

requirements of local general plans and system demands in future years. In addition, no increase in the reliability of water supplies available to SDCWA in water shortage years would occur." Long-term, SDCWA will still have to rely on MWD for water supply, independent of the Project - No Project decision. Currently MWD provides SDCWA with 600 KAFY; this water transfer is intended to only supplement that and allows for growth in the SDCWA service area. MWD has been very pro-active in acquiring water resources to support the needs of member agencies, and has taken significant steps to provide water resources for periods of prolonged drought, including the construction and filling of the 800,000 AF Diamond Valley Reservoir near Hemet, California. It is my belief that MWD will continue these efforts. As written, I view the statement as biased editorializing.

- Statement for No Project: Conditions Affecting the SDCWA Service Area: "Water users served by SDCWA could bear significantly higher costs to support development of new MWD water supplies because other supply sources in the SDCWA service area are extremely limited and the availability of other imported supplies is unknown." The statement is not supportable. First, SDCWA will still be responsible to prorata fund MWD projects which improve water supplies and availability for all MWD member agencies, thus SDCWA customers will NOT bear significantly higher costs. Secondly, water resources within SDCWA service area are NOT "extremely" limited. See my review comments for Appendix D of this Draft EIR/EIS. Also note that the Pacific Ocean provides an unlimited water resource through desalination. The only issue with desalination is cost and environmental concerns relative to desalination plant siting. Whether the environmental issues will be anywhere near the severity of the environmental issue of the Proposed Project, or it's alternatives is debatable. As written, I view the statement as biased editorializing.

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END OF SECTION 2 COMMENTS

SECTION 3.0: Environmental Analysis

Page 3.0-1: Paragraph: Introduction

- Statement: "No hazards and hazardous materials section is included in this Draft EIR/EIS because the Lead Agencies concluded that there are no potential impacts associated with hazards and hazardous materials that could result from implementation of the Proposed Project." Does this mean that the Lead agencies have collectively agreed that windborne dust off the exposed seabed containing selenium, chromium, arsenic, DDT, etc. (reference Table 3.1-10) is not a hazardous waste health issue??? I can only pray that they are forced to live within the influence of this non-hazardous environment!

C35-36

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Response to Comment C35-36

Please refer to the Master Response on *Air Quality—Health Effects Associated with Dust Emissions* in Section 3 of this Final EIR/EIS.

Page 3.0-2: Paragraph: Organization of the Impact Analysis

- Statement: "For the reasons described in Table 3-1 ... there would be no impacts in the SDCWA service area geographic subregion; therefore, this geographic subregion is not carried forward into the impact analysis." As I have stated previously, to the extent that the water transfer adds to the existing supplies obtainable through MWD, the water transfer is growth inducing in the SDCWA service area, thus full environmental impact analysis needs to be applied to the SDCWA service area. Additionally, I have expressed concern that the transfer water may not be blended with SWP water, thus increasing the overall TDS of water within the SDCWA service area. MWD must be REQUIRED to blend the transfer water with SWP water at a blend rate equivalent to, or better than, what is currently done. This must be emphatically stated as a condition of the water transfer agreement. Without this guarantee, SDCWA service area must receive full analysis in section 3.1: Hydrology and Water Quality.

C35-37

Response to Comment C35-37

In response to the portion of the comment expressing concern about growth inducement in San Diego, please refer to the Master Response on *Other – Growth Inducement Analysis* in Section 3 of this Final EIR/EIS.

Pages 3.0-4/13: Paragraph: Subregions Excluded From the Environmental Analysis Impact

