

IMPERIAL COUNTY # 4



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

April 26, 2002

Mr. Bruce D. Ellis
Environmental Resources Management
Division
Phoenix Area Office (PXAO-1500)
Bureau of Reclamation
P.O. Box 81169
Phoenix, AZ 85069-1169

Dear Mr. Ellis,

The Environmental Protection Agency (EPA) has reviewed the Draft Environmental Impact Statement (DEIS) for the **Imperial Irrigation District/San Diego County Water Authority Water Conservation and Transfer Project (IID/SDCWA water transfer) and Draft Habitat Conservation Plan (HCP), Southern California (CEQ# 020030)**. Our review and comments are pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), and Section 309 of the Clean Air Act. Our scoping comments for this project were provided on October 22, 1999.

The Imperial Irrigation District (IID) proposes to implement a water conservation and transfer project that would conserve and transfer up to 300,000 acre-feet per year (afy) of Colorado River water to San Diego County Water Authority (SDCWA), Metropolitan Water District (MWD), and Coachella Valley Water District (CVWD) (Proposed Project). Water for transfer would be conserved by implementing on-farm irrigation system improvements, water delivery system improvements, and/or fallowing. The terms of the water conservation and transfer transactions are set forth in the IID/SDCWA 1998 Transfer Agreement, as amended, and the Colorado River Quantification Settlement Agreement (QSA) to be executed by IID, CVWD, and MWD.

The objectives of the project are, 1) to respond to the State Water Resources Control Board's (SWRCB) directive for IID to develop and implement a conservation program while protecting IID's water rights; 2) to increase the reliability of the water supplies for SDCWA, MWD, and CVWD; and 3) to help settle, by consensual agreement, long-standing disputes regarding the quantity, priority, use, and transferability of Colorado River water. The transfer, which would remain in effect for up to 75 years, will facilitate efforts to reduce California's diversions of Colorado River water in normal years to its annual 4.4 million acre-feet (maf) legal apportionment. The Secretary of the Interior (through the Bureau of Reclamation) must approve the change in the point of delivery for the transferred water.

The Proposed Project and alternatives include implementation of a Habitat Conservation Plan (HCP) to address impacts to threatened and endangered species and their habitats protected

by the Endangered Species Act (ESA). This HCP includes specific conservation strategies for the Salton Sea, tamarisk scrub habitat, drain habitat, desert habitat, agricultural field habitat, burrowing owls, desert pupfish, and razorback suckers. The Salton Sea strategy includes two approaches: 1) construction and operation of a fish hatchery and 5,000 acres of fish ponds; or 2) conservation of sufficient additional water (beyond that conserved for transfer) to replace water lost to the Sea such that there would be no change in inflow to the Salton Sea.

Alternatives evaluated in the DEIS include the Proposed Project - water conservation and transfer of up to 300,000 afy to SDCWA, CVWD, and/or MWD with all conservation measures; Alternative 1 - no project; Alternative 2 - water conservation and transfer of up to 130,000 afy to SDCWA with on-farm irrigation system improvements as the exclusive conservation measures; Alternative 3 - water conservation and transfer of up to 230,000 afy to SDCWA, CVWD, and/or MWD with all conservation measures; and Alternative 4 - water conservation and transfer of up to 300,000 afy to SDCWA, CVWD, and/or MWD with fallowing as the exclusive conservation measure.

EPA endorses the effort to reduce Southern California's historic use of Colorado River water to California's legal apportionment of 4.4 million acre-feet per year (maf/yr) while minimizing the adverse effects on beneficial uses. We advocate use of all available tools to assure a long-term, sustainable balance between available water supplies, ecosystem health and water supply commitments. These tools include water transfers and exchanges, conservation, tiered pricing, irrigation efficiencies, operational flexibilities, market-based incentives, water acquisition, conjunctive use, voluntary temporary or permanent land fallowing, and wastewater reclamation and recycling. We urge aggressive implementation of water use efficiencies to maximize beneficial use of the transfer water and to achieve and maintain a sustainable balance between water supply and demand.

We are concerned with the public review process for the environmental documentation for the QSA, Department of Interior's Implementation Agreement (IA), which enables implementation of the QSA, and the IID/SDCWA water transfer. Although the IA, QSA, and IID/SDCWA water transfer are inextricably linked, the comment deadline dates are not related or in a logical sequence (i.e., programmatic to project-specific level of evaluation). Thus, it is difficult for the public, local, state, and Federal entities to provide comprehensive comments on all three actions. In addition, other actions such as the Salton Sea Restoration Project and Coachella Valley Water Management Plan, which are directly relevant to the potential impacts of the QSA and IID/SDCWA water transfer and which can only be fully evaluated within the context of these projects, have not yet been released for public review.

Our comments on the IA and QSA were submitted on March 26, 2002 and April 16, 2002, respectively. Our comments on the IA DEIS, QSA Draft Program Environmental Impact Report, and IID/SDCWA water transfer DEIS should be considered together and are incorporated by reference into our comments on each individual action. EPA provided comments on the Salton Sea Restoration Project DEIS on May 16, 2000. These comments are incorporated by reference, given the potential adverse effects of the proposed water transfer on the Salton Sea. If you would like a copy of these comments, please call Laura Fujii, of my staff, at (415) 972-3852.

