2034	66242	114373
2035	66716	116883
2036	67213	119313
2037	67714	121472
2038	68221	123559
2039	68664	125767
2040	69183	127728
2041	69665	129470
2042	70112	131103
2043	70582	132573
2044	71116	134094
2045	71601	135380
2046	72068	136557
2047	72531	137829
2048	72990	136808
2049	73470	135966
2050	73905	135275
2051	74378	134702
2052	74855	134249
2053	75333	134130
2054	75734	133880
2055	76215	133789
2056	76713	133774
2057	77270	134014
2058	77703	134188
2059	78134	134342
2060	78584	134635
2061	79119	135069
2062	79598	135514
2063	80122	136000
2064	80535	136365
2065	80949	136890
2066	81354	137327
2067	81785	137806
2068	82166	138237
2069	82559	138774
2070	83007	139392
2071	83424	139909
2072	83941	140332
2073	84458	140848
2074	84953	141415

Scenario 3 (cont.)

Salinity

Year	Baseline Elevation (feet)	IID to SD By Fallowing With No Effect and 33.3% OF CVWD Water Derived From System/On-Farm Returning to the Sea and IID Conditional ISG Backfill Elevation (feet)
2000	-227.0	-227.0
2001	-227.4	-227.4
2002	-227.8	-227.8
2003	-228.1	-228.1
2004	-228.5	-228.4
2005	-228.8	-228.7
2006	-229.1	-229.0
2007	-229.3	-229.3
2008	-229.6	-229.5
2009	-229.8	-229.8
2010	-230.1	-230.0
2011	-230.3	-230.3
2012	-230.5	-230.6
2013	-230.7	-231.2
2014	-230.9	-231.4
2015	-231.1	-231.7
2016	-231.3	-231.9
2017	-231.5	-232.2
2018	-231.6	-232.4
2019	-231.8	-233.4
2020	-231.9	-234.5
2021	-232.1	-235.7
2022	-232.2	-236.9
2023	-232.3	-238.1
2024	-232.4	-239.2
2025	-232.5	-240.3
2026	-232.6	-241.3
2027	-232.7	-242.2
2028	-232.8	-243.0
2029	-232.9	-243.8
2030	-233.0	-244.4
2031	-233.1	-245.0
2032	-233.2	-245.6
2033	-233.2	-246.0

Scenario 3

Elevation

2034	-233.3	-246.4
2035	-233.3	-246.8
2036	-233.4	-247.1
2037	-233.5	-247.4
2038	-233.5	-247.6
2039	-233.6	-247.8
2040	-233.6	-248.1
2041	-233.7	-248.2
2042	-233.8	-248.4
2043	-233.8	-248.5
2044	-233.9	-248.6
2045	-233.9	-248.7
2046	-234.0	-248.8
2047	-234.0	-248.9
2048	-234.1	-248.7
2049	-234.1	-248.5
2050	-234.2	-248.3
2051	-234.2	-248.2
2052	-234.3	-248.0
2053	-234.3	-247.9
2054	-234.3	-247.8
2055	-234.4	-247.7
2056	-234.4	-247.7
2057	-234.5	-247.6
2058	-234.6	-247.6
2059	-234.6	-247.5
2060	-234.6	-247.5
2061	-234.7	-247.5
2062	-234.7	-247.5
2063	-234.8	-247.5
2064	-234.8	-247.4
2065	-234.8	-247.4
2066	-234.9	-247.4
2067	-234.9	-247.4
2068	-234.9	-247.4
2069	-235.0	-247.4
2070	-235.0	-247.4
2071	-235.0	-247.4
2072	-235.1	-247.4
2073	-235.1	-247.4
2074	-235.2	-247.4

Scenario 3 (cont.)

Elevation

From: Bruce Ellis
To: Harnish', 'Laura
Date: 9/26/03 4:02PM
Subject: For your records

I spoke to Carol Roberts (FWS) about the new scenario you asked Paul Weghorst to run, which put all of the impacts of the benchmark water (72.5 KAF) in 2012. Paul had already provided the model runs to Carol, and she had already reviewed the results. She advised me that she did not need to do a new REA analysis to calculate brown pelican impacts, since all the salinity thresholds (every 1000 ppm between 50K and 65K) were crossed in the same years as the earlier run for 12.5,25, 35. Therefore the results in pelican years lost would be identical to the pro-rata run (12,428 pelican use-years). I hope this message is adequate for your files to document the results of this last scenario. bde

CC: carol.a.roberts@fws.gov; Eto, Sandy; Weghorst, Paul

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ecological Services
Carlsbad Fish and Wildlife Office
6010 Hidden Valley Road
Carlsbad, California 92009

In Reply Refer To:
FWS-IMP-2628.12

OCT 07 2003

Memorandum

To: Regional Director, Lower Colorado Region
Bureau of Reclamation, Boulder City, Nevada

From: Assistant Field Supervisor, Carlsbad Fish and Wildlife Office
Fish and Wildlife Service, Carlsbad, California

