22
CHANGES AND ERRATA

22.1 INTRODUCTION

This chapter describes the modifications that were made between the Draft and Final Facilities Plan and EIR. Modifications in the final document include all revisions related to public comments, updates, and clarifications, as determined necessary by the Santa Clarita Valley Sanitation District (SCVSD), the lead agency. Section 22.2 references these revisions. None of the revisions result in changes to significance findings in the Draft Facilities Plan and EIR.

Some of the modifications in the Final Facilities Plan and EIR are not included in Section 22.2. These changes are discussed below.

Two new sections are added to the Final Facilities Plan and EIR. Section 21 includes the comments received during the 90-day comment period for the Draft Facilities Plan and EIR and the responses to those comments. Section 22 presents changes and errata that were addressed during the preparation of the Final Facilities Plan and EIR.

In addition, the Final Facilities Plan and EIR includes the following new appendices:

- Appendix 1-A contains the State Water Resources Control Board Requirements for Project Reports
- Appendix 8-C contains the Public Participation Report
- Appendix 14-A contains the Deep Well Injection Induced Seismicity technical memorandum prepared by CH2M HILL (CH2M HILL 2013)

Specific revisions to tables and figures are not included in Section 22.2; however, revisions are referenced in Section 22.2, and the reader is directed to the revised tables and figures in the Final Facilities Plan and EIR to view complete errata. As necessary, the word "Draft" before Facilities Plan and EIR was removed or revised to "Final" throughout the document.

It should be noted that nonsubstantive changes that do not alter the meaning of the text, including errors in grammar, punctuation, spelling, acronyms, references, and typography, have been corrected for the final documents but are not included in this chapter.

22.2 MODIFICATIONS TO THE EIR

Revisions to the text as presented herein are incorporated into the Final Facilities Plan and EIR. Underlines indicate where additions were made to the original text. Strikeout indicates where the original text was deleted. The location of revisions is identified according to section number and/or heading from the Draft Facilities Plan and EIR; table and figure numbers from the Draft Facilities Plan and EIR are used where applicable. Readers are referred to the Final Facilities Plan and EIR to view complete sections.

22.2.1 Executive Summary

Based on strong public opposition during the Public Participation Program, Alternative 3 is no longer a recommended project and is removed from the Executive Summary of the Draft Facilities Plan and EIR. The Executive Summary has been reorganized to present the top-ranked alternative (Alternative 4 – Phased AWRM) first, followed by the backup alternative (Alternative 2). Readers are referred to the Final Facilities Plan and EIR to view the reorganization. Substantive changes, regardless of the reorganization of the Executive Summary, are presented below.

Range of Alternatives, Source Control, second paragraph, is revised as follows:

> Under current State Water Project operating conditions ~~without the Bay Delta Conveyance Facility portion of the proposed Bay Delta Conservation Plan~~, chloride levels in the water supply vary during drought conditions that are expected to occur three out of every ten years. Per work done in conjunction with the Castaic Lake Water Agency, chloride levels in the Valley's water supply are expected to peak at 85 mg/L during drought and average at 70 mg/L during non-drought years. Higher chloride levels in the water supply result in higher levels in the treated wastewater. In May 2013, a complete Administrative Draft of the Bay Delta Conservation Plan was released for comment. The information in this draft indicates that implementation of the Bay Delta Conveyance Facility would provide a much smaller improvement in the chloride level of the water delivered to the Santa Clarita Valley during drought conditions than previously expected. Consequently, implementation of the Bay Delta Conveyance Facility would not be sufficient to provide compliance with the Chloride TMDL. ~~When completed, the Bay Delta Conveyance Facility would result in significantly lower chloride levels in the Valley's water supply, even during drought. However, the most optimistic completion date for this project is 2025 – well after the State's May 2015 deadline for compliance with the chloride limit.~~

Disposal of Brine Waste, second paragraph, is revised as follows:

> Through extensive analysis, three top brine disposal methods were identified: (1) a brine pipeline to the Los Angeles Basin and discharge to a sewer owned by the Sanitation Districts of Los Angeles County (Sanitation Districts) that discharges to the ocean, (2) deep well injection (DWI) of brine over one mile below ground surface, and (3) truck transport of brine to the Los Angeles Basin and discharge to an existing Sanitation Districts' sewer that discharges to the ocean. After looking at several possible sites for a truck unloading terminal, the site located closest to the Valencia WRP was used for further analysis. ~~The fail-safe location would be at the Sanitation Districts' Joint Water Pollution Control Plant.~~ The SCVSD worked with the City of Los Angeles to see if brine

could be discharged into a City of Los Angeles-owned sewer in the San Fernando Valley. City of Los Angeles staff determined this would not be feasible. Unlike the hydraulic fracturing process (or "fracking") used by the natural gas industry, deep well injection is operated at much lower pressures that do not fracture the underground rock formations, thereby, protecting groundwater that is used for domestic water suppliers. An extensive siting analysis was completed for potential injection sites and two screening areas were identified, Site A and Site B. Site A is expected to accommodate all wells required, while Site B could only accommodate some of the wells required. Consequently, Site A is the preferred site because it is expected to handle all wells while use of Site B would require development of Site A as well as construction of two pipelines.

Final Alternatives, Phased AWRM section, is revised as follows:

The Phased AWRM alternative consists of two phases. Phase I includes UV disinfection, supplemental water, and groundwater wells and distribution piping in the Piru groundwater basin located in Ventura County just west of the Los Angeles-Ventura County line. The wells and piping in Ventura County would be used to extract high chloride groundwater, blend it with lower chloride water, and discharge the resulting blend (having acceptable chloride level) downstream. The blend would provide a new water supply, and the extraction of high chloride groundwater would lead to lower groundwater chloride levels over time as the groundwater basin is replenished through rainfall percolation. Salt management facilities would provide regional water quality and supply benefits that were the primary reason why the RWQCB-LA and Ventura County interests agreed to support chloride limits higher than 100 mg/L under the AWRM. The concept of supplemental water is to blend treated wastewater with low chloride groundwater from the Valley's Saugus Formation to maintain compliance when chloride levels are peaking during drought. To ensure no net loss of water supply to the Valley, the Saugus Formation groundwater would be replaced with additional imported water from a water bank in the Central Valley of California.

Phase II represents a formal backup plan in case ~~would only be built if~~ Phase I facilities ~~does~~ cannot consistently provide compliance with the chloride limit~~, and if the Bay Delta Conveyance Facility is not constructed in a timely manner~~. The specific conditions that would constitute lack of compliance and trigger Phase II are under negotiation with stakeholders and regulators. Phase II would add advanced treatment (MF/RO), brine minimization, brine disposal by DWI, and potentially a pipeline from the Valencia WRP to Ventura County to supply RO product water.

Comparison of Final Alternatives, Costs section, is revised as follows:

There are two types of costs that must be funded by users of the Valley's sewer system: capital costs and annual O&M costs. Generally, alternatives with higher capital costs have lower annual O&M costs. ~~Table ES-5 shows the differences in total costs over three time horizons. With construction of the Bay Delta Conveyance Facility, the SCVSD might meet the chloride limit without operation of the advanced treatment facilities. However, there is uncertainty about when the Bay Delta Conveyance Facility will be built and operational. Consequently,~~ Table ES-5 shows the total costs (capital plus O&M) spent by 2030~~25~~ and 2045, about 10 and 25 years into operation of the new facilities ~~the earliest the Bay Delta Conveyance Facility would be operational, and by the years 2030 and 2035 – representing 5- and 10-year delays in the Bay Delta Conveyance~~

~~Facility~~. The data in Table ES-5 show that, over time, alternatives with lower annual O&M costs result in lower overall total costs than the low capital cost alternatives.

Recommended Alternatives section of the Draft Facilities Plan and EIR (Recommended Project of the Final Facilities Plan and EIR), heading and the section are revised as follows:

RECOMMENDED ~~ALTERNATIVES~~ PROJECT

Alternative 4 (Phased AWRM) Phase I is the top-ranked alternative but requires regulatory approvals to be implemented. If Phase II is triggered, Alternative 4 is the lowest-ranked and most costly alternative. However, based on the triggers being proposed, Phase II is not expected to be needed. Alternative 2 is the second-highest ranked alternative and would comply with the existing 100 mg/L chloride limit. Therefore, the recommended project consists of Alternative 4 and, as a backup, Alternative 2 if Alternative 4 does not receive the necessary regulatory approvals or if the final negotiated Phase II triggers are unacceptable to the SCVSD. ~~Alternative 4, Phased AWRM Phase I, was the highest ranked alternative. If Phased AWRM Phase II is required, this alternative would be the most costly and lowest ranked. Because Phased AWRM does not comply with the State-mandated chloride limit, additional alternatives that comply with the chloride limit must be considered. Alternative 2 (MF/RO With Brine Disposal via DWI) and Alternative 3 (MF/RO With Brine Disposal via Trucking) meet all of the project objectives and received almost identical scores. These alternatives are thus recommended as fallback options if Alternative 4 does not become feasible. Alternative 1 had a substantially lower score and is not considered further.~~

Alternative 4 – Phased AWRM

The Phased AWRM alternative consists of two phases. Phase I includes UV disinfection at both of the Valley's Wastewater Reclamation Plants (WRPs), supplemental water, and groundwater wells and distribution piping in the Piru Subbasin located in Ventura County just west of the Los Angeles-Ventura County line (see Figure ES-6~~8~~). The wells and piping in Ventura County would be used to extract high chloride groundwater, blend it with lower chloride water, and discharge the resulting blend (having acceptable chloride level) downstream. The blend would provide a new water supply, and the extraction of high chloride groundwater would lead to lower groundwater chloride levels over time. Phase II is a backup plan that would only be built if Phase I does not consistently provide compliance with the chloride limit~~, and the Bay Delta Conveyance Facility is not constructed in a timely manner~~. Phase II would add advanced treatment (MF/RO), brine minimization ~~like Alternative 2~~, brine disposal by DWI via deep well injection (DWI) ~~like Aternative 2~~, and potentially a pipeline from the Valencia WRP to Ventura County to supply RO product water. There is the possibility of lower costs and environmental impacts for Phase II than shown in Tables ES-3, ES-4 and ES-5 through the replacement of the 12-mile pipeline with an alternate solution. However, these savings cannot be identified until regulatory requirements for this alternative are defined and finalized. There is also potential to share capital and operations and maintenance costs for supplemental water facilities between the SCVSD and Santa Clarita Valley water suppliers. However, no cost allocation has been agreed to and the costs presented assume SCVSD pays the entire cost. MF/RO treatment would be constructed at Valencia WRP. Resulting brine would be further treated using additional RO membranes to reduce volume in a process called brine minimization. Minimized brine would then be injected over one mile beneath the earth's surface in permeable soil through dedicated disposal

wells. Deep well injection is a commonly used method of disposal of brine with 47,000 active wells in California alone. Unlike the hydraulic fracturing (or "fracking") process used by the natural gas industry, deep well injection is operated at pressures well below the fracture pressure of the formation to ensure that confining geologic layers maintain their integrity and continue to protect groundwater resources. Site A, as shown in Figure ES-6, is the preferred injection site area. If there is a need to use Site B as a second or alternate injection site, the SCVSD would conduct appropriate environmental review as needed to comply with CEQA.

Backup: Alternative 2 – Microfiltration/Reverse Osmosis With Brine Disposal via Deep Well Injection

Project Schedules section, is revised as follows:

The project would be divided into a number of construction projects all designed and constructed concurrently. The implementation schedules for the ~~three recommended~~top-ranked and backup alternatives are shown on Figures ES-8~~9~~ and ES-9~~10~~. Despite these efforts, the work cannot be completed before the State's compliance deadline of May 2015. The SCVSD will pursue a schedule extension from the RWQCB-LA consistent with the schedules shown on Figures ES-8~~9~~ and ES-9~~10~~. While concluding negotiations regarding the Phased AWRM, it is recommended that efforts to obtain a permit from the EPA and install a test well for brine injection be started to allow timely implementation of the backup alternative in case the necessary regulatory approvals for the Phased AWRM are not obtained. The test well effort is a lengthy process and is needed to verify the geologic suitability for injection.

