

MANAGEMENT OF THE

# **CALIFORNIA STATE WATER PROJECT**

BULLETIN 132-08 | JUNE 2012

EDMUND G. BROWN JR. Governor, State of California

#### JOHN LAIRD

Secretary for Natural Resources Natural Resources Agency

MARK W. COWIN Director, Department of Water Resources

### Byron Bethany Irrigation District–Musco Family Olive Company

A pending agreement among Byron-Bethany Irrigation District (Byron-Bethany), DWR, and Reclamation provides for the conveyance of up to 800 af of Byron-Bethany's CVP water to Reach 2A of the California Aqueduct for use by Musco Family Olive Company. A total of 354 af was delivered in 2007 under this pending agreement (SWPAO #04300). Construction of a permanent turnout is currently being pursued. Note: On August 12, 2004, Plain View Water District became part of Byron-Bethany. Starting with SWPAO #04300, Byron-Bethany will execute conveyance agreements for CVP water to be used by Musco Family Olive Company.

### **U.S.** Department of Veterans Affairs

A pending letter agreement among the U.S. Department of Veterans Affairs, DWR, and Reclamation provides for the conveyance of up to 850 af of CVP-approved water to Reach 2B of the California Aqueduct to the U.S. Department of Veterans Affairs' San Joaquin Valley National Cemetery. A total of 113 af was delivered to the National Cemetery from Reach 2B of the California Aqueduct in 2007 under this pending agreement. (SWPAO #03312)

## U.S. Fish and Wildlife Service **Cooperative Agreement**

Reclamation initiated a cooperative agreement with DWR to deliver CVP water to the Kern National Wildlife Refuge for USFWS. Under the terms of this cooperative agreement, dated September 28, 2004, up to 30,500 af of CVP water would be delivered from the end of Reach 7, to the Buena Vista Water Storage District (Buena Vista) Turnout BV-1B, Reach 10A of the California Aqueduct, from May 1, 2002, to May 31, 2012. DWR conveyed 7,526 af of CVP water to Kern National Wildlife Refuge in 2007. (SWPAO #03317)

### Water Deliveries

#### Table A Deliveries

Each year, by October 1, the SWP water contractors submit initial requests for Table A deliveries allocated to them for use in the subsequent calendar year. Initial Table A allocation amounts for the coming year are made by DWR in December. They are based on operations studies that assume 90 percent exceedence of historical water supply (where exceedence refers to the possibility that water supply in the coming year will be exceeded by the historical water supply), current reservoir storage, and total requests by the SWP water contractors. Forecasts for the year are updated as hydrologic conditions change. Table A amounts are increased or decreased depending on both actual and projected hydrologic conditions, though decreases are rare as the 90 percent exceedence criteria is fairly conservative.

On October 1, 2006, SWP water contractors submitted initial requests for 2007 totaling 4.13 maf.

DWR approved deliveries of 2.47 maf on November 30, 2006, resulting in initial Table A amounts of 60 percent of most SWP water contractor requests.

Notices to State Water Project Contractors informing them of increases or decreases in Table A amounts are online at http://www. water.ca.gov/swpao/notices.cfm.

#### 2007 SWP Deliveries

The SWP delivers water for a variety of beneficial uses. In addition to delivering Table A water to SWP water contractors, the SWP:

- conveys water to other public and local agencies through special contracts and agreements;
- provides water for wildlife and

recreational uses; and

 stores, releases, and delivers local runoff water from SWP facilities to agencies that hold local water rights.

In 2007, 4,061,696 af was delivered to 27 SWP water contractors and 26 other agencies, categorized as follows:

- 1,986,455 af of Table A water;
- 309,973 af of Article 21 water;
- 94,762 af of 2006 carryover water;
- 2,581 af of SWP water for recreation and fish and wildlife;
- 1,258,278 af of nonproject water delivered to satisfy settlement agreements and agreements with SWP water contractors for local water supplies; and
- 114,492 af delivered to satisfy agreements between the SWP and CVP.

Figure 9-1 shows amounts of water delivered to various locations during 2007.

Specific information about water deliveries made to SWP water contractors and other agencies during 2007, and historical deliveries from 1962 through 2007, are presented in the following three sections, each with a corresponding table, located at the end of the chapter:

- Water Delivered to Long-Term Water Supply Contractors in 2007, by Service Area (Table 9-3);
- Water Delivered in 2007, by Month (Table 9-4); and
- Total Amounts of Annual Table A Water and Water Conveyed, by Type, 1962–2007 (Table 9-5).

