

From: Jerry Zimmerman [grzimmerman@crb.ca.gov]

Sent: Monday, April 30, 2007 2:23 PM

To: danielle_robinson@ios.doi.gov; bjohnson@usbr.gov; Jayne Harkins; Rick Gold; 'LC strategies'

Cc: bart@fisherwireless.com; Pat Tyrrell; pat.mulroy@lvvwd.com; hrguenther@azwater.gov;

rod.kuharich@state.co.us; Scott Balcomb; Dennis Strong; John R. D'Antonio, Jr.; Richard Bunker; Don Ostler

Subject: Comments on Reclamation's DEIS

Attachments: Congressional Budget Justification FY 2008 US Dept of State Page 838.PDF; Kempthorne Ltr_04302007.pdf; Table E-2 Comments.pdf; Table G-18 Comments.pdf

Attached for your consideration are the comments and supporting documentation of the Colorado River Board of California on the DEIS for *Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead*. Thank you for providing the Board the opportunity to comment on this important matter. A hard copy is being sent to you under a separate cover.

Thanks,

Jerry

Gerald R. Zimmerman
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**CONGRESSIONAL
BUDGET JUSTIFICATION**

FISCAL YEAR 2008



**United States
Department of State**

INTERNATIONAL BOUNDARY AND WATER COMMISSION - SALARIES AND EXPENSES

Administration

(\$ in thousands)

	Positions		Total Funds
	American	FSN	
FY 2008 Request	59	0	5,799

The FY 2008 budget request is \$5,799,000 for IBWC Administration activities.

FY 2007 Administration Department plans consist of the following:

- Implementation of the provisions of existing treaties and binational agreements;
- Pursue compliance and implementation of applicable domestic laws, mandates, and regulations;
- Continue to exercise the agency's administrative functions and activities, including human resources management, budget, procurement, payroll, property, and finance and accounting with modern information management capabilities using established internal control procedures;
- Ensure full implementation of policies and procedures, which conform to federal statutes and regulations, by using the Commissioner's executive staff which include, two principle engineers, chief administrative officer, legal counsel, and foreign affairs advisors who possess the expertise in the complexities related to international negotiations and agreements and provide guidance on all matters related to the full scope and operations of the USIBWC;
- Publication of the proceedings of the Binational Rio Grande Summit. Based on the results of the Summit, submit recommendations to the two Governments for the sustainable management of the Rio Grande Basin;
- Conclude a minute related to implementation of the IBWC Minute 311/Public Law 106-457 sanitation project for San Diego-Tijuana;
- Conclude discussions or consultations with Mexico related to development of shortage criteria for Colorado River deliveries carried out pursuant to the 1944 Water Treaty;
- Engage in consultations with Mexico regarding Mexican water deliveries to the United States under the 1944 Water Treaty;
- Continue to aggressively pursue implementation of the President's Management Agenda Program Initiatives, and in accordance with the various laws, regulations, and OMB circulars and guidance;
- Continue to fully comply with the President's goal to eliminate improper payments, which the USIBWC has excelled in meeting in prior years. Independent financial audits for the last five years confirm that the USIBWC fully implements generally accepted accounting principles for federal financial reporting purposes;
- Develop an information resources management (IRM) plan, which describes information and technology management functions and activities, along with an information technology/information resources management (IT/IRM) plan. This plan supports the USIBWC Strategic Goals, ensuring that IT investments are provided and funded only where they have the greatest impact on mission results;
- Continue to utilize the Capital Planning & Investment Control (CPIC) process to assist in the review of new capital investments for construction projects;
- Initiated the development of all Federal Information Security Management Act (FISMA) requirements;
- Comply with new initiatives in accordance with OMB Circulars A-123;
- Full implementation of Executive Order 13031, Federal Alternative-Fueled Vehicle Leadership.

COLORADO RIVER BOARD OF CALIFORNIA

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VIA: Electronic Mail
& U.S. Mail

April 30, 2007

The Honorable Dirk Kempthorne, Secretary
Department of the Interior
1849 C Street, NW
Washington, D.C. 20240

Re: Colorado River Board of California Comments on *Draft Environmental Impact Statement, Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead*

Dear Secretary Kempthorne:

Thank you for the opportunity for California to provide comments on the *Draft Environmental Impact Statement, Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead* (72 FR 39, 9026-9028) (February 28, 2007) ("DEIS") released for review and comment by the U.S. Bureau of Reclamation (Reclamation). The purpose of this letter is to provide the Department of the Interior and Reclamation with several comments associated with the DEIS, as well as indicate California's overall support for the adoption of the Basin States Alternative as the preferred alternative in the Final Environmental Impact Statement (FEIS) and subsequent Record of Decision (ROD).

As the Department of the Interior knows, the water and power resources of the Colorado River System are of utmost importance to the 36 million residents in the State of California, particularly the nearly 21 million residents in the metropolitan and agricultural regions of southern California. Water supplies diverted from the mainstream of the Colorado River, and utilized in southern California, support an overall service area economy in excess of \$850 billion annually. Consequently, decisions made regarding the management, use, and accounting of Colorado River water are of significant interest and concern to the State of California, the Colorado River Board of California (Board), as well as specific agencies within California holding entitlements to Colorado River mainstream water.

With the adoption of the Interim Surplus Guidelines in January 2001 and California's implementation of the 2003 Colorado River Water Delivery Agreement and Quantification Settlement Agreement (QSA), the State's Colorado River water entitlement-holders have worked diligently to ensure that California continues to live within its basic mainstream apportionment of 4.4 million acre-feet, while encouraging and supporting the efficient management and administration of the Colorado River reservoir system. Ongoing programs and activities within California and the other Lower Division States contribute to more efficient management of the water supplies stored, diverted, and used by entitlement-holders in the Lower and Upper Basins (e.g., All-American Canal

The Honorable Dirk Kempthorne, Secretary
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Lining Project, Lower Colorado Water Supply Project, Off-stream storage programs, weather modification demonstration programs, etc.).

