OTHER RESPONSES

3.19 Master Response on Cumulative Impacts

Cumulative impacts (the Mexicali Wastewater System Improvements) are intended to resolve problems related to the quality of water treated by the existing Mexicali wastewater system and treatment plant, which discharges its effluent into the New River, which ultimately empties into the Salton Sea. According to U.S. Environmental Protection Agency (US EPA) and the International Boundary Water Commission (IBWC), after the system improvements are complete, the treated water would be discharged into the New River. At the time of publication of this Final Environmental Impact Report/Environmental Impact Statement (EIR/EIS), neither US EPA nor IBWC were aware of any plans to redirect the treated water for use in Mexico (McNaughton 2002, Torrez 2002, Pena 2002). Similarly, the environmental documentation for the wastewater system improvements states that all wastewater collected for treatment will be discharged to the New River (US EPA and IBWC 1997). Therefore, the Draft EIR/EIS incorrectly states that 55 thousand acre-feet per year (KAFY) could be redirected for use in Mexico. The improvements would result in a beneficial impact on the water quality of the New River, and thus on the water quality of inflows to the Salton Sea.

In addition to the wastewater system improvements, two power plants are expected to come online in Mexico during the summer of 2002. One power plant would use a portion of the treated wastewater effluent for cooling water; the other power plant would obtain and treat raw sewer water and subsequently use the treated water for cooling water. The power plants would collectively evaporate approximately 10.57 KAFY. The net reduction in water flows to the Salton Sea would be less than 1 percent of the total amount of flow (U.S. Department of Energy [USDOE] 2001). The power plants combined would also remove 6,120,000 pounds of totally dissolved solids (TDS) per year in their water withdrawals. However, the increased TDS concentration of water discharged by the power plants to the New River would result in "an increase in salinity to the Salton Sea of 0.142 percent" (USDOE 2001).

According to the environmental documentation on the power plants, these impacts are negligible and well within the error range of the recorded data and measurement instruments (USDOE 2001). Ultimately, the reduction of phosphates, organics, and heavy metals from Mexico that are currently discharged to the Salton Sea will have a positive impact on water and biological resources. The small increase in salinity level and reduction in water quantity would be negligible; hence the power plants would have no measurable impact (USDOE 2001).

3.20 Master Response on Growth Inducement Analysis

A number of commenters questioned the analysis of growth-inducing impacts set forth in Section 5.2 of the Draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS), claiming that the transfer of additional or more reliable water supplies to the transferee agencies would have growth-inducing effects, particularly in the San Diego County Water Authority (SDCWA) service area.

The transfers included in the Proposed Project (Quantification Settlement Agreement [QSA] Implementation Scenario) are also part of the QSA. The Draft QSA Programmatic Environmental Impact Report (PEIR) assesses the impacts of the QSA components on an aggregate basis. The Draft QSA PEIR concludes, as described in Chapter 6.0 of that document, that the QSA will not foster economic or population growth or remove obstacles to population growth within the Imperial Irrigation District (IID), Coachella Valley Water District (CVWD), Metropolitan Water District of Southern California (MWD), or San Diego County Water Authority (SDCWA) service areas. The Final QSA PEIR includes the same conclusions that the QSA will not have growth-inducing impacts. The final QSA PEIR is expected to be certified by its four co-lead agencies (IID, MWD, CVWD, and SDCWA) prior to certification of the Final EIR/EIS.

The QSA PEIR is a programmatic document, and the analysis in the EIR/EIS incorporates the analysis of growth-inducing impacts from the final QSA PEIR by reference. In addition, since the EIR/EIS will provide project-level California Environmental Quality Act/National Environmental Policy Act (CEQA/NEPA) compliance for the transfer to SDCWA, this Master Response provides additional analysis of growth-inducing effects, particularly in the SDCWA service area. This information has been provided through consultation with the SDCWA.

3.20.1 Introduction

SDCWA is a regional resource agency mandated by state law to provide water necessary to meet demands of its public agency customers. SDCWA does not regulate land use in San Diego County; it is powerless to do so. SDCWA currently receives virtually all of its imported water supply from MWD. MWD supplies water through a variety of sources, including Colorado River water (CRW). Historically, the water delivered by MWD to SDCWA has been CRW; even after construction of the State Water Project, over three-quarters of MWD supplies delivered to SDCWA have come from the CRW. Of the total amount imported from MWD, only 303 thousand acre-feet per year (KAFY) is considered firm supply according to the SDCWA 2000 Urban Water Management Plan¹⁶. The remainder of the water currently supplied is comprised of water that cannot be relied upon on a year in-year out basis over the long term. The proposed project would give SDCWA a firm supply of 200-300 KAFY to service existing demands by providing SDCWA with a senior priority entitlement to Colorado River water instead of the less reliable MWD water it currently receives. Because of capacity limitations to MWD's Colorado River Aqueduct,

¹⁶ See Attachment B in the Final EIR/EIS, SDCWA 2000 Urban Water Management Plan. SDCWA's current preferential right as determined by MWD is 15.03 percent of MWD supplies. This equates to approximately 320 KAF of water using the same base as in the 2000 UWMP; i.e., MWD representations that it has 2.1 MAF of dry year supply. For purposes of this discussion, the 2000 UWMP amount of 303,000 is used.

which currently runs at or near full, the Project would not increase the amount of water into MWD's service territory.

MWD currently receives approximately 1.2 million acre-feet per year (MAFY) of CRW through a Priority 4 and 5 Entitlement. MWD's Priority 5 supply is dependent on yearly surplus declarations made by the Secretary of the Interior. These surplus declarations have enabled SDCWA to receive a larger amount of CRW than would be possible through normal-year supply. Because of circumstances discussed elsewhere in the EIR/EIS, MWD and SDCWA can no longer reasonably rely on these surplus declarations for future years.

In Fiscal Years (FYs) 2000 and 2001, SDCWA required approximately 600 KAFY of imported MWD water to service its existing customers. In FY 2002, this number is projected to be 635 KAFY. SDWCA's highest imported water requirement was approximately 672 KAFY to service its customers during drought conditions (July 1989-July 1990). Even with the Project, SDCWA will not be able to meet all of its existing demands with firm water; however, the project does provide greater assurances against the potential for devastating economic, social and environmental hardship in the event of drought or other extraordinary circumstances.

Existing SDCWA aqueducts are sufficient to permit SDCWA to meet imported water requirements through approximately 2015, assuming that imported water supplies (both firm and non-firm) are within the range of maximum historic imported water usage, and that existing treated water constraints are mitigated by increasing local treatment capacity and decreasing potable water demand through conservation. The Proposed Project has no effect on this projection.

In order to meet regional water needs, SDCWA must plan for future water supplies today. State law mandates that SDCWA plan its water supply based on regional growth management plans prepared by the San Diego Association of Governments (SANDAG). ¹⁸ In 1992, SANDAG and SDCWA entered into a Memorandum of Agreement requiring SDCWA to use SANDAG's most recent regional growth forecasts in determining water demands and the amount, type and phasing of facilities needed to serve the forecast population. ¹⁹ Since then, SDCWA has planned its future water supply based on SANDAG's regional growth forecasts.

As a resource agency having no land use authority of its own, SDCWA simply meets the demands of its public agency customers, some of which are cities that have constitutional and statutory authority to regulate the pace, location, and quantity of land development, and some of which are water districts serving cities or unincorporated areas of the county. Any water supply that SDWCA brings into its service area is subject to apportionment by

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¹⁷ See Attachment C in the Final EIR/EIS, Outline of Supplemental Expert Testimony of Maureen Stapleton.

¹⁸ See Attachment D in the Final EIR/EIS, Text of Proposition C -- November, 1988, Regional Planning and Growth Control Measure; see also, Attachment D in the Final EIR/EIS, Water Code § 10915 as added by Stats. 1995, c. 881, Sec. 4 (SB 901); Gov't Code § 66473.7(k) as added by Stats. 2001, c. 642, Sec. 4 (SB 221); Water Code § 10915 as amended by Stats. 2001, c. 643, Sec. 8 (SB 610).