Please note that the water delivery figures listed are accurate at the time of this Bulletin 132 publication, but small volumes of water may be reclassified over time pursuant to long-term water supply

contract provisions. If your research requires more current data than was available at the time of publication, please consult the most recent edition of Bulletin 132 and/or contact DWR staff in the State Water Project Analysis Office.

# 2007 Water Deliveries to Long-Term SWP Water Contractors

Table 9-3 shows amounts of water delivered in 2007, by service area. The following information is arranged by column number.

#### Table A Water Delivered

Columns 1 through 5 show a detailed breakdown of Table A water delivered for SWP water contractors in 2007.

#### Turn-Back Pool Water

Column 4 shows 16,380 af of Turn-Back Pool water was delivered to SWP water contractors in 2007.

# 2006 Carryover Table A Water Delivered During 2007

Column 6 shows a total of 94,762 af was carried over from 2006 for delivery in 2007.

The carryover program was designed to encourage the most effective and beneficial use of water and to avoid obligating the contractors to use or lose the water by December 31 of each year. The SWP water contractors' long-term contracts and amendments state the criteria for carrying over Table A water from one year to the next, under Articles 12(e), 14(b), and 56(c).

#### Total Table A Water Delivered

Column 7 shows all Table A water delivered in 2007—a total of 2,081,217 af.

#### Article 21 and Unscheduled Water

Column 8 shows 309,973 af of 2007 Article 21 water was delivered to SWP water contractors (which includes 308,801 af of Article 21 and 1,172 af of unscheduled water to Empire). SWP water contractors who have not signed the Monterey Amendments receive unscheduled water.

#### Other SWP Water

Column 9 shows 125,772 af of other SWP water. Other SWP water includes flexible withdraw water from Castaic Lake and Lake Perris, and settlement water.

#### **Total SWP Water Delivered**

Column 10 shows 2,516,962 af of total SWP water was delivered in 2007. This includes total Table A water, 2006 Table A carryover water, Article 21 water, and Other SWP water.

# Non-SWP Water Deliveries to Long-Term SWP Contractors

Columns 11 and 12 include deliveries of non-SWP water to long-term water contractors. Column 11 shows 179,951 af of water bank recovery water. Column 12 shows 77,042 of other non-SWP water. Non-SWP water is local and permit water that an SWP water contractor has a water right to, or water purchased from, exchanged with, or transferred from non-SWP agencies. In 2007, non-SWP water deliveries totaled 256,993 af.

#### **Total Deliveries**

Column 13 shows total amounts of water delivered to SWP water contractors. In 2007, the SWP delivered 2,773,955 af to 29 long-term contractors.

# Water Delivered in 2007 by Month

During 2007, the SWP provided water service to 53 agencies, including 29 SWP water contractors. Those agencies and the amounts of water delivered to them by month are listed in Table 9-4 and are summarized below as SWP water and non-SWP water.

#### **SWP Water**

SWP water, as defined in the long-term water supply contracts, includes Article 21 water, carryover Table A water, current year Table A amounts, transfer and exchange of Table A water, and Turn-Back Pools A and B. Detailed information concerning those conveyances is found under the "Miscellaneous Agreements with Long-Term SWP Water Contractors" section in this chapter.

#### 2007 Non-SWP Water

In 2007, DWR used SWP facilities to convey water for various agencies according to the terms of water rights settlement agreements and water transfer and exchange agreements. Detailed information concerning those conveyances is found under the "Miscellaneous Agreements with Other Agencies" section in this chapter.

#### **Water Rights Water**

Water in this category is transported through SWP facilities to long-term SWP water contractors and other agencies according to terms of various settlement agreements. Some water simply passes through SWP transportation facilities; some portion is stored in SWP reservoirs for release later. In 2007, 1,258,278 af in this category was delivered to the Feather River, Delta, South Bay, North Bay, and Southern California areas, as summarized below.

**Feather River Area.** Nine non-SWP agencies in the Feather River area received 1,192,276 af:

- Last Chance Creek Water District, 12,304 af;
- Thermalito Irrigation District, 1,781 af;
- South Feather Water and Power Agency, formerly Oroville-Wyandotte Irrigation District, 5,595 af;
- Western Canal Water District, 329,924 af;
- Joint Water District Board, 821,094 af;
- Oswald Water District, 490 af;

- Tudor Mutual Water Company, 2,270 af;
- Garden Highway Mutual Water Company, 14,208 af: and
- Plumas Mutual Water Company, 4,610 af.

Delta. In the Delta, 25,714 af of Byron-Bethany Irrigation District water was delivered pursuant to the May 28, 2003, Agreement Between the Department of Water Resources of the State of California and the Byron-Bethany Irrigation District Regarding the Diversion of Water from the Delta.