With the goal of establishing an interim period of more efficient reservoir system management and shortage guidelines during periods of drought within the Basin, California urges the Department of the Interior to adopt the Basin States' Alternative as articulated in the Basin States' Proposed Guidelines as the preferred alternative in the FEIS and subsequent ROD. Toward this end, California joins with the other six Colorado River Basin states in support of the following elements of the Basin States' package submitted to the Department of the Interior and Reclamation on April 30, 2007: (1) Basin States' Letter, dated April 30, 2007; (2) Proposed Interim Guidelines for Colorado River Operations; (3) Agreement Concerning Colorado River Management and Operations; (4) Lower Colorado River Basin Intentionally Created Surplus Forbearance Agreement; and (5) Shortage Sharing Agreement between Arizona and Nevada. An additional element of this package will need to be a water delivery agreement or agreements between the Secretary and the Parties to the Forbearance Agreement.

California's Specific Comments on the DEIS

In addition to California's endorsement and support of the Basin States' Alternative, the Board submits several specific comments regarding the information described within the DEIS. These comments address issues or concerns that for the most part are unique to California and are therefore submitted separately from the comments submitted on April 30, 2007, by the Colorado River Basin States Governors' Representatives on Colorado River Operations. These specific comments or concerns include the following:

Issues Related to Stage-Two Shortage-Sharing

In various places within the DEIS (e.g., section 2.2.1 on pages 2-5 and 2-6 and section 4.2.7.1 on pages 4-9 and 4-10), the document sets forth an assumption regarding Stage-Two shortages that result in California receiving 60 to 65 percent of such shortages. This is an incorrect assumption under the Law of the River and does not reflect the priority position of the California water delivery contractors relative to the positions of other Colorado River mainstream entitlement-holders.

If interim guidelines on Colorado River operations proposed for adoption by the Secretary cover possible shortage situations greater than the post-September 30, 1968, volume of contractual and other water rights (approximately 1.7 to 1.8 million acre-feet (maf) depending upon the year), then imposition of Stage-Two shortages would be based on the priority dates of the water entitlements in the June 25, 1929, to September 30, 1968, pool of contracts and other water rights without regard to state lines. Delivery of water would then be reduced to the holder of the second most recent priority if insufficient water were available for delivery. Reductions in deliveries would then continue in

reverse order of priority date. If the maximum shortage considered for purposes of this DEIS during the interim period is 2.5 maf, then the correct assumption is that California entitlement-holders would not experience a reduction in deliveries during a Stage-Two shortage.

Tables E-2 and G-18 and California Entitlement Holders

Table E-2 (State of California Colorado River Water Entitlement Holders and Priorities; Appendix E) contains a listing of California entitlement-holders and their diversion and consumptive use entitlements. Table G-18, (State of California; Appendix G) contains the listing of California entitlement-holders and their assumed adjusted deliveries during a 400,000 acre-foot shortage in 2017. These two tables contain several errors. For ease of reference, the Board has attached corrected versions of these tables and requests Reclamation to make these corrections in the FEIS.

Both Tables E-2 and G-18 imply that Water Certificates have been issued for use of water on the Yuma Island in California. The Board has found no evidence of the issuance of any Water Certificates for use of water on the Island. Thus, Reclamation should clarify this fact in the FEIS and revise the tables accordingly.

Furthermore, Reclamation should refer to the August 5 and 9, 2002, "Submittal of the Colorado River Board of California, Coachella Valley Water District, Imperial Irrigation District, Los Angeles Department of Water and Power, Metropolitan Water District of Southern California, Palo Verde Irrigation District, and San Diego County Water Authority regarding 'Review of Water Use On The Yuma Island,'" copies of which were provided to Reclamation's Lower Colorado Regional Director. It has been the long-standing position of the Board and the six agencies that water use on Yuma Island in California are illegal and should be eliminated, particularly when California is limited to use of 4.4 maf of water from the Colorado River.

Lake Mead Reservoir Elevations

Two of the alternatives analyzed in the DEIS include imposition of reduced deliveries to permit the elevation of Lake Mead to remain at or above elevation 1,000 feet, Southern Nevada Water Authority's lowest water intake. This condition, however, was not an element of the Basin States' Alternative. California suggests that, in order to present information on the full range of potential impacts associated with possible droughts that is as complete and accurate as possible, the FEIS include 2005 natural flow data and further sensitivity analysis of the possible influence of climate change and global warming on runoff during the 2008 to 2060 study period. In this regard, California suggests that Reclamation review the latest data and information from reports such as the recent United Nations report on climate change and global warming and other proxy record data describing potential streamflow and precipitation conditions within the Colorado River Basin.

Voluntary/Involuntary Shortages & Economic Impacts Analysis

In numerous places in the DEIS the potential impacts of voluntary (i.e., contained within the ‘Conservation Before Shortage’ Alternative) and involuntary shortages are analyzed and discussed. As a general matter, California suggests that the potential socioeconomic and air quality impacts of such shortages need to be more fully addressed. For example, under the ‘Conservation Before Shortage’ Alternative the maximum suggested water conservation amount is 600,000 acre-feet in one year. If that were to be carried out through land fallowing, about 100,000 acres of farmland would need to be fallowed. Although the exact location of the fallowed farmland cannot be forecast with precision at this stage, the general location of the larger irrigation districts in California and Arizona is well understood. Accordingly, the FEIS should contain a more thorough explanation and analysis of the potential impact resulting from land fallowing as a means of voluntary conservation.

