

5.a. - Colorado River Water Reports

**SUMMARY WATER REPORT
COLORADO RIVER BASIN
July 5, 2011**

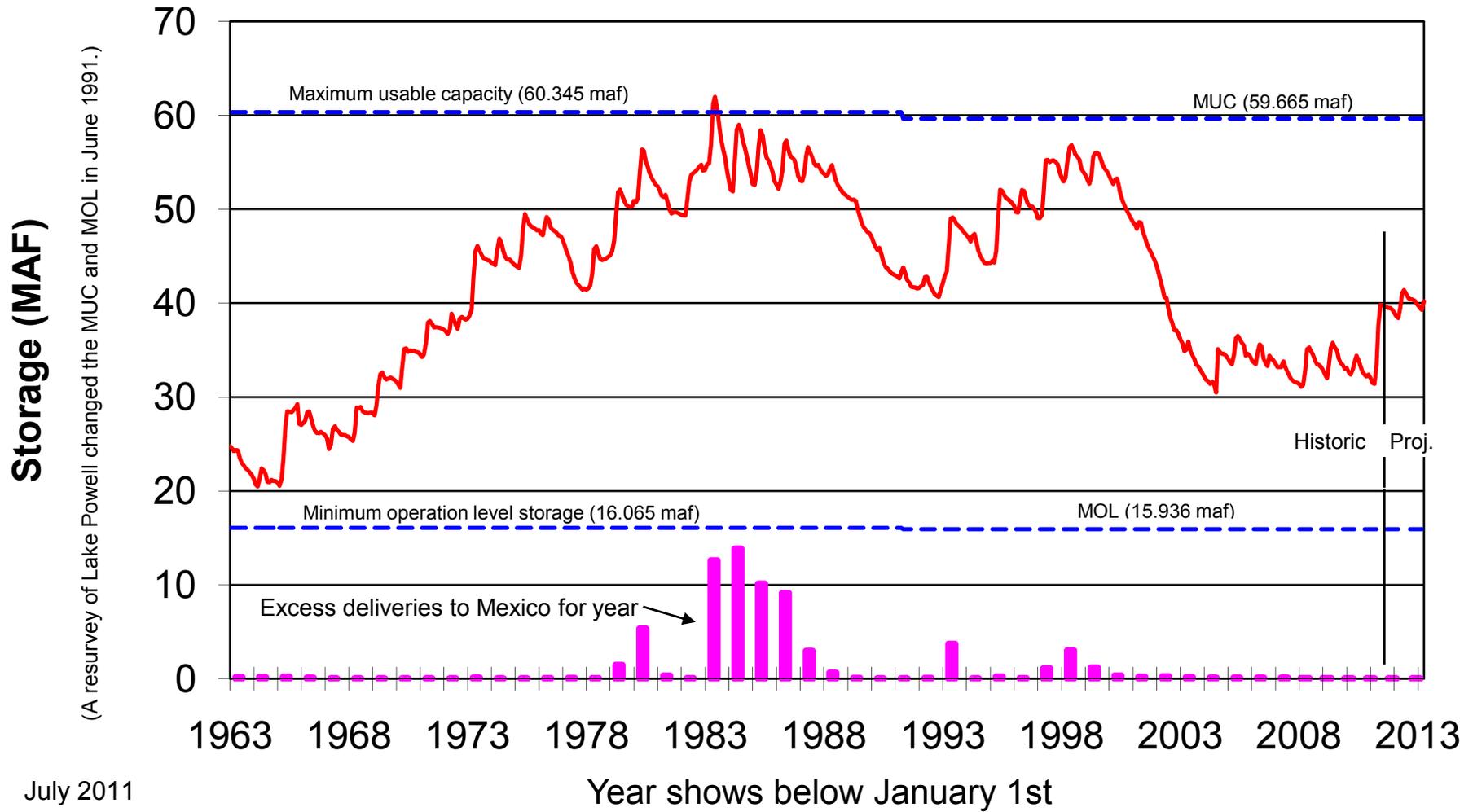
RESERVOIR STORAGE (as of July 4)	June 6, 2011					
	MAF	ELEV. IN FEET	□ of Capacity	MAF	ELEV. IN FEET	□ of Capacity
Lake Powell	17.433	3,651.7	72	14.498	3,626.8	60
Flaming Gorge	3.355	6,030.2	89	3.188	6,025.8	85
Navajo	1.461	6,068.6	86	1.453	6,068.0	86
Lake Mead	11.781	1,103.2	46	11.382	1,098.8	44
Lake Mohave	1.652	641.3	91	1.715	643.6	95
Lake Havasu	0.568	447.4	92	0.589	448.5	96
Total System Storage	37.366		63	33.583		56
System Storage Last Year	34.642		58	33.505		56

				June 6, 2011	
WY 2011 Precipitation (Basin Weighted Avg) 10/01/10 through 7/05/11			130 percent (34.3")		128 percent (32.5")
WY 2011 Snowpack Water Equivalent (Basin Weighted Avg) on day of 7/05/11 (Above two values based on average of data from 116 sites.)			N/A		264 percent (10.3")
				June 3, 2011	
July 1, 2011 Forecast of Unregulated Lake Powell Inflow		MAF	% of Normal	MAF	% of Avg.
2011 April through July unregulated inflow		12.000	151 %	12.600	159%
2011 Water Year forecast		16.086	134 %	16.598	138%

USBR Forecasted Year-End 2011 and 2010 Consum. Use, July 6, 2011 a.					MAF	
			2011		2010	
			Diversion	- Return =	Net	
Nevada (Estimated Total)			0.478	0.215	0.263	0.243
Arizona (Total)			3.644	0.876	2.767	2.792
CAP Total					1.583	1.653
Az. Water Banking Authority					0.134	0.134
OTHERS					1.184	1.140
California (Total) b./			4.767	0.614	4.153	4.363
MWD					0.631	1.099
3.85 Agriculture						
	Total	Conserved			Forecasted	Estimated
	IID c./	-0.360			2.803	2.547
	CVWD d./	-0.031			0.333	0.304
	PVID	0			0.318	0.274
	YPRD	0			0.044	0.039
	Island e./	0			0.007	0.006
	Total Ag.	-0.391			3.505	3.170
Others					0.017	0.094
PVID-MWD following to storage (to be determined)					--	0
Arizona, California, and Nevada Total f./			8.888	1.705	7.183	7.399

