlying the Coachella Valley Water Basin have superior overlying rights to use basin groundwater under state law. In addition to rights to use groundwater, tribes in the Coachella Valley hold federally reserved water rights held in trust by the United

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States. CVWD and their Water plan update process must recognize the unique position the tribes hold in this valley. The SPEIR should be imposed in a manner that does not discriminate against the tribes with respect to their unique position as owners of federally reserved water rights, and must ultimately benefit the tribes rather than diminish tribal resources. The tribes as owners of federal reserved water rights are in a substantially different position than other residents of the Coachella Valley who merely posse rights to use water under State law. The Coachella tribes should participate as equal members of the planning process. It is mentioned that self governance was an issue brought up by the Tribes in the planning meetings; however no other comments were made or suggestions presented.

6-2 2. Ground Water overdraft in the Coachella West Valley has been in decline for over 60 years. The East Valley has been in decline for the last thirty years, (reference; Figure 6-5, historical cumulative change in storage). Almost no progress to slow the decline of ground water is shown in Figure 6-5 since the last plan in 2002. The analysis of this SPEIR relies on similar flawed logic, programs and economic growth as the last plan to solve the next ten years of overdraft. There has been no demonstration within this report to show success for improved conditions regarding this issue. Failure will be at the expense of both local and tribal communities. Given the lack of success since 2002, how does this plan differ and what safety measures will be in place if groundwater overdraft is not halted for both short and long term projections.

In addition; it has been stated that groundwater recharge is necessary but treatment of recharge water from the Colorado River is not an option. There are no explanations presented regarding this statement. There is no consideration given for remediation of the basin in close proximity to the recharge locations.

6-3 3. Impacts of ground water recharge methodology to be used for recharging the upper and lower aquifer systems was not considered as it relates to tribal federal water reserves. Protecting Coachella Valley groundwater quality by pre-treating the water before it is spread into the recharge basins is a major concern for the tribes and the BIA.

6-4 4. It is very misleading to state the proposed plan for groundwater recharge and substitution of surface water is beneficial to both subsidence and groundwater levels which are still significantly declining, (albeit less than the no plan alternative). A reasonable person with a general understanding of the facts would strongly disagree with the use of "beneficial" in this case. Clearly it is being used as a sound bite to misinform and mislead the communities in the Coachella Valley. This needs to be addressed to prevent the term form misleading the public.

6-5 5. Subsidence occurring within the valley as a result of groundwater mining did not address how overdraft subsidence issues affect tribal trust lands.

6-6 6. Tribal water supply needs as well as infrastructure planning for improvement of living conditions on the reservations were not addressed.

6-7 7. Sanitary infrastructure hook-up with the local municipal districts that provide for sewage and treatment on the reservation were not addressed.

6-8 8. The general water quality monitoring plan lacks reporting requirements to the interested parties. The vague requirement stated in the SPEIR is that when standards are exceeded a substitute water supply will be furnished. The schedule, locations, and results of water quality monitoring in the Coachella Valley should be published and accessible. How this will be implemented should be fully disclosed in this document in order for the public to determine if it is adequate to protect the resources at risk. In this document it is not clear who will be responsible for testing and if the data is shared, or if each entity with concerns should have its own testing program. How will the monitoring program be implemented and the data shared between local management members of this basin and the public?

6-9 9. Elevated concentrations of native constituents found within the basin should be tested and analyzed for water quality. Treatment methods to be used to provide a safe drinking water source on tribal land should be considered and was not addressed.

6-10 10. Future permitting of ground water pumping and how it affects trust water resources on the reservations was not addressed and should be considered.

6-11 11. Recharging the aquifer system by surface run-off on the west side of the valley during flooding was not considered. Water run-off collection facilities should be considered within the plan for natural recharge in areas adjacent to tribal trust land.

6-12 12. Impacts to water quality from Coachella Valley Water district's recharge programs would likely degrade the aquifer's water quality near reservations. The Colorado River water movement, as a consequence of recharging the aquifer in these locations was not analyzed for water quality to confirm predictions and assumptions of the plume's movement already made by the water district. Potential impacts to trust tribal water reserves as well as possible mitigation measures on water quality were not identified or explored. On page 1-28 it is stated "should recharge with Colorado River water under the proposed project cause any Torres Martinez or Aqua Caliente domestic drinking water well to exceed any recognized health-based water quality standard, CVWD and DWA will work with the tribes to bring the drinking water supply to the tribes into compliance by providing domestic water service to the tribes from CVWD's or DWA's respective domestic water system or by providing appropriate well head treatment." Have the Tribes agreed to this? If not discussions need to be documented and an agreement should be made in writing before the SPEIR is finalized.

This question is now posed, at whose expense. Will CVWD or DWA incur cost to install domestic water infrastructure? Will CVWD or DWA provide treatment at the municipality's expense? Has the plan considered the other Tribes located in the valley? Namely, Cabazon Band of Mission Indians, Twenty Nine palms Band of Mission Indians and Augustine Band of Mission Indians including individual Indian allotment land?

6-13 13. Storm water run-off from urban sources and how these waters affect tribal land and the basin as it passes through were not addressed.

6-14 14. Contamination of the Salton Sea from urban, municipal and agricultural use was inadequately addressed.

6-15 15. Affects of elevated levels of contaminants on traditional native plants and wildlife important to the tribes culture was not addressed.

6-16 16. Feasibility studies for State Water Project Water Transfer to the Coachella Valley, and how this could possibly benefit tribal water reserves that are being depleted by water mining off the reservations were not addressed.

6-17 17. Reservation land must be included in the water modeling studies being conducted by the various water districts in the valley to have a complete picture of current and future impacts to the water basin was not addressed.

6-18 18. The tribes need to have a voice in water policy formulation as it relates to the Coachella Valley. The implementation for this was not addressed.

6-19 19. In comments submitted for the Coachella Valley WMP 2010 Update, it was stated that there was a general lack of specific data to support the findings in that report. It was requested that the supporting data be included in the report and appendices of the PEIR/EIR. The SPEIR does not support the findings of the Coachella Valley WMP 2010 Update and should accurately and honestly state the groundwater situation in Coachella Valley. In all probability, It is very likely groundwater levels will continue to decline near the existing rates as depicted in the Coachella Valley WMP 2002 Update.

6-20 20. Current planning for California Water Plan Update 2013 is underway and there are happening discussions about how to include other avenues to control groundwater overdraft. These actions are politically challenging and require strong leadership to propose and implement active management; monitoring and important regulations of water resources necessary to achieve sustainability of ground water basins for local communities to continue to prosper and thrive. The California Water Code allows these actions to occur in groundwater management areas. How are these discussions, groundbreaking ideas for implementation and shared management being introduced into this SPEIR to support the Coachella Valley WMP 2010 Update? How does this reporting interrelate with the Integrated Water Management planning for the Coachella Valley. Why are Federal reservation lands overlying this groundwater basin not being included in shared planning for Coachella Valley.