With respect to the ‘Conservation Before Shortage’ Alternative, page 4-275 of the DEIS states that the potential socioeconomic impacts resulting from voluntary shortages would be offset by payments made to farmers to forgo raising crops. Given the large volume of fallowing that might occur under this alternative, it is unclear whether this is a correct assumption supported by available data. For example, the FEIS should include reference to economic data related to ongoing voluntary fallowing programs to either support or refine this conclusion.

The air quality section of the DEIS at page 4-149 describes the potential effects on air quality at Lake Powell, Lake Mead, and the Glen Canyon-Lake Mead reach from particulate matter emissions. This section of the DEIS does not describe the potential effects on air quality resulting from the fallowing of as much as 100,000 acres of farmland as a voluntary conservation measure or how those potential effects may be minimized and mitigated.

Default Operating Criteria after Termination of the Interim Guidelines

Consistent with the 2001 Interim Surplus Guidelines, the Basin States’ Proposed Interim Guidelines state: “At the conclusion of the effective period of these Guidelines, the operating criteria for Lake Powell and Lake Mead are assumed to revert to the operating criteria used to model baseline conditions in the Final Environmental Impact Statement for the Interim Surplus Guidelines dated December 2000 (i.e., modeling assumptions are based upon a 70R strategy for the period commencing January 1, 2026 (for preparation of the 2027 AOP)).”

The Basin States’ proposed guidelines regarding access to surplus supplies address a full range of expected operations for both Lake Powell and Lake Mead during the interim period of 2008 through 2025 (through preparation of the 2026 AOP). Since there is no reliable way to predict the elevation of the reservoirs on January 1, 2027, it is important to address the possibility that the Lower Basin would be in a Shortage Condition, rather than in a Surplus Condition.

The DEIS addressed this scenario. Presumably, the FEIS, new interim surplus guidelines, and ROD also will address this possibility of shortage conditions. Therefore, to be consistent with the assumptions in the DEIS, California suggests that Reclamation apply the modeling assumption of “80P1050” (shortage trigger elevation to prevent Lake Mead’s water level from declining below 1,050 feet with approximately an 80 percent probability, commencing January 1, 2026) for preparation of the 2027 AOP. Reclamation would apply this default strategy if the Secretary and the Basin States could not agree on an operating strategy that extends or modifies any new interim guidelines for Colorado River operations.

Recent Mainstream Water Use by California

Several places in the DEIS suggest that California is in the process of *reducing* its water use from the Colorado River (see, e.g., p. 1-22:4-6, p. 1-25 and 3-36). These sections of the DEIS reflect an inaccurate perspective. As Reclamation has reported in its annual “Colorado River Accounting and Water Use Report, Arizona, California, and Nevada,” California’s annual Colorado River water use was less than 4.4 million acre-feet in 2004 and 2005. Accordingly, it is inaccurate to suggest that California needs to implement programs to assist “in reducing its projected Colorado River depletion to its normal apportionment of 4.4 maf” (page 3-36). Under the current version of California’s Colorado River Water Use Plan and other documents, such as the 2003 QSA and related agreements, California is in the process of shifting some water use within its 4.4 maf per year normal apportionment, from agricultural to municipal/industrial use for a period of years.

Description of Conservation Before Shortage Alternative

In various places in the DEIS, and specifically in Appendix M (modeling assumptions) the ‘Conservation Before Shortage’ Alternative is discussed and analyzed. However, Reclamation does not carefully distinguish between two separate components advanced in the ‘Conservation Before Shortage’ Alternative in Chapter 2 of the DEIS, Description of Alternatives, at page 2-12:

- 1) actions to avoid a shortage by paying users to fallow land; and
- 2) allowing “others” to participate in the Intentionally Created Surplus (ICS) program by creating ICS credits to meet certain proposed consumptive uses.

The main purpose of the ‘Conservation Before Shortage’ Alternative, is to create storage in Lake Mead through compensated voluntary land fallowing, hopefully to counteract the impact of Lower Basin shortages. Lake Mead would retain that water presumably to forestall a shortage threat,

instead of devoting that water to specific downstream uses.¹ In contrast, the development of ICS credits by “others” is for the specific purpose of having water that can then be *used* for specific environmental or other purposes either within the United States or in Mexico. Section 2.4 of the FEIS should clearly explain these concepts so that the reader fully will understand these two distinct operational approaches.

Mexican Treaty Issues

The “Congressional Budget Justification, Fiscal Year 2008, United States Department of State,” states on page 838 (copy attached) that the United States Section of the International Boundary and Water Commission (USIBWC) plans to:

“Conclude discussions or consultations with Mexico related to development of shortage criteria for Colorado River deliveries carried out pursuant to the 1944 Water Treaty”

in Fiscal Year 2007. California fully supports the conclusion of these discussions or consultations in Fiscal Year 2007 to permit USIBWC to inform Reclamation of the volume of deliveries to be made to Mexico, beginning in 2008, in years in which insufficient mainstream water is available for release to satisfy annual consumptive use of 7.5 maf in Arizona, California, and Nevada.

Conclusion of these discussions or consultations is important because of the interrelationship between reductions in deliveries to Mexico during shortage conditions and the effectiveness of the Basin States Proposal for stepped reductions in deliveries to minimize the frequency and magnitude of shortages in the Colorado River System. The Basin States Proposal is premised on deliveries to Mexico being reduced in proportion to the reduction in deliveries to the Lower Division States under the Step One, Step Two and Step Three reductions, so that the aggregate annual reductions in deliveries in both the Lower Division States and Mexico under those steps will total 400,000 acre-feet, 500,000 acre-feet and 600,000 acre-feet, respectively. The DEIS has used this assumption in modeling the impacts of the Basin States Alternative, and the Basin States Agreement, which was included in the package submitted to the Department of the Interior on April 30, 2007, provides that California users shall not bear any portion of those reductions. These aggregate reductions in deliveries from Lake Mead are essential to maintain reservoir levels under the coordinated operating criteria contained in the Basin States Proposal. These stepped reductions are not the exclusive conditions under which deliveries to Mexico may be reduced, and other circumstances may require reductions in deliveries to Mexico under the 1944 Water Treaty with Mexico.