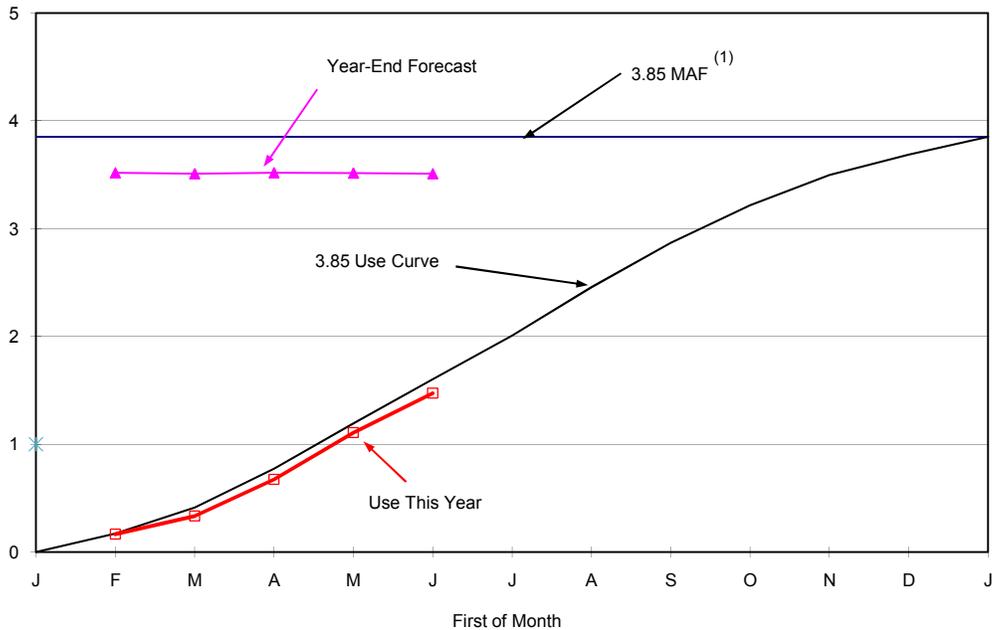
- a./ Incorporates Jan.-Apr. USGS monthly data and 75 daily reporting stations which may be revised after provision; data reports are distributed by USGS. Use to date estimated for users reporting monthly and annually.
- b./ California 2011 basic use apportionment of 4.4 MAF has been adjusted to 4.174 MAF for payback of Inadvertent Overrun and Payback Policy overruns (-1,213 AF), Intentionally Created Surplus Water by IID (-25,000 AF), Creation of Extraordinary Conservation ICS MWD (-200,000 AF)
- c./ 0.105 MAF conserved by IID-MWD Agreement as amended in 2007: 105,000 AF conserved for SDCWA under the IID-SDCWA Transfer Agreement as amended, 80,000 AF of which is being diverted by MWD; 16,000 AF required to conserved for CVWD under the IID-CVWD Acquisition Agreement, 67,700 AF conserved by the All-American Canal Lining Project.
- d./ 30,850 acre-feet conserved by the Coachella Canal Lining Project.
- e./ Includes estimated amount of 6,530 acre-feet of disputed uses by Yuma Island pumpers and 0 acre-feet by Yuma Project Ranch 5 being charged by USBR to Priority 2.
- f./ Includes unmeasured returns based on estimated consumptive use/diversion ratios by user from studies provided by Arizona Dept. of Water Resources, Colorado River Board of California, and Reclamation.

Monthly Total Colorado River Basin Storage



July 2011

FIGURE 1
JULY 1, 2011 FORECAST OF 2011 YEAR-END COLORADO RIVER WATER USE
BY THE CALIFORNIA AGRICULTURAL AGENCIES



Forecast of Colorado River Water Use by the California Agricultural Agencies (Millions of Acre-feet)			
Month	Use as of First of Month	Forecast of Year End Use	Forecast of Unused Water (1)
Jan	0.000	-----	-----
Feb	0.167	3.519	0.023
Mar	0.335	3.509	0.033
Apr	0.674	3.518	0.024
May	1.107	3.515	0.027
Jun	1.473	3.510	0.032
Jul			
Aug			
Sep			
Oct			
Nov			
Dec			
Jan			

(1) The forecast of unused water is based on the availability of 3.542 MAF under the first three priorities of the water delivery contracts. This accounts for the 85,000 af of conserved water available to MWD under the 1988 IID-MWD Conservation agreement and the 1988 IID-MWD-CVWD-PVID Agreement as amended; 80,000 AF of conserved water available to SDCWA under the IID-SDCWA Transfer Agreement as amended being diverted by MWD; as estimated 29,000 AF of conserved water available to SDCWA and MWD as a result of the Coachella Canal Lining Project, 67,700 AF of water available to SDCWA and MWD as a result of the All American Canal Lining Project; 14,500 AF of water IID and CVWD are forbearing to permit the Secretary of the Interior to satisfy a portion of Indian and miscellaneous present perfected rights use and 25,000 AF of water IID is conserving to create Extraordinary Conservation Intentionally Created Surplus. 0 AF has been subtracted for IID's Salton Sea Salinity Management in 2011. As USBR is charging uses by Yuma Island pumpers to priority 2, the amount of unused water has been reduced by those uses - 6,530 AF. The CRB does not concur with USBR's viewpoint on this matter.

COLORADO RIVER BOARD OF CALIFORNIA

April 28, 2011

COLORADO RIVER WATER REPORT

The following report summarizes data obtained from provisional reports of the U.S. Geological Survey, U.S. Bureau of Reclamation, International Boundary and Water Commission, and Imperial Irrigation District.

I. Active Surface Storage^{1/} in Reservoirs at end of Month (Thousand Acre-feet).

	<u>March 2011</u>				
<u>Upper Basin</u>	<u>Storage</u>	<u>Elevation in feet</u>	<u>% of Capacity</u>	<u>Change During Month</u>	<u>Change from 2010</u>
Lake Powell	12,804	3,610.7	53%	-431	-892
Flaming Gorge	3,160	6,025.0	84%	56	-38
Fontenelle	136	6,473.7	39%	-23	23
Navajo	1,326	6,058.3	78%	-2	80
Blue Mesa	495	7,478.5	60%	-37	-47
Morrow Point	113	7,154.4	96%	2	6
Crystal	17	6,750.9	93%	0	0
Sub-total	18,050		58%	-434	-869
<u>Lower Basin</u>					
Lake Mead	11,170	1,096.4	43%	53	-380
Lake Mohave	1,705	643.2	94%	6	29
Lake Havasu	581	448.1	94%	15	17
Sub-total	13,456		47%	74	-334
Upper and Lower Basin Total	31,506 ^{2/}		53%	-361	-1,202

^{1/} Figures shown do not include reservoir dead storage.