- Statement: "The region of influence for the Proposed Project includes six geographic subregions as ..." See my comments for Section 1.3. Airborne dust and stench airflow patterns do not recognize the boundaries of the six defined subregions. The analysis presented in Section 3.7: Air Quality needs to address this fact of nature. At a minimum, the subregions need to be expanded to include Mexico.
- I have issue with Table 3-1: Resource Areas With/Without Impacts Listed by Geographic Subregion. Impacts are identified in the analysis as being REAL not "Potential". Most of the column ratings should be marked "Impacted". There are a few that are truly "potential" because sufficient analysis has not been completed. Again, this is an example of biased editorializing. Also, the table needs to be expanded to indicate impacts on Mexico and other regions outside the six defined regions.
- Table 3-2: Impacts in the CVWD and MWD Service Areas, fails to list air borne toxic dust from the exposed seabed and stench from the sea for the MWD and CVWD subregions under the Resource Area heading: Air Quality. Given the proper atmospheric, dust storms do occur and they will effect these subregions as well as others.
- Table 3-2: Impacts in the CVWD and MWD Service Areas -Socioeconomics. Statement: "The increased water supply would be used to offset the existing groundwater overdraft and would not change population trends or impact agriculture." Overdrafting of the aquifer has provided for the explosive growth in the CVWD service area. Without that overdraft, would the growth have occurred?? Supplying the transfer water, even though the intentions are good in relation to using it for aquifer recharge, will cause growth. Where water is provided and secure, growth follows. Water IS growth inducing. History is full of examples. CVWD service area environmental impacts due to this new water source need analysis.

C35-38

The IID/SDCWA water transfer will not determine the blend of water (Colorado River, SWP water, or other water sources) that is delivered from MWD to SDCWA. The MWD/SDCWA Exchange Agreement does provide that the water delivered to SDCWA shall be at least as good as the water delivered by SDCWA to MWD, and may be of better quality, at MWD's discretion. Regardless of whether the Exchange Agreement is in effect, the blend of water delivered by MWD to SDCWA is determined by the MWD Board of Directors. MWD maintains that it is not required to provide any particular blend of water to its member agencies, and in some past years SDCWA has received almost exclusively Colorado River water. The composition of the blend of water that MWD delivers to SDCWA, therefore, will not be determined by the IID/SDCWA water transfer, but instead by whatever, if any, blending policy MWD may have at a given time. The commenter states that as a condition of the transfer MWD should be required to blend Colorado River water with SWP water at some particular level. However, since MWD maintains that it can set blending policy at its discretion now, it would appear unreasonable that MWD should be required to give up that discretion as a condition of the water transfer.

Response to Comment C35-38

With regard to the commenter's region of influence comments, including comments regarding impacts to Mexico, refer to the response given for Comment C35-24. With regard to Table 3-1, this table is a

Pages 3.0-14/17: Paragraph: Development of the Baseline

- Statement: "A predictive water quantity/quality computer model, ... which is called IIDSS, has been developed to determine the amount of water conservation that would result from implementation of the water conservation program, and the resultant impact of such conservation on water supply and quality in the Project's region of influence. Utilization of such a model requires the establishment of a "Baseline" against which to measure change. ... To be meaningful,

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Response to Comment C35-38 (continued)

guide to Chapter 3 of the Draft EIR/EIS rather than a summary of impacts (refer to Table ES-1 in the Executive Summary, Draft EIR/EIS for a summary of significant impacts and associated mitigation measures). Where "potential impacts" are noted in the table, the reader is referred to the appropriate geographic subregion in the referenced impact section for a detailed discussion of impacts.

With regard to the comment on air quality impacts from the exposed Salton Sea bed in the CVWD and MWD service areas, California is divided geographically into air basins for the purpose of managing the air resources of the state on a regional basis. An air basin generally has similar meteorological and geographic conditions throughout. For this reason, the air quality impacts would generally be confined to the Salton Sea Air Basin (SSAB), which does not include the MWD service area. Air quality impacts could be experienced in the CVWD service area; for this reason, the previous Draft EIR/EIS has been revised to reflect this concern. This change is indicated in this Final EIR/EIS in subsection 3.0, Table 3.1, under Section 4.2, Text Revisions.

The Proposed Project will not be growth-inducing in the CVWD service area because CVWD will receive transferred water for the sole purpose of offsetting the existing overdraft of its groundwater basins. The transferred water supplies will be used to improve the Coachella Valley's ongoing groundwater overdraft condition. In 1999, the overdraft was estimated to be approximately 136 KAFY. Water transfers under the QSA would result in changes in water deliveries to CVWD of up to 155 KAFY. This additional water resulting from the QSA will be used solely to offset the Valley's existing groundwater overdraft. New conveyance facilities to deliver transferred water to CVWD would not be required.