Impact on Rates, Service Charges section, is revised as follows:

The capital costs of the recommended ~~alternatives~~projects~~s~~ are considered to be "upgrade costs" and benefit existing users of the Valley's sewerage system by providing a higher level of treatment without providing additional capacity. These new capital costs would be paid by existing users through annual service charges. Annual operations and maintenance (O&M) costs are also paid by current users through annual service charges. Estimates of future service charges with no chloride treatment project and with the recommended ~~alternatives~~project are shown in Table ES-9. Although Alternatives 1 and 3 are not part of the recommended project, projected service charges for those alternatives are provided for comparison. These estimates are for fiscal year 2019-20 (when the project would become operational). These projections are based on best available financing assumptions, anticipated inflation of construction costs, anticipated inflation of O&M costs, and an assumed series of annual increases to service charges. For comparison, the current annual sewer service charge rate is $231 per sewage unit and is projected to increase to $270 by fiscal year 2019-20 as shown in Table ES-9.

Table ES-10 shows the projected INCREASE in annual service charge for each recommended alternative for fiscal year 2019-20. The increase is shown in two parts: the portion for annual loan payments for capital costs, and the potion for operation and maintenance of the facilities. Note that the capital repayment portion of the service charge would stop after loans are repaid while operation and maintenance costs would continue into the future. Although Alternatives 1 and 3 are not part of the recommended project, projected increases in annual service charge for those alternatives are provided for comparison.

Impact on Rates, Connection Fees section, first paragraph, is revised as follows:

> New users who connect to the sewerage system (or existing users who significantly increase their discharge) would pay a one-time connection fee for the right to use the existing system, i.e., they must "buy-in" to the system. Once connected, new users would pay for on-going expenses through service charges. In order to treat all new users in a fair manner, the connection fee would increase over time. Thus, new users who join the system early will pay a lower connection fee but would also be paying the annual service charge over time. Table ES-11 provides current connection fees (fiscal year 2013-14) for all types of use.

Impact on Rates, Connection Fees section, third paragraph, is revised as follows:

> Projected connection fees for selected user categories are presented in Table ES-12. Although Alternatives 1 and 3 are not part of the recommended project, projected connection fees for those alternatives are provided for comparison.

Environmental Review, Areas of Controversy and Issues to Be Resolved section, is revised as follows:

> In accordance with §§15063 and 15082 of CEQA Guidelines, the SCVSD, as the Lead Agency, prepared an NOP for the SCVSD Chloride Compliance Facilities Plan and EIR. Based on comments received on the NOP, known areas of controversy include:
>
> - The basis for the State-mandated chloride limit established by the RWQCB-LA.
>
> - Potential impacts to downstream beneficial uses if the Valley's wastewater reclamation plant discharges are reduced from current levels.
>
> - ~~Potential for facilities constructed for compliance with the State-mandated chloride limit to become unnecessary and, therefore, stranded assets when the Bay Delta Conveyance Facility is completed.~~
>
> An additional area of controversy, trucking brine into the City Terrace area for disposal, was identified based on comments received during the review period of the Draft Facilities Plan and EIR. Therefore, brine disposal via trucking was eliminated from the recommended project.
>
> The primary issue yet to be resolved is the receipt of regulatory approval for Alternative 4 to determine which portion of ~~identification of~~ the ~~final~~ recommended project will be implemented.

Table ES-5 is revised to remove total costs spent by 2025 and 2035 and include total costs spent by 2045.

Table ES-6 is revised to replace Potential for Stranded Assets criterion with Public Acceptability criterion and to revise ranking for Traffic and Institutional Feasibility for Alternative 3.

Table ES-7 is revised to remove Capital Costs + Interest and Cumulative $ Spent by 2025 criteria and add Cumulative $ Spent by 2045 criterion. The number of maximum possible points assigned to each criterion is also revised.

Table ES-8 is revised to incorporate results from Tables ES-6 and ES-7.

Table ES-9 is revised to include projected annual service charges for Alternative 1.

Table ES-10 is revised to include projected annual service charge increases for Alternative 1.

Tables ES-11 and ES-12 are added.

Table ES-11 is renumbered to Table ES-13 and is revised for Mitigation Measure (MM) AQ-4 as shown in Section 22.2.11.

Table ES-11 is renumbered to Table ES-13 and is revised for MM BIO-1, MM BIO-2, and MM BIO-3 as shown in Section 22.2.12.

Figure ES-7 of the Draft Facilities Plan and EIR is removed.

Figures ES-6, ES-8, and ES-10 are renumbered to Figures ES-7, ES-6, and ES-8, respectively.

Figure ES-9 is revised to remove the Alternative 3 implementation schedule.

22.2.2 Section 1, Introduction

Section 1.3, fourth paragraph, is revised as follows:

> In recent years, chloride levels in the WRP discharges have dropped significantly due to improved source control, largely through the community's removal of over 8,000~~7,800~~ automatic water softeners. Additional efforts to remove the relatively small number of remaining water softeners are underway. These reduced chloride levels provide a major benefit by reducing the size and cost of additional treatment facilities needed to comply with the chloride limit. Although chloride in the WRP discharges has been reduced, the state's regulation requires further chloride reduction to comply with either the 100 mg/L chloride limit or the modified 117 mg/L chloride limit conditioned upon construction of the AWRM facilities. Chloride removal facilities are needed to comply with either limit.

22.2.3 Section 2, Planning Area Characteristics

Section 2.3.1.1, second paragraph, is revised as follows:

> A number of endangered and sensitive plant and animal species are contained within the diverse ecological communities of the SCV. In particular, the unarmored threespine stickleback, a federal and state listed endangered species and a state fully protected species, is known to occur in the SCR. A number of sensitive bird species are known to use the riparian habitat along the SCR for nesting and foraging, including the white-tailed kite, least Bell's vireo, and southwestern willow flycatcher. Other sensitive wildlife species in the valley include, or may potentially include, the following: the arroyo toad, arroyo chub, Santa Ana sucker, and others. The riparian habitats along the upper SCR also have the potential to support two sensitive plant species, the slender-horned spineflower and the Nevin's barberry (Jones & Stokes 1996).

22.2.4 Section 3, Laws and Regulations

No substantive changes.

22.2.5 Section 4, Water and Wastewater Projections

Section 4.2.3, second paragraph, is revised as follows:

> Municipal reuse of VWRP's recycled water began in 2003 for irrigation at a local golf course and in roadway median strips. The 2012 recycled water delivery was 301 af but is projected to increase to 22,800 af by 2050 based on ~~CLWA's~~the 2010 Urban Water Management Plan (UWMP) adopted by CLWA and three SCV retail water purveyors.

Section 4.4.2, second paragraph, is revised as follows:

> The main factor that could affect the plant influent chloride level is saltwater intrusion in the Delta, which increases chloride level in SWP water. SWP water quality is not expected to worsen based on the likely continued restrictions to pumping for endangered species protection or construction of a Bay Delta Conveyance Facility. As mentioned in Section 4.2.1, CLWA observed lower SWP chloride levels in the most recent droughts compared to past droughts. These lower levels have been attributed to SWP operational restrictions due to recent Biological Opinions for the protection of endangered species and the implementation of water banking programs. As documented in the February 2012 report by CLWA titled State Water Project Chloride Modeling Analysis (see Appendix 4-A), these reductions are expected to continue into the future and lessen the amount of chloride reduction the SCVSD must provide to comply with the Chloride TMDL. For decades, there have been discussions about providing a new water conveyance facility around the Delta. In 1982, this conveyance was known as the "peripheral canal" and was defeated in a ballot initiative (California Proposition 9, the Peripheral Canal Act, June 1982). The more recent name is the Bay Delta Conveyance Facility. In May 2013, a complete Administrative Draft of the Bay Delta Conservation Plan was released for comment. The information in this draft indicates that implementation of the Bay Delta Conveyance Facility would provide a much smaller improvement in the chloride level of the water delivered to the SCV than previously expected. Consequently, implementation of the Bay Delta Conveyance Facility would not be sufficient to provide compliance~~When such an improvement is completed, there is the possibility that the SCV water supply quality could improve enough that treatment plant effluent could comply~~ with the Chloride TMDL without new facilities. ~~Construction of the Bay Delta Conveyance Facility is politically sensitive and costly. As such, it is uncertain whether this project will move forward. Even if a decision to move forward with the Bay Delta Conveyance Facility is made in 2013, the most optimistic completion date is 2025, which is well beyond the Chloride TMDL compliance deadline.~~

22.2.6 Section 5, Facilities Description

Section 5.5.1, third paragraph, is revised as follows:

> It is anticipated that overall water demands in the SCV will continue to increase. Recycled water would provide an additional, reliable water supply to meet projected

demands. In 2002, CLWA prepared a Recycled Water Master Plan in which landscape irrigation was identified as the primary potential use of recycled water. Recycled water demand was further refined in the 2010 Urban Water Management Plan prepared by CLWA and three SCV retail water purveyors. Table 5-3 shows the estimated recycled water reuse for the years 2020 through 2050. The projected recycled water reuse by 2050 is 22,800 afy.

Table 5-3 is revised to remove the following in the footnote section at the end of the table:

Source: 2010 Urban Water Management Plan~~CLWA~~.

Figure 5-1 is revised to correct the return sludge flow direction from the secondary settling tanks.

The legend on Figure 5-6 is revised.

22.2.7 Section 6, Alternative Analysis

Section 6.3.2.11, after the first paragraph, is revised with the addition of the following statement:

Input regarding public acceptability was gathered through meetings, presentations, public hearings, and public comments during the public review period for the Draft Facilities Plan and EIR.

Section 6.4.1.6, first paragraph, is revised as follows:

In this approach, the tertiary-treated flow remaining after meeting the minimum discharge and community recycled water needs would be used for groundwater recharge. Groundwater recharge is accomplished in two ways: by percolating treated water underground (via spreading grounds) or by direct injection into an aquifer. The first significant impediment to this approach is that groundwater recharge projects have historically taken up to ten years to permit, which is longer than the Chloride TMDL compliance deadline. Second, the state requires that tertiary-treated wastewater used in spreading ground applications be diluted with stormwater or potable water. The required amount of dilution water is determined by the California Department of Public Health based on a variety of site specific factors, but has historically been between 20 and 50 percent. Stormwater is only available a fraction of the year, and potable water is relatively costly and difficult to obtain rights to. Consequently, such projects are economically feasible only when there is insufficient groundwater supply or ready sources of stormwater that can be captured for blending. An additional issue with surface spreading is that much of the Santa Clarita area has a groundwater objective of 100 mg/L for chloride. As a result, tertiary-treated wastewater would likely require some AWT before surface spreading. There are two aquifers in Santa Clarita that could be recharged: the shallow Alluvial Aquifer and the deeper Saugus Formation. The Alluvial Aquifer is quickly recharged by natural precipitation. Thus, filling this aquifer with a blend of treated wastewater and potable water provides no benefit other than disposing of high chloride water. Groundwater recharge into the Saugus Formation is possible only through direct injection. Injected water does not receive the treatment provided by the soil that percolated water does. As a result, only advanced treated water can be direct injected. Consequently, the SCVSD would need an AWT facility sized to treat the entire plant flow (some for the minimum discharge and the rest for direct injection) resulting in

a more costly solution than the final alternatives in Section 6.7. Thus, groundwater recharge is not a feasible approach for this project.

Section 6.4.2.4, first paragraph, is revised as follows:

In this approach, the SCVSD would rely upon future implementation of the Bay Delta Conveyance Facility to dramatically improve chloride levels such that no other actions would be required for Chloride TMDL compliance. About half of the SCV water supply is comprised of imported water from the State Water Project (SWP). Most of the chloride in SWP water comes from water passing through the Sacramento-San Joaquin Delta (Delta) and mixing with seawater. For decades, there have been discussions about providing a new water conveyance facility around the Delta. In 1982, this conveyance was known as the "peripheral canal" and was defeated in a ballot initiative (California Proposition 9, the Peripheral Canal Act, June 1982). The more recent name is the Bay Delta Conveyance Facility. In May 2013, a complete Administrative Draft of the Bay Delta Conservation Plan was released for comment. The information in this draft indicates that implementation of the Bay Delta Conveyance Facility would provide a much smaller improvement in the chloride level of the water delivered to the SCV during drought conditions than previously expected. Consequently, implementation of the Bay Delta Conveyance Facility would not be sufficient to provide compliance with the Chloride TMDL. ~~When such an improvement is completed, there is the possibility that the SCV water supply quality could improve enough that treatment plant effluent could comply with the Chloride TMDL without new facilities. Construction of the Bay Delta Conveyance Facility is politically sensitive and costly. As such, it is uncertain whether this project will move forward. Even if a decision to move forward with the Bay Delta Conveyance Facility is made in 2013, the most optimistic completion date is 2025, which is well beyond the Chloride TMDL compliance deadline.~~ Thus, this approach is not feasible.