^{2/} Storage above minimum operation level is 31,506 - 15,936 = 15,570 thousand acre-feet. Minimum operation level (15,936 thousand acre-feet) is defined as the sum of active content at minimum power pool plus minimum active content required to make surface diversions at Lake Havasu and Navajo Reservoir.

II. Upper Basin Discharge (Acre-feet).

<u>Station</u>	<u>Meas. Flow March 2011</u>	<u>Cumulative Flow October thru March</u>	<u>Meas. Flow Adjusted for CRSP Surface Storage Changes</u>	
			<u>March 2011</u>	<u>% of Mar. 89- year average (1922-2010 water years)</u>
Green River at Green River, Utah	293,900	1,054,500	349,600	130%
Colorado River near Cisco, Utah	258,100	1,209,400	223,500	101%
San Juan River near Bluff, Utah	49,000	305,000	47,400	41%
At Lee Ferry (Compact Point)	1,057,100	5,263,500	645,500	104%

III. Lower Basin Discharge (Acre-feet).

<u>Station</u>	<u>March 2011</u>	<u>Cumulative Flow October thru March</u>
Below Hoover Dam	1,006,400	4,278,700
Below Davis Dam	987,200	4,216,600
Below Parker Dam	692,700	2,679,200
Above Imperial Dam	593,300	2,453,000

IV. Consumptive Use of Lower Colorado River Mainstream Water (Acre-feet).
March, 2011

California Users	Diversion	Return	Consumptive Use	Change in Cons. Use From Mar. 2010	Cumulative Cons. Use		
					January thru March	Change from prev. Jan. thru Mar.	12 Months thru March
Palo Verde Irrig. Dist.	60,520	31,710	28,810	5,250	45,330	35,120	345,180
Yuma Proj. (Res. Div.) ^{b/}	9,800	2,380	7,420	3,950	11,040	7,460	46,080
Imperial Irrig. Dist. ^{a/}	264,860		264,860	26,440	542,150	123,990	2,658,310
Salton Sea Mitigation	0		0	0	0	-320	79,020
USBR Operations	15,500		15,500	15,500	19,610	19,610	32,100
IID plus Salton Sea Mitigation	280,360		280,360	41,940	561,760	143,280	2,769,430
Coachella Val. Wat. Dist. ^{a/}	22,760		22,760	1,040	55,990	9,520	311,410
Subtotal	373,440	34,090	339,350	52,180	674,120	195,380	3,472,100
Fort Mojave Ind. Res. ^{c/}	2,290	1,060	1,230	230	2,110	-610	24,150
Cal. Miscellaneous ^{d/}	2,860		2,860	0	4,660	0	34,000
Metropolitan Water Dist.	70,890	430	70,460	-18,960	144,310	-110,590	985,970
Total	449,480	35,580	413,900	33,450	825,200	84,180	4,516,220
Arizona Users							
Central Arizona Project	181,260		181,260	52,930	404,840	59,470	1,711,390
Colorado River Ind. Res.	49,000	21,030	27,970	-5,790	42,630	5,860	418,970
Gila Gravity Main Canal	69,610	18,380	51,230	7,490	105,950	47,240	574,250
Yuma Proj. (Valley Div.)	41,290	12,440	28,850	11,090	50,320	19,590	232,630
Fort Mojave Ind. Res. ^{c/}	6,540	3,010	3,530	-3,420	6,700	-7,050	78,080
Havasu Nat. Wildlife Ref.	690	0	690	-3,300	880	-3,700	31,790
Arizona Miscellaneous ^{d/}	5,880		5,880	0	12,300	0	85,000
Total	354,270	54,860	299,410	59,000	623,620	121,410	3,132,110
Nevada Users							
From Lake Mead ^{b/ e/}	33,290	20,970	12,320	890	30,700	3,060	285,750
Mohave Steam Plant ^{e/}	10		10	-10	30	-30	340
Total	33,300	20,970	12,330	880	30,730	3,030	286,090
Total Consumptive Use (Ariz., Cal., Nev.)	837,050	111,410	725,640	93,330	1,479,550	208,620	7,934,420