Based on our review of the DEIS, EPA objects to the environmental impacts of the proposed IID/SDCWA water transfer action and finds that the DEIS relies on insufficient information to evaluate key components of the action for the following reasons:

- Significant adverse effects to surface and groundwater quality and the lack of mitigation for these adverse effects. For example, the magnitude and extent of exceedences of the selenium aquatic life criteria would increase (pg. 3.1-106) in IID drains and the New and Alamo Rivers, and total dissolved solids (TDS) could increase in Coachella Valley groundwater (pg. 5-34);
- Significant air quality impacts and exceedences of particulate matter less than 10 microns in diameter (PM10) in a PM10 nonattainment area (pg. ES-29);
- The lack of evaluation of potential impacts to Indian Tribes or Indian Trust Assets from all proposed actions throughout the project area. A total of thirty-five Indian tribes (see attached list) could be affected by the proposed IID/SDCWA water transfer actions and related actions (e.g., Interim Surplus Guidelines, QSA).
- Significant impacts to biological resources, especially at the Salton Sea. The IID/SDCWA water transfer would result in a more rapid collapse of the Sea's fisheries, displacement of sizable migratory bird populations, and exposure of up to 67,000 acres of currently inundated sediment.
- Insufficient information to fully assess the feasibility of the Habitat Conservation Plan. We question the ability of the HCP to provide sufficient mitigation to reduce adverse biological effects to a level below significance.
- Insufficient information to assess adequately the environmental impacts that should be avoided in order to protect the environment and human health. For instance, only direct effects of narrowly defined Federal actions are evaluated for Indian Trust Assets, socio-economic, environmental justice, and transboundary impacts. In addition, no mitigation measures are identified for these potential adverse effects.

Environmental objections indicate that our review has identified significant environmental impacts that should be avoided, via corrective measures or selection of another project alternative, to adequately protect the environment. We note that the DEIS clearly states that following (e.g., Alternative 4) and provision of replacement water for the Salton Sea (HCP Approach 2) would avoid or reduce significant and unavoidable impacts to water quality, air quality, biological resources, and recreation (pgs. 3.1-113, 4-13, 5-48). Detailed comments are enclosed with specific recommendations on how to address our objections. Our goal is to ensure comprehensive disclosure of critical issues and adverse impacts and to first avoid and, then minimize impacts to human health and the environment to the greatest extent practicable. The identified additional information, analyses, and discussions should be included in the Final EIS (FEIS).

On the basis of these objections, we have rated the DEIS as EO-2, Environmental Objections - Insufficient Information (see attached "Summary of the EPA Rating System"). We appreciate the opportunity to review this DEIS and look forward to working with you on these issues on May 17, 2002.

The issues of quantity, priority, use, and transferability of Colorado River water within southern California and the Lower Colorado River basin are extremely complex and controversial with many diverse stakeholders. We urge Reclamation to take a leadership role in developing a forum that will pull all these disparate stakeholders together in an effort to resolve outstanding issues and to develop a comprehensive, reliable, and long-term sustainable water supply for southern California.

Should you have questions, please call Laura Fujii, of my staff, at (415) 972-3852, email: fujii.laura@epa.gov. Please send three copies of the final EIS to our office when it is officially filed with our HQ EPA Office of Federal Activities

Sincerely,

Signed by Enrique Manzanilla

Enrique Manzanilla, Director
Cross Media Division

Enclosures: Detailed Comments (15 pages)
Summary of the EPA Rating System
List of Potentially Affected Indian Tribes
Guidance for Incorporating Environmental Justice Concerns

MI003322

Filename: iidwatertransferdeis2.wpd

cc: William Rinne, BOR

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Patricia Port, DOI
Tom Kirk, Salton Sea Authority
Elston Grubaugh, IID
Water Resources Division, USGS, Yuma, AZ.
Southern California Agency, BIA
Sacramento and Phoenix Area Offices, BIA
Affected Indian Tribes (see attached list)

DETAILED COMMENTS

Scope of the Evaluation and Water Supply Reliability Implications

1. Efforts to determine the quantity, priority, use, and transferability of Colorado River water within southern California and the Lower Colorado River basin are necessary and challenging. Any approach should take into consideration potential effects on the entire region. This includes the Imperial Valley, Coachella Valley, Salton Sea, Lower Colorado River Basin and Colorado River Delta (Delta). The region should be considered in its entirety because actions taken in one part of the Basin, particularly those related to additional or modified water diversions, could have significant adverse cumulative impacts on other parts of the Basin. For instance, cumulative reduction in Lower Colorado River flows is threatening the ecological viability of the Delta. On the other hand, due to the limited storage capacity of Morelos Dam (Mexico), recent flood flows have reached the Delta significantly rejuvenating this ecosystem.

Recommendation:

We urge the Bureau of Reclamation (Reclamation), Imperial Irrigation District (IID), Coachella Valley Water District (CVWD), and Metropolitan Water District (MWD) to take a broad, regional approach in determining water supply reliability and the potential impacts of water supply actions on other resources and parts of the Lower Colorado River basin. For instance, the final environmental impact statement (FEIS) should include an evaluation of the effects of the IID/San Diego County Water Authority (SDCWA) water transfer on the water needs for the Lower Colorado River Multi-Species Conservation Program and the Delta.