¹ See page 2 of the ‘Conservation Before Shortage’ proposal in Appendix K – “Federal ICS credits created in excess of the federal cap [of 1.5 maf to be devoted to replacement of bypass flows] would become system water.”

Elimination of Interim Surplus Guidelines benchmarks

Section 10 of the proposed Guidelines incorporates certain provisions from Section 5 of the Interim Surplus Guidelines (ISG) approved in 2001. The purpose and function of Section 5 of the ISG, and of the benchmarks in particular, was to provide assurances to the other Basin states as California reduced its use of Colorado River water from about 5.2 maf to 4.4 maf over a period of years. In fact, at the time of the development of the ISG this was referred to as a “soft landing” for California so as to not unnecessarily impose an abrupt usage reduction from 5.2 maf to 4.4 maf if surplus water was not available. However, in light of the drought situation that unfolded in 2002 and 2003, California was compelled to reduce its use of Colorado River water to 4.4 maf at the beginning of 2003, and California’s use of Colorado River water was below 4.4 maf in 2004 and 2005 and based on preliminary records in 2006.

Furthermore, the terms of the 2003 Colorado River Water Delivery Agreement, the QSA, and related agreements are binding on the California parties; and there is also an order of the California State Water Resources Control Board relating to the transfer of conserved water from Imperial Irrigation District. All of these factors indicate that circumstances have changed and the magnitude of California’s use of Colorado River water poses no meaningful risk to the other Basin states. Moreover, any failure or modification of the QSA and related agreements presents risks solely for parties within California who would then have to consider remedies that would be effectuated by the California parties. Stated differently, there is currently no meaningful purpose or function behind the California benchmark provisions in the proposed Guidelines (see sections 1.7.6.2, 1.8.3, and 1.8.4 of Volume 1 of the DEIS) as benchmarks for the State of California’s agricultural use are the subject of Section 8 of the October 10, 2003, Colorado River Water Delivery Agreement that Secretary of the Interior Norton signed. Thus, the benchmarks and associated text need not be a part of the final EIS and the ROD.

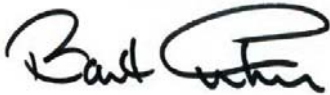
Conclusion

In summary, California wishes to reiterate its support for the Basin States’ Alternative, as described in the Basin States’ “Proposed Interim Guidelines for Colorado River Operations.” Further, California urges the Department of the Interior and Reclamation to adopt this proposal as the preferred alternative in the FEIS and to reflect this decision in the subsequent ROD. This proposal represents many months of hard work among the Basin States representatives; and it reflects the spirit of interstate comity and goodwill that has been developed during the course of this very important process. Finally, California requests that the Department of the Interior forward California’s specific comments on the DEIS to Reclamation for its use in preparing the FEIS for your review and concurrence.

The Honorable Dirk Kempthorne, Secretary
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The Colorado River Board of California thanks you for the opportunity to participate in this very important process, as well as providing you with specific comments on the DEIS. Please feel free to contact me at (818) 500-1625 if you have any questions, or require additional information.

Sincerely,

A handwritten signature in black ink, appearing to read "Dana B. Fisher, Jr.", written in a cursive style.

Dana B. Fisher, Jr.
Chairman

Attachments (3)

cc: Robert W. Johnson, Commissioner of Reclamation
Jayne Harkins, Acting Regional Director, Lower Colorado Region of Reclamation
Rick L. Gold, Regional Director, Upper Colorado Region of Reclamation
strategies@lc.usbr.gov
Colorado River Basin States Representatives

Appendix E Colorado River Water Entitlement Priority Systems within Arizona, California, and Nevada

Table E-2 State of California Colorado River Water Entitlement Holders and Priorities as of 2007

Priority	Entitlement Holder	Contract No.	Date	Use	Entitlement		
					Diversion	CU	
Surplus	Bureau of Land Management	8-07-30-W0374	1973	M&I	4,000	1,000	
	City of Needles	5-07-30-W0091	1985	M&I	40,000	10,000	
	Coachella Valley Water District	7-07-30-W0150	1987	M&I/Ag	400,000	100,000	
	Department of the Navy	6-07-30-W0351	1999	M&I	253	23	
	Metropolitan Water District of Southern California	7-07-30-W0171	1987	M&I	480,000	180,000	
	TOTAL				294,023	291,023	
7 th	For agricultural use in the Colorado River Basin in California as said basin is designated on map no. 23000 of the Department of the Interior, Bureau of Reclamation						
6 th , 7 th , Unused & Surplus	Palo Verde Irrigation District (6b) - Lower Palo Verde Mesa Lands	PVID20733C	1933	Ag	≤16,000 acres	Unquantified	
	Coachella Valley Water District (6a)	11r-781	1934	Ag		119,000	
	Imperial Irrigation District (6a)	11r-747	1932	Ag		63,000	
	Palo Verde Irrigation District (6b) - Mesa Lands Metropolitan Water District of Southern California	PVID20733C Colorado River Water Delivery Agreement	4933	Ag		38,000	
TOTAL					300,000		
5 th , 6 th , Unused & Surplus	City of San Diego County Water Authority (5b) (transferred right to Metropolitan ET)	11r-1454	19334	M&I		662,000	
4 th , 5 th	Metropolitan Water District of Southern California (5a) (Annexed 5b's Entitlement)	11r-645	1930, 1931	M&I		662,000	
	TOTAL					662,000	
	Metropolitan Water District of Southern California (4)	11r-645	1930, 1931	M&I		550,000	
	TOTAL					550,000	
3 rd , 4 th	Palo Verde Irrigation District (3b) - Lower Palo Verde Mesa Lands	PVID20733C_P5	1933	Ag	≤<16,000 acres	Unquantified	
	Coachella Valley Water District (3a)	11r-781	1934	Ag		347,000 [CRB1]	
	To permit the Secretary of the Interior to Satisfy Present Perfected Rights (PPR) Uses					3,000	
	Metropolitan Water District of Southern California	Agreement Relating to Supplemental Water Delivery Agreement					[CRB2]
	San Diego County Water Authority	Colorado River Water Delivery Agreement					[CRB3]
	Imperial Irrigation Districts (3a) ^{2a}	11r-747	1932	Ag		300,470,561,469	
2 nd , 3 rd	To permit the Secretary of the Interior to Satisfy PPR Uses					11,500	
	Metropolitan Water District of Southern California	1988-Conservation Agreement and Approval Agreement	4988	M&I		8599,000	
	Coachella Valley Water District	Approval Agreement				20,000	
	San Diego County Water Authority	SDCWA Transfer Colorado River Water Delivery Agreement				7530,000 ³	
1 st	Lower Colorado Water Supply Project	Lower Colorado Water Supply Project Exchange Contract				8,030 ⁴	
	TOTAL					830,000,908,459	
2 nd , 3 rd	Yuma Project, Reservation Division (includes Bard, Indian, Islands)	Water Certificates ⁵	1905	Ind./Ag	≤<25,000 acres	Unquantified	