¹⁹ See Attachment E in the Final EIR/EIS, Memorandum of Agreement Between the San Diego County Water Authority and the San Diego Association of Governments Establishing Implementation of the Regional Growth Management Strategy's Section on Water (1992); Attachment F in the Final EIR/EIS, SANDAG Regional Growth Management Strategy (1993) and Water element (updated January 2002); Attachment G in the Final EIR/EIS, SANDAG 2020 Regionwide Forecast (July 1998); Attachment H in the Final EIR/EIS, San Diego Association of Governments (SANDAG) and San Diego County Water Authority (CWA): Regional Growth and Water Demand Forecasting.

each member agency and is distributed at the discretion of the member agency. Except in unique circumstances of a declared water shortage emergency, SDCWA has no control or authority over ultimate use of water by its member agencies; SDCWA simply delivers the water.

The Proposed Project will alleviate the shortage of firm water currently experienced by SDCWA. It will not provide an additional source of water or change the amount of imported water delivered to SDCWA; rather, the water delivered to SDCWA as a result of the Project will be the same water as is currently delivered, but with senior water rights. The Proposed Project will bring SDCWA closer to meeting existing municipal, domestic and agricultural water demands with firm water supplies, but it will not increase total water supply or even completely close the gap between water demands and firm water entitlement.

3.20.2 CEQA and NEPA Standards for Growth Inducement Analysis

Both the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA) require examination of the potential for proposed actions to cause indirect and growth-inducing impacts.

CEQA Guidelines, Section 15126.2(d) states:

(d) Growth-inducing impact of the Project. Discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects that would remove obstacles to population growth (a major expansion of a wastewater treatment plant might, for example, allow for more construction in service areas). Increases in the population may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. Also discuss the characteristic of some projects that may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.

The Council of Environmental Quality's regulations for implementation of NEPA state at 50 Code of Federal Regulations Section 1508.8(b) that an EIS shall include an analysis of:

(b) Indirect effects, which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth-inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems.

3.20.3 Description of Project as it Relates to Possible Growth Inducement

The Proposed Project includes the water transfer provided in the IID/SDCWA Transfer Agreement and, if the QSA is approved and implemented, implementation of the modified transfers to SDCWA, MWD, and CVWD provided for in the QSA. These water transfers are a key element in the satisfaction of California's legal mandate to reduce its diversion of

Colorado River water from its historic diversions of up to 5.2 MAFY to its normal-year allotment of 4.4 MAFY. Consistent with existing water allocations under the Law of the River, the California parties will reallocate water with senior priority rights from inland agricultural water users to the Southern California coastal plain, a transfer plan intended to maintain existing water supplies vital to urban populations. If implemented as part of the QSA, the Proposed Project will involve conservation and transfer by IID of up to 200 KAFY of CRW to SDCWA, and up to 100 KAFY of CRW to CVWD and/or MWD. If the QSA does not proceed and the proposed project is implemented as a stand-alone transfer, IID could transfer up to 300 KAFY of CRW to SDCWA. Under either scenario, the "ramp up" to full potential deliveries would occur over a period of several years.

For SDCWA, the Project purposes are to acquire an independent, alternate, long-term replacement water supply that provides drought protection and increased reliability for municipal, domestic, and agricultural uses.²⁰ Although MWD's Colorado River supplies have been reliable in the past, in the absence of the Project that supply could be cut in half during years in which the Secretary of the Interior does not declare a surplus condition on the river. Loss of Colorado River deliveries in the future would have an immediate and significant impact on existing water supply capabilities of both MWD and SDCWA.

The Proposed Project does not involve construction of any new facilities. No new water pipelines or aqueducts are part of the actions under consideration. The water transferred from IID would be transported via the existing MWD Colorado River Aqueduct (CRA) and other transmission facilities. No delivery systems are proposed that would provide water to currently undeveloped land. Furthermore, the actions involved do not dictate the location of any future developments, as is the case, for example, with the placement of a new highway or a extension of a new water supply facility.

The Proposed Project Maintains Historic Deliveries and Assures the Future Reliability of SDCWA's Existing Water Supply, but Does Not Make Available New or Additional Water.

The proposed transfers, along with other QSA elements, are necessary to maintain historic deliveries of Colorado River water to the urban coastal plain. If California is reduced to its normal-year allocation of 4.4 MAFY, the reduction will occur primarily in deliveries through MWD's CRA, which is SDCWA's sole means of receiving water from the Colorado River. This is because of the junior priority of MWD's entitlement relative to agricultural users. For many years, the MWD and SDCWA have depended on and used virtually a full CRA (roughly 1.2 MAFY), and a reduction to normal-year CRW supply would today mean that 600 to 700 KAFY of that water would be lost. This is water that meets SDCWA's existing needs and the loss of that supply would have significant immediate impacts. Without any preventive action such as the QSA and the proposed transfers, a reduction of CRW supplies to California is likely.

MWD derives its water supply from two imported water sources: the Colorado River and the State Water Project (SWP). During the last drought (1986 to 1992), when SWP supplies were curtailed, the CRA was full. Until 1996, MWD was able to fill the CRA over and above its normal-year entitlement with water apportioned to, but unused by, Arizona and Nevada. Since 1996, now that those states are at or near their normal-year apportionment, the CRA

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 $^{^{20}}$ For a complete discussion of SDCWA's water supplies and planning, see Attachment B and H in the Final EIR/EIS.

has been filled through yearly surplus declarations by the Secretary of the Interior. To the extent that the proposed water transfers allocate senior priority river water to the CRA, SDCWA and MWD will be less dependent on annual surplus declarations to fill the CRA.

From Fiscal Years 1991 through 2000, of all water delivered from MWD to SDCWA, 84 percent of that water was from the Colorado River. While MWD deliveries to SDCWA and the rest of its service area lessened during the mid and late 1990s, primarily because of local wet weather, deliveries to SDCWA averaged about 600 KAFY in FYs 2000 and 2001, and are projected to total about 635 KAFY for FY 2002.

If the QSA is implemented, the maximum amount of water transferred from IID to SDCWA would be 200 KAFY. That water would be transported through the CRA. Assuming, for example, that the water transfer was currently in place at the full amount of 200 KAFY and a firm MWD supply of 303 KAFY, SDCWA would still need 122 thousand acre-feet (KAF) of supplies to meet projected deliveries to SDCWA this year, or 169 KAF to meet the peak July 1989 - July 1990 deliveries. These additional supplies would come from MWD non-firm supplies or some other, as yet unidentified source.

If the QSA is not implemented, under the alternate Proposed Project scenario, SDCWA could receive as much as 300 KAFY from IID. While SDCWA could receive more imported water from IID under a "no QSA" scenario, that scenario would probably require a downward adjustment of the "firm supply" estimates from MWD. The MWD "firm supply" assumes a full CRA, and without the QSA, a full CRA in the future is uncertain and would be dependent upon surplus declarations or other water supply sources. The SDCWA 2000 Urban Water Management Plan (2000 Plan) estimates that SDCWA's firm supply from MWD is 303 KAFY, but that estimate is based upon MWD's own firm supply representations, which include a full CRA. Therefore, even with the IID transfer water, SDCWA has no guarantee that it will in the future receive as much imported water as it has received in the past.

In order to meet its existing demands, SDCWA must find a reliable, long-term supply of water to replace the water it currently receives from surplus declarations. Because the water transfers proposed in the Project allocate senior priority CRW to SDCWA, SDCWA will be less dependent on annual surplus declarations to meet existing demand. The Proposed Project will help offset the diminished supplies of Colorado River water that could otherwise be available in the future and ensure that SDCWA will not suffer the loss of supplies that have been available to it in the past.