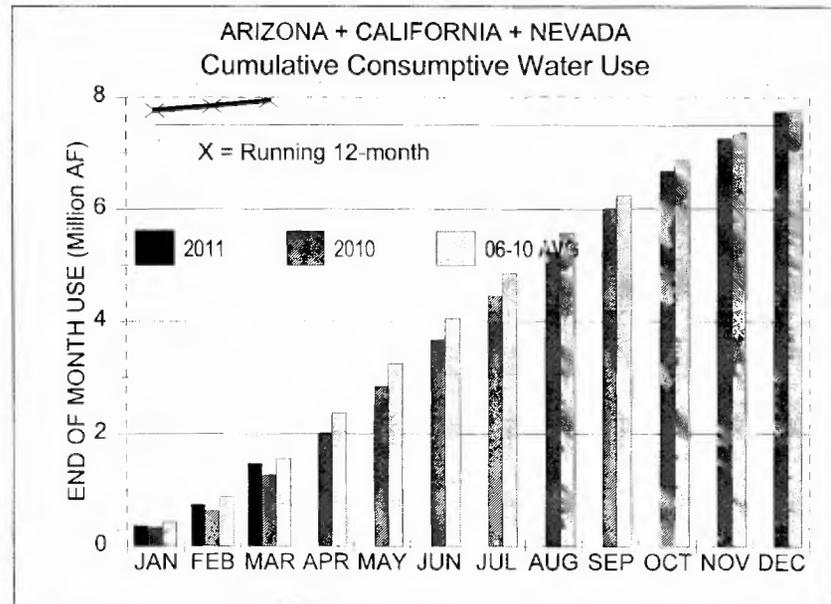
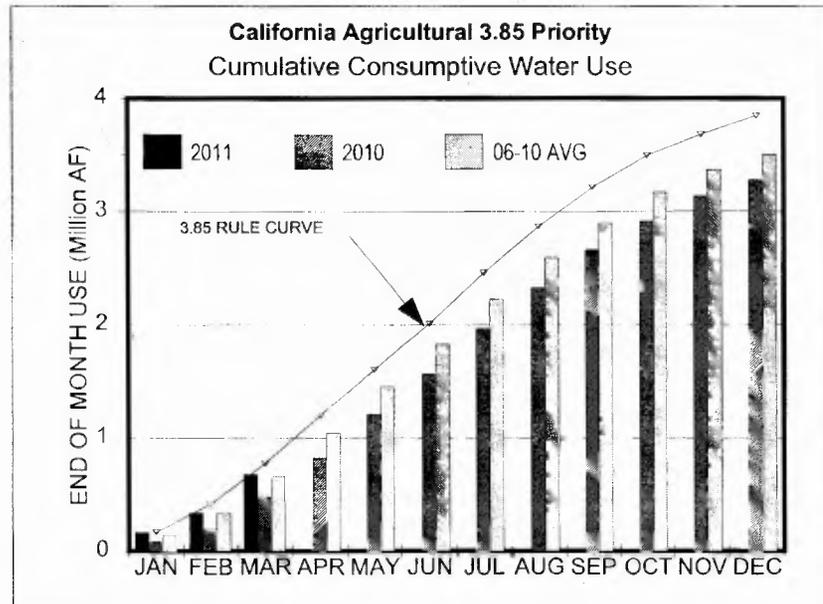
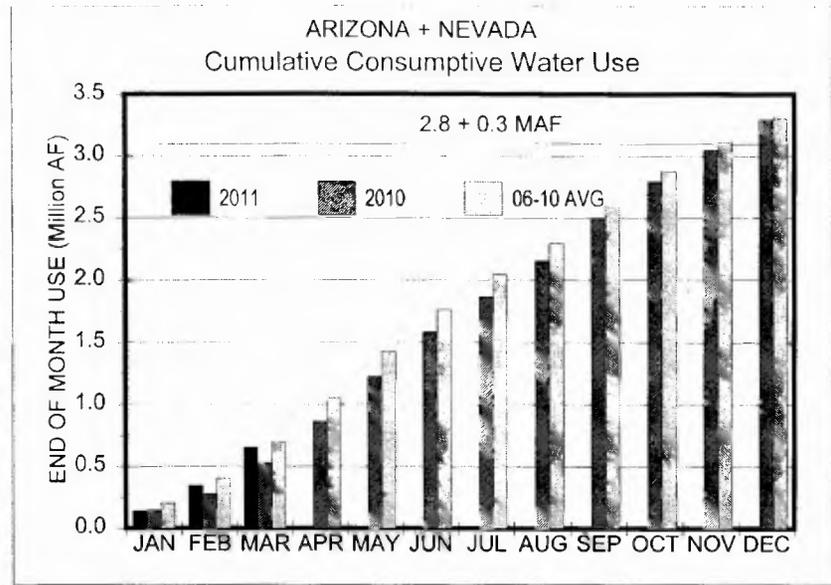
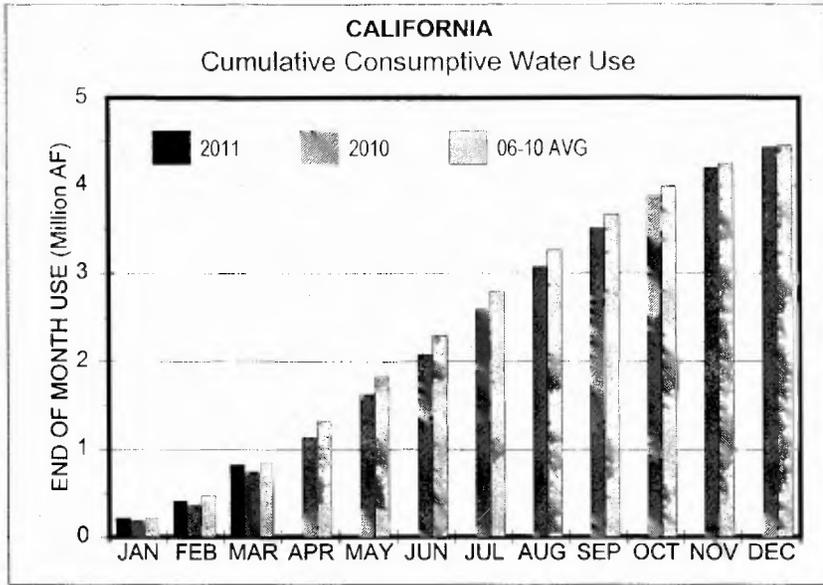
a. Based on measurements below Pilot Knob (assumed to be equal to USBR Article V data after credit is given for unmeasured California return flows between Imperial Dam and Pilot Knob). In addition, Salton Sea mitigation is not part of IID's use but is included in IID total diversion. USBR Operations consists of Salton Sea Operations 0 acre-feet and Warren H. Brock Reservoir Operations 4,040 acre-feet.

b. Return flow estimates based on averages of past returns as calculated by USBR for Article V data.

c. Starting January 2011 consumptive use value is diversion minus returns as reported by Reclamation.

d. An estimated residual made by the Colorado River Board of California combining such items as small diversions along the river, unmeasured groundwater return flow, etc., which, when combined with other quantities listed to arrive at the State's total, presents an estimate of the State's Consumptive use of Lower Colorado River water.

e. Nevada use in January 2011 not available in USBR/LC website, the January 2010 use numbers were assumed in this months calculation and will be revised later when data are available.



July 1, 2011, Observed Colorado River Flow into
Lake Powell (1) (Million Acre-feet)

	<u>USBR and National Weather Service</u>		<u>Change From Last</u>	
	<u>April-July 2011</u>	<u>Water Year 2011</u>	<u>April-July 2011</u>	<u>Wat Yr 2011</u>
Maximum (2)	12.300	17.086	0.800	1.702
Mean	12.000 *	16.086 **	0.500	0.702
Minimum (2)	11.700	15.086	0.200	-0.298

* This month's A-J observed is 151% of the 30-year A-J average shown below.

** This month's W-Y observed is 134% of the 30-year W-Y average shown below.

Comparison with past records
of Colorado River
inflow into Lake Powell
(at Lee Ferry prior to 1962)

	<u>April-July Flow</u>	<u>Water Year Flow</u>
Long-Time Average (1922-2010)	7.741	11.519
30-yr. Average (1961-90)	7.735	11.724
10-yr. Average (2001-2010)	5.203	8.449
Max. of Record	15.404 (1984)	21.873 (1984)
Min. of Record	1.115 (2002)	3.058 (2002)
Year 2000	4.352	7.310
Year 2001	4.301	6.955
Year 2002	1.115	3.058
Year 2003	3.918	6.358
Year 2004	3.640	6.128
Year 2005	8.810	12.614
Year 2006	5.318	8.769
Year 2007	4.052	8.231
Year 2008	8.906	12.356
Year 2009	7.804	10.633
<u>Year 2010</u>	<u>5.795</u>	<u>8.738</u>
Total Years 2000 - 2004	17.326	29.809
5-Year Average (2000-2004)	3.465	5.962

(1) Under conditions of no other Upper Basin reservoirs.