Section 6.4.3.1, heading, is revised to replace "Advanced Water Treatment" with "Advanced Wastewater Treatment".

Section 6.4.4, first paragraph, is revised as follows:

In this approach, the SCVSD would take no additional actions towards Chloride TMDL compliance which would result in exceeding the Chloride TMDL limit and violating discharge requirements set by RWQCB-LA pursuant to the federal Clean Water Act and the state's Porter Cologne Act. Violations would result in fines to the SCVSD, which would be passed on to the SCVSD's ratepayers. The penalties could include fines for every day that the SCVSD's WRPs violate the chloride limit and fines for every gallon of treated wastewater that is above the legal chloride limit. Additionally, third party lawsuits can be filed against the SCVSD with the potential of more expensive penalties totaling in the millions of dollars. The SCVSD's ratepayers would pay the cost of the fines, third party lawsuit fines, and eventually the cost of facilities for Chloride TMDL compliance. If the SCVSD refused or was unable to pay fines, a court would place the SCVSD into receivership wherein a third party would make decisions for the SCVSD rather than the SCVSD's Board of Directors. Such an outcome would result in loss of local control in decision-making on sanitation issues. In May 2011, the RWQCB-LA issued Notices of Violation for the VWRP and SWRP non-compliance with the Chloride TMDL (included in Appendix 6-B). In November 2012, the RWQCB-LA issued an administrative civil liability complaint to the SCVSD seeking a fine of $280,250 for

failure to complete a Facilities Plan and EIR in 2011. In March of 2013, the SCVSD reached a settlement with the RWQCB-LA that reduced the fine to $225,000~~Negotiations as to the final fine amounts are ongoing~~. Thus, this approach is not feasible but is analyzed in the EIR as required by California Environmental Quality Act (CEQA).

Section 6.5.2, Zero Liquid Discharge, first paragraph, is revised as follows;

Achieving ZLD requires processes that can remove water and concentrate brine mineral content to a degree such that the final material can be disposed as a solid waste product. These processes include mechanical and thermal evaporation, crystallization, and combinations of enhanced membrane and thermal processes. ZLD technologies are complex, costly to install and operate, energy intensive, and consequently employed when other brine disposal methods are infeasible. Even though ZLD technologies have been successfully implemented in industrial water treatment, they have not been widely utilized in wastewater treatment for brine disposal. Disposal of solid waste produced by a ZLD process can be very expensive if a suitable landfill is not located nearby. The Sanitation Districts' landfills and most Southern California landfills are Class III and cannot accept the soluble waste produced by the ZLD processes. The nearest Class I and Class II landfills ~~which~~that could accept such waste ~~is~~are the Clean Harbors Buttonwillow ~~Landfill~~and the Waste Management McKittrick Landfills, respectivewly, in Central California ~~(~~about 100 miles from the VWRP~~)~~. These processes are complex from an O&M perspective, are not proven with wastewater-derived brine, require considerable energy, and generate a residual that would be costly to haul and dispose. Thus, this approach is not feasible for this Facilities Plan.

Section 6.5.4.1, Ultraviolet, first paragraph, is revised as follows:

The UV disinfection process has replaced chlorination at a number of wastewater facilities within the U.S. Of more than 4,000 publicly owned treatment works (POTWs) in the U.S. with design capacities greater than 1 mgd, approximately 75 percent use chlorination and more than 20 percent use UV disinfection (Leong et al.~~,~~ 2008). The remaining 5 percent use other methods, such as ozone treatment. Using UV for drinking water disinfection in the United States dates back to 1916, but its use for disinfecting wastewater has only become popular in the last 20 years as system costs have declined and the concern regarding chlorination byproducts has increased. UV disinfection systems transfer electromagnetic energy to an organism's genetic materials, which inhibits the organism~~cell~~'s ability to reproduce. The main components of a UV disinfection system are reactors (tanks, piping, or channels) containing lamps and ballasts, power distribution equipment, and a control system. A variety of reactor configurations and lamp types exist. UV produces no harmful byproducts and no residual toxicity that could adversely impact human or aquatic life. The Sanitation Districts have operational experience with UV disinfection at the Whittier Narrows WRP (WNWRP) and Lancaster WRP, and the technology is becoming more widely used. Protocols for permitting in Title 22 municipal reuse applications have been developed but are still evolving.

Section 6.5.5.3, first paragraph, is revised as follows:

In this approach, MF/RO facilities would be sized to treat the typical chloride concentration reaching the VWRP. When chloride levels exceed typical, supplemental water would be blended with plant effluent to produce a blend meeting the chloride

discharge limit of 100 mg/L. Such use of supplemental water would avoid sizing expensive MF/RO and brine disposal facilities for peak chloride levels that are about 20 percent higher than typical levels and only expected to occur three out of every ten years (during drought). Under these conditions, approximately 6 mgd (6,400 afy) of supplemental water would be needed during drought years or 1.7 mgd (1,900 afy) on average. CLWA has confirmed the availability of such replacement water quantities from the Buena Vista-Rosedale source described in the ~~CLWA's~~ 2010 Urban Water Management Plan through the year 2050. However, replacement water is expected to be relatively costly. Utilization of supplemental water would require use of two or three existing or new groundwater wells along with new pipelines to convey water from these wells to the VWRP. The RWQCB-LA would have to approve the use of supplemental water, and it is unclear whether such approval would be granted. Overall, this approach is deemed feasible and is used in all subsequent discussions of supplemental water.

Section 6.6, Support for Municipal Reuse of Recycled Water, is revised as follows:

CLWA provides recycled water to the Santa Clarita Valley. In their most recent Recycled Water Master Plan drafted in 2002, CLWA projected an increasing need for recycled water that will reach 17,400 acre-feet per year by the year 2030. In 2010, CLWA along with the other three SCV retail water purveyors adopted an Urban Water Management Plan that refined the recycled water needs to 22,800 acre-feet per year by the year 2050. Using recycled water reduces the use of potable water and eases concerns of a water shortage during drought. The California Legislature declared its intent that the State undertake all possible steps to encourage development of water recycling facilities so that recycled water may be made available to help meet the growing water requirements of the State. Consistent with this policy and the third project objective in Section 6.2, each alternative would make recycled water available in quantities needed to support CLWA's Master Plan.

Currently, the VWRP and SWRP produce tertiary-treated water that has suitable quality to meet CLWA needs. Depending on how quickly demand for recycled water increases relative to growth in wastewater flow due to population growth, discharge of treated wastewater from the WRPs to the ~~Santa Clara River~~SCR could decrease. However, the combined WRP discharges would not be lower than the minimum flow of 13 mgd identified to sustain the river's biological resources. The basis for these minimum discharges is summarized in Section 11 and described in greater detail in Appendix 6-A.

Section 6.6.1.1, second paragraph, is revised as follows:

In the following discussion, the number of pump stations and pipeline diameter ~~and length~~ are all based on 7.4 mgd of product water produced by MF/RO facilities and 1.3 mgd of brine. Depending on subsequent refinements regarding the use of brine minimization, UV disinfection and supplemental water, the~~se~~ brine flow~~s~~ could drop~~vary~~.

Section 6.6.2, third paragraph, is revised as follows:

Injection wells would be drilled 7,000 to 12,000 feet below ground surface for injection into the relatively permeable Pico and Modelo formations. These formations contain relatively poor quality, naturally-occurring liquids that have similar or higher salinity than ~~the~~ brine to be injected. The Pico and Modelo formations are beneath the lowermost potential drinking water source (what EPA refers to as a USDW) and are isolated from

the USDW by layers of relatively impermeable shale. Wells would be deviated – that is, the bottom of the well (bottom hole location) would be located about one mile away from the top of the well (wellhead) when viewed on a map. Thus, well casings would extend beneath the property of neighboring land owners but would be at depths over 500 feet below ground surface. Deviated wells allow for multiple wellheads to be located on a single site to reduce overall costs.

Section 6.6.2.1, fifth paragraph, is revised as follows:

Site A and Site B screening areas include a large number of potential parcels. These potential parcels were screened for feasibility using the following criteria: (1) minimum footprint of 0.5 acre of land with a minimum dimension of 80 feet (minimums required for DWI construction and operation), (2) location outside of a floodplain and not under power transmission lines, and (3) appropriate zoning and development status. Feasible parcels were then evaluated using the following criteria: (1) conveyance pipeline distance from the VWRP, (2) compatible surrounding land use, (3) development suitability, (4) distance from formation outcrop and/or fault, (5) distance from screening area boundary, and (6) ability to site additional bottom hole location(s). This process resulted in two top-ranked parcels for Site A and two for Site B as shown on Figure 6-9. Based on the AOR analysis and numeric modeling mentioned in Section 6.6.2, ~~the performed analysis,~~ Site A is expected to~~is sufficient to~~ accommodate up to seven injection wells and Site B up to ~~and would be used as the primary well site in the following analysis. Site B can accommodate only~~ four injection wells ~~and would be considered as a backup location~~. For more details of this analysis, see Appendix 6-C.

Section 6.6.2.2, Softening followed by Second-Pass RO, first paragraph, is revised as follows:

Under this scenario, softening consisting of clarifiers and granular filters would be added upstream of a second-pass RO system. The softening system would reduce brine flow to 0.2 mgd, which could be conveyed to Site A by an 8-inch diameter pipeline and injected using three wells. Softening would require construction of chemical storage and handling facilities, clarifiers, filters, and a sludge dewatering system. Approximately two trucks per day of dewatered sludge would need to be trucked to an appropriate disposal facility. The Chiquita Canyon Landfill (about 4 miles from the VWRP) could be used if the sludge is 50 percent or more solids and can pass the "paint filter liquids" test~~text~~. Otherwise, dewatered sludge would likely go to the nearest Class I landfill, which is the Clean Harbors Buttonwillow Landfill in central California (about 100 miles from the VWRP).

Section 6.6.3.2, Area H, third paragraph, is revised as follows:

Area B was the top-ranked location including a top rating in all but one~~each~~ criterion. Area B was the only parcel to receive a top ranking on both freeway travel time and surface-street travel time – critical criteria in minimizing costs. With the exception of Area H (JWPCP), Area B was better than all other sites in the availability of several parcels having the right size and limited existing development. Such parcels would minimize the cost to purchase ~~the~~ land and construct a truck unloading terminal compared to larger parcels of land or land with expensive improvements such as a building. Area A and Area H were second-highest ranked. For Area A, freeway travel time is expected to be worse due to traffic on I-405 south of I-101. Area A had only a few properties requiring limited demolition. For Area H, each trip would be 30 miles

longer resulting in additional cost of $1.1 million per year compared to Area B, and 1,800 miles per day of additional traffic and vehicle emissions. Consequently, Area B (City Terrace) is selected for further analysis as the truck unloading terminal location and is used in all subsequent discussions of ~~the~~ brine disposal via trucking alternative. However, there could be problems with property acquisition, ~~and/or potential~~ public opposition, and ability to get necessary permits to install and operate the trunk unloading terminal. ~~The fail-safe location for the truck unloading terminal would be Area H at the JWPCP, which was the second ranked after Area B.~~

Section 6.6.3.3, Softening Followed by Second-Pass RO, first paragraph, is revised as follows:

Under this scenario, softening consisting of clarifiers and granular filters would be added upstream of a second-pass RO system. The softening system would reduce brine flow to 0.2 mgd, which would require 45 truck trips per day during peak conditions and 30 trips per day on average. The brine storage tank would be sized for 0.2 million gallons, which is about 45 feet in diameter. Softening would require construction of chemical storage and handling facilities, clarifiers, filters, and a sludge dewatering system. Approximately two trucks per day of dewatered sludge would need to be trucked to an appropriate disposal facility. The Chiquita Canyon Landfill (about 4 miles from the VWRP) could be used if the sludge is 50 percent or more solids and can pass the "paint filter liquids" test~~text~~. Otherwise, dewatered sludge would likely go to the nearest Class I landfill, which is the Clean Harbors Buttonwillow Landfill in central California (about 100 miles from the VWRP).