Response to Comment C35-39

Please refer to the Master Response on *Biology—Approach to the Salton Sea Habitat Conservation Strategy* in Section 3 of this Final EIR/EIS.

the Baseline must represent the expected variability of environmental resources that could reasonably be expected in the future, based on the present and historical state of such resources. ... The IIDSS model was developed by IID "to predict annual water conservation volumes ... and simulate the resulting changes in the quality and quantity of drainage water that flows in IID's drains and rivers." (page 3.1-93 this Draft EIR/EIS) It does not provide a Baseline for the Salton Sea predicted conditions, but only input for another model, the Salton Sea Accounting Model (SSAM) developed by Reclamation (Weghorst 2001). Thus the Project Baseline predictive modeling graphs of Salton Sea surface elevation, surface area and salinity shown in Figure 3.0-1 are the result of serial modeling. The SSAM model is believed to be similar to that used by SSRP in their Draft EIR/EIS. This model, developed by Thiery (1998) and significantly enhanced for use by SSRP (Reclamation 1999), has also been used to provide predictive graphing of Salton Sea surface elevation, surface area and salinity. These are shown in Table C3.0-1: Summary of Modeling Results and Assumptions, Figure C3.0-1: Projected Changes in Salinity and Elevation Over Time at Current Inflows (1.36 MAFY), and Figure C3.0-2: Projected Changes in Salinity and Elevation Over Time with Inflow Reduced to 1.06 maf/yr (Source: www.lc.usbr.gov: Salton Sea Restoration Draft EIS/EIR). As shown in Table C3.0-2: Comparison of IIDSS/SSAM and SSRP Model Results for 2060, the results provided by these two models differ. Both models have inflows to the Salton Sea as the primary driver. The SSRP modeling clearly states the inflow assumptions. For the IIDSS/SSAM, the reader is left to derive the inflows based on data scattered throughout the Draft EIR/EIS. Table C3.0-3 provides an accounting of the IIDSS/SSAM input Salton Sea inflows. Looking at the data, it is apparent that 1.36 MAFY No Project predictions represent the Existing Condition referred to in the Draft EIR/EIS (Water Transfer). Unfortunately, there is no directly comparable data set for Baseline, as defined in this Draft EIR/EIS (water transfer). Table C3.0-3 set the Baseline model inflow at 1285 KAFY. This represents 75 KAFY less water inflow than the No Project flow used by the SSRP model, the difference of which is significant enough, that we cannot directly compare the designated Project Baseline model predictions with the SSRP No Project model predictions. However, looking at the SSRP No Project predictions relative to the Alternative 4 IIDSS/SSAM model prediction, the inflows are substantially the same, yet there are significant differences in the model results with the IIDSS/SSAM indicating a greater mean sea level and acreage loss, and a greater increase in salinity. This leads to the conclusion that the Baseline model predictions may be overstating the decline of Salton Sea. If one believes the SSRP model results, and extrapolates data shown in Tables C3.0-2 and Table C3.0-3, the conclusion can easily be reached that the Baseline should reflect no net loss to Salton Sea surface elevation. Before the Baseline utilized in the Draft EIR/EIS can be accepted, the differences between the two model results must be reconciled.

- Statement: "Once Baseline conditions are established, impacts can be assessed by comparing Project impacts to the Baseline condition. Therefore, the Baseline ... represents the existing conditions at the time the NOP was published, based on historical data and reasonable, anticipated future changes in these conditions over the Project term. By including a future projection of existing conditions in the Baseline, effects caused by the Project can be differentiated from effects that are reasonably expected to result from existing conditions and trends. ..." This is true only if the impacts of the SSRP are ignored. Figure 3.0-1 and Figure C3.0-2 clearly show that Salton Sea surface elevation levels can be maintained and salinity reduced. As stated previously, the Proposed Project and Alternatives MUST be evaluated relative to the Baseline, but also relative to the SSRP program.