(2) USBR and NWS forecasts indicate the probability of 95 percent of the time the actual flow will not exceed the maximum value, and will not be less than the minimum value.

VI. Scheduled Flows to Mexico — Arrivals and excess arrivals of Water for Calendar Year 2011
(Acre-feet)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	<u>Scheduled</u>	<u>Total</u>	<u>Excess</u>	<u>Other</u>	<u>Total</u>	<u>Cumulative</u>	<u>Flow</u>	<u>Flow By-Pass</u>
	<u>Flow</u> ⁽⁹⁾	<u>Arrivals</u>	<u>Arrivals</u>	<u>Excess</u>	<u>Excess</u>	<u>Excess</u>	<u>Through</u>	<u>Southerly</u>
			<u>in accord</u>	<u>Arrivals</u>	<u>Arrivals</u>	<u>Arrivals</u>	<u>NIB and</u>	<u>International</u>
			<u>with</u>	<u>Arrivals</u>	<u>Arrivals</u>	<u>Arrivals</u>	<u>Limitrophe</u>	<u>Boundary</u>
			<u>Minute</u>					
			<u>242</u>					
Jan.	128,113	146,704	5,905	12,686	18,591	18,591	130,960	5,905
Feb.	155,921	179,145	5,785	17,439	23,224	41,815	162,997	5,785
March	195,427	205,858	6,960	3,471	10,431	52,246	186,916	6,960
April	192,064							
May	110,741							
June	119,566							
July	120,829							
August	82,600							
Sept.	89,307							
Oct.	67,821							
Nov.	109,270							
Dec.	118,341							
	<u>1,490,000</u>	<u>531,707</u>	<u>18,650</u>	<u>33,596</u>			<u>480,873</u>	<u>18,650</u>

- Column (1). Flow schedule requested by Mexico. In surplus years as determined by the United States, Mexico can schedule up to 1.7 rather than 1.5 million acre-feet.
- (2). Total Colorado River waters reaching Mexico. It is the sum of: 1) Colorado River water measured at the Northerly International Boundary, 2) drainage waters measured at the Southerly International Boundary near San Luis, Arizona, and 3) Wellton-Mohawk drainage waters measured at the Southerly International Boundary. It is the sum of Columns (1) + (5).
- (3). Arizona's Wellton-Mohawk Irrigation and Drainage District drainage water. This water is discharged to the Santa Clara Slough in Mexico via a concrete-lined canal.
- (4). Excess arrivals other than Wellton-Mohawk drainage. It is the sum of: 1) a delivery of about 5,000 a. f. per year to ensure that Mexico receives what is scheduled, 2) releases from Parker Dam which are not used due to unexpected rainfall in the Palo Verde, Coachella, Imperial, and Yuma areas, 3) controlled flood releases on the Gila and Colorado River, and 4) local runoff.
- (5). Sum of Columns (3) and (4).
- (6). Cumulation of Column (5).
- (7). Including Colorado River flow at the Northerly International Boundary plus flow from Cooper, 11-mile, and 21-mile spillways.
- (8). Including flow at the Southerly International Boundary, from the East and West Main canals, Yuma Valley Main, 242 Lateral plus diversions from Lake Havasu for Tijuana.
- (9). Revised schedule of Calander Year 2010 as of July 14, 2010

WEIGHTED MONTHLY SALINITY AT
SELECTED COLORADO RIVER STATIONS
AND RUNNING 12-MONTH NIB-IMPERIAL FLOW-WEIGHTED SALINITY DIFFERENTIAL
(in parts per million)

Month	Below Hoover Dam			Below Parker Dam ^{3/}			Palo Verde ^{3/} Canal Near Blythe			At Imperial Dam			At Northerly Inter- national Boundary			Running 12-Month Flow-Wtd. Differential ^{2/}	
	5-Year avg. ^{1/} 1974-78	2010	2011	5-Year avg. ^{1/} 1974-78	2010	2011 ^{4/}	5-Year avg. ^{1/} 1974-78	2010 ^{4/}	2011 ^{4/}	5-Year avg. ^{1/} 1974-78	2010	2011	5-Year avg. ^{1/} 1974-78	2010	2011	2010	2011
Jan.	690	623	606	709	630	620	751	660	640	913	756	714	1,041	831	882	130.7	143.3
Feb.	675	628	612	706	660	640	732	690	620	835	729	686	998	856	779	131.2	137.9
March	684	622	589	699	640		727	650		805	663	660	925	746	802	125.8	147.1
April	680	613		700	630		714	650		801	672		892	752		123.6	
May	677	614		698	630		709	640		822	685		962	951		130.6	
June	678	607		695	610		712	640		812	672		956	909		136.3	
July	682	611		688	620		709	620		797	658		909	834		139.8	
August	690	594		686	620		706	620		800	678		907	888		142.7	
Sept.	672	590		686	620		737	650		815	676		952	843		144.0	
Oct.	680	592		689	620		739	630		854	694		1,070	783		141.1	
Nov.	682	609		692	640		746	650		897	692		1,010	816		142.9	
Dec.	681	596		702	620		731	650		877	733		999	819		137.3	

General Notes:

^{1/} 5-Year averages are arithmetical.

^{2/} 12-month flow-weighted differential between NIB and Imperial Dam through month shown in left column.

^{3/} Operational values only.

^{4/} Values are grab samples (one or two samples per month) and are rounded to represent general magnitude of salinity at Parker Dam and Palo Verde Canal...

COLORADO RIVER BOARD OF CALIFORNIA

March 28, 2011

COLORADO RIVER WATER REPORT

The following report summarizes data obtained from provisional reports of the U.S. Geological Survey, U.S. Bureau of Reclamation, International Boundary and Water Commission, and Imperial Irrigation District.