2. Although the Draft EIS states that the water transfer will facilitate efforts to reduce California's diversions of Colorado River water in normal years to its annual 4.4 million acre-foot (maf/yr) legal apportionment, it is not clear how this reduction in Colorado River diversions would be achieved or ensured. For example, even though the IID/MWD 1988 conservation and transfer project professed to improve water use efficiencies, the actual diversion of Colorado River water by IID has increased.

Recommendation:

The FEIS should include a description of how the proposed water transfer would help to reduce California's Colorado River use to 4.4 maf/yr while maintaining MWD's historic use of 1.25 maf/yr. We recommend this description include tables that show the various water transfers and exchanges and the contribution that each action makes to bring California's use down to its 4.4 maf/yr allocation and/or provides for maintenance of 1.25 maf/yr in the Colorado River Aqueduct.

3. EPA believes a clear accounting of the sources and quantity of water for all proposed actions is key in determining the feasibility of the proposed water transfer actions and Habitat Conservation Plan (HCP) measures. Such an evaluation is especially important given the increasing competition for scarce water supplies.

Recommendation:

The FEIS should include a clear accounting of the sources and quantity of water for all proposed actions. For example, provide a table describing the water source(s) and quantities for proposed HCP measures such as the proposed 190 to 652 acres of managed marsh (pg. 2-46). The accounting of water sources should include an evaluation of existing uses such as the water used by duck clubs and wildlife refuges. For example, describe whether water for the duck clubs and refuges is purchased from IID and whether this use of Colorado River water is a designated beneficial use.

4. Effective and sustainable management of water supplies depends on accurate information about water supply availability and water use. This data can only be obtained through a program of monitoring and accounting of water supply and demand. The DEIS does not include a plan to monitor the activities to be undertaken, except in general terms, nor does it indicate how such an effort would be funded.

Recommendation:

We urge Reclamation, IID, MWD, and CVWD, in partnership with the regulatory agencies and local communities, to make a firm commitment to timely and accurate monitoring and accounting. This commitment should include dedicated funding for the monitoring/accounting effort. The FEIS should describe proposed monitoring, accounting methods, enforcement tools, and assurance measures that will be used to verify, validate, and ensure effective implementation of the water conservation and transfer actions. Given the proposed transfer of significant amounts of water, the FEIS should persuasively demonstrate that water will be put to reasonable beneficial use and that there will be safeguards against misuse of the water.

5. The DEIS states that there would be no socioeconomic impacts (Section 3.14) or biological resource impacts (pg. 3.2-12) in the SDCWA area because there would be no induced growth (pg. 5-37). This conclusion is based upon the fact that the transfer water would replace water currently purchased from MWD. However, the IID/SDCWA water transfer appears to replace an existing unreliable water supply (priority 4, 5 or 6 water), purchased from MWD, with a reliable supply (priority 3 water), purchased from IID. Increased reliability of the water supply could significantly influence future regional land use planning and future development. In addition, by replacing the existing unreliable water supply with a more reliable one, new water supply sources may then be available for other future beneficial uses.

Recommendations:

We recommend the FEIS describe the indirect impacts of replacing an unreliable water supply with a reliable supply. For instance, the IID/SDCWA water transfer may remove the SB 221 barrier to new development, which prohibits approval of new developments of at least 500 units unless a sufficient water supply is available. The FEIS should also reevaluate and validate the assumption that no socioeconomic or biological resource impacts would occur in the SDCWA area.

The FEIS should also address the consequences of Alternative 1, No Project, within the SDCWA region. If the IID/SDCWA water transfer does not occur, then SDCWA would continue to purchase water from MWD. It is clear from the DEIS that a large portion of MWD's Colorado River water supply is highly unreliable because it is based upon lower priority, surplus Colorado River water which may no longer be available on a sustainable basis.

Water Quality

1. EPA objects to the projected increase in concentration and magnitude of exceedences of the selenium aquatic life criteria in the New and Alamo Rivers and IID agricultural drains (pgs. 3.1-105 to 111). As noted in the DEIS, the concentration of selenium in many locations already exceeds EPA's aquatic life criteria of 5 micrograms per liter ($\mu\text{g/l}$). We are also concerned with the potential for increased concentrations of perchlorate, boron, nutrients, pesticides, sediments, metals, and total dissolved solids in surface waters. An increase in water temperatures is also a concern since it may have adverse effects on an already stressed biological system. Our concern is heightened by the presence of fish-eating migratory birds and other threatened and endangered fish and wildlife species that could be adversely affected by these harmful constituents and by the bioaccumulation of selenium up the food chain.

Recommendations:

The DEIS states that there is no reasonable mitigation available to reduce the concentration of selenium. EPA disagrees with this statement. Although control of selenium is a difficult challenge, efforts are underway in the Central Valley of California and other locations in the West to address selenium concentration levels in agricultural drain water.

We recommend the FEIS evaluate potential mitigation measures to address the adverse increase in concentration of constituents of concern such as selenium. Potential mitigation measures include biological and chemical selenium removal; integrated drainage management; desalination; evaporation ponds; deep well injection of extremely poor drainwater; and beneficial uses of drain water and salts.