6-21 The Tribe and the Coachella Valley Water District should work in a manner similar to cooperating agencies under the National Environmental Policy Act. We believe this would be useful given the Tribes' sovereign status and their unique knowledge, expertise, and position as overlying landowners in the Basin.

We believe that cooperative approaches can resolve conflict and result in solutions. Comments to the plan can and should be filed to better address tribal water supply issues as part of a cooperative approach.

If there are any questions or clarification needed regarding the content of this letter, please do not hesitate to contact Ms. Christina Mokhtarzadeh, Hydrologist Southern California Agency at (951) 276-6624 ext. 257 or Ms. Lenore Lamb, Agency Natural Officer at (951) 276-6624 ext 254.

Sincerely;

Robert Eben
Superintendent

Cc: Water Rights Specialist, Pacific Region, Bureau of Indian Affairs
Regional Hydrologist, Pacific Region, Bureau of Indian Affairs
Chairperson, Agua Caliente Band of Cahuilla Indians
Chairperson, Augustine Band of Cahuilla Indians
Chairperson, Torres Martinez Desert Cahuilla Indians
Chairperson, Twenty Nine Palms Band of Mission Indians
Chairperson, Cabazon Band of Mission Indians
Chairperson, Morongo Band of Mission Indians
Regional Solicitor, U.S. Department of the Interior
Superintendent, Palms Springs Agency, Bureau of Indian Affairs

6. Response to: Robert Eben, Superintendent, U.S. Bureau of Indian Affairs, Riverside California

Although the Bureau of Indian Affairs (BIA) letter was received after the close of the public review period, CVWD offers the following responses in the interest of cooperation.

The comment letter questioned why Native American concerns were not documented or recommendations provided to address trust water resources. Native American concerns were addressed in Section 8.9 of the Draft SPEIR, pages 8-58 to 8-69. This section provides information on Indian Trust Assets and Indian lands in the Coachella Valley and tribal water rights. Impacts of the 2002 PEIR are presented for historic context, as well as impacts of the 2010 WMP Update on land use, land ownership, water quantity salinity, perchlorate, and water levels.

In addition, as BIA is aware from invitations and attendance, CVWD held more than ten meetings with the tribes and BIA over the past three years, during the preparation of the 2010 WMP Update and SPEIR, to elicit information on their concerns and to provide a forum for discussion of the Plan, the SPEIR and their relationship to the Integrated Water Management Plan, prepared in parallel. Additional meetings have been held between CVWD and individual tribes to discuss specific water issues affecting the tribes.

6-1 Water Rights

The comment letter states that tribes overlying the Coachella Valley have a superior overlying right to use basin groundwater under state law and federally reserved water rights held in trust by the United States.

The Water Management Plan 2010 Update and the SPEIR do not address the validity of water rights held by groundwater users in the Basin, nor do these documents attempt to characterize their priority or extent with respect to other users. The SPEIR acknowledges, without response, that the Tribe and the United States as Trustee for the Tribe have asserted certain water rights claims. Beyond such acknowledgement, the District believes it is inappropriate to address such claims in a CEQA document.

The Proposed Project is intended to provide all water users in the Valley with sufficient supplies to meet their current and future needs. Furthermore, the comments regarding the planning process and self governance for the tribes are not strictly WMP Update or CEQA issues. CVWD has suggested the Integrated Regional Water Management Planning (IRWMP) process as a mechanism for increased tribal participation in the planning process. The Agua Caliente and Torres Martinez tribes participated in the meetings and the Agua Caliente commented on the IRWMP report. The Torres Martinez tribe submitted projects for funding through the IRWMP.

In response to discussions of these issues at the CVWD coordination meetings with the tribes, CVWD arranged a "government to government" reception on May 18, 2010 between the CVWD Board of Directors and the tribal councils at the BIA office in Palm Springs. No tribal council members attended. CVWD is still interested in conducting meetings with individual tribal councils.

6-2 CVWD respectfully disagrees with the contention that "almost no progress to slow the decline of groundwater is shown since the last plan in 2002." SPEIR Figure 6-5 (page 6-20) presents historical data through 2009; basin levels have risen since 2009 and are projected to rise further over the 35-year planning period (SPEIR Figures 6-14 and 6-15). While Figure 6-5 does show a continued decline in storage in the West Valley since 2002 (the result of reduced SWP Exchange deliveries due to drought), the storage decline in the East Valley was essentially zero in 2009 and has shown promising increases in 2010. Since adoption of the 2002 WMP, the State has experienced a significant drought and environmental restrictions on Delta exports have adversely affected SWP Exchange water deliveries. However, during this same time, CVWD and DWA acquired 132,900 AFY of additional SWP Table A Amounts through water transfers and acquisitions. Due to improved hydrological conditions, CVWD and DWA were able to recharge 228,000 AF in 2010 and almost 210,000 AFY through September 30, 2011 at the Whitewater replenishment facility. In addition, water levels in portions of the Valley rose significantly in 2010 and 2011 with nearly 500,000 AF of water recharged in 2010 and 2011. The WMP is a 35-year water management plan with the goal of balancing supplies and demands by 2045. Improvements in water levels are expected to occur over time. Some portions of the valley will see results sooner. The large size of the groundwater basin effectively dampens the effects of recharge activities with distance from the recharge facilities. Consequently, those portions of the basin nearest the recharge basins will respond more rapidly than more distant portions.

Since 2002, CVWD and DWA have invested more than $240 million in water acquisitions, conservation, construction of new facilities and monitoring to reduce overdraft and manage the basin. The following table provides a summary of these major investments by program element.

In the East Valley, water levels have risen sufficiently to re-establish artesian conditions in some areas. Water levels near the Thomas E. Levy Water Replenishment Facility have risen 50 feet in less than two years. In the West Valley, the Mid-Valley Pipeline Phase I was completed and golf courses are requesting Canal water delivery. With completion of the Mid-Valley Pipeline distribution system and connection of golf courses, overdraft in the entire Whitewater Basin will be reduced by one–third.