Subject: Review of the December 18, 2002, Final Biological Opinion on the Bureau of Reclamation's Proposed Section 7(a)(1) Conservation Measures for Listed Species in the Imperial Irrigation District/Salton Sea Areas in light of the Revised Colorado River Water Delivery Agreement (Draft Dated September 22, 2003)

The Fish and Wildlife Service (Service) has received your review of the above biological opinion (BO) relative to the revised Colorado River Water Delivery Agreement (in draft) that was developed as a result of recently completed negotiations on the Quantification Settlement Agreement (QSA). We concur with your findings that the analysis provided in the Bureau of Reclamation's (Reclamation) Biological Assessment (BA) and our BO adequately address the additional conservation and transfer of a cumulative total of 145 thousand acre-feet (KAF), with a maximum cumulative reduction of inflows to the Salton Sea of 72.5 KAF, from Imperial Irrigation District (IID) for the benefit of the Metropolitan Water District of Southern California (MWD) and/or the San Diego County Water Authority (SDCWA). This additional component may be necessary to meet the benchmark requirements in the Interim Surplus Guidelines (ISG). The analysis of the effects indicates that the conservation measures as described in the BA and BO adequately offset the impacts to the California brown pelican (*Pelecanus occidentalis*), Yuma clapper rail (*Rallus longirostris yumanensis*), and desert pupfish (*Cyprinodon macularius*) even with the additional reduction in drain flows and inflows to the Salton Sea associated with the conservation and transfer of this "benchmark" water. Although this was the only new water transfer component requiring approval from the Department of the Interior, the Colorado River Water Delivery Agreement does not preclude, and the QSA and associated legislation recently passed by the State of California call for, additional activities that have not been addressed in this consultation. These are discussed below.

Your letter indicates that there are two blocks of water that may also be conserved and transferred as part of the revised agreements. The 800 KAF block referred to in the negotiations

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as mitigation water is the functional equivalent of the 15-year Minimization Plan described in the BA/BO (i.e., water for the Salton Sea to replace inflow reductions resulting from water conservation). However, the State legislation allows for the possible transfer of this water out of the Salton Sea basin if compatible with a Salton Sea restoration plan to be developed by the State. The use of this water for anything other than the 15-year Minimization Plan as described in the BA/BO has not been analyzed as part of the consultation, nor has incidental take of listed species been exempted for this activity. Similarly, your letter notes that there is an additional block of 800 KAF that may be conserved for sale to the California Department of Water Resources and ultimate resale to the MWD. Details regarding the implementation of this component are not available at this time. The conservation and transfer of this water out of the Salton Sea basin has not been analyzed in the BA/BO, and incidental take of listed species has not been exempted for these activities. Re-initiation of the consultation would be required prior to either of these changes in water use being implemented, and additional conservation measures may be required to offset the impacts associated with these activities.

The revised agreements do not preclude the conservation and transfer of water from IID to SDCWA earlier or at greater volumes than called for in the current schedule. However, the analysis in the BA and BO used the specific volumes of conservation and transfer on the specific schedule described in the 15-year Minimization Plan to complete the resource equivalency analysis. Any increase in the volume or rate of water transfer would go beyond scope of the BA/BO analysis. Re-initiation of the consultation would be required prior to such increases in the rate or volume of the water transfer. This also would be the case if the volume of water conserved and transferred to meet the ISG (benchmark water), or the associated reductions in Salton Sea inflows, were to exceed the volumes described above (145 KAF and 72.5 KAF, respectively).

The QSA allows for the use of East Mesa groundwater as a substitute for IID conserved water in the 15-year Minimization Plan. This approach was not analyzed in the BA and the BO, nor was it included in the Environmental Impact Report/Environmental Impact Statement completed for the project. Re-initiation of the consultation would be necessary prior to the implementation of this activity to determine if there are additional impacts to the listed species addressed in the BO and/or impacts to additional listed species that were not included in the BO. No incidental take has been exempted for this activity.

We would like to reiterate that the receipt and use of conserved and transferred water by MWD, SDCWA and Coachella Valley Water District (CVWD) is not addressed in the BO. CVWD currently is pursuing Endangered Species Act compliance for this use through the Coachella Valley Multiple Species Habitat Conservation Plan.

Reclamation previously consulted on the ISG and the Secretarial Implementation Agreements with the Service's Arizona Fish and Wildlife Office (AESO/SE 2-21-00-F-273 dated January 12, 2001). That consultation analyzed the effects on listed species of a change in the point of diversion of 400 KAF of Colorado River water per year from Imperial Dam to Lake Havasu. The

revised agreements allow for additional blocks of water to be conserved and transferred by IID to MWD and/or SDCWA. If the cumulative volume of these transfers would result in the change in point of diversion for a volume of water greater than 400 KAF in one or more years during the term of the agreements, then Reclamation would need to re-initiate that consultation so that the impacts of the increased volume of diversion can be analyzed.

We continue to appreciate the exceptional support provided by Reclamation staff in addressing issues related to the water transfer. We look forward to working with you and your staff to implement the conservation measures included in your program once the QSA has been signed. If you have any questions about our concurrence or comments, or would like to discuss any other aspects of the IID water transfer, please contact Carol Roberts of my staff at (760) 431-9440 ext. 271.