In addition, the Regional Water Quality Control Board (RWQCB) is developing Total Maximum Daily Loads (TMDL) for selenium and nutrients in the Salton Sea. TMDLs are based on the quantitative assessments of sources of pollutants to a water body. Each source is allocated a pollutant load so as to reduce levels sufficiently to achieve water quality standards. We encourage Reclamation, IID, CVWD, and MWD, to work with the Regional Water Quality Control Board, EPA and local Indian tribes as they develop TMDLs and other measures to address water quality problems.

Proposed actions to reduce the amount of water applied to agricultural fields to achieve the objectives of the water transfer should be consistent with Best Management Practices employed to achieve TMDL load values. We note that the costs and risks associated with on-farm irrigation system improvements can be reduced by integrating proposed conservation measures with the TMDL program, Farm Bureau's Environmental Quality Incentives Program (EQIP), and EPA's Nonpoint Source Pollution (NPS/319) program.

The DEIS also does not provide sufficient discussion on the potential impact of increased water temperatures or increased concentrations of perchlorate, boron, pesticides, nutrients, sediments, metals, and total dissolved solids in a reduced volume of surface water. Many of these constituents, such as perchlorate, can have serious adverse effects on human health and the environment. We recommend that the FEIS address the potential impacts of water temperature and constituent concentrations related to the reduced volume of drainage water flowing into the New, Alamo, and Whitewater Rivers and the Salton Sea. The FEIS should also provide an evaluation of the cumulative effects of possible increased concentrations of these constituents of concern.

2. We note that the models (Imperial Irrigation Decision Support System and Salton Sea Accounting Model) used for the hydrological and water quality effects analysis use either the IID drainage system conservation measures or a worst case scenario in which all conserved water is transferred out-of-basin (pg. 3.1- 93 to 101). However, the IID/SDCWA water transfer, as amended by the Quantification Settlement Agreement (QSA), would transfer conserved Colorado River water to Coachella Valley to address their groundwater overdraft problem. Colorado River water would be used in lieu of groundwater or for groundwater recharge. The use of Colorado River water to recharge the overdrafted Coachella Valley groundwater aquifer is a matter of concern for EPA. Furthermore, the DEIS does not evaluate the effects of Coachella Valley groundwater recharge on Indian Trust Assets because the recharge action is a non-federal action. The DEIS does not appear to provide a detailed description or evaluation of potential groundwater effects which may result from the transfer of conserved water to Coachella Valley.

The lack of such an evaluation is problematic since the QSA Draft Program EIR states that the use of Colorado River water, which is high in total dissolved solids (TDS), for groundwater recharge, could cause the lower aquifer groundwater to exceed EPA's 500 milligrams per liter (mg/l) water quality standards. The proposed groundwater recharge area is located near Martinez Canyon below Lake Cahuilla, less than one mile from a primary drinking water well for the Torres Martinez Indian Reservation. Other tribes within the Coachella Valley, the Cabezon, Agua Caliente, Twenty-Nine Palms, and Augustine tribes, may also have concerns regarding potential adverse effects to their groundwater resources.

In addition, perchlorate has been detected at concentrations from 4 to 10 parts per billion (ppb) in Colorado River water at sampling points between Hoover Dam and the Mexican Boundary since testing began in 1997, including 8 ppb in the most recent Hoover Dam sample on February 22, 2002. On January 18, 2002, the California Department of Health Services (CA DHS) lowered the State Action Level for perchlorate in drinking water to 4 ppb and requires water agencies to notify public officials if this level is exceeded. Thus, the water that will be used to reduce the groundwater overdraft could exceed recommended drinking water standards for perchlorate, potentially adversely affecting a drinking water source of the Torres Martinez Tribe.

Recommendation:

EPA understands that Reclamation, IID, CVWD, and MWD chose to defer evaluation of Coachella Valley groundwater effects to CVWD's Water Management Plan Draft EIR. We note that this document has not been released for public review. Furthermore, its proposed release date continues to be delayed. In the interest of full disclosure, we believe that the FEIS should include a more detailed description of the Coachella Valley Water Management Plan. This description should include, to the maximum extent feasible, a detailed evaluation of potential adverse effects of the groundwater recharge, as proposed, on tribal and Coachella Valley drinking water sources and groundwater quality. There is concern that the aquatard between aquifers could be permeable, resulting in the contamination of the higher quality aquifer used for drinking water. If there is a risk of contamination to tribal or other drinking water sources, the FEIS should evaluate potential mitigation measures.

3. As we have indicated in the previous comment, EPA is concerned with the potential cumulative impacts of the proposed IID/SDCWA water transfer and related actions on perchlorate concentrations and distribution in water provided for drinking water use. Perchlorate is a serious concern because of its potential adverse health effects, particularly to children. Perchlorate has been on the Contaminant Candidate List for several years. EPA is in the process of developing information that would support a specific regulatory level. As of January 2001, perchlorate was included in EPA's nationwide "Unregulated Contaminant Monitoring Requirement" for public water supplies, with a method detection level of 4 ppb.