**Colorado River Water Entitlement Priority
Systems within Arizona, California, and Nevada**

Appendix E

**Table E-2
State of California Colorado River Water Entitlement Holders and Priorities as of 2007**

Priority	Entitlement Holder	Contract No.	Date	Use	Entitlement	
					Diversion	CU
1 st / ₂ nd	TOTAL				0	Unquantified⁰
	Palo Verde Irrigation District (1) – Valley Lands	PVID20733C_P2	1933	Ag	≤104,500 acres unaffiliated	Unquantified
	TOTAL				0	Unquantified⁰
	One Acre PPR's	PPR's 45-80	1895-1928	M&I	36	21,62
	Sonny Gowan (Gramms)	PPR 32 & 7-07-30-W0158	1928	Ag	180	
	Chagnon	PPR No. 41	1925	Ag	120	
	Stephenson	PPR No. 30	1923	Ag	240	
	Colorado River Sportsmen's League	PPR No. 36	1921	Ag	96	
	Andrade (AKA Andrade, Andrews, Bly, Brown, Carney, Daniel, Fairbanks, Glynn, Lindeman, Leon, Schroeder, Sherman, Perrett, Wetmore, Wetmore, Williams)	PPR No. 38	1921	M&I/Ag	66	
	Milpitas	PPR No. 34	1918	Ag	108	
	Lawrence	PPR No. 42	1915	Ag	120	
	Milpitas	PPR No. 37	1914	Ag	69	
	Morgan	PPR No. 33	1913	Ag	150	
	Chemehuevi Indian Reservation	PPR No. 22	2/2/1907	Ind.	(i) 11,340	or (ii) CU required for irrigation of 1,900 acres and for satisfaction of related uses, whichever of (i) or (ii) is less
	Cooper	PPR No. 40	1905	Ag	60	or (ii) CU required for irrigation of 6,294 acres and for satisfaction of related uses, whichever of (i) or (ii) is less
4 th (PPR's) ³ **	Yuma Project, Reservation Division (includes non-Indian portion/Island)	PPR 28 & Water Cert.	7/18/1905	Ind./Ag	(i) 38,270	or (ii) CU required for irrigation of 424,145 acres and for satisfaction of related uses, whichever of (i) or (ii) is less
	Reynolds	PPR No. 39	1904	Ag	36	or (ii) CU required for irrigation of 424,145 acres and for satisfaction of related uses, whichever of (i) or (ii) is less
	Imperial Irrigation District (includes lands in CAWWD)	PPR No. 27	1901	Ag	(i) 2,600,000	or (ii) CU required for irrigation of 424,145 acres and for satisfaction of related uses, whichever of (i) or (ii) is less
	Atchison, Topeka, and Santa Fe Railway Co. (being assigned to Needles)	PPR No. 44	1896	M&I	1,260	273

**Colorado River Water Entitlement Priority
Systems within Arizona, California, and Nevada**

Appendix E

**Table E-2
State of California Colorado River Water Entitlement Holders and Priorities as of 2007**

Priority	Entitlement Holder	Contract No.	Date	Use	Entitlement	
					Diversion	CU
	Picacho Development Corp and CA Department of Parks and Recreation	PPR 31 & 8-07-30-W0187	1893	Ag	120	or (ii) CU required for irrigation of 2,587 acres and for satisfaction of related uses, whichever of (i) or (ii) is less
	Fort Mohave Indian Reservation	PPR No. 25	9/18/1890	Ind.	(i) 16,720	or (ii) CU required for irrigation of 10,742 acres and for satisfaction of related uses, whichever of (i) or (ii) is less
	Simons City of Needles	PPR No. 35 PPR No. 43/5-XX-30-W0445	1889 1885	Ag M&I	60 1,500	or (ii) CU required for irrigation of 33,604 acres and for satisfaction of related uses, whichever of (i) or (ii) is less
	Fort Yuma Indian Reservation	PPR No. 23	1/9/1884	Ind.	(i) 71,616	or (ii) CU required for irrigation of 33,604 acres and for satisfaction of related uses, whichever of (i) or (ii) is less
	Palo Verde Irrigation District	PPR No. 26	1877	Ag	(i) 219,780	or (ii) CU required for irrigation of 879 acres and for satisfaction of related uses, whichever of (i) or (ii) is less
	Colorado River Indian Reservation	PPR No. 24	5/15/1876	Ind.	(i) 5,860	or (ii) CU required for irrigation of 879 acres and for satisfaction of related uses, whichever of (i) or (ii) is less