Potential Direct and Indirect Growth Inducing Impacts of Maintaining Historic Supplies and Ensuring Future Reliability of Existing Water Supply.

Maintaining historic and existing CRW supplies and ensuring those supplies for the future do not create an increased water supply or make additional water supplies available to new or future development. The Proposed Project firms up the future reliability of service to existing users; it does not create new water for future users. Currently, SDCWA does not have enough firm water supply to adequately serve existing demands. In order to meet its current demands, SDCWA must rely on yearly surplus declarations from the Secretary of the Interior and other extraordinary measures. The proposed transfer will convert a portion of the less reliable water currently used into a firm supply serviced by senior priority CRW.

The proposed transfer is a step by SDCWA towards meeting all current demands with firm water.

Because the Project only provides more reliable water for current demands, it will not affect future growth of the San Diego region. All of the water secured by the proposed transfer is already committed to current demands; none will be available for future development. Under the SDCWA 2000 Plan, all deliveries are to be based on firm supply. Increasing the future reliability of dry year water deliveries that are already committed to existing users and needs has no direct or indirect impact on future growth, nor does it remove obstacles to population growth.

Land Use Decision-Making and Future Growth In San Diego County.

The proposed project has no growth-inducing impact because it does not provide new water for new development, but only maintains historic delivery quantities and assures the future reliability of that water for existing customer demands. The following information is provided to inform the decision-maker how SDCWA determines the level of service required to meet existing and future needs within its service area and supports the conclusion that the project merely assures future reliability of supply quantity necessary to serve current users.

Role of SANDAG in Land Use Planning.

In San Diego County, SANDAG plays a key role in assisting local governments meet their responsibilities to plan and regulate land use. SANDAG is the regional planning agency for the 18 incorporated cities and county government. SANDAG is governed by a Board of Directors composed of elected officials from each of the 19 local governments. Supplementing the voting members are seven advisory members, including the SDCWA. SANDAG is mandated as the regional transportation planning agency, the regional transportation commission, and the regional growth management and review board. SANDAG provides a variety of services, including regional transportation planning, regional growth management,²¹ demographic and economic analysis, land use and growth management strategies, public facilities location, housing needs analysis, and environmental planning.

SANDAG's Regional Growth Forecast.

One of the most important land use tools provided by SANDAG is its regional growth forecast (RGF). Local agencies throughout the San Diego region use the RGF to assist with long-range land use decision-making. SDCWA also relies upon the RGF to assist with its water planning needs and capital programming processes.

SANDAG's preparation of the RGF is a two-step process. First, SANDAG creates a regional forecast for the total growth in the San Diego region through the use of economic and demographic factors. Second, SANDAG allocates the growth identified in the regional forecast to the 18 cities and county. For the City and County of San Diego the allocations are also made for each community plan area.

²¹ See Attachment F, SANDAG Regional Growth Management Strategy (1993) and Water element (updated January 2002).

The most recent iteration of the SANDAG forecast, the 2020 RGF, was approved for use by the SANDAG Board of Directors in February 1999, and its numbers were certified for use in all regional plans and studies, including those conducted by SDCWA. The 2020 RGF predicts that local population, employment, and income will grow steadily throughout the next 20 years. The region should see an average annual population increase of 46,400 through 2020. Total population is projected to reach 3.85 million by 2020, roughly one million more than in 1998. Most of the projected growth in population – about 60 percent – will be the result of natural increase (more births than deaths, not due to migration to the area).

SANDAG's Regional Housing Needs Assessment and Housing Elements.

SANDAG is the State's designated agency to provide regional housing needs assessment (RHNA) for the San Diego region.²² In that capacity, SANDAG identifies the total number of residential units (by income categories) that a jurisdiction must provide for the next five years as part of their housing element updates. An important ingredient of any local agency's housing element is identifying an adequate number of housing sites to meet the local agency's allocated share of the regional housing needs. SANDAG's RHNA plays a critical role in this determination.

All cities in the county and the County of San Diego have approved general plans. Each of these general plans was prepared and adopted in conformance with CEQA. Fifteen of the cities and the county have revised their housing elements to reflect SANDAG's most recent regional growth forecast, and the remaining three cities are currently in the process of doing so. The County is also in the process of a comprehensive general plan update and is using SANDAG's regional growth projections in that process as well.

County Water Authority Act

SDCWA provides water to meet current and projected needs identified by SANDAG, and advises local governments regarding water supply issues. SDCWA is mandated by its principal act, the County Water Authority Act (Stats. 1943, c. 545) (CWA Act), to provide water to meet the needs of member agencies in its service area. The CWA Act, at Section 5(11), provides that a county water authority board of directors "as far as practicable, shall provide each of its member agencies with adequate supplies of water to meet their expanding and increasing needs." SDCWA is not a retail water supplier; it is a wholesale water supplier to its member agencies, which are themselves retail suppliers and/or provide water to retail suppliers.

SDCWA's statutory purpose and direction is to provide a safe, reliable water supply for its service area, both present and future. SDCWA is a water provider, not a land use regulator. SDCWA has no jurisdiction over local land use policy or decision-making, which lie with the cities and County government. As a wholesaler, SDCWA has no ability to direct the allocation of water by its member agencies so long as water use is within the uses prescribed in the CWA Act.

²² See California Gov. Code § 65585.1.(a).

SDCWA/SANDAG Memorandum of Agreement

In order to meet its purpose and direction under the CWA Act, SDCWA has been working together with SANDAG for the past twelve years to link future water supply needs with forecasted regional growth. In 1992, SANDAG and SDCWA entered into a Memorandum of Agreement (MOA), which details how the two regional agencies coordinate to ensure the availability of water for future growth. Under the MOA, SDCWA agrees to use SANDAG's most recent regional growth forecasts for regional water supply planning purposes, provide updated information on changes in plans or programs, and implement relevant actions contained in the Water Element of the Regional Growth Management Strategy. The MOA ensures that water demand projections for the San Diego region are linked with SANDAG's growth forecasts and that water supply is a component of the overall Regional Growth Management Strategy.

The Legislature has recognized the unique regulatory and planning structure in San Diego County and has made SDCWA's adherence to the MOA one of the criteria for SDCWA's alternative compliance with its statutorily mandated water supply planning under Section 10915 of the Water Code. SANDAG revises its RGF once every five years. Thus, both water availability and housing development are driven by the same set of growth forecasts and are both periodically reassessed at the same time as part of the growth forecast update process for each forecast. The RGF is also used by the local agencies as part of their long-range planning and capital facilities programming.

The relationship established between SANDAG and SDCWA implements the requirements of SB 901, passed in 1995, which requires planning agencies to consider information provided by water agencies in their decisions to approve or deny commercial, industrial, or residential development. The State has determined that Proposition C, adopted by San Diego County voters in 1988, is functionally equivalent to the requirements of SB 901. Under Proposition C, SANDAG was charged with developing a Regional Growth Management Study and was designated by the cities and County government as the Regional Planning and Growth Management Review Board.

Two recent state legislative enactments also play a role in defining the nexus between land use and water supply, and further define water agencies' advisory role in the formulation of land use decisions by city and county governments. SB 221 amended various sections of the California Business and Professions Code and the Government Code to help ensure that new housing developments have adequate water supplies. SB 221 prohibits approval of a tentative map, parcel map or subdivision development agreement unless the legislative body of a city or county provides written verification from the applicable public water system that a sufficient water supply is available, or in addition, a finding is made that sufficient water supplies are, or will be, available prior to completion of the project. SB 610 requires (in part) that an urban water management plan include a description of all water supply projects and programs that may be undertaken to meet total projected water uses, and prohibits an urban water supplier that fails to prepare a plan from receiving funding from bond acts until the plan is submitted.

SDCWA's 2000 Urban Management Plan.