Section 6.6.5 is revised as follows:

This alternative is based on implementing most of the AWRM elements described in Section 6.6.4 (hereinafter "original AWRM") in a way that provides similar water quality and water supply benefits and meets the same regulatory standards (namely chloride limits at Reach 4B of 130 mg/L during drought and 117 mg/L at other times) should they be granted, while deferring, potentially indefinitely, the remaining more costly and environmentally impactful elements. Such an approach can be considered based on new information about future water supply chloride levels that was not available when the original AWRM was developed. As noted earlier, the original AWRM was developed from 2006 to 2008 and was based, in part, on the assumption that historical peak chloride levels in the community's water supply would continue into the future. SWP water comprises about half of the SCV's potable water supply and has historically been the most significant contributor to high chloride levels during drought. Since 2007, the Sacramento-San Joaquin Delta operational criteria and other SWP operational information indicate that future peak chloride levels will be lower than what have been observed historically. CLWA prepared a report titled State Water Project Chloride Modeling Analysis that indicates future SWP chloride levels would remain in the low 80 mg/L range during dry and critically dry years based on projected SWP operating criteria. Further, the ~~CLWA's~~ 2010 Urban Water Management Plan compiled by CLWA and three SCV retail water purveyors calls for a shift to more use of Saugus formation groundwater during drought conditions. The Saugus formation has a much lower chloride level than other potable water sources and such use would mitigate increases in SWP chloride level. Finally, recent progress on the Bay Delta Conservation Plan leads some to believe that the Bay Delta Conveyance Facility will be built. In May 2013, a complete Administrative Draft of the Bay Delta Conservation Plan was released for comment. The information in this draft indicates that implementation of the Bay Delta

Conveyance Facility would provide a much smaller improvement in the chloride level of the water delivered to the Santa Clarita Valley during drought conditions than previously expected. If the Bay Delta Conveyance Facility is implemented, overall chloride levels in the SCV water supply would improve but would not provide compliance with the Chloride TMDL without additional facilities ~~significantly,~~. Such improvement would reduce the volume of supplemental water required and provide greater ability to stay under the proposed triggers for the Phase II facilities described below ~~and the SCVSD may not need to construct facilities to comply with the 100 mg/L chloride limit. The agencies involved in the Bay Delta Conservation Plan believe that the earliest operational date for the Bay Delta Conveyance Facility is 2025. The SCVSD will continue to monitor progress of this important effort~~. Based on the preceding new information, the phased AWRM divides original AWRM elements into two phases: (1) initial facilities believed to be sufficient to meet the original AWRM chloride limits and provide similar water quality and water supply benefits as the original AWRM and (2) deferred facilities consisting of the remaining original AWRM elements.

Phase I Elements

Phase I elements are described below and shown on Figure 6-18:

- **UV Disinfection Facilities.** Existing chlorination systems at the VWRP and SWRP would be replaced with UV disinfection facilities to minimize the addition of chloride during wastewater treatment.

- **Supplemental Water.** Supplemental water in the form of low chloride groundwater from the Saugus formation would be added to VWRP effluent to meet conditional SSOs and any chloride goals. This groundwater would be replaced with imported water. There is a potential to share capital, operations and maintenance costs for supplemental water facilities between the SCVSD and SCV water suppliers. However, no cost allocation has been agreed to at this time, and all costs presented herein assume SCVSD pays the entire cost.

- **Salt Management Facilities.** The following facilities would be sized to provide similar total water production capability as the original AWRM salt management facilities and would be able to provide the chloride export requirements in the Chloride TMDL for the original AWRM:
  - Approximately five groundwater extraction wells in the eastern portion of the Piru Subbasin where chloride levels are relatively high.
  - Approximately six groundwater extraction wells in the west portion of the Piru Subbasin where chloride levels are relatively low.
  - A pipeline and pump stations to connect the well fields and convey blended water to a point in the SCR with perennial flow (near the Fillmore Fish Hatchery).

In order to operate the East Piru well field at maximum capacity (10,000 gpm or 14 mgd), analyses indicate that the West Piru well field would need to operate at 5,500 gpm or 8 mgd on average to produce blend water with 95 mg/L chloride. On average, the system would produce 22 mgd of blend water; however, constraints associated with species or nearby groundwater pumpers could reduce the average amount pumped. Further, if the

system can meet its objectives operating at less than full capacity, the average amount pumped would be less.

Phase II Elements

Phase II represents a formal backup plan in case Phase I facilities cannot consistently provide water quality in the SCR that complies with the modified chloride limits. The specific conditions that would constitute lack of compliance and trigger Phase II are under negotiation with stakeholders and the RWQCB-LA. To minimize the time to implement Phase II if Phase II is ever triggered, the SCVSD would complete certain Phase II studies and design tasks concurrent with design of Phase I. Phase II has the following elements.~~If the predicted water supply chloride levels are accurate and sufficient supplemental water is available, implementation of Phase I elements should meet the original AWRM chloride limit of 117 mg/L. Further, if the Bay Delta Conveyance Facility is implemented, overall chloride levels in the SCV water supply would improve significantly and no facilities may be needed to comply with the 100 mg/L chloride limit. In the event that chloride limits are not met and progress is not being made on the Bay Delta Conveyance Facility, the following Phase II elements would be implemented.~~

- **MF/RO Facilities.** MF/RO facilities would be constructed at the VWRP. The facilities would be sized to reliably meet chloride limits. Based on current predictions of water supply chloride level, no facilities are expected to be needed. However, for the purposes of cost estimating and evaluating alternatives, MF/RO facilities producing 2 mgd of product water and 0.4 mgd of brine are assumed.

- **Brine Disposal Facilities.** The specific brine disposal method ~~would be determined at the time of implementation and~~ could involve a pipeline, DWI or trucking like the alternatives evaluated earlier. ~~However, b~~Based on the ~~relatively small~~ anticipated brine flow, DWI is ~~likely to be~~ the recommended~~selected~~ method ~~and is assumed for the purposes of cost estimating and evaluating alternatives~~.

- **RO Product Water Conveyance System to Ventura County.** A pump station at the VWRP and a 24-inch diameter, 12-mile RO product water pipeline may be needed to provide low chloride water to the eastern portion of the Piru Subbasin for use as blending water and as a low-chloride water source for users of river water if SCR chloride levels are expected to exceed 117 mg/L after implementation of MF/RO facilities.

As currently written, the Chloride TMDL provides two options for compliance: (1) WRP effluent below 100 mg/L, or implementation of the original AWRM facilities to obtain the conditional SSO of 117 mg/L in Reach 4B of the SCR. Implementation of the Phased AWRM alternative would require support by Ventura County stakeholders and would require the RWQCB-LA to modify the Chloride TMDL. Negotiations with Ventura County s~~S~~takeholders on the scope of the salt management facilities are ongoing in an effort to reduce the operational impacts and cost of these facilities ~~and, as such, the scope is subject to change~~. If the scope of these facilities changes in the future, the SCVSD will conduct appropriate environmental review as needed to comply with CEQA. At this time, the RWQCB-LA has not indicated support for such a modification, which makes this alternative infeasible from a regulatory standpoint. However, this alternative would generally meet the water quality and water supply objectives of the original AWRM and,

thus, the RWQCB-LA might support this alternative in the future. Given this possibility, this alternative is carried into the EIR for detailed analysis and into Section 6.7 for evaluation among other alternatives.

Section 6.7.1.2, first paragraph, is revised as follows:

This alternative is similar to Alternative 1 except that brine would be disposed via DWI and UV disinfection would replace the existing chlorine-based disinfection systems at both WRPs. Alternative 2 facilities are shown on Figure 6-20. At the VWRP, the UV disinfection facilities would be located immediately north of the existing chlorine contact tanks. At the SWRP, the UV disinfection facilities would be located on the top of the existing chlorine contact tanks. Conversion to UV disinfection would reduce the size of the MF/RO facilities to 5.6 mgd and the amount of brine from the primary RO system to 1.0 mgd. The second-pass RO system would produce 0.5 mgd of RO product water and 0.5 mgd of brine. As noted in Section 6.6.2.1, DWI Site A is expected to accommodate up to seven wells and Site B up to four wells. Consequently, Site A is the preferred site because it is expected to handle all five wells while use of Site B would require development of Site A as well as construction of two pipelines. Brine would be conveyed to DWI Site A via a pump station located at the VWRP and an 8-inch diameter, 2.5-mile long force main. Five injection wells would be constructed at Site A along with appurtenant facilities such as injection pumps, chemicals storage tanks, and electrical switchgear. Wells would be deviated – that is, the bottom of the well (bottom hole location) would be located about one mile away from the top of the well (wellhead) when viewed on a map. Thus, well casings would extend beneath the property of neighboring land owners but would be at depths over 500 feet below ground surface. Deviated wells allow for multiple wellheads to be located on a single site to reduce overall costs. If there is a need to use Site B as a second or alternate injection site, the SCVSD would conduct appropriate environmental review as needed to comply with CEQA.

Section 6.7.1.4 is revised as follows:

This alternative consists of two phases: Phase I and Phase II. Based on predictions of future water supply chloride levels, Phase I elements should be sufficient to meet a chloride limit of 117 mg/L at Reach 4B of the SCR. Phase II represents a formal backup plan in case Phase I facilities cannot consistently provide water quality in the Santa Clara River that complies with the modified chloride limits. The specific conditions that would constitute lack of compliance and trigger Phase II are under negotiation with stakeholders and the RWQCB-LA. To minimize the time to implement Phase II if Phase II is ever triggered, the SCVSD would complete certain Phase II studies and design tasks concurrent with design of Phase I. ~~Further, if the Bay Delta Conveyance Facility is implemented, overall chloride levels in the SCV water supply would improve significantly and no facilities may be needed to meet a 100 mg/L limit. In the event that chloride limits are not met and progress is not being made on the Bay Delta Conveyance Facility, Phase II would be implemented.~~

Phase I includes construction of UV disinfection facilities at the VWRP and SWRP, salt management facilities in the Piru Subbasin, and use of supplemental water. UV disinfection facilities would be located as described for Alternative 2. Salt management facilities would consist of approximately five groundwater extraction wells in the eastern portion of the Piru Subbasin, approximately six groundwater extraction wells in the western portion of the Piru Subbasin, at least one pump station for each well field, and a

36-inch diameter, 6-mile long pipeline ~~less than one mile long~~ to deliver blended groundwater to a point in the SCR with perennial flow (near the Fillmore Fish Hatchery). In order to operate the East Piru well field at maximum capacity (10,000 gpm or 14 mgd), analyses indicate that the West Piru well field would need to operate at 5,500 gpm or 8 mgd on average to produce blend water with 95 mg/L chloride. On average, the system would produce 22 mgd of blend water; however, constraints associated with species or nearby groundwater pumpers could reduce the average amount pumped. Further, if the system can meet its objectives operating at less than full capacity, the average amount pumped would be less. The hydrologic analyses in the EIR assume this pumping regime while all other EIR analyses are based on the worst day, which is both well fields operating at full capacity (22,000 gpm or 32 mgd).

The supplemental water system would consist of a 24-inch diameter pipeline less than ~~one~~ 1 mile long to two or three existing or new groundwater wells. There is a potential to share capital and operations and maintenance costs for supplemental water facilities between the SCVSD and SCV water suppliers. However, no cost allocation has been agreed to, and all costs presented herein assume SCVSD pays the entire cost. The low chloride water provided by these wells would be added to the VWRP discharge to meet the required limit at Reach 4B of the SCR during peak conditions. To replace this water and ensure no net loss of water supply to the SCV, additional water would be imported by CLWA on the SCVSD's behalf. This replacement water would be obtained from the Buena Vista-Rosedale (BV-R) project in the Central Valley of California under existing agreements between CLWA and the BV-R operator and would be conveyed using existing infrastructure. Phase I of Alternative 4 also includes support for municipal reuse of recycled water as described in Section 6.6. However, the combined WRP discharges would not be lower than the minimum flow of 13 mgd identified to sustain the river's biological resources.

Phase II, if needed, would include MF/RO facilities at the VWRP, a brine disposal system, and potentially an RO product water conveyance system to Ventura County. Based on current predictions of water supply chloride level, no MF/RO facilities are expected to be needed. For the purposes of cost estimating and evaluating alternatives, MF/RO facilities producing 2 mgd of product water and 0.4 mgd of brine are assumed and would be located as described for Alternative 1. Similar to Alternatives 1, 2 and 3, the MF/RO facilities are assumed to include second-pass RO for brine minimization, which would reduce brine flows to 0.2 mgd. Based on the relatively small anticipated brine flow, DWI is the recommended method of brine disposal~~The specific brine disposal method would be determined at the time of implementation and could involve a pipeline, DWI or trucking like Alternative 1, 2 and 3, respectively. However, based on the relatively small brine flow, DWI is likely to be the selected method and is assumed for the purposes of cost estimating and evaluating alternatives~~. Similar to Alternative 2, brine would be conveyed to DWI Site A via a pump station located at the VWRP and a 6-inch diameter, 2.5-mile long force main. Three injection wells would be constructed at Site A along with appurtenant facilities such as injection pumps, chemical storage tanks, and electrical switchgear. The RO product water conveyance system to Ventura County may be needed to supply low-chloride water for users of river water during drought if SCR chloride levels are expected to exceed 117 mg/L after implementation of MF/RO facilities. The conveyance system would consist of a 24-inch diameter, 12-mile pipeline from the VWRP to the eastern portion of the Piru Subbasin. Alternative 4 facilities are shown on Figure 6-18. There is the possibility of lower costs and environmental impacts for Phase II than shown in Tables 6-17, 6-18, and 6-19 through the replacement of the 12-

mile pipeline with an alternate solution. However, the lack of final regulatory requirements and the required size of the advanced treatment and brine disposal systems prevent meaningful analysis of alternate solutions at this time.