Colorado River Water Entitlement Priority Systems within Arizona, California, and Nevada

Appendix E

**Table E-2
State of California Colorado River Water Entitlement Holders and Priorities as of 2007**

Priority	Entitlement Holder	Contract No.	Date	Use	Entitlement	
					Diversion	CU
	Colorado River Indian Reservation	PPR No. 24	11/16/1874	Ind.	(i) 40,241	or (ii) CU required for irrigation of 6,037 acres and for satisfaction of related uses, whichever of (i) or (ii) is less
	Colorado River Indian Reservation	PPR No. 24	10/22/1873	Ind.	(i) 10,745	or (ii) CU required for irrigation of 1,612 acres and for satisfaction of related uses, whichever of (i) or (ii) is less
	Yuma Associates LTD and Winterhaven Water District (262.8 M&I)	PPR 29 & 4-07-30-W0053	1856	M&I/Ag	780	
	TOTAL				3,019,573	4,245

Note: CU means Consumptive Use; all units are in AFY. Forbearances and Transfers/Leases are displayed below the Priority Entitlement Holder and indented five spaces.

¹Under contract 11-645, the Metropolitan Water District of Southern California has the exclusive right to withdraw and divert into its aqueduct any water in Lake Mead accumulated to the individual credit of said District (not exceeding at any one time 5 million acre-feet in the aggregate) by reason of reduced diversions by said District, provided that accumulations shall be subject to such conditions as to accumulation, retention, release, and withdrawal as the Secretary of the Interior may from time to time prescribe in his discretion.

²ID's PPR protects 2,600,000 acre-feet of its Seven Party 3rd/4th Priority Entitlement. Therefore the Use of the 3rd/4th priority entitlement shown in this table is reduced by the PPR right, and forbearances and transfers as 44,500af reduction agreed to in the 2003 Colorado River Water Delivery Agreement, and the exchange for Lower Colorado Water Supply Project water QSA for the tribes. It is assumed that water forborne and transferred by IID QSA agreements retains a 3rd/4th priority right. Of the 667,459af remaining 3rd/4th priority right, IID forbears use of 11,500 af to permit the Secretary of the Interior to satisfy PPR use not covered by the Seven Party Agreement, 85,000 af for MWD, receives 90,000af and 20,000 af for CVWD, and IID transfers 50,000 af to San Diego County Water Authority receives 30,000 acre-feet in 2007. IID forbears use of Colorado River water for Lower Colorado Water Supply Project water discharged into the All-American Canal.

³In 2007, with 25,000 acre-feet of this amount for Salton Sea mitigation purposes.

⁴In 2007.

⁵Incorporation of Yuma Island pumps' use within this priority does not represent either a final approval of this use by Reclamation or a final determination of the appropriate Decree accounting for this use; and is not an admission by any Colorado River contractor as to the legality of this use or diversion of Colorado River water. No Water Certificates have been issued for use of water on the Yuma Island in California.

⁶PPR's are reduced last in the region, in order of priority date, regardless of state lines.

These priorities are based on the California Seven Party Agreement, modified to include the PPR's identified by the Consolidated Decree and executed contracts and agreements.

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[CRB1]Amount to be inserted by the Bureau of Reclamation once the Secretary of the Interior has issued the determination of the amount of water conserved by the Coachella Canal Lining Project with the amount equal to 327,000 minus the amount of water resulting from the Coachella Canal Lining Project made available to Metropolitan and San Diego County Water Authority.

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[CRB2]Amount to be inserted by the Bureau of Reclamation once the Secretary of the Interior has issued the determination of the amount of water conserved by the Coachella Canal Lining Project.

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[CRB3]Amount to be inserted by the Bureau of Reclamation once the Secretary of the Interior has issued the determination of the amount of water conserved by the Coachella Canal Lining Project.

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Table G-18
State of California

2017	Priority	No.	Entitlement Holder	Contract No.	Date	Use	ENTITLEMENT		FULL ENTITLEMENT USE ^{1,2}		ADJUSTED DELIVERY		SHORTAGE ALLOCATION	
							Diversion	CU	Diversion	CU	Diversion	CU	Diversion	CU
			State Consumptive Use						4,400,000		4,400,000			0
		15	Metropolitan Water District of Southern California ² (4)	11-645	1930-1931	M&I	550,000		464,935,547 -535	461,872,486 -872	464,935,547 -535	461,872,486 -872		0
			TOTAL				0	550,000	464,935,547 -535	461,872,486 -872	464,935,547 -535	461,872,486 -872	0	0
			PERCENT									100%		0%
		18	Palo Verde Irrigation District (3b) - Lower Palo Verde Mesa Lands	PVID2073C_P5	1933	Ag	≤16,000 acres	Unquantified	26,9090	11,4600	26,9090	11,4600	0	0
		6	Coachella Valley Water District (3a)	11-781	1934	Ag		347,900 [CRB1]	336,973 [CRB2]	327,900 [CRB3]	336,973 [CRB4]	327,900 [CRB5]	0	0
			Metropolitan Water District of Southern California or San Luis Rey Indian Water Rights Settlement Parties (Exchange with Metropolitan)	Agreement Relating to Supplemental Water		M&I or TBD		[CRB6]				[CRB7]		
			San Diego County Water Authority	Colorado River Water Delivery Agreement		M&I							[CRB10]	
		13	Imperial Irrigation District ³ (3a)	11-747	1932	Ag		93,459,561.4 59	96,146,577.292	93,459,561.4 -459	96,146,577.292	93,459,561.4 -459	0	0
		15	Metropolitan Water District of Southern California	1988 Cons. Agreement and Approval Agreement	1988	M&I		8599,000	85,000	85,000	85,000	85,000		
			Coachella Valley Water District	Approval Agreement /Acquisition Agreement		Ag		65,000	66,982	65,000	66,982	65,000		