SDCWA's 2000 Urban Water Management Plan identifies the future water demands for its service area through 2020 based on the RGF developed by SANDAG. A key objective of the

2000 Plan is to provide a firm supply of water to meet the identified demand. The 2000 Plan identifies a need for 813 KAF of water for its service area in the year 2020. This amount is not the identified imported water need; rather, it is the total need to be derived from both local and imported sources, when considered with extensive conservation that will continue to be implemented over the next two decades.

3.20.4 Conclusion

As discussed earlier, the Project does not provide new water or new water facilities, but rather maintains historic delivery quantities and assures the future reliability of that water to meet existing customer demands using existing facilities. The above discussion is intended to inform the decision-maker as to the land use planning and growth forecasting used within SDCWA's service area. While the Proposed Project only supplies existing demands, and therefore cannot encourage or induce growth or remove barriers to future growth, it is helpful to understand the process by which local agencies within the San Diego region plan for and accommodate growth.

3.21 Master Response on Desalination and Water Conservation in SDCWA Service Area

3.21.1 Introduction

A number of commenters argued that San Diego County Water Authority (SDCWA) should satisfy its need for additional water supplies through desalination projects and/or increased conservation measures within the SDCWA service area. This Master Response responds to those comments and describes the status of implementation of desalination projects and conservation measures within the SDCWA service area. This information has been provided through consultation with SDCWA.

SDCWA and its member agencies have for decades examined the prospects of ocean water desalination as a source of water for the SDCWA service area. Desalination has been identified as a potential local water resource in the SDCWA Urban Water Management Plan (2000 Plan), which projects that seawater desalination will contribute 25,000 acre-feet per year (AFY) to the regional water supply in the year 2020. While the cost of seawater desalination has generally declined over the years, feasibility on a large scale is unknown at this time. Significant issues that must be resolved include potential environmental impacts, brine concentrate discharge, accessibility of a reliable energy source to accomplish the desalination process, and capital and operation/maintenance costs for desalination equipment and necessary delivery facilities. At present, it appears that the most likely location for a seawater desalination facility would be at or near an existing coastal electrical power generating station. Reasons for this include the increased likelihood of available power, existing ocean intake and discharge facilities, and compatible land use. SDCWA, along with certain of its member agencies, are exploring the feasibility of such a project at the Encina power station in the City of Carlsbad. The feasibility study contemplates a facility that would produce up to 56,000 AFY. Assuming optimal conditions in which there would be minimal environmental costs and a reliable and moderately priced energy supply, first year cost of water production is estimated at \$794 per acre-foot, with a constant dollar cost over a 30-year project period of about \$900 per acre-foot. This price does not include the cost of necessary delivery facilities, which would be considerable. SDCWA is also considering submission of an application to Metropolitan Water District of Southern California (MWD) for funds to help pay the high cost of desalination. MWD has indicated that it will consider providing partial funding for desalination projects in its service area up a total production of 50,000 AFY.

In summary, SDCWA continues to explore the feasibility of seawater desalination as a part of the total water supply in its service area. Whether, when, and to what extent desalination would occur is not known at this time. At this point, it appears that if seawater desalination is to be feasible, projects must be located in areas where environmental, power, and cost issues can be minimized. Such locations, if available, are limited in the San Diego region. SDCWA is concentrating its study efforts on what at present appears to be the site with the most favorable conditions for a desalination project. However, feasibility studies for that site envision a maximum capacity of 56,000, which in and of itself would constitute the largest seawater desalination facility in the western hemisphere. At this time, it not possible for

desalination to produce a volume of water supply at a cost comparable to water that will be provided by the Proposed Project.

SDCWA has and will continue to aggressively pursue water conservation and water recycling opportunities within its service area to minimize the need for imported water supplies. SDCWA's past accomplishments and plan for the future are summarized in its 2000 Urban Water Management Plan (2000 Plan), portions of which are reproduced below.

3.21.2 Water Conservation

Water conservation is frequently the lowest-cost resource available to the SDCWA and its member agencies. Water conservation is a critical part of the SDCWA's 2000 Plan and long-term strategy for meeting the water supply needs of the San Diego region. The goals of the SDCWA's water conservation program are to reduce demand for more expensive, imported water; demonstrate continued commitment to the Best Management Practices (BMPs) and Agricultural Efficient Water Management Practices; and to ensure a reliable future water supply.

Best Management Practices

The California Urban Water Conservation Council (CUWCC) was formed in 1991 through a Memorandum of Understanding (MOU) Regarding Urban Water Conservation in California. The urban water conservation practices, or BMPs, included in this MOU are intended to reduce California's long-term urban water demands. Table 3.21-1 provides an overview of the SDCWA and its member agencies' progress in the implementation of the recently updated BMPs as outlined by the CUWCC. Major SDCWA activities include active participation in the development and implementation of statewide BMPs; participation with member agencies, MWD and American Water Works Association Research Foundation in research and development activities; and implementation of public information and education programs.

Implementation of BMPs

Since program inception, the SDCWA and its member agencies have provided incentives for the installation of more than 384,000 ultra-low-flow toilets (ULFTs). Financial incentives have also been provided for installation of more than 4,500 residential high-efficiency clothes washers (HEWs) and more than 1,700 coin-operated HEWs. The SDCWA, member agencies and San Diego Gas and Electric (SDG&E) have also distributed more than half a million showerheads to customers. Since 1990, the SDCWA has spent close to \$9 million on implementation of these and other conservation programs.

TABLE 3.21-1Best Management Practices for Urban Water Conservation in California

BMP No.	Description		Conservation Programs	Compliance
1	Residential Surveys		Residential Survey Program	√ Yes
2	Residential Plumbing Retrofit	•	Showerhead distribution	√ Yes
3	Distribution System Water Audits			√ Yes
4	Metering with Commodity Rates			√ Yes

TABLE 3.21-1Best Management Practices for Urban Water Conservation in California

BMP No.	Description	Conservation Programs	Compliance
5	Large Landscape Programs and Incentives	 Professional Assistance for Landscape Management Program Protector Del Agua 	√ Yes
6	High-Efficiency Clothes Washer Rebates	 Residential High-Efficiency Clothes Washer (HEW) Program 	√ Yes
7	Public Information Programs	 Media Coverage Xeriscape Awards Website Water Conservation Literature 	√ Yes
8	School Education Programs	 Classroom Presentations Splash Science Mobile Lab Youth Merit Badge Program Magic Show Teaching Garden Mini-grants of up to \$250 	√ Yes
9	Commercial, Industrial and Institutional (CII) Water Conservation	 CII Voucher Program 	√ Yes
10	Wholesale Agency Assistance Programs	Ongoing	√ Yes
11	Conservation Pricing	Ongoing	√ Yes
12	Water Conservation Coordinator	Water Resources staff	√ Yes
13	Water Waste Prohibition		√ Yes
14	Residential ULFT Replacement Programs	 Residential ULFT Voucher and Rebate Programs Community Based ULFT Distribution Program 	√ Yes

SDCWA's fiscal year (FY) 2000 budget included \$1.2 million for conservation programs anticipated to save 38,000 AFY over the useful life of the measures. This funding was augmented by SDCWA member agencies, Reclamation, SDG&E, and MWD amounting to \$5.1 million. Therefore, the total amount spent during FY2000 for all conservation programs was \$6.3 million. SDCWA provides approximately 19 percent of all conservation funding. SDCWA and its member agencies also administer both the Agriculture Audit Program and California Irrigation Management Information Systems for agricultural use.

Revenue Impacts

Water conservation is a well established component in ensuring that there will be a reliable water supply in the future for the increasing population and commerce of our local region. However, conservation occasionally suffers from the perception that it reduces commodity-based rate revenues. Over the long-term, conservation measures actually serve to defer or limit rate increases by reducing the region's need for other, more expensive supplies and increased infrastructure. SDCWA's FY2001 budget included \$1.6 million for conservation programs, which represents an average cost of \$3.00/acre-foot (AF) of projected water sales during FY2000.