I. Active Surface Storage^{1/} in Reservoirs at end of Month (Thousand Acre-feet).

February 2011

<u>Upper Basin</u>	<u>Storage</u>	<u>Elevation in feet</u>	<u>% of Capacity</u>	<u>Change During Month</u>	<u>Change from 2010</u>
Lake Powell	13,235	3,614.9	54%	-593	-544
Flaming Gorge	3,104	6,023.6	83%	-8	-77
Fontenelle	158	6,478.4	46%	-25	33
Navajo	1,328	6,058.7	78%	-15	111
Blue Mesa	532	7,483.5	64%	-23	-14
Morrow Point	111	7,151.9	95%	-1	4
Crystal	17	6,751.4	92%	1	-0
Sub-total	18,484		59%	-664	-486
<u>Lower Basin</u>					
Lake Mead	11,117	1,095.8	42%	352	-663
Lake Mohave	1,699	643.0	94%	29	19
Lake Havasu	567	447.3	92%	17	19
Sub-total	13,383		47%	397	-625
Upper and Lower Basin Total	31,866 ^{2/}		53%	-266	-1,112

^{1/} Figures shown do not include reservoir dead storage.

^{2/} Storage above minimum operation level is 31,866 - 15,936 = 15,930 thousand acre-feet. Minimum operation level (15,936 thousand acre-feet) is defined as the sum of active content at minimum power pool plus minimum active content required to make surface diversions at Lake Havasu and Navajo Reservoir.

II. Upper Basin Discharge (Acre-feet).

<u>Station</u>	Meas. Flow February 2011	<u>Cumulative Flow</u> October thru February	<u>Meas. Flow Adjusted for CRSP Surface Storage Changes</u>	
			February 2011	% of Feb. 89- year average (1922-2010 water years)
Green River at Green River, Utah	128,200	760,600	120,200	83%
Colorado River near Cisco, Utah	130,700	951,300	107,600	65%
San Juan River near Bluff, Utah	44,900	256,000	30,100	47%
At Lee Ferry (Compact Point)	984,700	4,206,400	345,800	85%

III. Lower Basin Discharge (Acre-feet).

<u>Station</u>	February 2011	<u>Cumulative Flow</u> October thru February
Below Hoover Dam	634,400	3,272,300
Below Davis Dam	587,700	3,229,400
Below Parker Dam	406,700	1,986,500
Above Imperial Dam	381,000	1,859,700

IV. Consumptive Use of Lower Colorado River Mainstream Water (Acre-feet).
February, 2011

California Users	Diversion	Return	Consumptive Use	Change in Cons. Use From Feb. 2010	Cumulative Cons. Use		
					January thru February	Change from prev. Jan. thru Feb.	12 Months thru February
Palo Verde Irrig. Dist.	41,540	28,280	13,260	16,700	16,520	29,870	339,930
Yuma Proj. (Res. Div.) ^{b/}	3,100	1,680	1,420	870	3,620	3,510	42,130
Imperial Irrig. Dist. ^{a/}	131,660		131,660	34,170	277,290	97,550	2,631,870
Salton Sea Mitigation	0		0	0	0	-320	79,020
USBR Operations	4,110		4,110	4,110	4,110	4,110	16,600
IID plus Salton Sea Mitigation	135,770		135,770	38,280	281,400	101,340	2,727,490
Coachella Val. Wat. Dist. ^{a/}	17,660		17,660	4,500	33,230	8,480	310,370
Subtotal	198,070	29,960	168,110	60,350	334,770	143,200	3,419,920
Fort Mojave Ind. Res. ^{c/}	930	430	500	-360	880	-840	23,920
Cal. Miscellaneous ^{d/}	1,090		1,090	0	1,800	0	34,000
Metropolitan Water Dist.	22,700	390	22,310	-43,940	73,850	-91,630	1,004,930
Total	222,790	30,780	192,010	16,050	411,300	50,730	4,482,770
<u>Arizona Users</u>							
Central Arizona Project	134,530		134,530	43,650	223,580	6,540	1,658,460
Colorado River Ind. Res.	26,250	19,940	6,310	-580	14,660	11,650	424,760
Gila Gravity Main Canal	42,470	10,790	31,680	21,730	54,720	39,750	566,760
Yuma Proj. (Valley Div.)	21,000	10,800	10,200	1,810	21,470	8,500	221,540
Fort Mojave Ind. Res. ^{c/}	3,980	1,830	2,150	-1,250	3,170	-3,630	81,500
Havasu Nat. Wildlife Ref.	170	0	170	-290	190	-400	35,090
Arizona Miscellaneous ^{d/}	4,140		4,140	0	6,420	0	85,000
Total	232,540	43,360	189,180	65,070	324,210	62,410	3,073,110
<u>Nevada Users</u>							
From Lake Mead ^{b/ e/}	26,710	16,560	10,150	1,460	18,380	2,170	284,860
Mohave Steam Plant ^{e/}	10		10	-10	20	-20	350
Total	26,720	16,560	10,160	1,450	18,400	2,150	285,210
Total Consumptive Use (Ariz., Cal., Nev.)	482,050	90,700	391,350	82,570	753,910	115,290	7,841,090