As currently written, the Chloride TMDL provides two options for compliance: (1) WRP effluent chloride below 100 mg/L, or (2) implementation of the original AWRM facilities to obtain the conditional SSO of 117 mg/L chloride measured in Reach 4B of the SCR. Implementation of the Phased AWRM alternative would require support by Ventura County stakeholders and would require the RWQCB-LA to modify the Chloride TMDL. Negotiations with Ventura County s~~S~~takeholders on the scope of the salt management facilities are ongoing in an effort to reduce the operational impacts and cost of these facilities~~and, as such, the scope is subject to change~~. If the scope of these facilities changes in the future, the SCVSD will conduct appropriate environmental review as needed to comply with CEQA. At this time, the RWQCB-LA has not indicated support for such a modification, which makes this alternative infeasible from a regulatory standpoint. However, this alternative would generally meet the water quality and water supply objectives of the original AWRM and, thus, the RWQCB-LA might support this alternative in the future.

Section 6.7.2, fourth paragraph, is deleted.

Section 6.7.2.1 is revised as follows:

Alternative 1 was ranked ~~fourth~~ third overall ~~(last)~~ with the ~~lowest~~ third ranking for ~~environmental/social factors and lowest ranking for~~ costs. This alternative tied with Alternatives 2 and 4 (Phase I) for top ranking in environmental/social factors. This alternative received the highest rating for energy usage and greenhouse gas emissions because its brine disposal method requires the least energy. Alternative 1 also received the highest rating for risk because pipeline construction is commonplace and because, once constructed, there is limited risk of operational problems with a pipeline and pump station. This alternative received the highest rating for public acceptability because it received the most comments of support and fewest comments in opposition during the public review period.

Alternative 1 received ~~the lowest rating for stranded assets because the brine disposal pipeline is a costly facility that is not likely to serve a useful purpose if advanced treatment is not needed in the future. This alternative also received~~ the lowest rating for adaptability because a pipeline has limited ability to handle changing flows. Alternative 1 received the lowest rating for time to implement because the time to design, permit and construct the long brine disposal pipeline would result in the longest implementation schedule of all final alternatives.

From a cost standpoint, Alternative 1 has the highest capital cost which is $27 million (16 percent) higher than the next closest alternative. This alternative has the second highest O&M cost and EAC. Consequently, Alternative 1 received ~~a much~~ lower cost rating than Alternatives 2 and 4 (Phase I)~~the other final alternatives, with the exception of Alternative 4 with Phases I and II~~.

Section 6.7.2.2, first paragraph, is revised as follows:

Alternative 2 was ranked second overall with second best ~~a~~ ranking ~~of third for environmental/social factors and a ranking of second~~ for costs. This alternative tied with Alternatives 1 and 4 (Phase I) for top ranking in environmental/social factors. In summing the ratings for environmental factors, this alternative received the highest total in large part due to the limited footprint of disturbance which resulted in the highest ratings for cultural and traffic impacts. While Alternative 2 rated highest in only a couple of criteria, no ratings below 3 were received, which indicates no significant concerns in any particular area.

Section 6.7.2.3 is revised as follows:

Alternative 3 was ranked ~~third~~ fourth (last) overall with the lowest ranking for environmental/social factors and lowest ranking for costs~~but only two percent lower than the second ranked alternative. This alternative ranked second for environmental/social factors and third for costs~~. This ~~A~~alternative ~~3~~ was ranked highest for biological, cultural, and hydrology impacts due to limited footprint of disturbance but ranked lowest for air emissions, energy consumption, greenhouse gases and traffic due to the sizable trucking operation needed for brine disposal. Additionally, Alternative 3 received the lowest ranking in public acceptability due to strong public opposition from the City Terrace community.

Due to the limited number of new facilities and facility construction primarily taking place at the VWRP and SWRP, Alternative 3 rated highest in constructability~~, institutional feasibility~~, and time to implement. This alternative is also the most adaptable because trucks could be added or removed from the brine trucking operation as needed to manage changing brine flow. ~~Alternative 3 received the second best rating for stranded assets because there would be limited stranded brine disposal facilities if advanced treatment is not needed in the future.~~

Alternative 3 has the lowest capital cost because it has the fewest facilities. However brine disposal by trucking makes this alternative the most costly by far in terms of O&M costs. On the whole, this alternative ranked ~~third~~ last in terms of costs because it would have the second lowest costs initially but the significant O&M costs would make this alternative third best after 7 years of operation, and last after 12 years of operation.

Section 6.7.2.4 is revised as follows:

Phase I of Alternative 4 was conditionally ranked first overall including ~~first for environmental/social factors and~~ first for costs. This alternative tied with Alternatives 1 and 2 for top ranking in environmental/social factors. The ranking is conditional upon the RWQCB-LA modifying the Chloride TMDL to make this alternative feasible from a regulatory standpoint. This alternative received the highest ratings for air emissions, hydrology and traffic. ~~Alternative 4 was also rated highest for stranded assets because nearly all facilities would continue to serve a useful public purpose if the Bay Delta Conveyance Facility is implemented and reduces chloride levels significantly.~~ This alternative received a relatively high rating for adaptability because the use of supplemental water can be decreased or increased (to some extent) to match changed circumstances.

Alternative 4 was rated lowest for biology because the discharge from the salt management facilities would need to be carefully controlled to avoid a significant impact

to endangered Southern California steelhead. This alternative received a lower rating for energy and greenhouse gases due to the energy required for supplemental water and the salt management facilities. However, this concern would be mitigated to the extent that water discharged from the salt management facilities reduces existing groundwater pumping elsewhere and thereby reduces energy consumption. Alternative 4 received the lowest rating for institutional feasibility due to the extensive number of agreements and approvals required. This alternative received the lowest rating for public acceptability because it received the most comments of opposition and fewest comments in support during the public review period.

Alternative 4 Phase I received the highest rating for all cost criteria because it has the lowest O&M cost, lowest EAC, and nearly the lowest capital cost.

Alternative 4 with Phases I and II received the lowest rating for nearly all criteria. If Phase II is needed, Alternative 4 would become the most costly alternative and would generate the most environmental impacts.

Section 6.7.3 is revised as follows:

Alternative 4 (Phased AWRM) Phase I is the top-ranked alternative but requires regulatory approvals to be implemented. If Phase II is triggered, Alternative 4 is the lowest-ranked and most costly alternative. However, based on the triggers being proposed, Phase II is not expected to be needed. Alternative 2 is the second-highest ranked alternative and would comply with the existing 100 mg/L chloride limit. Therefore, the recommended project consists of Alternative 4 and, as a backup, Alternative 2 if Alternative 4 does not receive the necessary regulatory approvals or if the final negotiated Phase II triggers are unacceptable to the SCVSD.~~and would be the recommended project if this alternative met regulatory requirements. If Phase I did not consistently provide compliance with the chloride limit and the Bay Delta Conveyance Facility is not constructed in a timely manner, Phase II would be needed which would make Alternative 4 the lowest ranked and most costly alternative.~~

~~Of the three alternatives that currently meet the Chloride TMDL, two are ranked very close – Alternative 2 (MF/RO With Brine Disposal via DWI) and Alternative 3 (MF/RO with Brine Disposal via Trucking) – while MF/RO with Brine Disposal Via Pipeline is clearly lower ranked. At this time, Alternatives 2 and 3 are both recommended.~~

As part of the planning process, input from the public and interested parties has been~~will be~~ used to guide the selection of the final recommended project.

Section 6.8 is revised as follows:

The alternatives analysis began with identifying the universe of approaches that would either entirely or partly provide compliance with the Chloride TMDL. Examples include conveying treated wastewater to the ocean where there is essentially no chloride limit; conveying raw sewage out of the basin for treatment where chloride limits are not an issue; recycling all treated wastewater; and treating the drinking water supply to remove chloride.

Minimum discharges of 8.5 and 4.5 mgd are needed from the VWRP and SWRP, respectively, to support biological resources such as the unarmored three-spine~~d~~

stickleback, an endangered species. The combined minimum discharge of 13 mgd represents two-thirds of today's combined discharge, leaving only one-third to be reused or discharged to another location. The minimum discharge would have to comply with the Chloride TMDL which necessitates addition of advanced treatment since normal wastewater treatment processes, such as those employed at the VWRP and SWRP, do not remove chloride.

Conceptual approaches were screened against their ability to meet the project goals and objectives, and the five approaches meeting all criteria were deemed potentially feasible and considered further. Two of the potentially feasible approaches – Residential AWS Removal and Chloride Control Measures for Industrial and Commercial Dischargers – are in progress, will continue into the future, and are thus not included as part of the recommended project. The remaining three – Modifying WRP Operations, Advanced Wastewater Treatment, and Supplemental Water – are potentially feasible and were carried into further analysis. The only modification to WRP operations that would yield a perceptible change in chloride levels is a switch to a non-chlorine based disinfection process. Supplemental water is low chloride groundwater that would be mixed with tertiary-treated wastewater to achieve a blend that meets the Chloride TMDL limit.

Potentially feasible approaches were then refined in a number of ways such as identifying the type of technology, process configuration, and location for new facilities. MF/RO was found to be the best advanced treatment technology, and UV disinfection was found to be the best non-chlorine based disinfection process. Individually or in combination, UV disinfection and supplemental water would not consistently provide compliance with the 100 mg/L Chloride TMDL limit. Thus, advanced wastewater treatment (MF/RO) is needed to comply. Addition of UV disinfection or supplemental water to MF/RO may result in a better overall alternative.

The MF/RO process produces a brine byproduct that must be disposed in a safe manner. Several brine disposal approaches were evaluated, and three were considered feasible and carried into further evaluation: conveyance via pipeline to an ocean discharge point, deep well injection, and trucking to a sewer tributary to a wastewater treatment plant with an ocean discharge.

Brine disposal is the most costly component of any alternative utilizing MF/RO. As such, minimizing brine volume has the potential to save significant costs. A number of brine minimization processes were examined, and three were found to be appropriate for further consideration: second-pass RO, softening followed by second-pass RO, and evaporation by mechanical or thermal means.

Refined feasible approaches were then assembled into the following alternatives intended to provide full compliance with the Chloride TMDL.

- MF/RO Facilities With Brine Disposal via Pipeline
- MF/RO Facilities With Brine Disposal via DWI
- MF/RO Facilities With Brine Disposal via Trucking
- AWRM

- Phased AWRM

Each alternative includes support for municipal reuse of recycled water as first described in Section 6.6. However, the combined WRP discharges would not be lower than the minimum flow of 13 mgd identified to sustain the river's biological resources. Prior to comparing alternatives, alternatives with MF/RO facilities were further developed through a series of evaluations to address issues such as whether to use UV disinfection and supplemental water. The best brine minimization process, pipeline routes, DWI locations, and locations for brine truck loading and unloading terminals were also evaluated. Developed alternatives were screened, and the AWRM alternative was found to be clearly less favorable than the other alternatives and eliminated from further consideration. The remaining four alternatives became the final alternatives.

Final alternatives were analyzed for environmental impacts and were then evaluated based on environmental/social factors and costs. Alternative 4 (Phased AWRM) Phase I was the top-ranked alternative but requires regulatory approvals to be implemented. If Phase II is triggered, Alternative 4 would be the lowest-ranked and most costly alternative. However, based on the triggers being proposed, Phase II is not expected to be needed. Alternative 2 was the second-highest ranked alternative and would comply with the existing 100 mg/L chloride limit. Therefore, the recommended project consists of Alternative 4 and, as a backup, Alternative 2 if Alternative 4 does not receive the necessary regulatory approvals or if the final negotiated Phase II triggers are unacceptable to the SCVSD. ~~and would be the recommended project if this alternative met regulatory requirements. If Phase II of Alternative 4 is required, this alternative would be the lowest ranked and most costly alternative. Of the three alternatives that currently meet the requirements of the Chloride TMDL, two are ranked very close – Alternative 2 (MF/RO With Brine Disposal via DWI) and Alternative 3 (MF/RO With Brine Disposal via Trucking) – while MF/RO With Brine Disposal via Pipeline is clearly lower ranked. At this time, Alternatives 2 and 3 are both recommended in addition to Alternative 4. The three recommended projects are described in more detail in Section 7.~~

As part of the planning process, input from the public and interested parties has been~~will be~~ used to guide the selection of the final recommended ~~alternative~~project.