3.21.3 Future Water Conservation Savings

Projected water savings and effectiveness provided in the 2000 Plan are based on industry standard methodologies for calculating savings, as defined by CUWCC. SDCWA assists the CUWCC in conducting pilot programs and analyzing ways to increase the accuracy of savings calculation methodologies. The implementation of existing and proposed urban BMPs would produce water savings of approximately 93,000 AFY by the year 2020 within the SDCWA service area (Table 3.21-2).

TABLE 3.21-2
Potential Water Conservation Savings Through 2020 Within SDCWA Service Area

Best Management Practices	2005 AF	2010 AF	2015 AF	2020 AF
Existing BMPs				
Residential Surveys	1,100	1,100	1,100	1,100
Plumbing Retrofits	8,100	8,100	8,100	8,100
New Residential Construction	6,800	10,900	14,100	17,300
Main Line Leak Detection	13,230	18,320	18,360	19,310
Large Landscape Audits	1,400	1,600	1,900	2,200
Commercial, Industrial and Institutional	1,100	1,100	1,100	1,100
Residential Landscape	900	900	900	900
ULFT Incentives	20,800	28,280	31,240	31,240
Clothes Washer Incentives	1,000	3,000	4,000	5,000
Subtotal	54,430	73,300	80,800	86,250
Proposed BMPs				
Appliance Efficient Standards	200	560	2,060	6,400
Car Wash Retrofits	240	500	500	500
Greywater	30	40	40	50
Subtotal	470	1,100	2,600	6,950
TOTAL	54,900	74,400	83,400	93,200

This conservation target was set by SDCWA's Board of Directors and coincides with the availability of anticipated member agency, SDCWA and/or MWD funds. The estimates in Table 3.21-2 are based on savings projections from implementation of various conservation measures. Updated SANDAG demographic information is also used to determine savings through BMP implementation. This data is incorporated into SDCWA's water demand forecast.

Some of the BMPs that are not quantified in Table 3.21-2, such as public information and school education, do not directly result in water savings. These BMPs instead result in a decision by a water user to take an action that will result in savings. For example, a water user may learn about the availability of showerheads through a public information program, but water will not be saved until the user installs a water saving showerhead, available through the plumbing retrofit program. To avoid double counting, the projected savings from the showerhead is reflected only in the plumbing retrofits BMP.

SDCWA is a recognized leader in implementing innovative water conservation program. Efforts have been so successful, however, that many of the conservation programs that were implemented in the early 1990s are maturing. Additional conservation measures, such as

Landscape, CII, and residential programs, are being considered to achieve further water savings.

Landscape

Additional landscape water savings can potentially be achieved through both incentives and mandated regulations/rates. Future potential incentives include: vouchers for purchase of improved efficiency irrigation devices; additional conservation literature; expanded water user efficient irrigation training programs; more landscape audits and increased support for member agency landscape design demonstration gardens. More aggressive enforcement of landscape design standards could be pursued. Additionally, SDCWA's member agencies could be encouraged to consider retail rate structures and water budgets that incorporate pricing signals designed to sway residential customers to make decisions that lead to increased landscape water use efficiency. Finally, water budgets and pricing signals could be encouraged for CII customers as well.

Commercial, Industrial, and Institutional

There is a potential to achieve additional savings from CII water users. Participation in the existing CII Voucher Program could potentially be increased with an enhanced marketing effort. Additionally, maximum per device voucher incentives could be increased when cost effective. The CII Voucher Program could also be expanded to include additional devices, like water efficient commercial dishwashers and multi-load HEWs. Finally, opportunities may exist to enhance participation in the Commercial HEW Program through very targeted marketing.

Residential

Installation of hot water on demand systems in new homes could be investigated. Additionally, incentives for undersink hot water demand systems for existing homes could be explored. The Residential HEW Program could be expanded, and if appropriate, the per machine voucher amount could be increased. While the Residential ULFT Program has reached a significant portion of the homes in the SDCWA's service area, untapped markets may exist. An effort to identify those markets and overcome any obstacles to participation could be undertaken.

Finally, SDCWA and its member agencies will continue to cooperate with the CUWCC and MWD to identify future opportunities for water conservation savings.

3.21.4 Water Recycling

Water recycling is defined as the treatment and disinfection of municipal wastewater to provide a water supply suitable for non-potable reuse. Non-potable reuse is the term applied to recycled water used for non-drinking water purposes. Examples range from landscape irrigation to recreational impoundments. Agencies in San Diego County use recycled water to fill lakes, ponds, and ornamental fountains; to irrigate parks, campgrounds, golf courses, freeway medians, community greenbelts, school athletic fields, food crops, and nursery stock; to control dust at construction sites; and to recharge groundwater basins. Recycled water can also be used in certain industrial processes and for flushing toilets and urinals in non-residential buildings. As an example, the newly constructed detention facility in the Otay Mesa area of San Diego County was dual-plumbed

to allow use of recycled water for toilet and urinal flushing. However, current regulations allow only new buildings to be dual-plumbed for this specific use. Additional uses for recycled water are being identified and approved as local agencies and regulators become comfortable with its use.

Water recycling is an important component of the area's local water resources. A number of agencies in the San Diego region continue to implement and expand their water recycling projects. Currently, about 13,700 AF of recycled water is beneficially reused within the SDCWA service area annually. Approximately 94 percent of the water is used for agriculture, landscape irrigation, and other M&I uses; the remaining 6 percent is recharged into groundwater basins.

Issues

There are a number of issues that local agencies have to consider when developing recycled water projects. These include economic and financial considerations, water quality, regulatory, institutional, and public acceptance. These issues, if left unresolved, can limit the amount of wastewater that can be recycled in San Diego County. Recycled water development issues are discussed in greater detail below.

3.21.5 Economic and Financial Considerations

The capital intensive cost of constructing recycled water projects has traditionally been a barrier to project implementation. The up-front capital cost for construction of treatment facilities and recycled water distribution systems can be expensive, while full market implementation is usually phased in over a number of years, thus affecting cash flow in the early project years. This situation is compounded by the seasonal nature of recycled water demands. Recycled water demands tend to peak during the hot summer months and drop off during the winter months when landscape irrigation demands are low. Projects that serve a large portion of irrigation demands, like the majority of the projects in the SDCWA service area, often utilize only half of their annual production capacity due to these seasonal demand patterns. The costs of these projects tend to be higher than those of projects that serve year-round demands, since the project facilities must be sized to accommodate seasonal peaking. Projects that serve mostly irrigation demands also tend to have less stable revenue bases, since irrigation demands are heavily influenced by hydrologic conditions.

There are significant benefits to implementing water recycling projects and as uncertainty over purchasing imported supplies from MWD increases in the future, recycling projects become more important.

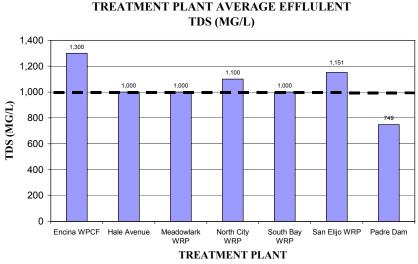
To be financially feasible, a project's benefits must offset or exceed its associated costs. Project benefits can take the form of: (1) revenues from the sale of recycled water; (2) increased supply reliability; (3) increased control over the cost of future water supplies; (4) avoided water and wastewater treatment, storage, and conveyance costs; and (5) financial incentives from SDCWA, MWD, and federal and state agencies. Agencies developing recycled water projects must be able to quantify these benefits in order to determine the financial feasibility of a project. Many of the economic issues can be offset in the long term through investment in a supply that when debt service is retired only operating costs remain, thus making it a low-cost supply. When the long-term economics are considered along with the increased reliability, water recycling can be a viable option.