Program Element	Status	Expenditure Since 2002
Water Conservation – Agriculture, domestic and golf	On-going	$14,500,000
Water Supply Development		
Quantification Settlement Agreement	On-going	$36,000,000
SWP Table A Acquisition	Completed	$88,800,000
Source substitution		
Mid-Valley Pipeline Phase 1	Completed	$44,700,000
Groundwater Recharge		
Thomas E. Levy Recharge Facility	Completed	$44,400,000
Martinez Canyon Pilot Recharge Facility	Completed	$7,700,000
Surface and Groundwater Monitoring	On-going	$6,800,000
Total Expenditures		**$242,900,000**

Pretreatment of Colorado River water before recharge is discussed in SPEIR Section 10 Alternatives to the Proposed Project, Section 10.4.2, page 10-11 *ff*. As explained in that section, this alternative is not economically feasible at this time. Desalination of Canal water prior to recharge was found to have potentially significant impacts in addition to impacts of the WMP Update, particularly potential biological and cultural resources effects, energy demand, greenhouse gas emissions and brine disposal by methods to be determined. In addition, while the treatment process is technically feasible, the feasibility of brine disposal methods has not been sufficiently evaluated and presents a potentially significant environmental and permitting constraint. No alternative can be built if the lead agency and the rate payers cannot afford it, if it is not economically feasible, and if it has unacceptable impacts on the service area.

CVWD performed a reconnaissance-level evaluation of desalinating Canal water prior to recharge at the Whitewater facility and at the three East Valley facilities – Levy, Martinez and Indio. To bracket the desalination options at Whitewater, two options were considered, one where the capacity is limited to the average recharge (90,000 AFY capacity) with any additional water bypassed without treatment and one where all recharge water is desalinated (180,000 AFY capacity). Both of these options assume location of a treatment facility near Metropolitan's Colorado River Aqueduct (CRA) to minimize the impact of total dissolved solids (TDS) on the groundwater basin between the CRA and recharge facility. The East Valley facilities were assumed to operate at a continuous recharge rate as indicated in the WMP Update. Using costs from a CVWD-funded investigation of Colorado River water treatment (Malcolm Pirnie, 2008a), the cost of treatment was estimated as presented in the Table below to achieve: 1) a 500 mg/L TDS target based on the California recommended secondary drinking water standard for TDS and 2) a 250 mg/L TDS target based on the general water quality of the Lower aquifer. The costs of desalination treatment are also compared with the cost of the SWP Extension and several

combination options involving both the SWP Extension and treatment of recharge water in the East Valley.

Previous estimates of treatment costs have excluded the cost of brine disposal. Brine flows from recharge water desalination are estimated to range from 7.4 mgd to 55 mgd, depending on the TDS target and the treatment capacity. Although the Malcolm-Pirnie studies evaluated a wide variety of potential brine disposal options, discharge to wetlands near the Salton Sea showed the most promise. Previous studies have also ignored the cost to obtain replacement water to offset the amount of water lost to brine disposal. This evaluation includes these additional costs.

This evaluation shows that the cost to construct treatment at Whitewater could range from $68 million for the smaller facility with a 500 mg/L TDS target to $508 million for the larger facility with a 250 mg/L target. These costs are exclusive of brine conveyance and disposal. Total annual costs including amortized capital, O&M and replacement water costs would range from $15 million to $71.4 million per year depending on the TDS target and the design capacity.

In addition, CVWD evaluated the cost to treat Colorado River water prior to recharge at the Thomas E. Levy Groundwater Replenishment Facility near La Quinta and the proposed recharge facilities at Martinez and Indio. As with the Whitewater options, two TDS targets were considered: 500 mg/L and 250 mg/L. The capital cost (also exclusive of brine conveyance and disposal) would be $117 million to achieve the 500 mg/L target, while the capital cost to achieve the 250 mg/L target would be $237 million. Amortized capital, O&M and replacement water costs are estimated to be $22.6 million and $47.9 million per year, respectively, for the two water quality targets.

To estimate an order of magnitude cost for brine conveyance and disposal, it is assumed that a brine line could be constructed roughly parallel to the Whitewater River channel from Whitewater to the Salton Sea, with branches to collect brine from Indio and Martinez as shown on the attached figure. Such a brine line system would be more than 66 miles long with diameters ranging from 12 to 30 inches for the smallest option and from 12 to 54 inches for the largest option. Based on current pipeline installation costs (assuming use of high density polyethylene pipe-HDPE), the brine line construction could add $158 million to more than $288 million to the capital cost of a recharge water desalination program. Assuming 1 percent per year for O&M, the annual cost of the brine line would be $1.4 million to $2.2 million per year. The capital cost of a separate brine line to serve East Valley recharge desalters would add $67 million to $79 million to the program cost. Whether discharge of brine to the Salton Sea via wetlands would be permitted is uncertain at this time. Previous evaluations of lined evaporation ponds and zero liquid discharge approaches show comparable or higher costs than those presented here (Malcolm Pirnie, 2008b).