TABLE C35-1

Table 2.4-2
Summary of Modeling Results and Assumptions

Inflow Rate/Alternative	Middle of Phase 1 2015			End of Phase 1/Start of Phase 2 2030			30 years of Phase 2 2060		
	Elevation (ft. msl)	Salinity (mg/L)	Surface Area (acres)	Elevation (ft. msl)	Salinity (mg/L)	Surface Area (acres)	Elevation (ft. msl)	Salinity (mg/L)	Surface Area (acres)
Current Inflow Scenario, 1.56 maf/yr									
No Action	-225	47,835	238,955	-224	52,896	241,436	-223	64,253	243,576
Alternative 1	-224	43,366	217,474	-229	36,824	200,383	-227	27,196	212,146
Alternatives 2 & 3	-229	47,043	230,640	-232	45,510	222,881	-234	37,042	219,235
Alternative 4	-227	44,161	219,615	-229	39,566	216,199	-229	31,165	215,126
Alternative 5	-229	45,246	223,348	-232	40,854	217,996	-231	33,926	218,808
Reduced Inflow Scenario, 1.06 maf/yr									
No Action	-228	51,001	232,580	-234	75,050	218,371	-241	122,530	198,267
Alternative 1	-225	46,394	200,091	-237	45,862	181,074	-232	34,742	189,404
Alternatives 2 & 3	-230	50,847	213,002	-237	53,726	196,945	-232	38,120	208,371
Alternative 4	-228	47,573	202,134	-235	47,467	190,758	-232	40,436	195,877
Alternative 5	-230	48,857	205,790	-236	46,197	193,738	-232	37,343	202,843
Reduced Inflow Scenario, 0.80 maf/yr									
No Action	-228	51,998	232,978	-234	75,043	218,358	-249	177,848	169,435
Alternative 1	-225	46,405	200,086	-237	45,858	181,054	-234	38,303	186,577
Alternatives 2 & 3	-230	50,846	213,000	-237	53,658	197,032	-238	45,347	184,159
Alternative 4	-228	47,574	202,133	-235	47,508	190,717	-234	44,467	191,537
Alternative 5	-230	48,849	203,782	-236	46,161	193,776	-236	40,745	195,443

Note: Bas Year: 2000
Elevation in Bas Year: 227 ft msl
Salinity in Bas Year: 44,000 mg/L
Surface Area of Bas Year: 213,818 acres (165 square miles)

TABLE C3.0-2 Comparison of IIDSS and SSRP Model Results for 2066

Salton Sea Inflow	Year 2060 Predicted Surface Elevation (ft, msl)	Surface Area (acres)	Salinity (mg/L.)
Initial Values: Year 2000			
1.36 MAFY			
IIDSS model*	-227	234,000	44,000
SSRP model	-227	233,898	44,000
Predicted Values: Year 2060			
1.36 MAFY (No Project)			
IIDSS model* - Baseline	-235	218,000	75,000
SSRP model	-223	243,576	64,253
1.06 MAFY (Project)			
IIDSS model* - Project (300 KAFY)	-250	168,000	145,000
IIDSS model* - Alternative 3 (230 KAFY)	-247	171,000	126,000
SSRP model	-241	198,267	122,530

* Data taken from Figure 3.0-1: Predicted Effects at the Salton Sea: Baseline and Proposed Project, of this Draft EIR/EIS.