Water Quality

Water quality, as it pertains to high salinity supplies, is another significant issue. MWD's historic deliveries to SDCWA have consisted primarily of Colorado River water, which has a high salinity content, expressed in terms of totally dissolved solids (TDS). High TDS source water poses a special problem for water recycling facilities because conventional treatment processes are designed to remove suspended, but not dissolved, particles. TDS removal, or demineralization, requires an advanced treatment process, which can significantly increase project costs.

Residential use of water typically adds 200 to 300 milligrams per liter (mg/L) of TDS to the wastewater stream. Self-regenerating water softeners can add another 60 to 100 mg/L. Infiltration of brackish groundwater into sewer lines can also cause an increase in TDS. If an area receives a water supply that has a TDS of more than 700 mg/L, and residents add 300 mg/L or more through normal use, the recycling facility will produce recycled water with a TDS concentration of 1,000 mg/L or higher. Figure 3.21-1 shows the average TDS at several of the existing and projected water recycling treatment plants. In general, TDS more than 1,000 mg/L becomes problematic for irrigation and industrial reuse customers. This greatly limits the potential uses and marketability of recycled water, particularly for agricultural purposes, because certain crops and nursery stock cannot be irrigated with high-TDS water.

FIGURE 3.21-1



One of the actions to reduce salinity impact on water recycling development, is MWD's establishment of a TDS concentration objective of 500 mg/L. Although, MWD has been able to maintain the objective since initiation of the objective in April 1999, there is no guarantee,

due to natural events and other factors, that MWD will be able to continuously meet the

objective, thus putting this sizeable investment in recycling projects at risk.

3.21.6 Regulatory

There are two state agencies primarily responsible for regulating the application and use of recycled water; the State Department of Health Services (DHS) and the California Regional

Water Quality Control Board (Regional Board). Planning and implementation of water recycling projects could entail numerous interactions with these regulatory agencies prior to project approval.

The DHS establishes the statewide effluent bacteriological and treatment reliability standards for recycled water uses in Title 22 of the California Administrative Code. Under Title 22, the standards are established for each general type of use based on the potential for human contact with recycled water. The highest degree of standards is established for recycled water used for unrestricted body contact.

The Regional Board is charged with establishing and enforcing requirements for the application and use of recycled water within the state. Permits are required from the Regional Board for each water-recycling operation. As part of the permit application process, applicants are required to demonstrate that the proposed recycled water operation will not exceed the ground and surface water quality objectives in the Basin Plan and is in compliance with Title 22 requirements.

A regulatory issue that hinders recycled water development projects is the DHS groundwater recharge rule that requires treatment prior to injection of recycled water in order to reduce the total organic carbon concentration to less than 2 mg/L. This increases the cost, thereby limiting development of groundwater recharge.

3.21.7 Public Acceptance

Without public acceptance, it would be difficult for any agency to locate, finance, construct, and operate a water-recycling project. The most successful means to obtain public acceptance is through education and involvement. Agencies in the San Diego region have formed citizens advisory groups and held public workshops in order to get the public more involved in development of their projects.

3.21.8 Encouraging Recycled Water Development

Table 3.21-3 summarizes the programs used by SDCWA's member agencies to assist and encourage development of recycled water. A description of the major programs is also included. Some of these programs are developed by the water recycling agencies, while others are primarily provided by SDCWA, MWD, and state and federal agencies.

3.21.9 Policies, Ordinances, and Guidance Documents

SDCWA has adopted a number of policies, guidance documents, and a model ordinance to assist local agencies with water recycling project implementation. Many local agencies have adopted the SDCWA-sponsored ordinance. The ordinance includes provisions that typically require new development projects to install recycled water systems. The ordinance also states that where allowed by law and available in sufficient quantities, at a reasonable cost and quality, recycled water shall be the sole water supply delivered for non-potable uses.

Water recycling guidance documents available from the Authority include, Model Rules and Regulations for Recycled Water Service, Construction Specifications for Recycled Water Systems, Retrofit Guidelines, and a recycled water user's manual.

TABLE 3.21-3

Programs to Encourage Recycled Water Use

Incentive Programs

- Reclaimed Water Development Fund (SDCWA)
- Local Resources Program (MWD)

Grants

- Title XVI Funding Program (Reclamation)
- Proposition 13 Grant (State of California)

Low Interest Loans

- Financial Assistance Program (SDCWA)
- State Revolving Fund (State of California)
- Water Reclamation Loan Program (State of California)
- Proposition 13 Loan (State of California)

Long-term Contracts (Price/Reliability) Rate Discounts

Public Education/Information

Regional Planning

Model Water Reclamation Ordinance

- Dual Plumbing Standards
- Prohibits Specific Potable Water Uses

Guidance Documents

- Model Rules and Regulations for Recycled Water Service
- Construction Specifications for Recycled Water Systems
- Recycled Water Retrofit Guidelines
- Recycled Water User's Manual

3.21.10 Training

SDCWA, in partnership with other water agencies, offers a one-day certified course designed to provide irrigation supervisors with a basic understanding of recycled water. Completion of the Recycled Water Site Supervisor Training fulfills the training requirement as mandated by regulatory authorities. The class provides information to supervisors on the water recycling process, recycled water quality and safety issues, the duties and responsibilities of the supervisor, landscape irrigation fundamentals, maintenance and management, and cross connection control shut-down tests and inspections. Understanding similarities and differences between recycled and potable water is important to the successful operation of a recycled water system.

The first class started in 1993 with 14 participants. At this time more than 500 participants have been certified. Instructors include a state registered environmental health specialist and environmental assessor, water quality chemist/reclamation specialist and landscape specialists.

3.21.11 Optimizing the Use of Recycled Water – Regional Perspective

While local agencies typically expand and develop their respective recycled water projects independently based on local interests, SDCWA is conducting a study that will identify opportunities to expand the region's recycled water projects and develop a regional system or systems that could maximize reuse on a regional scale. This study, named the "Regional Recycled Water System Alternatives Analysis (Regional Recycling Study)," will identify

opportunities to develop a regional recycled water system(s) that would potentially utilize SDCWA and local agency facilities. Reclamation is conducting a similar study, on a much larger study area, called the "Southern California Comprehensive Water Reclamation and Reuse Study (SCCWRRS)." SDCWA's Regional Recycling Study will build on work from SCCWRRS and has a more focused and detailed objective than SCCWRRS. The two studies are being closely coordinated and SDCWA's Regional Recycling Study will use the data previously collected for the SCCWRRS.

3.21.12 Future Recycled Water Use

As noted previously, San Diego agencies currently beneficially reuse about 13,700 AFY of recycled water, primarily for groundwater recharge, landscape irrigation and other industrial, and commercial uses. The region's demand for recycled water is projected to increase to about 45,100 AFY in 2010 and about 53,400 AFY in 2020. Figure 3.21-2 shows the location of the recycled water treatment plants. Table 3.21-4 displays the total projected recycled water use anticipated through the year 2020 within the SDCWA service area.

TABLE 3.21-4Projected Recycled Water Use

(AF/Year)							
2005	2010	2015	2020				
33,400	45,100	51,800	53,400				

3.21.13 Wastewater Generation, Collection, Treatment and Disposal

Approximately 336,000 AFY of wastewater is currently being generated, collected, and treated within the SDCWA service area. Most of the large wastewater treatment plants are located along the coast for easy and convenient access to an ocean outfall. These plants serve most of the San Diego region's highly urbanized areas. Figure 3.21-2 identifies the location of the wastewater treatment plants and the associated outfall systems. The coastal location of the plants is not always conducive to development of recycled water since most of the market for recycled water is located inland at higher elevations making it costly to construct distribution systems to serve customers.

3.21.14 Summary

Even after maximizing all existing BMPs (and potential BMPs) for water conservation and implementation of feasible, cost effective water recycling opportunities, SDCWA will continue to rely on imported supplies to meet a significant portion of regional needs. SDCWA will continue to examine emerging technologies for application in the San Diego region in an effort to provide increased security for normal and drought year supplies.