Comparison of Desalination and SWP Importation Options

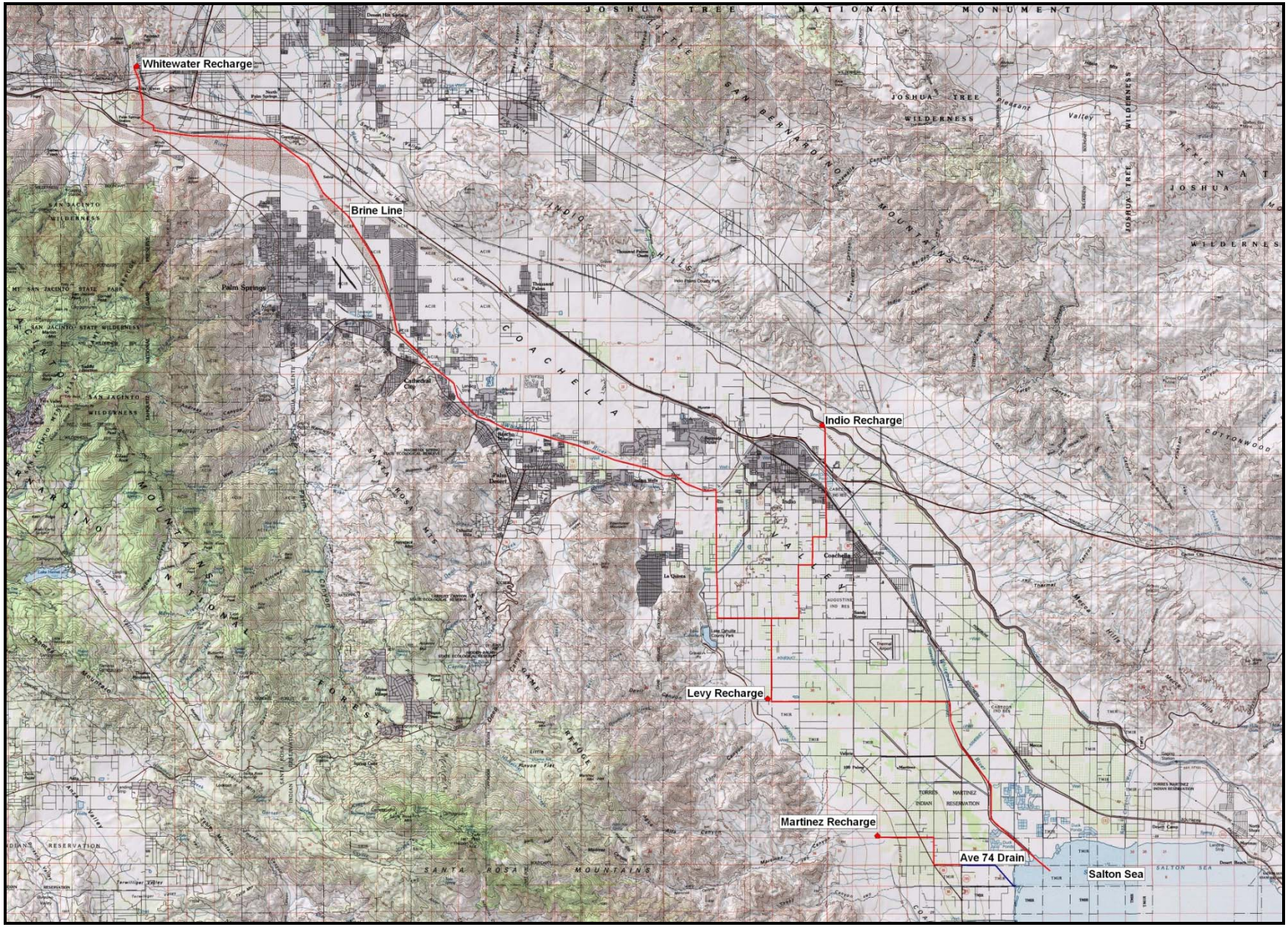
Location	TDS Target- mg/L	Avg Annual Delivery- AFY	Plant Capacity- mgd	Capital Cost	O&M Cost- $/yr	Total Annual Cost $/yr	Average Groundwater Production AFY	Average RAC Impact - $/AF	Existing Avg RAC $/AF	Percent RAC Increase
Desalination-1										
Whitewater River	500	85,000	22.6	$ 68,000,000	$ 8,100,000	$ 15,000,000				
Levy	500	40,000	20.3	$ 62,000,000	$ 6,100,000	$ 12,200,000				
Martinez	500	20,000	10.1	$ 35,000,000	$ 3,300,000	$ 6,700,000				
Indio	500	10,000	5.1	$ 20,000,000	$ 1,800,000	$ 3,700,000				
Brine System				$ 158,000,000	$ 1,600,000	$ 13,300,000				
Total				$ 343,000,000	$ 20,900,000	$ 50,900,000	257,000	$198	$90	220%
Desalination-2										
Whitewater River	500	100,000	173.2	$ 376,000,000	$ 7,800,000	$ 37,500,000				
Levy	500	40,000	20.3	$ 62,000,000	$ 6,100,000	$ 12,200,000				
Martinez	500	20,000	10.1	$ 35,000,000	$ 3,300,000	$ 6,700,000				
Indio	500	10,000	5.1	$ 20,000,000	$ 1,800,000	$ 3,700,000				
Brine System				$ 197,000,000	$ 2,000,000	$ 16,500,000				
Total				$ 690,000,000	$ 21,000,000	$ 76,600,000	257,000	$298	$90	332%
Desalination-3										
Whitewater River	250	85,000	62.9	$ 192,000,000	$ 26,100,000	$ 45,400,000				
Levy	250	40,000	39.3	$ 128,000,000	$ 14,200,000	$ 26,300,000				
Martinez	250	20,000	19.7	$ 70,000,000	$ 7,500,000	$ 14,000,000				
Indio	250	10,000	9.8	$ 39,000,000	$ 4,000,000	$ 7,600,000				
Brine System				$ 230,000,000	$ 2,200,000	$ 19,200,000				
Total				$ 659,000,000	$ 54,000,000	$ 112,500,000	257,000	$438	$90	487%
Desalination-4										
Whitewater River	250	100,000	194.6	$ 508,000,000	$ 28,100,000	$ 71,400,000				
Levy	250	40,000	39.3	$ 128,000,000	$ 14,200,000	$ 26,300,000				
Martinez	250	20,000	19.7	$ 70,000,000	$ 7,500,000	$ 14,000,000				
Indio	250	10,000	9.8	$ 39,000,000	$ 4,000,000	$ 7,600,000				
Brine System				$ 288,000,000	$ 2,700,000	$ 23,800,000				
Total				$1,033,000,000	$ 56,500,000	$ 143,100,000	257,000	$557	$90	620%
SWP Extension Only										
SWP Extension	330	100,000		$ 817,000,000	$ 12,000,000	$ 71,300,000	165,000			
Total				$ 817,000,000	$ 12,000,000	$ 71,300,000	165,000	$432	$112	386%

Comparison of Desalination and SWP Importation Options (continued)

Location	TDS Target- mg/L	Avg Annual Delivery- AFY	Plant Capacity- mgd	Capital Cost	O&M Cost- $/yr	Total Annual Cost $/yr	Average Groundwater Production AFY	Average RAC Impact - $/AF	Existing Avg RAC $/AF	Percent RAC Increase
SWP Extension and Desalination-1										
SWP Extension	330			$ 817,000,000	$ 12,000,000	$ 71,300,000				
Levy	500	40,000	20.3	$ 62,000,000	$ 6,100,000	$ 12,200,000				
Martinez	500	20,000	10.1	$ 35,000,000	$ 3,300,000	$ 6,700,000				
Indio	500	10,000	5.1	$ 20,000,000	$ 1,800,000	$ 3,700,000				
Brine System				$ 67,000,000	$ 800,000	$ 5,900,000				
Total				$1,001,000,000	$ 24,000,000	$ 99,800,000	257,000	$388	$90	432%
SWP Extension and Desalination-2										
SWP Extension	330			$ 817,000,000	$ 12,000,000	$ 71,300,000				
Levy	250	40,000	39.3	$ 128,000,000	$ 14,200,000	$ 26,300,000				
Martinez	250	20,000	19.7	$ 70,000,000	$ 7,500,000	$ 14,000,000				
Indio	250	10,000	9.8	$ 39,000,000	$ 4,000,000	$ 7,600,000				
Brine System				$ 79,000,000	$ 800,000	$ 6,700,000				
Total				$1,133,000,000	$ 38,500,000	$ 125,900,000	257,000	$490	$90	545%

Basis of Estimates:

- Size of desalination facilities based on average recharge water deliveries with a 20% peaking factor. Capacity based on mass-balance of treated and bypassed water to achieve desired TDS target. Average CRA TDS = 640 mg/L, average Canal water TDS = 767 mg/L per Reclamation projections (Reclamation, 2007).
- Capital and operations and maintenance (O&M) costs of desalination based on cost data from Malcolm-Pirnie, 2008a. Updated to 2010 cost levels using ENR construction cost index and sized based on treatment capacity.
- SWP Extension costs based on lowest cost option – Modified North Pass Alignment, Small Project serving CVWD and DWA only as presented in Final Draft SWP Extension Project Development Report (GEI, et al., 2011). Assumes 93 percent of the cost is allocated to Whitewater River Subbasin and 7 percent to Mission Creek Subbasin.
- Brine system assumes construction of high density polyethylene (HDPE) pipeline to convey brine flows by gravity from treatment sites located near each recharge facility to Salton Sea. Whitewater facility is assumed to be located near CRA turnout. Brine from Martinez facility is assumed to be discharged to Avenue 74 drain.
- Capital costs are amortized at 6 percent for 30 yrs.
- Pipeline O&M costs are assumed to be 1 percent of construction costs.
- Total annual costs consist of amortized capital, O&M and replacement water for brine discharge at $300/AF.
- Average groundwater production is for period 2021 through 2045 based on WMP Update unpublished data files for Proposed Project. For the SWP Extension Only option, the average production is for the West Valley only.
- Average Replenishment Assessment Charge (RAC) Impact assumes all costs of SWP importation or desalination are recovered through increased RAC charges on pumping.
- Existing RAC charge is the production-weighted average of the 2011-12 RAC adopted by DWA for the West Valley ($82/AF); CVWD for the West Valley ($108/AF) and CVWD for the East Valley ($31/AF).



Schematic of Potential Coachella Valley Brine Lines

Based on the foregoing analysis, the capital cost to treat Colorado River water prior to recharge including brine disposal could range from $343 million to achieve a 500 mg/L TDS target while treating most but not all of the water at Whitewater to about $1.03 billion to achieve a 250 mg/L target treating all recharge water. The economic impact of implementing a desalination program is significant as shown in the table above. The smallest desalination program would more than triple the average RAC in the Valley, while the largest program would increase the average RAC by a factor of more than seven times the current charge. The impact on private producers like golf courses and farmers would be substantial and would likely result in severe economic impacts. For example, a typical golf course using 1000 AFY of water would see its replenishment assessment increase from about $112,000 a year to $432,000 a year. Therefore, in light of the high cost and the uncertainty associated with brine disposal permitting, desalination of recharge water is considered to be infeasible at the present time.

In addition, Section 8.1.4.2 of the 2010 WMP Update states that "an evaluation of the potential effects of Colorado River recharge will be conducted in conjunction with the salt/nutrient plan" to be submitted to the State Water Resources Control Board by 2014 to meet SWRCB Recycled Water Policy requirements. The tribes, as well as CVWD, DWA, other Valley water agencies and stakeholders, will have an opportunity to participate in the preparation of that basin-wide plan on how salinity and nutrients should be managed and monitored.

6-3 The comment stated that impacts of recharge methodology as it relates to tribal federal water reserves was not considered and that pre-treating the water before recharge is a major concern for the tribes and the BIA. The WMP Update and SPEIR consider the groundwater basin as a whole for everyone, including the tribes. A key objective of the plan is to reliably meet current and future demands in a cost-effective and sustainable manner. The WMP Update and SPEIR state that impacts on groundwater quality for Torres-Martinez and Agua Caliente tribal wells are a major concern, a potentially significant impact for which there is currently no feasible mitigation (SPEIR pages 6-50 to 6-62).

Pretreatment of Colorado River water before recharge is discussed in SPEIR Section 10 Alternatives to the Proposed Project, Section 10.4.2, page 10-11 (and see response 6-2 above).

6-4 The comment questions the benefit of the Proposed Project as it relates to continued groundwater level decline and increasing subsidence. Subsidence in the Coachella Valley is an existing condition, not an impact of the Proposed Project. Subsidence may be caused by ongoing overdraft due to well pumping by all pumpers, including the tribes, or may be caused by tectonic activity in the Valley (USGS, 2007). The projected reduction in overdraft and subsidence is a fundamental beneficial effect of the 2010 WMP Update. SPEIR Figure 6-13 (page 6-43) shows projected Lower Aquifer groundwater contours with implementation of the Proposed Project from 2009 through 2045, the end of the planning period. The groundwater model projects positive changes in groundwater levels in all areas of the Whitewater River Subbasin. The rises in groundwater levels will halt further subsidence that may be caused by dewatering of aquifer

strata. Increasing groundwater levels and halting subsidence are two central points of the larger WMP Update strategy. SPEIR Figure 6-12 shows that groundwater elevations may continue to decline through 2020 due to overdraft until sufficient WMP programs are in place and operating for a while before they begin to rise again. However, the current reductions in water demand, coupled with minimal growth in recent years, will likely contribute to more rapid recovery of water levels in the near term. As presented in the table above, CVWD and DWA have invested over $240 million in the last 10 years to solve overdraft and implement the 2002 WMP. While CVWD has not been able to implement all the WMP elements hoped by this point, with implementation of the WMP Update by 2045, basin groundwater levels are projected to be approximately 80 feet higher than at present.

6-5 The comment states that subsidence on tribal trust lands was not addressed. CVWD is aware of no evidence of subsidence on tribal trust lands. The ongoing USGS/CVWD subsidence monitoring program (mostly recently reported in 2007) looked at the Valley as a whole. From a review of the report, monitoring devices were not placed on tribal lands, but several were sited near East Valley ITAs— specifically, near the Cabazon, Augustine, Twenty-nine Palms and Torres Martinez tribal areas. Measured subsidence was found to be highest in Palm Desert, Indian Wells and La Quinta (USGS, 2007), in areas not near tribal land. Subsidence in the Coachella Valley is an existing condition, not an impact of the Proposed Project. According to the USGS (2007), subsidence may be caused by ongoing overdraft due to well pumping by all pumpers, including the tribes, or may be due to tectonic activity in the Valley.

6-6 The comment states that tribal water supply and infrastructure needs were not addressed. In the absence of land use and water demand information requested from the tribes for preparation of the 2010 WMP Update, tribal water supply needs were assumed based on the same Riverside County-CVAG projected land use and growth patterns elsewhere the Valley (SPEIR Section 3.1). CVWD reviewed this approach in the monthly meetings with the tribes. Infrastructure planning for improvement of reservation living conditions is not a 2010 WMP Update or SPEIR issue. The WMP Update and SPEIR are programmatic and consider basin wide issues; the documents included no infrastructure at any specific location in the Valley to meet water demands. Infrastructure improvements on reservation lands are part of other, ongoing CVWD-tribal-Indian Health Service cooperative efforts.

6-7 The comment states that tribal sanitary infrastructure hook-up to municipal districts was not addressed. Specific infrastructure hookups, including sanitary hookups, are not part of the 2010 WMP Update, as discussed in 6-6 above. SPEIR Section 8.9.4 presents mitigation for potential impacts on Indian Tribal Assets. Page 8-69 presents Mitigation Measure ITA-2, which specifically addresses potential impacts on septic tanks or cesspits on tribal land from a rise in shallow groundwater levels. CVWD is currently meeting with the Torres Martinez tribe to look for grants and other funding mechanisms for sewer hookups, independent from the 2010 WMP Update.