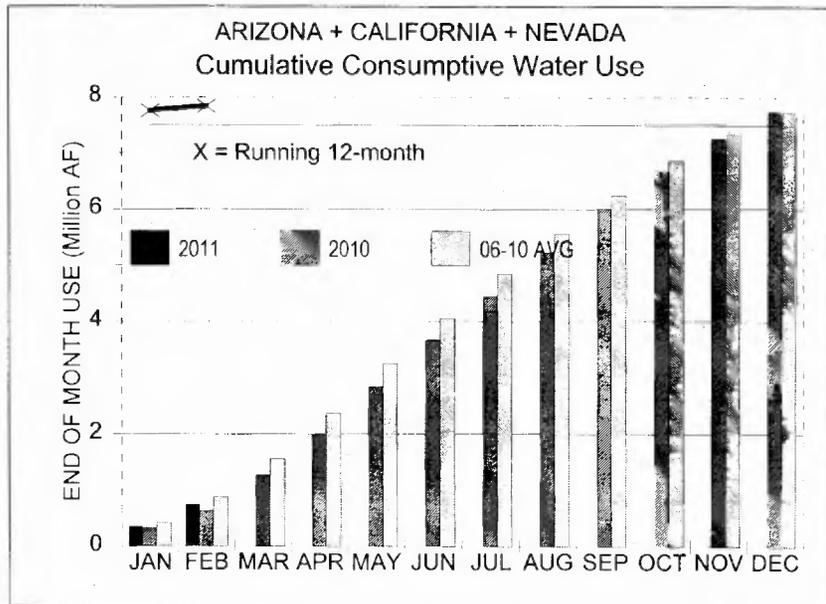
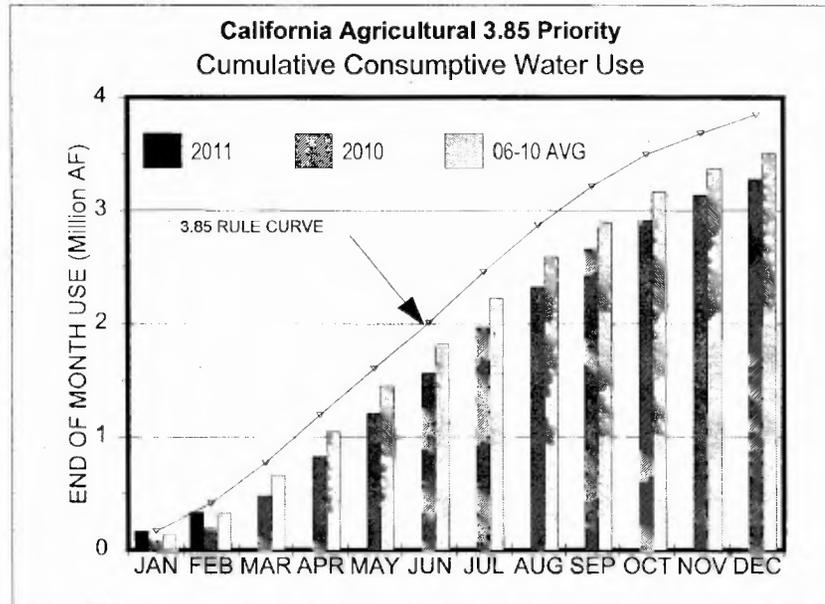
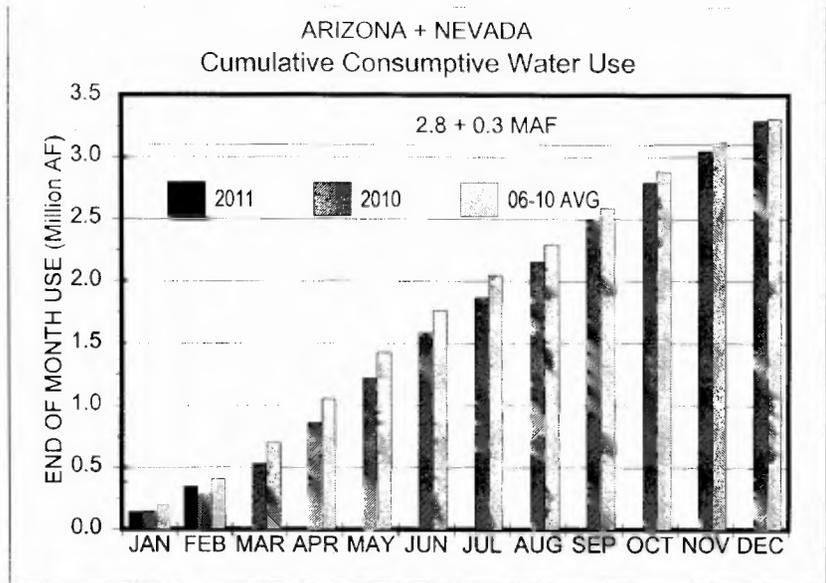
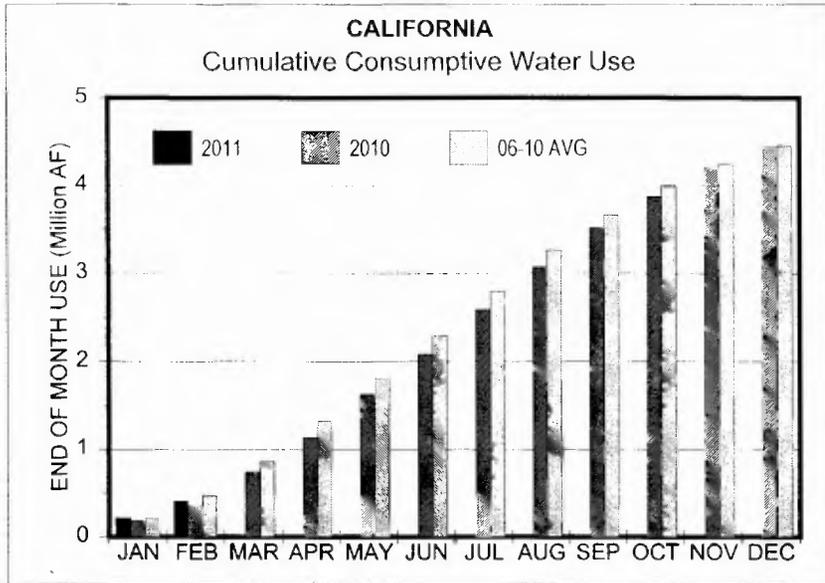
a. Based on measurements below Pilot Knob (assumed to be equal to USBR Article V data after credit is given for unmeasured California return flows between Imperial Dam and Pilot Knob). In addition, Salton Sea mitigation is not part of IID's use but is included in IID total diversion. USBR Operations consists of Salton Sea Operations 0 acre-feet and Warren H. Brock Reservoir Operations 4,040 acre-feet.

b. Return flow estimates based on averages of past returns as calculated by USBR for Article V data.

c. Starting January 2011 consumptive use value is diversion minus returns as reported by Reclamation.

d. An estimated residual made by the Colorado River Board of California combining such items as small diversions along the river, unmeasured groundwater return flow, etc., which, when combined with other quantities listed to arrive at the State's total, presents an estimate of the State's Consumptive use of Lower Colorado River water.

e. Nevada use in January 2011 not available in USBR/LC website, the January 2010 use numbers were assumed in this months calculation and will be revised later when data are available.



May 4, 2011, Observed Colorado River Flow into
Lake Powell (1) (Million Acre-feet)

	<u>USBR and National Weather Service</u>		<u>Change From Last</u>	
	<u>April-July 2011</u>	<u>Water Year 2011</u>	<u>April-July 2011</u>	<u>Month's Projected Wat Yr 2011</u>
Maximum (2)	12.800	17.784	3.300	4.708
Mean	11.500 *	15.384 **	2.000	2.308
Minimum (2)	10.200	13.084	0.700	0.008

* This month's A-J observed is 145% of the 30-year A-J average shown below.
 ** This month's W-Y observed is 128% of the 30-year W-Y average shown below.