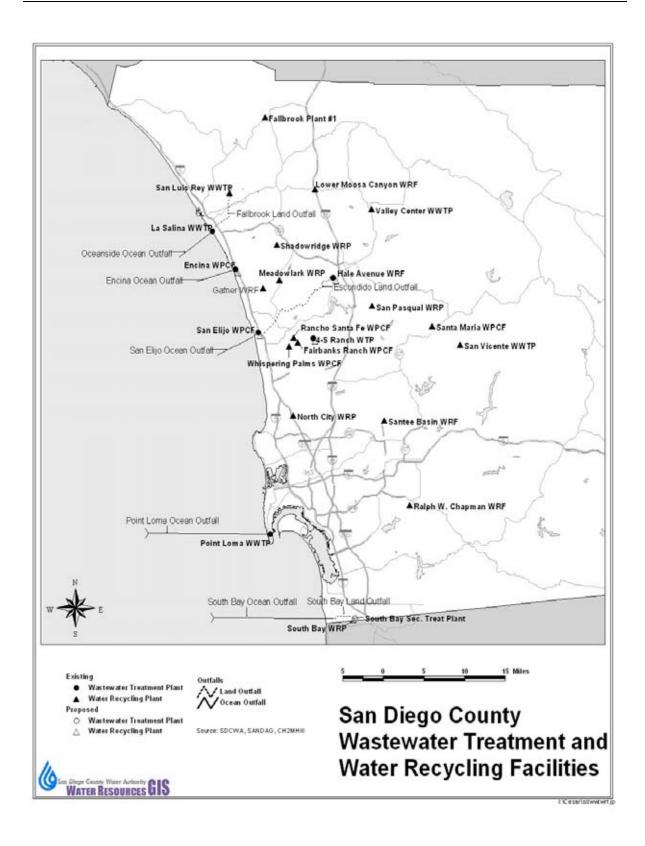


Figure 3.21-2 San Diego County Wastewater Treatment and Water Recycling Facilities

3.22 Master Response on Relationship Between the Proposed Project and Salton Sea Restoration Project

A number of commenters asked for clarification of the relationship between the Proposed Project and the Salton Sea Restoration Project, claimed that the Proposed Project is inconsistent with restoration efforts, or argued that implementation of the Proposed Project should be delayed and coordinated with the Salton Sea Restoration Project. This Master Response addresses those comments.

The Salton Sea Restoration Project is evaluating actions to stabilize the elevation and reduce the salinity of the Salton Sea, pursuant to the Salton Sea Reclamation Act of 1998 [Public Law (PL) 105-372]. The Act directed the Secretary to:

...complete all studies, including, but not limited to environmental and other reviews, of the feasibility and benefit-cost of various options that permit the continued use of the Salton Sea as a reservoir for irrigation drainage and: (i) reduce and stabilize the overall salinity of the Salton Sea; (ii) stabilize the surface elevation of the Salton Sea; (iii) reclaim, in the long term, healthy fish and wildlife resources and their habitats; and (iv) enhance the potential for recreational uses and economic development of the Salton Sea.

To implement this directive, the Salton Sea Authority, as the California lead agency under California Environmental Quality Act (CEQA), and Reclamation, as the federal lead agency under National Environmental Policy Act, released a draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS) in January 2000 that evaluated proposed Salton Sea Restoration Project alternatives. A revised draft EIS/EIR, including different alternatives and revised modeling and impact analysis, is currently being prepared.

Both the Proposed Project and the Salton Sea Restoration Project have the potential to affect environmental resources at the Salton Sea. However, they are separate projects with different objectives and different timelines for implementation. The Draft EIR/EIS identifies the Salton Sea Restoration Project as a proposed, related project in Chapter 1 of the Draft. It is also considered in the cumulative impact analysis in Chapter 5 of the Draft.

CEQA does not require that an EIR be delayed to include the results of all future studies. Rather, environmental documents are to rely on information that is available at the time they are prepared. The Proposed Project must be assessed now so that, if approved, it will be available to provide reliable supplies of Colorado River water to California water agencies as early as 2002. Timely implementation of the Proposed Project will assist in meeting time deadlines for California's reduction of its Colorado River water use to 4.4 million acre-feet in a normal year and in satisfying the requirements of Reclamation's Interim Surplus Guidelines Record of Decision. In contrast, no preferred alternative has yet been identified for the Salton Sea Restoration Project, and the project has not been authorized, approved, or funded by Congress.

Implementation of the Proposed Project is not inconsistent with subsequent implementation of a restoration project. The Salton Sea Reclamation Act anticipated reductions in inflows as

a result of water conservation and expressly directed the Secretary, in evaluating restoration options to do the following:

...apply assumptions regarding water inflows into the Salton Sea Basin that encourage water conservation, account for transfers of water out of the Salton Sea Basin, and are based on a maximum likely reduction in inflows into the Salton Sea Basin which could be 800,000 acre-feet or less per year.

3.23 Master Response on the Relationship Between the Proposed Project and the QSA, IA, IOP, and CVWD Groundwater Management Plan

3.23.1 Introduction

A number of comments were received regarding the relationship between the Draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS), Quantification Settlement Agreement (QSA) Programmatic Environmental Impact Report (PEIR), and Implementation Agreement (IA) EIS. Commenters questioned whether the Project was improperly segmented and whether the Draft EIR/EIS improperly referred to or tiered from other documents. This discussion responds to those issues.

3.23.2 Required Scope of a Project

Environmental laws require a coordinated assessment of related transactions. In developing a procedure for appropriate environmental compliance for the Project, the Lead Agencies focused on these principles:

- (1) Under California Environmental Quality Act (CEQA), the "project" is defined as the "whole of an action" which has the potential to result in either a direct physical change in the environment or a reasonably foreseeable indirect physical change in the environment [CEQA Guidelines § 15378]. A public agency may not divide a project into smaller individual subparts and focus on the separate effects of the parts; rather, the agency must assess the aggregate effect of the whole action.
- (2) Under National Environmental Policy Act (NEPA), proposals or parts of proposals which are related to each other closely enough to be, in effect, a "single course of action," must be evaluated in a single EIS [CEQ Regulations § 1502.4].

3.23.3 Relationship between the Proposed Project and the QSA

As the background of the Proposed Project set forth in the Draft EIR/EIS indicates (Sections 1.4 and 2.2.1), the original Project consisted of a water conservation and transfer transaction between Imperial Irrigation District (IID) and San Diego County Water Authority (SDCWA), on proposed terms set forth in the IID/SDCWA Transfer Agreement executed in 1998. Subsequent to publication of the Notice of Preparation/Notice of Intent (NOP/NOI) for the Draft EIR/EIS, the proposed QSA was negotiated by IID, Metropolitan Water District of Southern California (MWD), and Coachella Valley Water District (CVWD), with the participation of SDCWA and state and federal agencies. The QSA is intended to resolve longstanding water disputes among the participating water agencies and to provide a framework for implementing key components of the California Plan. The QSA was also negotiated, in part, in response to the IID/SDCWA Transfer Agreement. The California Plan, released in draft form in May 2000 (also subsequent to the NOP/NOI for the Draft EIR/EIS), is designed to assist in reducing California's use of Colorado River water to its normal-year apportionment of 4.4 MAFY.

The QSA involves multiple agencies and accommodates multiple component projects, including water conservation projects, groundwater conjunctive use, water transfers, and exchanges. Implementation of the QSA is subject to satisfaction of numerous conditions precedent and approval by the participating agencies. As described in Section 1.4.7 of the Draft EIR/EIS, if the QSA is approved and implemented, it will modify the terms of the IID/SDCWA transaction – that is, IID would be permitted to transfer a maximum of 200 MAFY of conserved water to SDCWA, and CVWD and/or MWD would have the opportunity to acquire up to 100 million acre-feet per year (MAFY) of conserved water from IID.