6-8 The comment states that the plan lacks general water quality reporting to interested parties. The 2010 WMP Update does include recommendations to improve monitoring and data management (see WMP Update page 8-13 and SPEIR page 3-22). In addition, the tribes have provided no tribal groundwater quality data to CVWD in response to the District's request for such information. Therefore, CVWD must assume that the tribes monitor the quality of their own wells in compliance with U.S. Environmental Protection Agency requirements. The District agrees that a forum for shared water quality data would be beneficial. The District also plans to work through the IRWMP process to develop a shared database with the other four public agencies in the Valley and other stakeholders who choose to participate. The District encourages the tribes to participate and share data as well. The District has prepared the SPEIR's impact analysis based upon the best information available, and is aware of no information contradicting its conclusions as to the Proposed Project's impacts on groundwater.

6-9 The comment states that concentrations of native constituents should be tested and analyzed and that treatment methods to be used to provide safe drinking water sources to tribal land were not addressed. Elevated concentrations of native constituents such as arsenic are not an impact of the Proposed Project; they are part of existing conditions. Elevated levels of native constituents are therefore not an impact of the Proposed Project, and the District is not required in connection with this project to mitigate for such existing conditions. However, the SPEIR does present general information on the levels of several key water quality parameters on Figures 6-8, 6-9 and 6-10 as part of the Existing Conditions. CVWD is not responsible for evaluating concentrations of water quality constituents on tribal land and has no authority to sample and analyze wells on tribal land and does not have information on the quality of tribal wells. The tribes, rather than CVWD, have the responsibility for providing safe drinking water on tribal lands relative to native constituents. However, CVWD is willing to work with the tribes to provide technical expertise in resolving specific water quality problems experienced by the tribes.

6-10 The comment stated that future permitting of groundwater pumping and its effect on trust water resources was not addressed. It is not clear which permits for groundwater pumping are referred to; the basin is not adjudicated. Well drilling permits are issued by the County of Riverside on an individual basis. Future wells drilled by CVWD will be subject to CEQA review when those projects are developed. Future groundwater pumping in the East Valley will decrease (see response 6-2 above) with implementation of the WMP Update elements (conservation, source substitution, recycled water use, etc.). It should be noted that the effects of the Proposed Project, including its program of groundwater pumping and recharge, have been evaluated in the SPEIR with regard to groundwater quantity and quality, as well as with regard to Indian Trust Assets. While groundwater quality would be degraded in an absolute sense, it was determined that the impact with regard to Indian Trust Assets would be less than significant because beneficial uses would be maintained for a wide variety of land uses, including for residential, commercial, industrial, and agricultural uses.

6-11 The comment states that recharge with surface runoff was not addressed. Stormwater runoff in the Valley is small in volume and occurs sporadically, during a few storms each year. On the west side of the Valley, runoff is currently captured and recharged at the Whitewater Spreading Facility and in local stormwater retention basins along the base of the mountains. The Whitewater River also percolates runoff in the West Valley since it is an unlined, soft-bottom channel. In fact, evaluation of USGS gauged streamflows in the Whitewater River near Indio indicate that flow averages 3.2 cfs (2,300 AFY) but only occurs 2.3 percent of the time (about 8 days per year). This fact demonstrates that little stormwater is currently being lost. However, in spite of this low amount, the WMP Update and SPEIR consider on-site stormwater retention in future development plans (see SPEIR section 3.2.1.9, page 3-20), incorporating stormwater capture and flood control as development proceeds in the East Valley. SPEIR page 3-25 identifies as an Implementation Plan element a feasibility study for additional stormwater capture in the East Valley to be completed by 2015.

6-12 The comment states that CVWD's recharge programs would likely degrade groundwater near the reservations. Impacts of Colorado River water recharge are considered in the SPEIR and mitigation measures are evaluated in SPEIR Section 6. CVWD concurs that the salinity of the Colorado River water recharged is higher than most native groundwater in the basin (SPEIR section 6.4.4 Groundwater Quality, page 6-50). District water quality data do confirm changes in salinity near recharge areas (SPEIR page 6-57*ff* and Figure 6-18, page 6-59, Extent of Imported Water Migration Due to Groundwater Recharge). Impacts on tribal water resources are discussed on SPEIR pages 8-62 to 8-69 and shown in Figure 8-2, Tribal Lands Potentially Affected by Recharge, page 8-65.

An analysis of water quality mitigation and alternatives is given in SPEIR Section 8.9.4 starting on page 8-69, pages 6-61to 6-65, and in Alternatives Section 10.4 starting on page 10-8.

If a health-based water quality standard is exceeded, mitigation will be implemented, if the affected tribe agrees. To date, no tribe has approached CVWD documenting exceedance of a health-based water quality standard in a tribal well and requesting wellhead treatment or an alternative water supply. In addition, it must be determined that recharged imported water is the cause of the observed water quality change in a given well. For example, in the East Valley, long-term percolation of agricultural drainage also can increase the salinity of shallow and Upper aquifer groundwater. Some West Valley wells located a significant distance from the recharge sites have salinity levels higher than Colorado River water, so recharge is not the only source of that salinity.

The groundwater model projects that only Torres Martinez and Agua Caliente wells would be affected by recharged imported water; the other tribal wells are too distant to be affected (see SPEIR Figure 8-2). The modeling of impacts from the Proposed Project indicates that primary health-based water quality standards will not be exceeded due to the Project. Mitigation measure ITA-1 is primarily included as a backup measure to ensure that this will occur even if unforeseen

circumstances arise. Until such a situation arises, it would be premature to enter into an agreement with the tribes as the specifics of what the tribes would like to do would change depending on a host of variables, including the division of costs between the tribes and the District. This could include, but is not limited to, the location of any water quality standard exceedances relative to District facilities, as well as the extent that such an exceedance is caused by non-Project water sources.