Figures 6-22a and 6-22b illustrate the alternatives analysis process in detail including the four steps in the process and a box for each of the 24 different evaluations. Each box contains a title for the particular evaluation, a listing of the options considered, indication of option(s) carried forward, and a reference to where the particular evaluation is described.

Table 6-5 and 6-12 are revised to reletter footnote "a" to footnote "b".

Table 6-5 and 6-12 are revised to add footnote "a" to the row Annual O&M Cost (avg.) and the following addition to the footnote section at the end of the table:

[a] Includes supplemental water cost.

Table 6-19 is revised to add footnote "d" to the last row under Component and the following addition to the footnote section at the end of the table:

[d] Supplemental water cost include cost to purchase and convey replacement water, operation and maintenance costs for Saugus groundwater wells and a conveyance pipeline.

Table 6-21 is revised under Criteria to remove Potential for Stranded Assets and add Public Acceptability[a,b]. The number of possible points assigned to these two criteria is also revised.

Table 6-21 is revised to add footnotes "a" and "b" to the footnote section at the end of the table:

[a] The "Potential for Stranded Assets" criterion in the Draft Facilities Plan has been removed based on new information published in May 2013 in the Administrative Draft of the Bay Delta Conservation Plan. The information in this draft indicates that implementation of the Bay Delta Conveyance Facility would provide a much smaller improvement in the chloride level of the water delivered to the SCV during drought conditions than previously expected and would not provide compliance with Chloride TMDL without additional facilities. Consequently, there would be no stranded assets since the constructed chloride treatment facilities would be needed regardless of whether the Bay Delta Conveyance Facility is implemented.
[b] The Public Acceptability criterion was added to incorporate public opinion solicited during the public review period.
Note: Comparative ratings are Superior (5) and Inferior (1).

Table 6-22 is revised under Criteria to remove cumulative $ Spent by 2025 and add Cumulative $ Spent by 2045. The number of maximum possible points assigned to each criterion is also revised.

Table 6-22 is revised to add a note to the footnotes section of the table:

Note: Comparative ratings are superior (max points) and Inferior (1).

Table 6-23 is revised to incorporate results from Tables 6-21 and 6-22.

Figure 6-11is revised to re-label the Brine Truck Unloading Terminal Areas from "Site" to "Area".

Figure 6-22a, Alternative Discharge Location (§6.4.1), fourth bullet, is revised as follows:

- Convey Treated Effluent to JOS for Treatment and Ocean Discharge~~SWRP Out of Service/Convey Raw Sewage to JOS for Treatment and Ocean Discharge~~

Figure 6-22b, Use of UV Disinfection (§6.6.2.3), first and second bullets, are revised as follows:

- **UV at Both WRPs**
- No UV

22.2.8 Section 7, Recommended Project Summary

Based on strong public opposition during the Public Participation Program, Alternative 3 is no longer a recommended project and is removed from Section 7.2 of the Draft Facilities Plan and EIR. Section 7.2 has been reorganized to present the top-ranked alternative (Alternative 4 – Phased AWRM) first, followed by the backup alternative (Alternative 2). Readers are referred to

the Final Facilities Plan and EIR to view the reorganization. Substantive changes, regardless of the reorganization of Section 7.2, are presented below.

Section 7.1, first paragraph, is revised as follows:

> As described in Section 6, an extensive alternatives analysis was completed to identify a recommended project that meets project objectives including compliance with the State-mandated Santa Clara River Chloride Total Maximum Daily Load (Chloride TMDL). This process resulted in identification of ~~three~~a recommended project~~s~~, which consists of the top-ranked alternative (Alternative 4) and a backup alternative (Alternative 2). The purposes of this section are to describe the recommended project~~s~~, including an implementation schedule and costs, ~~for each project~~and to describe methods of financing, ~~final recommended projects (selected projects)~~including use of State Revolving Fund (SRF) loans.
>
> Section 7 is organized into the following major sections:
>
> - Summary of ~~each~~the recommended project
> - Revenue program and rate impacts

Section 7.2.2 of the Draft Facilities Plan and EIR (Section 7.2.1 of the Final Facilities Plan and EIR), heading and first paragraph, is revised as follows:

7.2.1 Top-Ranked Alternative: Alternative 4 – Phased AWRM

> Alternative 4 has two phases. Based on predictions of future water supply chloride levels, Phase I elements should be sufficient to meet a chloride limit of 117 mg/L at Reach 4B of the Santa Clara River (SCR). Phase II represents a formal backup plan in case Phase I facilities cannot consistently provide water quality in the ~~Santa Clara River~~ SCR that complies with the modified chloride limits. The specific conditions that would constitute lack of compliance and trigger Phase II are under negotiation with stakeholders and the Regional Water Quality Control Board-Los Angeles (RWQCB-LA). To minimize the time to implement Phase II if Phase II is ever triggered, the SCVSD would complete certain Phase II studies and design tasks concurrent with design of Phase I. This alternative requires RWQCB-LA approval to be implemented.~~Phase I is the highest ranked alternative but does not currently meet regulatory requirements. If Phase II is needed, Alternative 4 would be the lowest ranked and most costly alternative. The first phase would be implemented immediately. The second phase would be implemented if chloride limits are not met and progress is not being made on the Bay Delta Conveyance Facility.~~

Section 7.2.2.1 of the Draft Facilities Plan and EIR (Section 7.2.1.1 of the Final Facilities Plan and EIR), Salt Management Facilities, first paragraph, is revised as follows:

> Salt management facilities would be constructed to export salt from the Piru groundwater basin located in Ventura County near the Los Angeles-Ventura County line. These facilities would consist of two well fields, at least one pump station at each well field, and a pipeline to connect the well fields and discharge the blended water to a point in the SCR with perennial flow (near the Fillmore Fish Hatchery). One well field would be located in the eastern portion of the Piru Subbasin (just west of Piru ~~c~~Creek) and consist

of approximately five wells. The other well field would be located in the western portion of the Piru Subbasin and consist of approximately six wells. These facilities would have the capability to extract up to 22,000 gallons per minute (gpm) (36,000 acre-feet per year (afy) or 32 mgd). However, the western field would only be operated as needed to produce a blend having a chloride level of ~~below 100~~95 milligrams per liter (mg/L). In order to operate the East Piru well field at maximum capacity (10,000 gpm or 14 mgd), the West Piru well field would need to operate at 5,500 gpm or 8 mgd on average to produce blend water with 95 mg/L of chloride. Furthermore, well field operation may be constrained to limit impacts to neighboring groundwater pumpers and biological resources in the SCR. In addition, if the system can meet its objectives operating at less than full capacity, the average amount pumped would be less. The pipeline would be 36-inches in diameter and approximately 6 miles long. Negotiations with Ventura County ~~S~~stakeholders on the scope of these facilities are ongoing in an effort to reduce the cost of these facilities~~, and the scope of the final facilities may be different than described here~~. If the scope of these facilities changes in the future, the SCVSD will conduct appropriate environmental review as needed to comply with CEQA. The salt management facilities are shown conceptually on Figure 7-~~8~~1.

Section 7.2.2.1 of the Draft Facilities Plan and EIR (Section 7.2.1.1 of the Final Facilities Plan and EIR), Support for Municipal Reuse of Recycled Water, first paragraph, is revised as follows:

~~The Castaic Lake Water Agency (~~CLWA~~)~~ provides recycled water to the Santa Clarita Valley (SCV). In their most recent Recycled Water Master Plan drafted in 2002, CLWA projected an increasing need for recycled water that will reach 17,400 afy ~~acre-feet per year~~ by the year 2030. In 2010, CLWA along with three SCV retail water purveyors adopted an Urban Water Management Plan that refined the recycled water needs to 22,800 afy ~~acre-feet per year~~ by the year 2050. Using recycled water reduces the use of potable water and eases concerns of a water shortage during drought. The California Legislature declared its intent that the s~~S~~tate undertake all possible steps to encourage development of water recycling facilities so that recycled water may be made available to help meet the growing water requirements of the ~~S~~state. Consistent with this policy and the third project objective in Section ~~6.2~~1.4, the SCVSD would make recycled water available in quantities needed to support CLWA's Master Plan. Currently, the VWRP and SWRP produce tertiary-treated water that has suitable quality to meet CLWA needs. Depending on how quickly demand for recycled water increases relative to growth in wastewater flow due to population growth, discharge of treated wastewater from the WRPs to the ~~e Santa Clara River (~~SCR~~)~~ could decrease. However, the combined WRP discharges would not be lower than the minimum flow of 13 mgd identified to sustain the river's biological resources. The basis for these minimum discharges is summarized in Section 11 and described in greater detail in Appendix 6-A.

Section 7.2.2.1 of the Draft Facilities Plan and EIR (Section 7.2.1.1 of the Final Facilities Plan and EIR), Brine Disposal System, heading and first paragraph, is revised as follows:

Brine Disposal ~~System~~via DWI

The 0.2 mgd of brine produced as a byproduct of the RO process would be conveyed to DWI Site A via a pump station located at the VWRP and a 6-inch diameter, 2.5-mile long force main. Three injection wells would be constructed at Site A along with appurtenant facilities such as injection pumps, chemicals storage tanks, and electrical switchgear. The locations of DWI Site A and the pipeline from VWRP to the site are shown on

Figures 7-41 and 7-6. If there is a need to use Site B as a second or alternate injection site, the SCVSD would conduct appropriate environmental review as needed to comply with CEQA.

Section 7.2.3 of the Draft Facilities Plan and EIR (Section 7.2.2 of the Final Facilities Plan and EIR), Implementation Schedule, first paragraph, is revised as follows:

To implement the project in as short a time as practicable, the project would be divided into a number of construction projects all designed and later constructed concurrently. This division would include concurrent construction of UV disinfection facilities, supplemental water facilities, and salt management facilities. Due to the magnitude of the recommended projects, none of the projects alternatives can be completed by the current Chloride TMDL deadline of May 4, 2015. The SCVSD will request that the RWQCB-LA extend the Chloride TMDL compliance deadline to July 2019 to provide the needed time for permitting, design, construction, and start-up. The implementation schedule for Phase I of Alternative 4 is shown on Figure 7-95 and includes the extended compliance deadline that will be requested by the SCVSD. Although not expected to be needed, Phase II is also shown on Figure 7-59 with an assumed decision to proceed in the middle of 2020 (about one year after commencing Phase I operations). While concluding negotiations regarding the Phased AWRM, it is recommended that efforts to obtain a permit from the EPA and install a test well for brine injection be started to allow timely implementation of the backup alternative in case the necessary regulatory approvals for the Phased AWRM are not obtained. The test well effort is a lengthy process and is needed to verify the geologic suitability for injection.

Section 7.2.4 of the Draft Facilities Plan and EIR (Section 7.2.3 of the Final Facilities Plan and EIR), Project Cost, first paragraph, is revised as follows:

The capital, operations and maintenance (O&M), and equivalent annual costs for Alternative 4 are presented in Table 7-48. Although the project costs would be incurred over multiple years in the future, all amounts shown in Table 7-48 are in 2012 dollars and include design, construction, and project management. The agency responsible for the O&M costs related to the salt management facilities has not been determined. There is also a potential to share capital, operations and maintenance costs for supplemental water facilities between the SCVSD and SCV water suppliers. However, no cost allocation has been agreed to and all costs presented herein assume SCVSD pays the entire cost. In Table 7-48, such costs are assumed to be borne by the SCVSD.