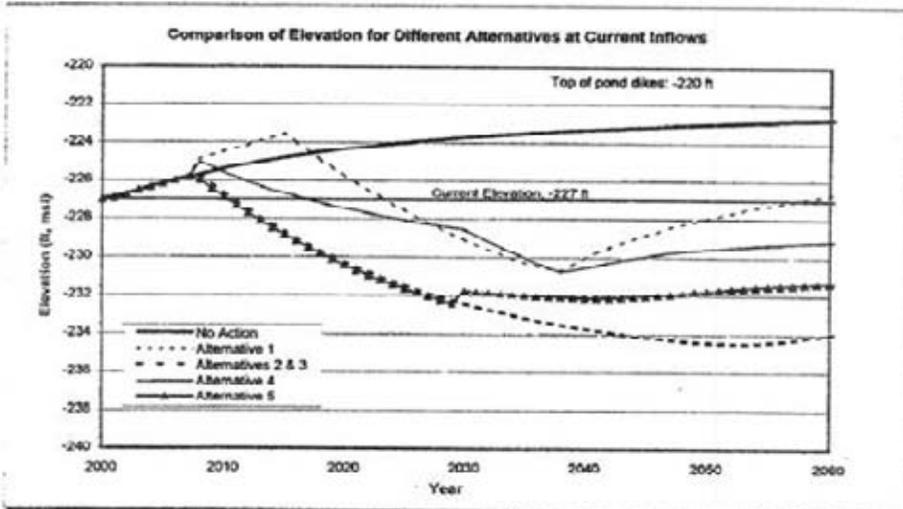
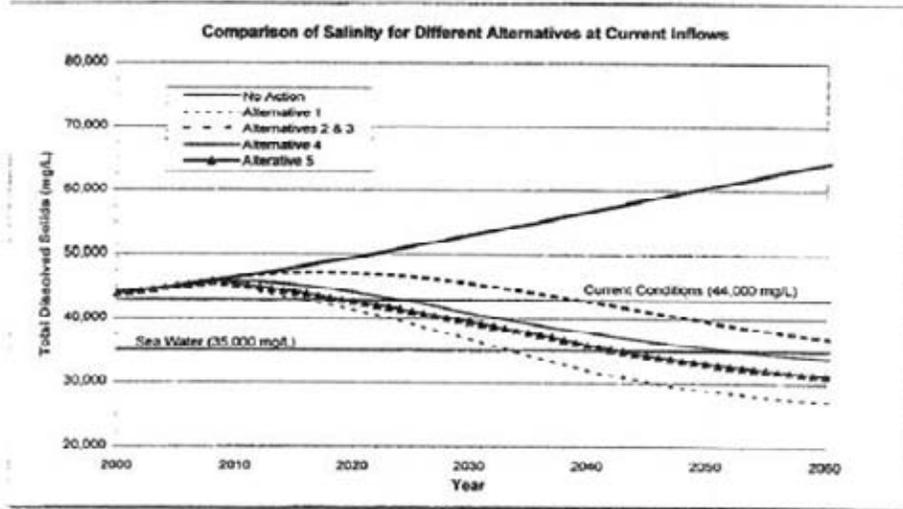
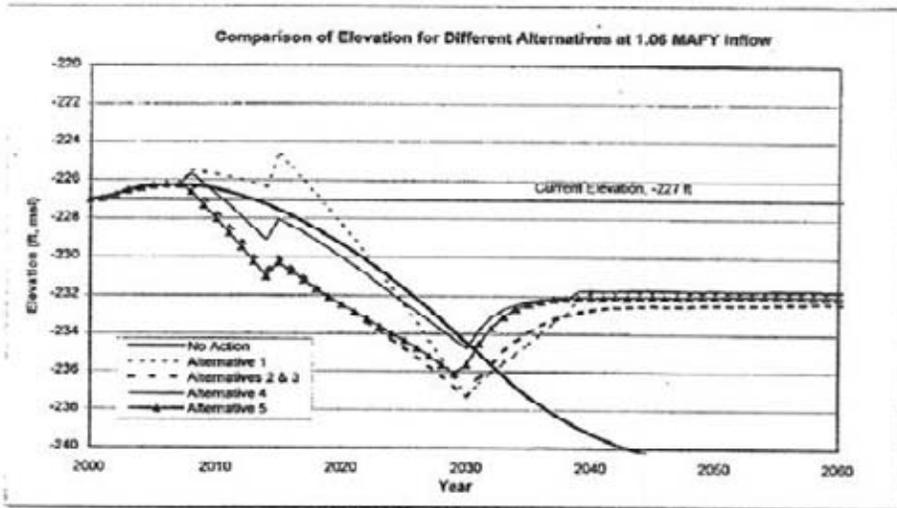
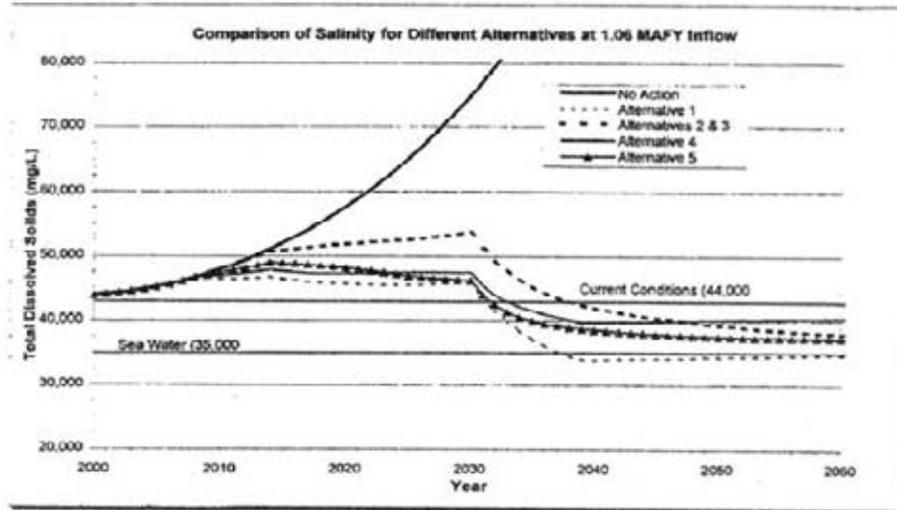