6-13, 6-14 and 6-15 The comments stated that urban and agricultural runoff affecting tribal land and the Salton Sea, or effects of elevated contaminants on traditional native plants and wildlife important to tribal culture, were not addressed. These impacts would not be due to the 2010 WMP Update, but are rather part of existing conditions or would be impacts due to other, unrelated projects within the Valley. Urban and municipal stormwater runoff is collected in existing flood control channels and flows to the Whitewater River /Coachella Valley Stormwater Channel (CVSC). The quality of urban runoff sources is the responsibility of the County of Riverside and the Valley cities under the State Water Resources Control Board (SWRCB) Small Municipal Separate Storm Sewer System (MS4) Program (SWRCB, 2011). MS4 permits requirements are addressed in the jurisdictions' General Plans and EIRs. Local agencies must address urban runoff quality under requirements of the NPDES program. The SWRCB Storm Water Program (2011) is available at:
http://www.swrcb.ca.gov/water_issues/programs/stormwater/phase_ii_municipal.shtml

The contribution to the Salton Sea from agricultural use is projected to decrease, as agriculture transitions to urban land uses. The quality of agricultural drainage is anticipated to change, with increase in TDS to 2800-2900 mg/L and the possible increase in selenium. Impacts of selenium and mitigation for potential increases in concentrations in the CVSC and drains are addressed in the SPEIR, pages 5-23 to 5-24, 5-27, 5-40 to 5-41, 5-50, and in Section 10.4.5, pages 10-16 to 10-18. Salinity changes in Salton Sea inflow are discussed on SPEIR pages 5-39 to 5-40, 5-45 to 5-46, and 5-50.

The comment is not clear on which water contaminants are affecting or could affect traditional native plants and wildlife. No specific traditional native plants or wildlife were referenced in the comment and this issue was not raised at any meetings with the tribes or BIA over the past several years. The quality of recharge water would not affect any biological resources.

6-16 The comment states that feasibility studies on SWP importation to the Valley were not addressed. The preliminary analysis of potential benefits to the Valley as a whole, which includes tribal resources, and the costs of the State Water Project Extension into the Coachella Valley are discussed in Section 10–Alternatives to the Proposed Project, Section 10.4.1, based on the draft feasibility study. An expansion of that discussion follows.

CVWD, DWA, Metropolitan, San Gorgonio Pass Water Agency and Mojave Water Agency commissioned a feasibility study of extending the SWP to the Coachella Valley in 2006 (GEI, et

al., 2011). The SWP Extension feasibility study initially evaluated four potential conveyance alignments: 1) a Lucerne Valley alignment originating on the East Branch of the California Aqueduct near Hesperia and running through Yucca Valley, 2) a North Pass alignment originating at the SWP Devil Canyon Afterbay in San Bernardino and paralleling Interstate 10, 3) a South Pass alignment originating at Lake Perris and paralleling State Route 60 and Interstate 10, and 4) a San Jacinto alignment originating at Lake Perris and tunneling through the San Jacinto Mountains. Following completion of the initial evaluation in 2007, two potential alignments were selected for more detailed evaluation — a 90-mile-long Lucerne Valley alignment and a 40-mile-long Modified North Pass alignment that utilized Metropolitan's Inland Feeder. For each alignment, two different project sizes were considered: a small project entailing delivery capacity for CVWD and DWA only with water delivery over 11 months per year and a large project including capacity for CVWD, DWA and other contractors along the alignment with water delivery over 9 months per year. The alignments were evaluated equally and neither alignment was selected as the proposed project.

Environmental constraints for both alignments were found to be numerous and substantive (for example, it is not certain that a Morongo Canyon alignment reach would be permitted, even if tunneled). A full EIR and NEPA EIS will be required for the project and neither process has commenced; in addition, a federal lead agency has not been identified.

The total capital cost of the Lucerne Valley project was estimated to range from $900 million to $1.2 billion for the small project and $1.1 to $1.4 billion for the large project in 2009 dollars, with a $7.5 million per year (2009 dollars) operation and maintenance (O&M) cost. The capital cost allocation to CVWD and DWA was estimated at $1.06 billion for the small project and $1.2 billion for the large project using the mid-point of the capital cost estimates. For the Modified North Pass alignment, the estimated total capital cost in 2009 dollars was $774 million to $981 million for the small project and $881 million to $1.13 billion for the large project. Estimated annual O&M costs were $26.2 million for the small project and $19.1 million for the large project. The CVWD and DWA construction cost share of the Modified North Pass alignment was estimated at $878 million for the small project and $897 million for the large project using the mid-point of the capital cost estimates. The viability of the Modified North Pass alignment also depends on Metropolitan allowing use and purchase of available Inland Feeder capacity; no commitment has been made to date. A number of additional issues affecting the project feasibility remain unresolved.

- Reliability of the SWP conservation facilities is an unresolved constraint to the SWP Extension project. SWP Conservation Facilities are basically those facilities that generate the yield of the SWP, and include Lake Oroville, San Luis Reservoir, and a portion of the California Aqueduct from the Delta to San Luis Reservoir. In order to receive the full benefit of a State Water Project extension. SWP reliability would have to increase from the current 60 percent to its historical 75 percent.

- Capacity in the California Aqueduct north of the bifurcation into the East Branch and West Branch is a potential constraint to the SWP Extension.
- The Pearblossom Pumping Plant on the East Branch of the California Aqueduct has less capacity than required to supply the SWP Extension project along with other contractors' needs.
- The capacity of the Inland Feeder may not be adequate to make deliveries to the Modified North Pass Alignment as well as meet Metropolitan's needs. Further analysis is needed to determine the anticipated available capacity in future years.
- The governance structure for the design, construction and operation of the project has not yet been determined. Such a structure is necessary for securing bond funding of the project.
- Feasibility will also be affected by the results of future stakeholder and public agency outreach.
- Participation of the project partners will depend on whether their individual needs for supplemental water can be met by the proposed project, which depends on which alignment ultimately is selected.

The SWP Extension feasibility report is in final draft form and is expected to remain in that form pending resolution of the feasibility constraints above and resolution of the Bay Delta Conservation Plan and the potentially participating agencies' ability to finance the project. For all of the above reasons, the SWP Extension is considered infeasible. In SPEIR Section 3.3, it is identified as an element for possible inclusion in future updates to the WMP, but its inclusion at this time is highly speculative and would require a drastic change in state and local agency financial conditions, at the very least.

6-17 The comment states that reservation lands were not included in water modeling studies. Reservation land was included in the groundwater modeling studies. Land use and water demand on tribal lands were assumed to be the same as for similar areas of the Valley, since information specific to tribal land and water use was not provided. CVWD would be happy to include additional tribal-specific data in the model.

6-18 The comment states that tribes need to have a voice in water policy formulation. The role of the tribes in formulation of water policy is not a CEQA issue. CVWD held several meetings with the tribes and BIA over the last three years to identify their concerns and to provide a forum for discussion of water issues. CVWD also attempted to involve tribal councils in water management meetings and arranged a government to government reception at BIA offices on May 18, 2010 with the CVWD Board of Directors. The tribal council members did not attend and chose to send staff instead. CVWD remains open to meeting with the individual tribal councils.

6-19 The comment challenges the findings of the SPEIR with regard to groundwater levels and quality. The projected ground water levels and water quality are shown as SPEIR text and

figures are excerpted directly from the WMP Update. The information was based on CVWD well monitoring and the peer-reviewed groundwater model which was revisited for the WMP Update. Therefore, the analyses in the WMP Update and the SPEIR, represented in13 figures from model results, are congruent.