¹Draft EIS – Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead

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State of California

2017	Priority	No.	Entitlement Holder	Contract No.	Date	Use	ENTITLEMENT		FULL ENTITLEMENT USE ^{1*}		ADJUSTED DELIVERY		SHORTAGE ALLOCATION	
							Diversion	CU	Diversion	CU	Diversion	CU	Diversion	CU
		21	San Diego County Water Authority****	Colorado River Water Delivery Agreement SDCWA Transfer		M&I		156,200,000	156,200	156,200	156,200	156,200		
			San Diego County Water Authority (Salton Sea Mitigation)	Colorado River Water Delivery Agreement			150,000		154,312	150,000	154,312	150,000		
			Metropolitan Water District of Southern California or San Luis Rey Indian Water Rights Settlement Parties (Exchange with Metropolitan)	Agreement Relating to Supplemental Water		M&I or TBD	11,500		11,500	11,500	11,500	11,500		
			Lower Colorado Water Supply Project	2-07-30-W0280	1992	M&I	10,000		Dependent upon demand and Protect capacity ⁰	Dependent upon demand and Protect capacity	Dependent upon demand and Protect capacity	Dependent upon demand and Protect capacity		
			TOTAL				4,028,159		944,264	888,159	944,264	888,159	0	0
			PERCENT				[CRB11]					100%		0%
		26	Yuma Project, Reservation Division (includes Bard ³ , Indian ³ , Island ⁵)	Water Certificates ⁴	1905	Ind./ Ag	Unquantified		13,644	7,545	13,644	7,545	0	0
			TOTAL				0		13,644	7,545	13,644	7,545	0	0
			PERCENT									100%		0%

February 2007

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2017	Priority	No.	Entitlement Holder	Contract No.	Date	Use	ENTITLEMENT		FULL ENTITLEMENT USE ^{1*}		ADJUSTED DELIVERY		SHORTAGE ALLOCATION	
							Diversion	CU	Diversion	CU	Diversion	CU	Diversion	CU
		18	Palo Verde Irrigation District ³ - Valley Lands (1)	PVID20733C _P2	1933	Ag	≤104,500 acres entitled	Unquantified	722,352,690 ,559	307,639,294 ,999	722,352,690 ,559	307,639,294 ,999	0	0

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2017	Priority	No.	Entitlement Holder	Contract No.	Date	Use	ENTITLEMENT		FULL ENTITLEMENT USE ^{1,2}		ADJUSTED DELIVERY		SHORTAGE ALLOCATION	
							Diversion	CU	Diversion	CU	Diversion	CU	Diversion	CU
			Metropolitan Water District of Southern California	Following and Forbearance Agreement		M&I		Dependent upon following call	Dependent upon following call	Dependent upon following call	Dependent upon following call			
			TOTAL				0	0	722,352,690	307,639,294	722,352,690	307,639,294	0	0
			PERCENT						100%					0%
		27	One Acre PPR's	PPR's 45-80	1895-1928	M&I	36	22	36	22	36	22	0	0
		23	Sonny Gowan (Grannis)	PPR 32 & 7-07-30-W0158	1928	Ag	180	108	180	108	180	108	0	0
		3	Chagnon	PPR No. 41	1925	Ag	120	72	120	72	120	72	0	0
		24	Stephenson	PPR No. 30	1923	Ag	240	144	240	144	240	144	0	0
		8	Colorado River Sportsmen's League	PPR No. 36	1921	Ag	96	58	96	58	96	58	0	0
		1	Andrade	PPR No. 38	1921	M&I /Ag	66	47	66	47	66	47	0	0
			(AKA Andrade, Andrews, Bly, Brown, Carney, Daniel, Fairbanks, Glynn, Lindeman, Leon, Schroeder, Sherman, Perrett, Wetmore, Wetmore, Williams)											
		16	Milpitas	PPR No. 34	1918	Ag	108	65	108	65	108	65	0	0
		14	Lawrence	PPR No. 42	1915	Ag	120	72	120	72	120	72	0	0
		16	Milpitas	PPR No. 37	1914	Ag	69	41	69	41	69	41	0	0
		17	Morgan	PPR No. 33	1913	Ag	150	90	150	90	150	90	0	0
		4	Chemehuevi Indian Reservation	PPR No. 22	1907	Ind.	11,340	6,094	11,340	6,094	11,340	6,094	0	0
		9	Cooper	PPR No. 40	1905	Ag	60	36	60	36	60	36	0	0