Figure 2.4-1. Projected Changes in Salinity and Elevation Over Time at Current Inflows (1.36 MAFY)

FIGURE C3.0-1



* This model does not specifically simulate the impact of the IID/San Diego water transfer. Those impacts will be evaluated in a separate EIS/EIR and may demonstrate more or less severe salinity/elevation impacts than shown here.

Figure 2.4-2. Projected Changes in Salinity and Elevation Over Time with Inflow Reduced to 1.06 maf/yr *

FIGURE C3.0-2

TABLE C3.0-3: Derived Salton Sea Inflows - IIDSS/SSAM Model

	Existing (Figure 3.1-16)	Baseline (Figure 3.1-30)	Project (300 KAFY) (Figure 3.1-26)	Alternative 3 (230 KAFY) (Figure 3.1-34)
IID Drainage (KAFY)				
Subsurface to Sea	1	1	1	1
Alamo River	604	576	401	441
Direct to Sea	96	92	56	63
New River	448	431	335	361
CVWD Drainage*				
Surface Water	115	115	115	115
Subsurface	2	2	2	2
Unmeasured Inflows*	68	68	68	68
TOTALS	1334	1285	978	1051

* Table 3.1-5: Annual Average Historical Water Balance for Salton Sea
(Period 1950 - 1999) (Source: this Draft EIR/EIS)

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END OF **SECTION 3.0** COMMENTS

SECTION 3.1: Hydrology and Water Quality

c35-40 Page 3.1-1/3: paragraph 3.1.1
 • No criteria definitions are given in Table 3.1-1 for the "Less than significant impact", "Significant and unavoidable impact", and "Beneficial impact". Page 3.1-101, paragraph 3.1.4.2 defines the criteria for "significant impact", but fails to address the others. Also, the criteria, "No Impact" and "Less than Beneficial Impact" should be included.

c35-41 Page 3.1-12: Paragraph 3.1.3.1 Lower Colorado River - Water Quality at Parker Dam
 • The term COC has not previously been defined.

c35-42 Page 3.1-32/37: paragraph 3.1.3.2 IID Water Service Area and AAC - IID Irrigation System
 • Statement: "Flow measurements (collected from 1986 to 1999 at Drop No. 1, just before the AAC enters the IID water service area) show that Colorado River irrigation deliveries generally range from approximately 2.4 MAFY to more than 3.1 MAFY. The average annual delivery of irrigation water during the same period is approximately 2.8 MAFY ... The remaining balance of diverted water is discharged into the ... or the Coachella Canal, or is lost to spillage, evaporation, or seepage along the length of the AAC." This paragraph is extremely important with respect to Figure 3.1-9 and the IIDSS/SSAM modeling of the Proposed Project and Alternatives, because it is the basis for establishing the model's flow input. Unfortunately, as written, the paragraph is confusing and fails to provide the information required. Fortunately, the data is available within the Draft EIR/EIS. Refer to Table 3.1-3: Annual Average Gross Diversions from Colorado River into AAC (1987 - 1998) - see page 3.1-25 - and the paragraph immediately following Table 3.1-3, Figure 3.1-16: Existing Setting - Average Overall Water Balance, and Appendix E, Table 3-3: IIDSS Simulated Water Balance. The following average water flows (1986 to 1998) can be determined from the referenced Tables and Figures.