Comparison with past records
of Colorado River
inflow into Lake Powell
(at Lee Ferry prior to 1962)

	<u>April-July Flow</u>	<u>Water Year Flow</u>
Long-Time Average (1922-2010)	7.741	11.519
30-yr. Average (1961-90)	7.735	11.724
10-yr. Average (2001-2010)	5.203	8.449
Max. of Record	15.404 (1984)	21.873 (1984)
Min. of Record	1.115 (2002)	3.058 (2002)
Year 2000	4.352	7.310
Year 2001	4.301	6.955
Year 2002	1.115	3.058
Year 2003	3.918	6.358
Year 2004	3.640	6.128
Year 2005	8.810	12.614
Year 2006	5.318	8.769
Year 2007	4.052	8.231
Year 2008	8.906	12.356
Year 2009	7.804	10.633
<u>Year 2010</u>	<u>5.795</u>	<u>8.738</u>
Total Years 2000 - 2004	17.326	29.809
5-Year Average (2000-2004)	3.465	5.962

(1) Under conditions of no other Upper Basin reservoirs.

(2) USBR and NWS forecasts indicate the probability of 95 percent of the time the actual flow will not exceed the maximum value, and will not be less than the minimum value.

VI. Scheduled Flows to Mexico — Arrivals and excess arrivals of Water for Calendar Year 2011
(Acre-feet)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	<u>Scheduled</u>	<u>Total</u>	<u>Excess</u>	<u>Other</u>	<u>Total</u>	<u>Cumulative</u>	<u>Flow</u>	<u>Flow By-Pass</u>
	<u>Flow</u> ⁽⁹⁾	<u>Arrivals</u>	<u>Arrivals</u>	<u>Excess</u>	<u>Excess</u>	<u>Excess</u>	<u>Through</u>	<u>Southerly</u>
			<u>in accord</u>	<u>Arrivals</u>	<u>Arrivals</u>	<u>Arrivals</u>	<u>NIB and</u>	<u>International</u>
			<u>with</u>	<u>Arrivals</u>	<u>Arrivals</u>	<u>Arrivals</u>	<u>Limitrophe</u>	<u>Boundary</u>
			<u>Minute</u>					
			<u>242</u>					
Jan.	128,113	146,704	5,905	12,686	18,591	18,591	130,960	5,905
Feb.	155,921	179,145	5,785	17,439	23,224	41,815	162,997	5,785
March	195,427							
April	192,064							
May	110,741							
June	119,566							
July	120,829							
August	92,600							
Sept.	89,307							
Oct.	67,821							
Nov.	109,270							
Dec.	118,341							
	<u>1,500,000</u>	<u>325,849</u>	<u>11,690</u>	<u>30,125</u>			<u>293,957</u>	<u>11,690</u>

- Column
- (1). Flow schedule requested by Mexico. In surplus years as determined by the United States, Mexico can schedule up to 1.7 rather than 1.5 million acre-feet.
 - (2). Total Colorado River waters reaching Mexico. It is the sum of: 1) Colorado River water measured at the Northerly International Boundary, 2) drainage waters measured at the Southerly International Boundary near San Luis, Arizona, and 3) Wellton-Mohawk drainage waters measured at the Southerly International Boundary. It is the sum of Columns (1) + (5).
 - (3). Arizona's Wellton-Mohawk Irrigation and Drainage District drainage water. This water is discharged to the Santa Clara Slough in Mexico via a concrete-lined canal.
 - (4). Excess arrivals other than Wellton-Mohawk drainage. It is the sum of: 1) a delivery of about 5,000 a. f. per year to ensure that Mexico receives what is scheduled, 2) releases from Parker Dam which are not used due to unexpected rainfall in the Palo Verde, Coachella, Imperial, and and Yuma areas, 3) controlled flood releases on the Gila and Colorado River, and 4) local runoff.
 - (5). Sum of Columns (3) and (4).
 - (6). Cumulation of Column (5).
 - (7). Including Colorado River flow at the Northerly International Boundary plus flow from Cooper, 11-mile, and 21-mile spillways.
 - (8). Including flow at the Southerly International Boundary, from the East and West Main canals, Yuma Valley Main, 242 Lateral plus diversions from Lake Havasu for Tijuana.
 - (9). Revised schedule of Calander Year 2010 as of July 14, 2010

WEIGHTED MONTHLY SALINITY AT
SELECTED COLORADO RIVER STATIONS
AND RUNNING 12-MONTH NIB-IMPERIAL FLOW-WEIGHTED SALINITY DIFFERENTIAL
(in parts per million)

Month	Below Hoover Dam			Below Parker Dam ^{3/}			Palo Verde ^{3/} Canal Near Blythe			At Imperial Dam			At Northerly Inter- national Boundary			Running 12-Month Flow-Wtd. Differential ^{2/}	
	5-Year avg. ^{1/}			5-Year avg. ^{1/}			5-Year avg. ^{1/}			5-Year avg. ^{1/}			5-Year avg. ^{1/}				
	1974-78	2010	2011	1974-78	2010	2011 ^{4/}	1974-78	2010 ^{4/}	2011 ^{4/}	1974-78	2010	2011	1974-78	2010	2011	2010	2011
Jan.	690	623	606	709	630	620	751	660	640	913	756	714	1,041	831	882	130.7	143.3
Feb.	675	628	612	706	660	640	732	690	620	835	729	686	998	856	779	131.2	137.9
March	684	622		699	640		727	650		805	663		925	746		125.8	
April	680	613		700	630		714	650		801	672		892	752		123.6	
May	677	614		698	630		709	640		822	685		962	951		130.6	
June	678	607		695	610		712	640		812	672		956	909		136.3	
July	682	611		688	620		709	620		797	658		909	834		139.8	
August	690	594		686	620		706	620		800	678		907	888		142.7	
Sept.	672	590		686	620		737	650		815	676		952	843		144.0	
Oct.	680	592		689	620		739	630		854	694		1,070	783		141.1	
Nov.	682	609		692	640		746	650		897	692		1,010	816		142.9	
Dec.	681	596		702	620		731	650		877	733		999	819		137.3	

General Notes:

1/ 5-Year averages are arithmetical.

2/ 12-month flow-weighted differential between NIB and Imperial Dam through month shown in left column.

3/ Operational values only.

4/ Values are grab samples (one or two samples per month) and are rounded to represent general magnitude of salinity at Parker Dam and Palo Verde Canal..