1. (PPR's) *

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2017	Priority	No.	Entitlement Holder	Contract No.	Date	Use	ENTITLEMENT		FULL ENTITLEMENT USE ^{1,2}		ADJUSTED DELIVERY		SHORTAGE ALLOCATION	
							Diversion	CU	Diversion	CU	Diversion	CU	Diversion	CU
			400,000											
		26	Yuma Project, Reservation Division (includes non-Indian portion/island)	PPR 28 & Water Cert.	1905	Ind./Ag	38,270	17,918	38,270	17,918	38,270	17,918	0	0
		20	Reynolds	PPR No. 39	1904	Ag	36	22	36	22	36	22	0	0
		13	Imperial Irrigation District (includes lands in CVWD)	PPR No. 27	1901	Ag	2,600,000	2,527,341	2,600,000	2,527,341	2,600,000	2,527,341	0	0
		5	Atchison, Topeka, and Santa Fe Railway Co. (being assigned to Needles)	PPR No. 44	1896	M&I	1,260	273	1,260	273	1,260	273	0	0
		19	Picacho Development Corp and CA Dept of Parks and Recreation	PPR 31 & 8-07-30-W0187	1893	Ag	120	66	120	66	120	66	0	0
		11	Fort Mohave Indian Reservation	PPR No. 25	1890	Ind.	16,720	8,994	16,720	8,994	16,720	8,994	0	0
		22	Simons	PPR No. 35	1889	Ag	60	36	60	36	60	36	0	0
		5	City of Needles	PPR No. 43/5-XX-30-W0445	1885	M&I	1,500	950	1,500	950	1,500	950	0	0
		12	Fort Yuma Indian Reservation	PPR No. 23	1/9/1884	Ind.	71,616	34,506	71,616	34,506	71,616	34,506	0	0
		18	Palo Verde Irrigation District	PPR No. 26	1877	Ag	219,780	93,601	219,780	93,601	219,780	93,601	0	0
		7	Colorado River Indian Reservation	PPR No. 24	1876	Ind.	5,860	3,324	5,860	3,324	5,860	3,324	0	0
		7	Colorado River Indian Reservation	PPR No. 24	1874	Ind.	40,241	22,823	40,241	22,823	40,241	22,823	0	0
		7	Colorado River Indian Reservation	PPR No. 24	1873	Ind.	10,745	6,094	10,745	6,094	10,745	6,094	0	0
		25	Yuma Associates LTD and Winterhaven Water District (262.8 M&I)	PPR 29 & 4-07-30-W0053	1856	M&I /Ag	780	528	780	528	780	528	0	0
			TOTAL				3,019,573	1,245	3,019,573	2,723,325	3,019,573	2,723,325	0	0
			PERCENT											
			CALIFORNIA TOTALS				3,310,596	2,541,403 [CRB12]	6,378,066	4,400,000	5,185,576	4,400,000	0	0
														100%
														0-
														1,192,49
														4,2

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2017 Priority	No.	Entitlement Holder	Contract No.	Date	Use	ENTITLEMENT		FULL ENTITLEMENT USE ^{1,2}		ADJUSTED DELIVERY		SHORTAGE ALLOCATION	
						Diversion	CU	Diversion	CU	Diversion	CU	Diversion	CU
		CALIFORNIA PERCENT											
												46, 422	1 0- 22 %
													10078%

Note: CU means Consumptive Use; TBD means To Be Determined; all units are in AFY. Forbearances and Transfers/Exchange Agreements are displayed below the Priority Entitlement Holder and indented five spaces and include the amount of water to be conserved by the All-American Linking Project.

¹-2004 Decree Accounting values and Diversion/CU conversion ratios were used to estimate not specified and unquantified entitlements. Consumptive use on Lower Palo Verde Mesa lands assumed to be equal to 2007 Palo Verde Irrigation District request.
²The difference between Metropolitan's diversion and CU is 100 percent of its return flow credit.
³A portion of this Seven Party Agreement entitlement is shown below in the PPR priority.
⁴Incorporation of Yuma Island pumps' use within this priority does not represent either a final approval of this use by Reclamation or a final determination of the appropriate Decree accounting for this use, and is not an admission by any Colorado River contractor as to the legality of this use or diversion of Colorado River water. No Water Certificates have been issued for use of water on the Yuma Island in California.
⁵PPR's are reduced last in the region, in order of priority date, regardless of state lines. It is assumed that each of the PPR holders would divert and consumptively use all of its PPR in 2017. (see PPR Spreadsheet).
 ****Met's return credit ratio was used for this new user.

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[CRB1] Amount to be inserted by the Bureau of Reclamation once the Secretary of the Interior has issued the determination of the amount of water conserved by the Coachella Canal Lining Project with the amount equal to the quantity, 327,000 minus the amount of water resulting from the Coachella Canal Lining Project made available to Metropolitan and San Diego County Water Authority in 2007.

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[CRB2] Amount to be inserted by the Bureau of Reclamation once the Secretary of the Interior has issued the determination of the amount of water conserved by the Coachella Canal Lining Project with the amount equal to the quantity, 327,000 minus the amount of water resulting from the Coachella Canal Lining Project made available to Metropolitan and San Diego County Water Authority in 2007, plus return flow credit.

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[CRB3] Amount to be inserted by the Bureau of Reclamation once the Secretary of the Interior has issued the determination of the amount of water conserved by the Coachella Canal Lining Project with the amount equal to 327,000 minus the amount of water resulting from the Coachella Canal Lining Project made available to Metropolitan and San Diego County Water Authority in 2007.

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[CRB5] Amount to be inserted by the Bureau of Reclamation once the Secretary of the Interior has issued the determination of the amount of water conserved by the Coachella Canal Lining Project with the amount equal to 327,000 minus the amount of water resulting from the Coachella Canal Lining Project made available to Metropolitan and San Diego County Water Authority in 2007.

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[CRB6] Amount to be inserted by the Bureau of Reclamation once the Secretary of the Interior has issued the determination of the amount of water conserved by the Coachella Canal Lining Project.

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[CRB7] Amount in this column and the column to the left to be inserted by the Bureau of Reclamation once the Secretary of the Interior has issued the determination of the amount of water conserved by the Coachella Canal Lining Project.

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[CRB8] Amount in this column and the column to the left to be inserted by the Bureau of Reclamation once the Secretary of the Interior has issued the determination of the amount of water conserved by the Coachella Canal Lining Project.

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[CRB9] Amount in this column and the next two columns to the left to be inserted by the Bureau of Reclamation once the Secretary of the Interior has issued the determination of the amount of water conserved by the Coachella Canal Lining Project.

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[CRB10] Amount in this column and the column to the left to be inserted by the Bureau of Reclamation once the Secretary of the Interior has issued the determination of the amount of water conserved by the Coachella Canal Lining Project.

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[CRB11] Value to be inserted in this column and the next four columns to the right once the Bureau of Reclamation has inserted values above.

Page: 5

[CRB12] Value to be inserted in this column, the next column to the right, and the third to the next column to the right once the Bureau of Reclamation has inserted values above.