AAC Gross Diversion	5.093 MAFY
AAC below Pilot Knob (IID and CVWD)	3.292 MAFY
AAC conveyance loss Imperial Dam to Pilot Knob	0.139 MAFY
Coachella Canal Diversion (4.1 KAFY* belongs to IID, remainder CVWD)	324 KAFY
AAC diversions to IID below Pilot Knob*	3 KAFY
AAC water flow below Pilot Knob after Coachella Canal diversion (IID water - not including 7.5 KAFY diverted via Coachella Canal)	2.965 MAFY
AAC loss between Pilot Knob and Mesa Lateral 5 (Just upstream of East Highline)	99 KAFY
AAC water at Mesa Lateral 5	2.866 MAFY

* Per Appendix E, page 2-3, footnote 2, water diversion to IID are 4.1 KAFY from the Coachella Canal and 3.4 KAFY from the AAC below Pilot Knob.

These numbers need to be clearly explained in the subject paragraph. Additionally, it is recommended that Figure 3.1-9: Project Site Features, be revised to include showing of the Mesa Lateral 5 location.

Page 3.1-38/49: paragraph 3.1.3.2 IID Water Service Area and AAC - Drainage to the Salton Sea.
 • Statement: "... Total discharge to the Salton Sea from the IID water service area averaged approximately 0.98 MAF (1.16 MAF with inflow from Mexico) during the period 1986 to 1999." The number "0.98 MAF" does not fully agree with the number derivable from Appendix E, Table 2-1: Measured and Simulated Mean (1987 to 1998) Annual Flows (ac-ft) along Major Flow Paths within IID. From the "Recorded" data column in the Table a number of 992,800 AF (0.99 MAF) is derived. It is noted that the statement refers to the data years 1986 to 1999, whereas the Table refers to data years 1987 to 1998. Since the modeling is based on the 12 year Table values, why

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Response to Comment C35-40

A description of the rationale and criteria for the various impact designations is given in the detailed discussions for the respective impacts, which can be found in Section 3.1.4, Impacts and Mitigation Measures, in the Draft EIR/EIS.

Response to Comment C35-41

Comment noted. The term 'constituent of concern' (COC) is defined in the Acronyms and Glossary section of the EIR/EIS.

Response to Comment C35-42

The comment correctly notes discrepancies in the Draft EIR/EIS between flow values used in the report text and flow values used in the IIDSS modeling. As the commenter correctly surmises, these differences arise from small differences in the time periods used by the authors of the main body of the Draft EIR/EIS in describing flow volumes delivered to IID and the 12-year period used in the modeling. While these inconsistencies are noted, they do not compromise either the construction of the model or the correctness of values presented in the Draft EIR/EIS.

Among the analyses performed by the EIR/EIS team were analyses of IID cropping patterns and water use. During the modeling period, it appears that the intensity of irrigation increased within the IID. Because the irrigated land was in crop production a greater percentage of the time, annual water demands increased per unit area at the same time that the IID/MWD conservation program was being implemented. In addition to this more intensive land use, shifts in cropping were observed to crops that produce higher economic returns, but have higher water demands. The net impact of these changes in cropping was the apparently paradoxical situation of an increase in IID water use at the time when the IID/MWD program was being implemented. Year 1992 was the year of the white fly infestation that led to an abrupt reduction in IID water consumption, which tends to reduce average estimates of water use (including 2002), while raising estimates of water use efficiency. All of these factors combine to present the appearance of higher IID use of water and lower efficiency in this use.