The District has had an extensive monitoring program in place for more than 60 years. The District's program currently monitors water levels in more than 500 wells at least three times per year. It was the results of CVWD's basin-wide, ongoing well monitoring that clearly identified a serious decline in groundwater levels in the West and East Valleys before 1993, which spurred the preparation of the first WMP. CVWD groundwater monitoring data are published in the CVWD Annual Engineer's Report prepared in conjunction with the Replenishment Assessment. CVWD publishes hydrographs for two example wells in the West Valley and 14 wells in the East Valley. Data for a minimum of 10 additional wells will be presented in future reports. The District also will be participating in the state's California Statewide Groundwater Elevation Monitoring (CASGEM) program, submitting groundwater elevation data for 45 wells twice per year starting in January 2012. The District agrees that development of a comprehensive groundwater level database would be beneficial for providing a more complete picture of groundwater conditions, and encourages the tribes to participate. Consequently, this has been included as a WMP project.

The WMP goal is to eliminate long-term overdraft, and not to continue "mining" the basin. However, that does not mean there will not be periods when extraction from the basin temporarily exceeds natural and artificial recharge. Although water levels are expected to rise in the long term, periods of increasing and decreasing water levels will occur as the result of hydrologic variation in the supplies used to recharge the basin, especially near recharge basins. CVWD and DWA strive to recharge as much water as possible when it is available with full knowledge that there will be periods when supplies are reduced due to drought. Thus, the 2002 WMP and the 2010 WMP Update identify actions to be taken over the next 35 years to halt overdraft and manage the basin in a sustainable manner. CVWD and DWA have made significant investments to acquire water supplies over the past eight years that put the Valley on a path toward sustainability.

6-20 The comment refers to the on-going California Water Plan Update 2013. The planning underway for the proposed California Water Plan Update is not part of the WMP Update or SPEIR; however, a review of the draft California Water Plan indicates that it proposes the same water resources management elements already in the WMP Update: conservation, maximizing local supplies, use of shallow groundwater, and maximizing recycling. The CVWD has already achieved 18.4 percent conservation, a long way to meeting its 20 by 2020 conservation goal; years ahead of schedule.

The interrelationship with the Coachella Valley IRWMP is not a physical impact of the 2010 WMP Update on the environment, and thus is not strictly a subject of the SPEIR. The IRWMP

was prepared in 2009-2010 under a Memorandum of Understanding among CWA, CVWD, Desert Water Agency, Indio Water Authority and Mission Springs Water District to develop a regional water management plan for submittal to the Department of Water Resources (DWR) to regionally manage water resources and work cooperatively to manage available local and imported water supplies. DWR provides funding for water management projects through competitive planning and implementation grant programs. The 2002 WMP was a significant source of information for the IRWMP. Federal reservations lands overlying the groundwater basin are included in the 2010 WMP Update: land use and water demand on tribal lands within the study area were assumed to be the same as for similar areas of the Valley, since information specific to tribal land and water use was not provided. With regard to the claim that the tribes are not being involved in planning for the Valley, please see, e.g., Response to Comment 6-18.

6-21 The Coachella Valley tribes are not cooperating agencies under NEPA for the WMP Update because the Proposed Project has no NEPA nexus (no federal funding, no required federal permits or federal land involvement). Similarly, the tribes are not Responsible Agencies under CEQA, defined as those state or local agencies that have approval authority by regulation or statute over the Proposed Project.

At the same time, CVWD initiated and continued extensive coordination with the Coachella Valley tribes and BIA over several years during the preparation of the WMP Update and SPEIR. As discussed in response to comment 6-1 above, the District invited the tribal councils to a government to government reception with the CVWD Board of Directors, which the councils declined to attend. The District remains willing to arrange additional meetings with tribal councils and their staffs on issues of mutual interest.

STATE OF CALIFORNIA

Governor's Office of Planning and Research

State Clearinghouse and Planning Unit

Edmund G. Brown Jr.
Governor

Ken Alex
Director

September 26, 2011

RECD SEP 29 2011 CVWD

ORIG/EML: P REYES
EML: L STOWE
M JOHNSON
S BIGLEY
J BARRETT
G GIL
FILE: 0643.511

Patti Reyes
Coachella Valley Water District
85-955 Avenue 52
Coachella, CA 92236

Subject: Coachella Valley Water Management Plan 2010 Update
SCH#: 2007091099

Dear Patti Reyes:

The enclosed comment (s) on your Draft EIR was (were) received by the State Clearinghouse after the end of the state review period, which closed on September 19, 2011. We are forwarding these comments to you because they provide information or raise issues that should be addressed in your final environmental document.

The California Environmental Quality Act does not require Lead Agencies to respond to late comments. However, we encourage you to incorporate these additional comments into your final environmental document and to consider them prior to taking final action on the proposed project.

Please contact the State Clearinghouse at (916) 445-0613 if you have any questions concerning the environmental review process. If you have a question regarding the above-named project, please refer to the ten-digit State Clearinghouse number (2007091099) when contacting this office.

Sincerely,

Scott Morgan
Director, State Clearinghouse

Enclosures
cc: Resources Agency

SCAN & SHRED

SCANNED

1400 TENTH STREET P.O. BOX 3044 SACRAMENTO, CALIFORNIA 95812-3044
TEL (916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

STATE OF CALIFORNIA - THE NATURAL RESOURCES AGENCY EDMUND G. BROWN, JR., Governor

COLORADO RIVER BOARD OF CALIFORNIA
770 FAIRMONT AVENUE, SUITE 100
GLENDALE, CA 91203-1068
(818) 500-1625
(818) 543-4685 FAX

September 21, 2011

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STATE CLEARING HOUSE

State Clearinghouse
1400 Tenth Street
P.O. Box 3044
Sacramento, CA 95812-3044

Regarding SCH# 2007-091-099: Notice of Completion & Environmental Document Transmittal for Draft Environmental Impact Report (DEIR) for the Coachella Valley Water Management Plan 2010 Update, Coachella Valley Water District, Riverside County, California

To Whom It May Concern:

The Colorado River Board of California (CRB) has received and reviewed a copy of Notice of Completion & Environmental Document Transmittal for Draft Environmental Impact Report (DEIR) for the Coachella Valley Water Management Plan 2010 Update, Coachella Valley Water District, Riverside County, California.

At this juncture, the CRB has determined that it has no comments regarding the Notice. If you have any questions, please feel free to contact me, or Dr. Jay Chen of my staff, at (818) 500-1625.

Sincerely,

Christopher S. Harris
Acting Executive Director

7. Response to: Christopher S. Harris, Acting Executive /Director Colorado River Board

The Colorado River Board had no comments; therefore, no response is necessary.