Section 7.2.5.1 of the Draft Facilities Plan and EIR (Section 7.2.4.1 of the Final Facilities Plan and EIR), Project Description, first paragraph, is revised as follows:

Alternative 2 would be the backup alternative if the RWQCB-LA does not modify the Chloride TMDL to allow implementation of Alternative 4 or if the final negotiated Phase II triggers are unacceptable to the SCVSD. Alternative 2 consists of the following components, which are described below:

- UV disinfection facilities at VWRP and SWRP
- MF/RO facilities at VWRP
- Second-pass RO facilities at VWRP
- RO product water conveyance system to SWRP

- Brine disposal system via DWI

Section 7.2.5.1 of the Draft Facilities Plan and EIR (Section 7.2.4.1 of the Final Facilities Plan and EIR), Brine disposal via DWI, first paragraph, is revised as follows:

> The average brine flow of 0.~~2~~5 mgd would require ~~three~~five injection wells and an ~~6~~8-inch diameter conveyance pipeline from the VWRP to the DWI site. The rest of the DWI system would be the same as described in Section 7.2.1.~~1~~2. The location of DWI Site A is shown on Figure 7-4 along with the pipeline from VWRP to the site. If there is a need to use Site B as a second or alternate injection site, the SCVSD would conduct appropriate environmental review as needed to comply with CEQA.

Section 7.5.2, second paragraph, is revised as follows:

> Similar to service charges, connection fees are expressed on a per capacity ~~sewage~~ unit basis where one ~~sewage~~ capacity unit represents the sewage from a typical single-family home. The adopted connection fee rates per capacity unit (equivalent single-family home) are provided in Table 7-9~~10~~.

Section 7.6.2, second paragraph, is revised as follows:

> Service charges have been estimated for each recommended project based on the best available financing assumptions along with projected inflation of construction costs and projected inflation of O&M costs. Key assumptions include a multi-year ramp-up in service charges through fiscal year 2019-20 (when the selected project is expected to be operational) and that interest is capitalized (i.e., interest that accrues prior to the first loan payments is added to the loan amount). These estimated service charges are shown in Table 7-10~~1~~ for all types of use. The ramp-up in rates would reduce the percentage of the project cost that must be financed by collecting some monies prior to spending on construction. The rates in Table 7-10~~1~~ can be used to estimate a particular user's future service charge. For example, office building owners can estimate their future service charge by dividing their actual unit of usage (square footage) by the Table 7-10~~1~~ unit of usage (1,000 square feet) and multiplying the result by the service charges for the particular alternative (e.g., $308 per year for Alternative 2). Please note that the estimates presented in Table 7-10~~1~~ include the rates for both existing and additional facilities. As such, the difference between a particular alternative's service charge and the "No Chloride Treatment Project" service charge represents the increase in service charge rate for the particular alternative. Although Alternatives 1 and 3 are not part of the recommended project, projected annual service charge rates and connection fees for these alternatives are included in the following tables for comparison purposes.

Section 7.6.4, first paragraph, is revised as follows:

> As discussed earlier, existing users will pay for the facilities they need through the Service Charge Program. New users that connect to the sewerage system or existing users that significantly increase their discharge would pay for the facilities they utilize through a one-time connection fee. As soon as they connect to the system, they would become existing users and would pay for on-going expenses through the Service Charge Program. Table 7-13 provides existing connection fees (fiscal year 2013-14) for all types of use.

Section 7.6.5, first paragraph, is revised as follows:

> Assuming no unexpected events occur, it is recommended that the adopted connection fee for fiscal year 2013-14 not be increased for costs related to ~~any of~~ the recommended ~~Chloride TMDL~~ project~~s~~ until fiscal year 2019-20. At that time, the project is expected to be operational, and the connection fee would increase by approximately $200 per capacity ~~sewage~~ unit. However, the increase could be more or less depending upon the alternative ultimately implemented~~selected~~, the final cost of the implemented~~selected~~ alternative, and the percentage of the costs financed. The connection fee would continue to increase over time as the loan for the ~~selected~~ project is paid off. When the loan is paid off, the connection fee would have increased to fully reflect the capital cost of the project~~selected alternative~~. Projected connection fees for common user categories are shown in Table 7-14.

Table 7-5 of the Draft Facilities Plan and EIR is removed.

Tables 7-2, 7-3, 7-4, 7-6, 7-7, 7-8, 7-9, and 7-10 are renumbered to Tables 7-5, 7-6, 7-7, 7-2, 7-3, 7-4, 7-8, and 7-9, respectively.

Table 7-11 is renumbered to Table 7-10 and is revised to include Alternative 1 and the sewage units for each user category.

Table 7-12 is renumbered to Table 7-11 and is revised to include Alternative 1.

Table 7-13 is renumbered to Table 7-12 and is revised to include Alternative 1.

Tables 7-13 and 7-14 are added.

Figures 7-6 and 7-7 of the Draft Facilities plan and EIR are removed.

Figures 7-1, 7-2, 7-3, 7-4, 7-5, 7-8, and 7-9 are renumbered to Figures 7-2, 7-3, 7-6, 7-4, 7-7, 7-1, and 7-5, respectively.

Figure 7-5 is renumbered to Figure 7-7 and is revised remove the Alternative 3 implementation schedule.

22.2.9 Section 8, EIR Purpose and Scope

Section 8.3.1, second paragraph, is revised as follows:

> The EIR was prepared pursuant to the CEQA and the CEQA Guidelines (California Code of Regulations, Title 14, Division 6, Chapter 3). The EIR is to be used by regulators and the public in reviewing of the potential environmental impacts of the proposed project, alternatives for accomplishing the project's objectives, and any mitigation measures that may minimize, avoid, or eliminate environmental impacts. Note that in this EIR, the term "proposed project" is equivalent to the term "recommended project" in the Facilities Plan.

Section 8.4, heading and first paragraph, is revised as follows:

8.4 INTENDED USES OF THIS ~~DRAFT~~ EIR

This ~~Draft~~ EIR has been prepared in accordance with applicable state environmental statutes, regulations, and policies to inform federal, state, and local decision makers regarding the potential environmental impacts of the proposed project and its alternatives. As an informational document, an EIR does not recommend approval or denial of a project. The~~is~~ Draft EIR was~~is being~~ provided to the public for review, comment, and participation in the planning process. After public review and comment, ~~a~~this Final EIR was~~will be~~ prepared. This~~e~~ Final EIR ~~will~~ include~~s~~ responses to comments on the Draft EIR received from agencies, organizations, and individuals. It is~~will~~ being distributed to provide the basis for decision making by the lead agency and other responsible and trustee agencies.

Section 8.5.2, second paragraph, is revised as follows:

The EIR identifies impacts as significant or less than significant. While impacts determined to be less than significant need only be acknowledged, an EIR must identify feasible mitigation measures for any significant impact. If there ~~is~~are no feasible mitigation measures for a given impact, that impact would remain significant and unavoidable. The SCVSD has based its conclusions about the significance of environmental impacts in this EIR on identifiable thresholds and have supported its conclusions with substantial evidence. Public comments on the ~~D~~draft EIR could~~may~~ have raised~~yield~~ evidence that might have resulted in~~raise~~ disagreement about levels of significance and mitigation. Any disagreements ~~will be~~have been noted and will be considered by the SCVSD during the public hearing process. However, CEQA does not require this EIR to resolve such disagreements.

Section 8.6, first paragraph, is revised as follows:

The SCVSD, as lead agency, published an NOP for the Draft EIR on January 6, 2012 and circulated the NOP for an extended 42-day public ~~comment~~ review period ~~that~~ starting on January 9, 2012 and ending on February 17, 2012~~for 42 days~~. ~~The public comment period ended on February 17, 2012.~~ The NOP ~~consisted of~~included a project description and a preliminary list of potential environmental impacts. Copies of the NOP were also made available for public review at the SCVSD office at 1955 Workman Mill Road in the City of Whittier and on the SCVSD web site at http://www.lacsd.org/~~www.lacsd.org~~. The SCVSD received comments on the NOP from 34 parties. Appendix 8-B includes the NOP and comments received.

Section 8.7 is revised as follows:

CEQA recommends conducting early coordination with the general public, appropriate public agencies, and local jurisdictions to assist in developing the scope of the environmental document. Three EIR scoping meetings were held at the City of Santa Clarita Activities Center during the NOP review period. The first meeting, ~~which was~~ intended for public agencies, was held on the afternoon of February 1, 2012. The second and third meetings, ~~specifically~~ intended for the general public ~~participation~~, were held on the evenings of February 1 and February 9, 2012. Attendees were provided an

opportunity to voice comments and concerns regarding potential environmental effects of the proposed project and the issues to be addressed in the Draft EIR.

The comments received during the NOP review period and at the public scoping meetings were considered during preparation of the Draft EIR. Issues not related to the scope or environmental effects of the proposed project (e.g., financing or economic factors) ~~are~~were not addressed in the Draft EIR but may be considered by the SCVSD before making a final decision on the project. In addition to the three public scoping meetings conducted in February 2012, numerous additional outreach meetings were held with various organizations from late 2011 through 2013.

CEQA requires issuance of a Notice of Availability (NOA) when a draft EIR is made available to the public for review to enable responsible agencies and interested parties to provide meaningful input. The NOA was released on April 24, 2013, when the Draft Facilities plan and EIR was released, for an extended 60-day public review period ending June 24, 2013. The NOA described the project, the four final alternatives, and listed the potential significant environmental effects of these alternatives. Although not required by CEQA, the SCVSD also held four informational meetings and four public hearings in both Santa Clarita and City Terrace during the review period. In response to public interest, the public review period was subsequently extended an additional 30 days to July 24, 2013. Both the NOA and the extension of the public review period were extensively advertised in local newspapers.

The SCVSD accepted a total of 114 written (letters and comment cards), electronic (e-mails), and oral (public hearing testimonies) communications containing a total of 565 individual comments on the Draft Facilities Plan and EIR throughout the public review period. Section 21 includes a list of all agencies, organizations, and persons who submitted comments, as well as copies of all comments and responses thereto. As required by CEQA, responses were provided to all public agencies that submitted comments at least 10 days prior to certification of the Final Facilities Plan and EIR.

More details on the Public Participation Program are included in Appendix 8-C.

Section 8.8 is revised with the addition of the following paragraph:

An additional area of controversy, trucking brine into the City Terrace area for disposal, was identified based on comments received during the review period of the Draft Facilities Plan and EIR.

Section 8.10 is revised as follows:

Implementation of the Facilities Plan and EIR may require approval from the following agencies:

- California Department of Transportation – Encroachment Permit for trenching in a State Route
- Regional Water Quality Control Board – Waste Discharge Requirements and Stormwater Pollution Prevention Plan
- State Water Resource Control Board – Water Diversion

- Environmental Protection Agency – Brine Injection Permit
- California Department of Fish and Wildlife – Streambed Alteration Agreements
- United States Army Corps of Engineers – Nationwide Permit
- United States Fish and Wildlife Service – Federal Endangered Species Act consultation regarding effects to federally listed species
- California State Office of Historical Preservation – SRF-required consultation
- ~~South Coast Air Quality Management District – Permit for diesel backup generators~~
- Los Angeles County Department of Public Works – Encroachment Permit for trenching in county roads
- City of Santa Clarita – Encroachment Permit for trenching in city streets
- City of Burbank – Encroachment Permit for trenching in city streets
- City of Glendale – Encroachment Permit for trenching in city streets
- City of San Fernando – Encroachment Permit for trenching in city streets
- City of Los Angeles – Encroachment Permit for trenching in city streets
- Ventura County Department of Public Works – Encroachment Permit for trenching in county roads

Section 8.11 is revised as follows:

A summary of the potential environmental impacts associated with the proposed project are included in the Executive Summary (available under separate cover). Organization of this ~~Draft~~Final EIR is as follows:

8 EIR Purpose and Scope

9 Aesthetics

10 Air Quality

11 Biological Resources

12 Cultural Resources

13 Energy Resources

14 Geology, Soils, and Seismicity

15 Greenhouse Gas Emissions

16 Hydrology and Water Quality

17 Land Use and Planning

18 Noise

19 Transportation and Traffic

20 Cumulative Impacts and Project Alternatives

21 Responses to Comments

22 Changes and Errata

22.2.10 Section 9, Aesthetics

No substantive changes.

22.2.11 Section 10, Air Quality

Mitigation Measure AQ-4 is revised in Section 10.4.2.2, Operation, Alternative 3 – MF/RO with Brine Disposal via Trucking, Impact Summary, as follows:

> **Mitigation Measure AQ-4: NO_X Emission Reduction.** The brine hauling contractor shall be required to only use ~~a truck fleet consisting of 2010 (or newer) diesel-powered engines~~ trucks that meet or exceed the 2010 U.S. Environmental Protection Agency standards for NO_X.