The QSA provides a framework for multi-agency cooperation to implement a broad, but coordinated, plan to reduce Colorado River water use. The QSA incorporates certain preexisting projects that have already been assessed in final environmental documents, other projects (like the IID/SDCWA water transfer) which were in the process of environmental review at the time of release of the QSA, and other projects that have not yet received any environmental analysis. After release of the QSA, Lead Agencies and QSA parties made a concerted effort to structure a comprehensive environmental review process, which would provide an assessment of the QSA components, the aggregate impacts of these components and the cumulative impacts of the QSA components and related actions. The decision was made to prepare the QSA PEIR to provide an overall assessment of the QSA components at a programmatic level, so that the aggregate impacts of implementing all of its component projects on environmental resources like the Lower Colorado River (LCR) and the Salton Sea could be identified. By cooperating on a joint programmatic assessment of the QSA, the Lead Agencies under this Draft EIR/EIS and the Lead Agencies under the QSA PEIR (IID, MWD, CVWD, and SDCWA) intended to avoid the segmentation of the QSA analysis into discrete assessments of its components, to make a good faith effort to assess the interrelationships and related effects of all of the QSA components, and to provide a meaningful opportunity for state and federal agencies and members of the public to review and comment on the environmental effects, in compliance with CEQA and NEPA.

3.23.4 Modified Description of the Proposed Project

The Draft EIR/EIS is intended to provide a project-level analysis of the IID conservation program, the transfer of water by IID to SDCWA, CVWD and/or MWD, and the receipt and use of transferred water by SDCWA within the SDCWA service area. It relies on the QSA PEIR to address the aggregate QSA program impacts and the use by MWD of transferred water in the MWD service area. After release of the proposed QSA, the Lead Agencies modified the project description under the Draft EIR/EIS to address two implementation scenarios:

- (1) The original IID/SDCWA Transfer (130–300 thousand acre-feet per year [KAFY] to SDCWA), referred to in the Draft EIR/EIS as the IID/SDCWA Transfer Agreement Implementation Only scenario.
- (2) The scenario that would result if the QSA conditions precedent were satisfied and the QSA implemented (up to 200 KAFY to SDCWA and up to 100 KAFY to CVWD and/or MWD), referred to in the Draft EIR/EIS as the QSA Implementation scenario).

The Lead Agencies determined that it was proper to analyze both scenarios, because the Proposed Project could be implemented under either, but ultimately only one, scenario. If the QSA is approved and implemented, then the second scenario (QSA Implementation Only) would apply. If the QSA is not implemented, the IID/SDCWA Transfer Agreement would remain in effect and, subject to obtaining all appropriate regulatory approvals, could be implemented as a stand-alone transaction. Assessing both scenarios also provides an opportunity to compare their relative merits and impacts.

3.23.5 Relationship of the Proposed Project to the IA and IOP

Execution of the IA by the Secretary is the federal action approving modifications to the operation of Colorado River facilities and water deliveries to allow implementation of the QSA. Execution of the IA is a condition precedent to implementation of the QSA. The IA authorizes a change in the point of diversion from Imperial Dam to Parker Dam, to transfer conserved water from IID to SDCWA or MWD. An aggregate flow reduction of 183-388 KAFY would occur in the LCR segment between Parker Dam and Imperial Dam with implementation of the water transfer projects authorized by the IA.

In order to assess the aggregate effects of the IA on the LCR, Reclamation prepared the IA EIS pursuant to NEPA. The IA EIS also includes an analysis of certain biological enhancement measures which Reclamation proposes to implement to offset impacts to biological resources along the LCR resulting from the IA and the Interim Surplus Guidelines (approved and implemented by Reclamation in January 2001). It also includes an analysis of the effects on the LCR of the Inadvertent Overrun Payback Policy (IOP), which provides a method of paying back, over a subsequent period of years, a water user's exceedance of its legal apportionment of Colorado River water. Reclamation's adoption of the IOP is also a condition precedent to implementation of the QSA.

3.23.6 Coordinated Preparation and Review of Environmental Documents

The Lead Agencies involved in these three assessments — the Draft EIR/EIS, the QSA PEIR, and the IA-EIS — made every effort to coordinate the preparation of these documents so that the information presented would be both accurate and consistent. These agencies also went to considerable effort to finalize their draft documents on a coordinated schedule, so that members of the public, and state and federal agencies, would have the opportunity to concurrently review the assessments. The Draft IA EIS was filed on January 4, 2002, and the comment period was extended to March 26, 2002. The Draft QSA PEIR was published on January 30, 2002, and the comment period was also extended to March 26, 2002. Thus, both documents were available for review concurrently with the Draft EIR/EIS. These agencies are also coordinating the responses to comments received during the public review periods and revisions to the final environmental documents, so that the final documents will be accurate, as complete as possible, and consistent.

Section 1.5.6 and Table 1-2 of the Draft EIR/EIS explain in detail the related state and federal actions and the CEQA/NEPA environmental compliance documents for each action. We acknowledge that the relationship between the projects is complex and different from the typical relationship between a program and its components. However, the Lead Agencies developed the best available process for achieving an overall and integrated environmental review of these projects.

Both CEQA and NEPA encourage the coordination of federal and state environmental review processes in order to reduce delay and paperwork. CEQA Guidelines Section 15006 directs public agencies to eliminate duplication by providing joint federal/state documents and by adopting completed NEPA documents; to eliminate repetitive discussions of the same issues by using EIRs on programs, policies, or plans and by tiering from reports of broad scope to those of narrow scope; and to use incorporation by reference. Sections 1500.4, 1500.5, 1502.4, 1502.20 and 1502.21 of the CEQ Regulations state similar policies under NEPA.

The Draft EIR/EIS incorporates by reference information from the Draft IA EIS, especially the analysis of the impacts on the LCR of the change in the point of diversion required for transfers to SDCWA or MWD. The IA EIS and the QSA PEIR essentially analyze similar effects along the LCR. The Draft EIR/EIS also incorporates by reference information from the Draft QSA PEIR, especially the analysis of the aggregate impacts of all of the QSA components (including the second implementation scenario of the Proposed Project), the growth-inducing effects of the QSA components, and the cumulative impacts of the QSA and other related projects. Under CEQA Guidelines Section 15150 and CEQ Regulations Section 1502.21, it is appropriate to incorporate information from another document which is a matter of public record or generally available to the public. This Final EIR/EIS will incorporate by reference the final version of this information from the Final IA EIS and the Final QSA PEIR.

3.23.7 CVWD Groundwater Management Plan

Under the QSA, up to 100 KAFY of conserved water would be transferred to CVWD, for use within CVWD's Improvement District No. 1 in the Lower Coachella Valley. CVWD has stated that it intends to use the transferred water to recharge the groundwater aquifer and/or to reduce groundwater overdraft. CVWD is developing the Coachella Valley Water Management Plan to provide a comprehensive plan for water use within the CVWD service area. A draft version of this Plan has been released, but a draft EIR, which is anticipated, has not been completed and a final Plan has not been approved. An assessment of the impacts of CVWD's receipt and use of the conserved water is included in the QSA PEIR at a program level. The Lead Agencies consulted with CVWD in order to incorporate into the Draft EIR/EIS available information regarding the environmental effects of CVWD's receipt and use of conserved water. A summary of anticipated impacts was included in Chapter 3, and specifically Table 3-2, of the Draft EIR/EIS, and this information has been updated in this Final EIR/EIS (refer to Section 4.2, Text Revisions in this Final EIR/EIS). However, the Lead Agencies believe that additional environmental assessment must be conducted by CVWD to fully analyze, at a project level, the environmental effects of CVWD's use of transferred water, as part of its proposed overall Coachella Valley Water Management Plan.