As noted above, CA DHS has recently lowered the State Action Level for perchlorate in drinking water to 4 ppb, requiring water agencies to notify public officials if this level is exceeded. As the first step in developing an enforceable Primary Drinking Water Standard for California, the California Office of Environmental Health Hazard Assessment has begun accepting public comments on a draft Public Health Goal of 6 ppb for perchlorate in drinking water supplies. EPA's National Center for Environmental Assessment recently published a draft Toxicity Health Assessment recommending a dose of approximately 1 ppb as a safe level for perchlorate in drinking water.

Recommendation:

We recommend the FEIS provide data on the predicted levels of perchlorate in Colorado River water diverted for domestic drinking water use. If no data is available, we urge Reclamation, IID, CVWD, MWD and other Colorado River interests to work together to develop and implement monitoring and research programs to obtain this data. The FEIS should describe existing or planned actions to obtain additional information on levels of perchlorate and to address the presence of this contaminant in water taken from the Colorado River.

4. The Regional Water Quality Control Board is developing TMDLs for various contaminants in the Salton Sea, New, Alamo and Whitewater Rivers and agricultural drains. Implementation of the specific TMDL program may or may not be consistent with the activities to be undertaken to reduce water use associated with the water transfer.

Recommendation:

EPA has a strong interest in ensuring actions that may affect the Salton Sea are consistent with TMDL requirements and the need to meet water quality standards. Therefore, we recommend TMDL actions be integrated into the proposed IID/SDCWA actions, where applicable, and their impact on the objectives of the transfer fully described in the FEIS.

5. It is likely that tilewater salinity and selenium loadings are not uniform across IID's service area.

Recommendation:

We urge voluntary implementation of water conservation measures and fallowing on lands identified as contributing the highest contaminant loadings to the New, Alamo, and Whitewater Rivers, Salton Sea, and IID drains.

6. Until recently, the US Geological Survey (USGS) performed regular monitoring of water quality in the Lower Colorado River. As part of the National Stream Quality Accounting Network (NASQAN), this vital water supply was well characterized by this comprehensive and

long-term monitoring program. As of October 2000, the monitoring program has been curtailed, due to lack of funding.

Recommendation:

With the potential changes in the management of flow and storage in the Colorado River system and increased use of the water for direct human consumption, a reliable and comprehensive monitoring program relating to water quality is critical. The FEIS should describe any actions taken to support including the Colorado River in the NASQAN. We urge Reclamation, IID, CVWD, and MWD, as managers and users of the Colorado River resource, to advocate for and pursue funding to restore the USGS NASQAN effort, a critical part of water quality monitoring of the Colorado River.

Air Quality

1. The IID/SDCWA water transfer could result in exposure of 67,000 acres (approximately 105 square miles) of land currently inundated by the Salton Sea. The DEIS states that the surface elevation of the Salton Sea is expected to decline at a faster rate and to a greater extent with the water transfer. The evaluation of soils and potential air quality impacts states that exposed Salton Sea sediments would dry with a crust covering which would minimize the ability of winds to generate dust emissions (pg. 3.3-23).

EPA disagrees with the statement that the exposed lake bed, caused by reduced inflows to the Salton Sea, would dry and form a crust covering which would minimize the ability of winds to generate dust emissions. EPA believes that the crust formed may breakup under natural events similar to the Owens dry lake bed in California. These natural events could come from ground water evaporation, surface moisture, or rain. EPA also believes that human disturbances associated with off-road vehicle traffic (dune buggies, all-terrain vehicles, and dirt bikes) as well as hunting, fishing, boat launching activities and foot traffic could fracture the crust. These events can cause the surface to crack and, when exposed to wind, will contribute to particulate matter less than 10 microns in diameter (PM10) emissions. The Owens dry lake bed is approximately 105 square miles of which 35 square miles (22,400 acres) are highly emissive. Crust formations do accrue upon the Owens dry lake bed that can sustain the weight of a car. As the weather changes, these surfaces break up and cause the worst PM10 emissions in the United States.

EPA objects to the potential air quality impacts of exposed Salton Sea sediment. Our objections are increased by the lack of information and data regarding constituents of the sediments and its potential behavior when exposed to high winds and human disturbance. We note that there is widespread local concern regarding the constituents of the exposed sediment and its potential to cause adverse human health and environmental effects.

Recommendations:

We strongly recommend that Reclamation and other stakeholders initiate and participate in a study to determine the durability and sustainability of crust formations on the exposed Salton Sea shoreline. We note that the composition of the sediments and weather patterns may vary along the shoreline and affect crust formation. This fact should be considered when designing the study.

We recommend that the FEIS include a description of the composition of the sediments and the risk of adverse human health and environmental effects if this sediment becomes airborne. If specific data is not available, the FEIS should describe research and data needs and commit to participate in efforts to obtain this critical information.

The FEIS should also evaluate possible control measures for the newly exposed shoreline. Control measures could include, but are not limited to, the introduction of native plants to provide ground cover. Human disturbances along the exposed shore line should also be addressed as they too can contribute to PM10 and dust emissions. It may be necessary to limit public access to certain areas of the shore line. A PM10 monitoring network should be established around the Salton Sea as soon as possible in order to determine baseline emissions and for use in determination of PM10 violations of the National Ambient Air Quality Standards (NAAQS).