22.2.12 Section 11, Biological Resources

Section 11.2.6, Unarmored Threespine Stickleback, heading and first paragraph, is revised as follows:

> ### *Unarmored ~~Three Spine~~Threespine Stickleback (Gasterosteus aculeatus williamsoni)*
>
> The unarmored threespine stickleback is a federal~~ly~~ and state- listed endangered species and a fully protected state species that is a small, laterally compressed fish. The stickleback occurs throughout the SCR but tends to gather in areas of slow flow or standing water. In fast flowing sections, the stickleback is found in eddies behind obstructions or along the edge of the river where vegetation slows the flow. Critical habitat for the endangered unarmored threespine stickleback in the SCR was proposed in 1980 (Federal Register 45:76012).

Mitigation Measure BIO-1 is revised in Section 11.4.2.1, Alternative 1 – MF/RO with Brine Disposal via Pipeline, Impact Summary, as follows:

> **Mitigation Measure BIO-1: Preconstruction Breeding Bird Surveys.** If construction of select pipeline segments is within or immediately adjacent to native vegetation during the bird nesting period (typically February 1 through August 31), preconstruction surveys for nesting/roosting bird species shall be conducted by a qualified biologist no more than 5 days prior to the start of construction. The select pipeline segments consist of those

that are within or adjacent to Los Angeles County Significant Ecologic Area Nos. 23 and 64, the portion of The Old Road between Calgrove Boulevard and Sierra Highway, the blended groundwater pipeline between State Route 126 and the outfall at the Santa Clara River bank, and any blended groundwater pipeline construction activity within 100 feet of the Santa Clara River. The preconstruction surveys shall be limited to areas of native habitat located directly adjacent to and extending up to 500 feet from the construction area. The preconstruction surveys shall include species protected under the Migratory Bird Treaty Act, including raptors.

Active nest sites identified during the preconstruction surveys shall be avoided and a non-disturbance buffer zone established as determined by a qualified biologist. Buffer distances shall be 150 feet for common birds, 300 feet for special-status birds, and 500 feet for raptors. The size of individual buffers may be modified based on site-specific conditions and pre-existing disturbance levels (e.g., species-specific information; ambient conditions and birds' habituation to them; and the terrain, vegetation, and birds' lines of sight between the project activities and the nest and foraging areas), as determined by a qualified biologist. Documentation of any buffer zone modifications shall be maintained and submitted to the Santa Clarita Valley Sanitation District (SCVSD). The buffer zone shall be delineated in the field with flagging, stakes, or construction fencing, and all clearing and grubbing activities shall remain outside the demarcated area. Nest sites shall be avoided until the adults and young are no longer reliant on the nest site for survival as determined by a qualified biologist.

Project personnel, including all contractors working on site, shall be instructed on the sensitivity of the area. Documentation of all surveys and recommended protective measures shall be maintained by the biologist and provided to the SCVSD on a regular basis.

Mitigation Measure BIO-2 is revised in Section 11.4.2.1, Alternative 2 – MF/RO with Brine Disposal via DWI, Impact Summary, as follows:

Mitigation Measure BIO-2: Special-Status Species Survey. If it is determined that ~~during final design~~ the deep well injection site will ~~is to~~ be located in undisturbed native vegetation, a qualified biologist~~(s)~~ shall survey the site for special-status plant and wildlife species prior to ground disturbance**.** The preconstruction survey for wildlife shall occur no more than 1 year ~~2 weeks~~ before ground~~-~~disturbing activities within undisturbed native habitats to be considered valid. The rare plant surveys shall occur during the spring when plants are more easily identified no more than 2 years before ground disturbing activities within undisturbed native habitats. The qualified biologist~~(s)~~ shall walk transects spaced 20 feet apart or at an appropriate distance to obtain 100-percent visual coverage within the area where disturbance may occur. ~~If a terrestrial special-status species is encountered~~No more than 2 weeks prior to construction, a biologist with a California Department of Fish and Wildlife Scientific Collection Permit shall capture ~~the species~~ and release ~~the~~ terrestrial special-status species to nearby suitable habitat located outside of the construction limits. If a bat maternity roost is observed, a 500-foot "no disturbance" buffer shall be implemented around the roost and construction activities within the buffer shall be limited to daylight hours until the roost is determined by a qualified biologist to no longer be active.

Mitigation Measure BIO-3 is revised in Section 11.4.2.1, Alternative 4 – Phased AWRM, Impact Summary – Phase I, as follows:

> **Mitigation Measure BIO-3: Southern California Steelhead Plan.** Prior to discharging water from the blended groundwater pipeline to the Santa Clara River, a plan shall be developed to identify discharge conditions throughout the year that are compatible with southern California steelhead management goals through the portion of the Santa Clara River channel between the Fillmore Fish Hatchery and the Freeman Diversion. The plan may involve modifying the discharge rate during low flow season. The plan shall be compatible with local habitat conservation planning efforts approved by the National Marine Fisheries Service. The plan shall include operational requirements to ensure compatibility with adopted conservation plans and with all biological resources in the river, including identification of seasonal discharge restriction periods, monitoring, and reporting to wildlife agencies.

Section 11.4.2.6, Alternative 2 – MF/RO With Brine Disposal via DWI, Brine Disposal System (DWI), first paragraph, is revised as follows:

> The brine disposal system facilities for this alternative are described in Section 6.7.1. The DWI facilities would not be within an HCP or NCCP. The DWI brine pipeline would cross the SCR and SEA No. 23. The DWI brine pipeline would be installed either by being suspended from The Old Road Bridge or installed under the SCR using trenchless technology. The DWI brine pipeline would not modify land uses or impact natural resources within SEA No. 23. The remaining portion of the pipeline alignment would be confined to the existing roadways and public ROW to the maximum extent practicable. However, it is anticipated that the DWI site would be located in or adjacent to SEA No. 64 (see Section 11.2.4.12). An area of 152 acres of SEA No. 64 is going to be dedicated as a preserve as required by the Resource Mitigation and Monitoring Plan for the Westridge Project being developed in the vicinity. The construction of the injection wells would have the potential to impact valley oaks in SEA No. 64. Implementation of Mitigation Measure BIO-5 would reduce the impact to a less than significant level. Impact would be less than significant with mitigation.

Table 11-2, under Status: Federal/State, for the unarmored threespine stickleback, is revised to replace “Endangered/Endangered” with “Endangered/Endangered-Fully Protected Species”.

22.2.13 Section 12, Cultural Resources

Table 12-1 is revised to replace “NHL = National Registered Landmark” with “NHL = National Historic Landmark” in the table footer.

22.2.14 Section 13, Energy Resources

No substantive changes.

22.2.15 Section 14, Geology, Soils, and Seismicity

Section 14.1, first paragraph, is revised as follows:

> This section addresses the potential impacts to geology, soils, and seismicity from implementation of the proposed Santa Clarita Valley Sanitation District (SCVSD) Chloride Compliance Project (proposed project). This section provides a description of

the regional geology, a summary of the regulations related to geologic and seismic hazards, an evaluation of the potential impacts that may result from implementing the proposed project, and identifies mitigation to minimize potential effects. This section incorporates geologic information contained in the Site Study Report for Brine Disposal via Deep Well Injection prepared by the SCVSD (SCVSD 2013), which is included in Appendix 6-C. This section also incorporates geologic information included in the Resumption of Wellfield Feasibility Study prepared by CH2M HILL (CH2M HILL 2012), which is included as an appendix to the Site Study Report within Appendix 6-C. Furthermore, this section incorporates information on induced seismicity in the Deep Well Injection Induced Seismicity technical memorandum prepared by CH2M HILL (CH2M HILL 2013), which is included in Appendix 14-A.

Section 14.4.2.4, Alternative 2 and Phase II of Alternative 4, Brine Disposal System (DWI), fourth paragraph, is revised as follows:

As of 2010, over 16,000 Class I injection wells had been operated in California including nearly 600 that were actively operating in the DOGGR region that includes Santa Clarita (DOGGR 2011). Only nine injection sites have reported induced seismic events~~seven seismic events have been attributed to injection~~ in California and none in the DOGGR region that includes Santa Clarita (National Academy of Sciences 2012). As a result, the probability of an injection-induced seismic event is believed to be very small. If DWI is implemented, the SCVSD would develop a seismic monitoring plan prior to commencing injection that would identify the monitoring frequency during well startup and operations as well as a flow ramp-up schedule during startup. Impact would be less than significant.

22.2.16 Section 15, Greenhouse Gas Emissions

No substantive changes.

22.2.17 Section 16, Hydrology and Water Quality

Section 16.4.2, fifth paragraph, is revised as follows:

Three GSWIM simulations were prepared for this Draft EIR. The first model run uses the combined 2011 discharge from the VWRP and SWRP (19.5 mgd) to provide a baseline or "without project" condition. The second simulation uses a combined discharge from the VWRP and SWRP of 13 mgd, which is the proposed minimum flow required to protect biological resources (see Section 11). A summary report of the two runs is included in Appendix 16-A (ESA 2012). The third run simulated groundwater level changes assuming the operation of the salt management facilities in the Piru Subbasin at an extraction rate of 15,500 gpm (22 mgd), which is the average rate required to produce a blend water with 95 mg/L chloride, as part of Alternative 4, coupled with the proposed minimum flow of 13 mgd from the VWRP and SWRP. Graphical outputs of this model run are included in Appendix 16-A (AMEC 2012; AMEC 2013).

Section 16.4.3.1, Alternative 4 – Phased AWRM, Salt Management Facilities, third paragraph, is revised as follows:

Chloride levels in the Piru Subbasin are expected to drop with the implementation of Alternatives 1, 2, 3, or 4; however, with the implementation of Alternative 4, chloride

levels would drop more quickly and dramatically. The removal of relatively high chloride groundwater from the eastern Piru Subbasin would allow natural recharge with lower chloride surface water, thereby resulting in improved groundwater quality. The blended groundwater would constitute a new, usable water supply that would offset pumping on the Oxnard Plain and reduce overdrafting and seawater intrusion associated with that pumping. In summary, the salt management facilities would have a positive impact on water quality. Impact would be less than significant.

Table 16-5 is revised to add the following to the footnote section at the end of the table:

Source: SCVSD GSWIM Model 2012.

22.2.18 Section 17, Land Use and Planning

No substantive changes.

22.2.19 Section 18, Noise

Section 18.4.2.1, Alternative 2 – MF/RO with Brine disposal via DWI, Brine Disposal System (DWI), after the first paragraph, is revised with the addition of the following paragraph:

The DWI wells would be deviated which would result in well casings located under the property of neighboring land owners at depths over 500 feet below ground surface. Noise impacts to the nearest sensitive receptors would be attenuated by depth. No construction or operational impact would occur.

Section 18.4.2.1, Alternative 2 – MF/RO with Brine disposal via DWI, Brine Disposal System (DWI), third paragraph, is revised as follows:

Operation of the DWI facilities and associated pipeline would not generate noise levels above ambient levels and would not create a significant long term noise impact to the surrounding area. The DWI brine pipeline would not include any component that would create noise other than the pump station located within the VWRP. The DWI facilities would include the five~~six~~ injection~~s~~ wells. The new wells would generate noise from the electric pumps; however, the facilities would be located adjacent to an existing roadway that contributes vehicle noise to the area. In addition, the injection pumps would be housed within a closed environment that would reduce noise levels coming from pump operation. Furthermore, impacts to the nearest sensitive receptors would be attenuated by the topography of the land because the DWI site is below grade in a low spot surrounded by rolling hills and mature vegetation. Impact would be less than significant.

Section 18.4.2.2, Alternative 2 – MF/RO with Brine Disposal via DWI, Brine Disposal System (DWI), after the first paragraph, is revised with the addition of the following paragraph:

The DWI wells would be deviated which would result in well casings located under the property of neighboring land owners at depths over 500 feet below ground surface. Vibration impacts to the nearest sensitive receptors would be attenuated by depth. No construction or operational impact would occur.

Section 18.4.2.2, Alternative 2 – MF/RO with Brine Disposal via DWI, Brine Disposal System (DWI), third paragraph, is revised as follows:

> Operation of the DWI facilities would include the use of five~~six~~ injection pumps operating at 225 horsepower (HP) each. The injection pumps would be located on concrete pads that would absorb the vibrations produced during operation. The operation of the electric pumps would not produce vibration levels that would exceed FTA threshold standards. No vibrations would be associated with the operation of the DWI brine pipeline. Impact would be less than significant.

22.2.20 Section 19, Transportation and Traffic

No substantive changes.

22.2.21 Section 20, Cumulative Impacts and Project Alternatives

No substantive changes.

22.2.22 References

No substantive changes.

22.2.23 List of Preparers and Contributors

No substantive changes.

22.2.24 Acronyms

No substantive changes.