2. The use of conserved water to replace the loss of inflow into the Salton Sea has been suggested as mitigation for potential air quality impacts from exposed sediments (pg. 3.7-36). Replacement water would maintain the existing inflows to the Salton Sea, avoiding and minimizing the reduction in the Sea's surface elevation and exposure of currently inundated land. The DEIS also suggests that a Salton Sea monitoring and mitigation plan could be developed with the South Coast Air Quality Management District and Imperial County Air Pollution Control District (pg. 3.7-36).

Recommendations:

EPA recognizes water conservation and fallowing as tools to avoid, minimize and mitigate for potential impacts of the proposed actions. Thus, we wish to acknowledge the second mitigation strategy of utilizing conserved water to help address adverse air quality impacts of the IID/SDCWA water transfer. We note that fallowing is a very controversial issue and has been rejected by many of the local communities. We recommend the FEIS provide a more detailed evaluation of the feasibility and process of using conserved water to avoid and minimize adverse air quality effects on the Salton Sea.

The FEIS should also describe other mitigation measures which could help address adverse effects of exposed Salton Sea sediments. We urge Reclamation, IID, CVWD, and MWD to work with affected Air Pollution Control Districts and Management Districts to develop a detailed monitoring and mitigation plan. The monitoring and mitigation plan should be included in the FEIS, if possible.

3. The projected change in Salton Sea surface elevations and exposed shoreline is described and evaluated under a number of resource areas (hydrology and water quality, air quality, recreation). The unit of measurement and numbers are not consistent with differences of up to 7 feet (15 foot drop versus a 22 foot drop) in the estimate of surface elevation changes. Given the shallow north and south shorelines, these differences could translate to significantly different estimates of exposed shoreline (50,000 acres versus 67,000 acres).

Recommendation:

The FEIS should correct these inconsistencies. For instance, Table 3.6-4, Recreation (pg. 3.6-12) should match numbers in Section 3.1 on Hydrology and Water Quality and Section 3.7 on Air Quality (pg. 3.7-34). We recommend the FEIS use either square miles or acres instead of using these measurement units interchangeably.

Tribal Resources and Consultation and Coordination with Indian Tribal Governments

1. The evaluation of impacts to Indian Trust Assets is limited to potential impacts from Federal actions within the Lower Colorado River and Salton Sea geographic subregions. EPA objects to the lack of evaluation of potential impacts to Indian Tribes or Indian Trust Assets from all proposed actions and the limited geographic scope of the evaluation. A total of thirty-five Indian tribes (see attached list) could be affected by proposed IID/SDCWA water transfer actions and related actions such as the Interim Surplus Guidelines and QSA: five tribes on the lower Colorado River; six tribes in the Salton Sea watershed; six tribes that use or may be affected by the Central Arizona Project; and 18 tribes within San Diego County. Furthermore, there are a number of tribes (Torres Martinez, Coachella Valley Tribal Consortium, and 18 tribes in San Diego County) that could be directly affected by IID/SDCWA water transfer actions. These tribes have broad regulatory and land management authority for resources within and traversing their reservations. For instance, the Torres Martinez and Coachella Valley Tribal Consortium are currently establishing beneficial use criteria for waters in and under their reservations and are developing water quality standards and TMDLs to protect these uses.

The Cocopah Indian Tribe has expressed concern about the cumulative decrease in water to the Limitrophe. The Limitrophe is a 22-mile stretch of the Lower Colorado River that forms the boundary between Mexico and the US, as agreed to in the Gadsden Treaty (1853). It is a major part of the Cocopah Tribal lands. The Cocopah are working to have the Limitrophe designated an International Wildlife Refuge. Furthermore, the Tribe exists on both the US side

and in the Colorado River delta on the Mexican side and has a strong interest in restoring the Colorado River delta region.

Recommendations:

We strongly recommend that all potentially affected Indian Tribes be consulted on a government-to-government basis. For assistance you may contact James Fletcher, Region 9 EPA, State, Tribal, and Municipal Programs Office, 619-235-4763 (place-based in San Diego, CA) or Clancy Tenley, Manager of the Indian Programs Office, 415-972-3785.

The FEIS should evaluate the potential effects of all IID/SDCWA water transfer actions on Indian Tribes and their Trust Assets, including those of the Cocopah and other Colorado River Tribes. Of specific concern are potential adverse groundwater effects from the use of Colorado River water for groundwater recharge in the Coachella Valley (see Water Quality comment #2 above).

2. The Torres Martinez Indian Reservation is adjacent to and partially inundated by the Salton Sea and will, therefore, be adversely affected by identified impacts to the Salton Sea. In fact, nearly 12,000 acres of the Reservation is currently inundated by the Salton Sea. Part or all of this inundated land may be exposed under IID/SDCWA water transfer actions.

The Salton Sea was designated as an agricultural sump for drainage water in 1922. There are data suggesting that the water and accompanying sediment contain contaminants such as metals, perchlorate, pesticides and nutrients. There is concern regarding the impact of exposure of these sediments in the region, particularly in light of the stated potential need to limit public access to prevent adverse air quality impacts. We note that the Torres Martinez Desert Cahuilla Settlement Claims Act addressed damages caused by the flooding of tribal property and provided for a permanent flowage easement on tribal land at elevations lower than -220 mean sea level (msl). The Act does not specifically address potential damage to inundated land caused by deposition of potentially contaminated sediment.

Recommendation:

Additional research and data collection is needed before a determination can be made as to the use of and potential impacts from exposed Salton Sea sediment. We recommend the FEIS describe existing research on Salton Sea sediment and the efforts to obtain more data. For instance, the Regional Water Quality Control Board has recently entered into an agreement with the Torres Martinez to conduct water quality sampling and sediment analysis for various constituents; and the Salton Sea Science Subcommittee funded studies on the physical and chemical properties of the water and sediment in the Sea.

3. Rather than providing a summary of the amounts, priority dates, and states where tribal water rights are perfected, the DEIS refers the reader to the Department of Interior's Implementation Agreement DEIS. While we support the incorporation of information by reference, we believe a short summary of the cited information would better serve the public, decision makers, and the full disclosure requirements of the National Environmental Policy Act.

Recommendation:

The FEIS should provide a short summary of the amounts, priority dates, and location of tribal present perfected water rights. If appropriate, this information could be incorporated into the FEIS in a table format.

Biological Resources and the Habitat Conservation Plan (HCP)

1. Implementation of the IID/SDCWA water transfer could result in significant adverse effects to biological resources due to construction within the IID service area, reduction in flows of the Lower Colorado River, reduction in Salton Sea surface elevations, and increased salinity in the Salton Sea. To address adverse effects to the Salton Sea, two mitigation approaches are proposed: Approach 1) fish hatchery and habitat replacement, and Approach 2) use of water conserved through additional water conservation measures and/or fallowing to replace water so there would be no change in inflow to the Salton Sea.

EPA supports all efforts to avoid, minimize, and mitigate potential adverse effects of the IID/SDCWA water transfer. However, we question whether proposed mitigation, especially mitigation proposed for the Salton Sea, would be able to reduce adverse impacts below the level of significance. We note that the HCP presents many general concepts, leaving key ecological and logistical issues unaddressed. Unresolved issues related to Approach 1) include: the water source(s) for the proposed fish hatchery, fish ponds, and replacement water; temperature requirements of tilapia; aquaculture wastewater management; adaptability of hatchery fish to conditions within the Sea; and how to adapt project operations and management to changing concentrations of water contaminants in the Salton Sea. EPA is concerned that a commitment to such a conceptual and unproven mitigation approach might put biological resources at severe risk, especially in light of the predicted imminent collapse of the Salton Sea fishery and concomitant reduction of a food source for fish-eating birds.

Recommendations:

We urge Reclamation, IID, CVWD, MWD, US Fish and Wildlife Service (USFWS), and California Fish and Game (CFG) to continue to refine the HCP. If feasible, a more developed HCP should be included in the FEIS. Unresolved issues such as the water source(s) for the proposed fish hatchery, fish ponds, and replacement water; temperature requirements of tilapia; wastewater treatment; adaptability of hatchery fish to conditions within the Sea; and how to adapt projects to changing concentrations of water contaminants in the Salton Sea

should be fully addressed. The proposed water sources are of specific interest, especially given the scarcity of such sources and the proposed commitment to provide biological mitigation water which is less than 2 µg/L selenium.

Other potential adverse effects, such as bioaccumulation of selenium, are not adequately addressed in the HCP. The HCP should provide a comprehensive mitigation strategy for biological resources, addressing all potential adverse impacts to the Salton Sea and other affected fish and wildlife species and habitat.

EPA urges use of all possible tools, including voluntary fallowing, to avoid, minimize, and mitigate for potential impacts to biological resources. We acknowledge the second mitigation approach of utilizing conserved water to help address adverse biological resource impacts of the IID/SDCWA water transfer. We note that fallowing is a very controversial option and has been rejected by many of the local communities. We recommend the FEIS provide a more detailed evaluation of the feasibility of using conserved water to avoid and minimize adverse biological resources effects on the Salton Sea.

2. The HCP proposes to create at least 190 to 652 acres of managed marsh habitat as mitigation for potential impacts to biological resources from implementation of water conservation measures or regular agricultural operation and maintenance activities (pg. 2-46). The description of potential water source(s), required water quantities, and the potential for selenium accumulation and bioaccumulation is minimal.

Recommendation:

EPA believes that much more detailed information regarding the water requirements, implementation, and operation of the HCP is required in order to determine the feasibility of proposed HCP measures. Specifically, the FEIS should include additional information on the marsh creation proposal. This information should include a description of potential water source(s) and the required water quantities. We also recommend a full evaluation of the potential for selenium accumulation in the proposed marsh and the risk of selenium bioaccumulation.

3. The DEIS appears to discount the potential danger of reduced drain flows on the special - status desert pupfish because turbidity would remain high, thus, providing protection from predators. We note that a TMDL will be developed to reduce sediment, therefore, reducing turbidity in the IID drains.

Recommendation:

We recommend Reclamation reevaluate the assumption that turbidity in the IID drains would provide sufficient protection for the desert pupfish. The FEIS should

consider and evaluate the potential effects to desert pupfish populations if increased predation does occur.

4. The DEIS appears to downplay the importance of increasing salinity levels in the Salton Sea. Although salinity levels are already increasing in the Sea, the IID/SDCWA water transfer would accelerate the rate of this increase. As described in the DEIS, the Salton Sea Restoration Program is attempting to develop measures to control the current salinity levels and to eliminate any new increase in salinity. While control measures may be feasible, given current salinity levels and projected salinity increases, it is very unlikely these measures would be effective in addressing a more rapid increase in salinity.

Recommendation:

The FEIS should evaluate the potential effects of the proposed IID/SDCWA water transfer on the feasibility and costs of implementing the Salton Sea Restoration Program salinity control measures.

5. The DEIS states that biological conservation measures for the Lower Colorado River would not be implemented under the No Action condition (pg. 2-54). EPA disagrees with this statement, given the fact the biological conservation measures are nondiscretionary reasonable and prudent measures identified in the USFWS Biological Opinion dated January 12, 2001 for the Interim Surplus Criteria, Secretarial Implementation Agreements, and Conservation Measures on the Lower Colorado River.

Recommendation:

We recommend Reclamation reevaluate the assumption that the biological conservation measures for the Lower Colorado River would not be implemented under the No Action condition. Since the Interim Surplus Criteria are already in place, the Biological Opinion issued, and Section 7 consultation complete, we strongly recommend that implementation of the biological conservation measures proceed as quickly as feasible. If implementation of these nondiscretionary biological measures is suspended, consultation with USFWS should be reinitiated.

Environmental Baseline for the Salton Sea

We question the appropriateness of the environmental baseline used in the Salton Sea effects analysis. Only IID inflow into the Salton Sea seems to have been used for the environmental baseline versus total inflow into the Sea which would include inflow from CVWD, local seeps, and intermittent creeks. There is a concern that the baseline used may minimize the potential adverse effects and necessary mitigation attributed to the IID/SDCWA water transfer.

Recommendations:

Since the environmental baseline is used to determine the magnitude of potential impacts of the proposed action, we believe it is crucial that the rationale for establishing an appropriate baseline be fully and clearly addressed in the FEIS.

To minimize confusion, Reclamation may wish to consider the use of two baselines: existing conditions and the project future condition. The addition of an existing condition baseline that includes all present inflows would provide a more complete set of conditions against which to predict potential project effects.

We also recommend providing a range for the model predictions of effects, to include a "likely-case" scenario and "worst-case" scenario, rather than using only a worst-case scenario evaluation.

Environmental Justice

The DEIS evaluates only the potential environmental justice impacts of narrowly defined Federal actions even though other proposed actions (water conservation measures, use of Colorado River water in Coachella Valley) could have a disproportionate effect on agricultural workers, Indian tribes, and low income or minority populations.

Recommendation:

We believe an environmental justice evaluation including all proposed actions, not just Federal actions, is very important given the presence of low income populations or minority communities which could be disproportionately and adversely affected by proposed implementation of the IID/SDCWA water transfer. We note that California enacted Environmental Justice legislation in October 12, 2001 and may soon require consideration of environmental justice effects for non-Federal actions. As a guide, we have enclosed the Federal Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations."

General Comments

1. The DEIS clearly states that fallowing (Alternative 4) and provision of replacement water for the Salton Sea (HCP Approach 2) would avoid or reduce significant and unavoidable impacts to water quality, air quality, biological resources, and recreation (pgs. 3.1-113, 4-13, 5-48). As stated earlier, EPA advocates use of all available tools to address potential impacts and to balance water supply and demand.

Recommendations:

We urge Reclamation, IID, CVWD, and MWD to consider modifying agreements and resolutions, where appropriate, to allow for voluntary fallowing.

We also note that Section 3.4 on Land Use states there are no conflicts between land use plans and fallowing because fallowing would not change the land use zoning from agriculture. However, fallowing has been specifically rejected by local communities via policy statements and ordinances. We recommend the FEIS describe the existing policies, agreements, and ordinances that either prohibit or provide for fallowing.

2. A potential project scenario includes implementation of the water transfer as proposed in the unmodified 1998 IID/SDCWA Water Transfer Agreement (pg. 1-2). The Department of Interior's Implementation Agreement DEIS only evaluated the potential effects of implementing the IID/SDCWA water transfer as agreed to under the QSA. If the QSA scenario for the IID/SDCWA water transfer is not selected, than a new Implementation Agreement would be required.

Recommendation:

To help avoid spending additional time and resources, we recommend the FEISs for the IA and IID/SDCWA water transfer describe the options and process for addressing potential effects of alternative Department of Interior implementation agreements for other water transfer alternatives which could be selected.

3. Given the increasing scarcity and limitations of existing water supply sources, EPA advocates implementation of planned growth principles which are town-centered; transit and pedestrian oriented; have a greater mix of housing, commercial and retail uses; and maximizes water use efficiencies. We urge aggressive implementation of water use efficiency measures in order to achieve and maintain a sustainable balance between water supply and demand.

Recommendation:

We recommend the FEIS provide a detailed description of water use efficiency and water conservation efforts being taken by SDCWA and MWD. We encourage consideration of water use efficiency targets as one benchmark for obtaining additional increments of transfer water.