**North Bay Area.** In the North Bay area, 11,801 af of Vallejo permit water and 10,568 af of water pursuant to the May 19, 2003, Settlement Agreement among DWR, Solano County Water Agency, and the Cities of Fairfield, Vacaville, and Benicia, was delivered.

**South Bay Area.** In the South Bay area, a total of 17,794 af of local water was delivered to Alameda-Zone 7 and Alameda County. These two South Bay Aqueduct (SBA) SWP water contractors hold water rights to runoff from the Lake del Valle watershed.

**Southern California.** In Southern California, 125 af of local runoff from the Houston Creek watershed was stored and delivered to Crestline under water rights held by DWR on Houston Creek. The authorized place of use is limited to Crestline.

# **Annual Table A Water and Water Delivered Since 1962**

Information about annual Table A water and water conveyed for the past 45 years is contained in Table 9-5. The following discussion of conveyed Table A water is arranged according to column numbers.

#### Annual Table A Water

Columns 1 through 7 of Table 9-5 show the amount of SWP water contractors' annual Table A water by area for years 1962 through 2007 as specified in the Table A schedules of the long-term water supply contracts.

In some instances, Table A schedules projections of each contractor's need for water to 2035—have been amended to meet the needs of individual contractors. The amounts of annual Table A water each SWP water contractor may request for years 1962 through 2035 can be found in Table B-4 in Appendix B.

#### **Water Delivered**

Columns 8 through 16 show water delivered or conveyed, including initial fill water and operational losses and storage changes.

Table A Water. Column 8 shows amounts of Table A water delivered each year from 1962 through 2007. In 2007, a total of 2,081,217 af of Table A water was delivered.

Article 21 and Unscheduled Water. Column 9 shows amounts of Article 21 water. as defined under SWP deliveries, and unscheduled water delivered from 1962 through 2007. Article 21 and unscheduled water is water in excess of that required to meet all demands for the year's Table A water and water to be stored in SWP reservoirs. In 2007, a total of 309,973 af of Article 21 and unscheduled water was delivered.

Other Water. Column 10 includes amounts of water classified as other water delivered in 2007, including non-SWP water conveyed through SWP facilities and regulated delivery of local supply. In 2007, a total of 449,935 af of other water was delivered.

Feather River Diversions. Column 11 includes amounts of water from the Feather River delivered according to agreements for water rights water. Column 11 also includes Delta diversions. In 2007, a total of 1,217,990 af in this category was delivered to agencies in the Feather River area, including 25,714 af delivered to Byron-Bethany in the Delta.

**Recreation Water.** Column 12 shows water conveyed for recreational use or to improve habitat or water quality for fish and wildlife. In 2007, 2,581 af of SWP water was conveyed for this purpose.

*Initial Fill Water.* The quantities listed in Column 14 represent the amounts used to initially fill the aqueducts and reservoirs south of the Delta to maximum operating capacities. Initial filling began with the SBA in 1962, and was completed in 1979, when Lake Perris reached its maximum operating capacity of 127,000 af. In 1996 and 1997, the Coastal Aqueduct was initially filled.

**Operational Losses.** Column 15 includes the total amounts of water lost through evaporation and seepage, net storage changes in reservoirs south of the Delta, and amounts of inflow from local drainage areas, including inflows into San Luis Canal and from the Kern River Intertie. Negative values are indicated for years when withdrawals and evaporation from reservoirs south of the Delta exceed the amounts of water added to the reservoirs.

Table 9-3 Water Delivered to Long-Term Contractors in 2007, by Service Area (Acre-Feet)

			Table	Table A Water Delivered	red						Non	Non-SWP	
SWP Contractor	Table A not Transferred, Exchanged, or Stored	Table A Transferred or Exchanged (2)	Table A Stored (3)	Turnback Pools (4)	Total 2007 Table A (5)	2006 Carryover (6)	Total Table A (7)	Article 21 (8)	Other SWP (9)	Total SWP Water (10)	Water Bank Recovery (11)	Other Non- SWP (12)	Total Water Delivered (13)
Feather River													
County of Butte	926				926		926			926			926
Plumas County FC&WCD					0		0			0			0
City of Yuba City	2,327				2,327		2,327			2,327			2,327
North Bay													
Napa County FC&WCD	6,362				6,362	866	7,360	3,597		10,957			10,957
Solano County WA	14,892				14,892	1,822	16,714	8,217	10,568	35,499		11,801	47,300
South Bay													
Alameda County FC&WCD-Zone 7	32,972			378	33,350	2,895	36,245	912		37,157		14,196	51,353
Alameda County WD	16,541			197	16,738	2,103	18,841	550		19,391	2,000	865'9	30,989
Santa Clara Valley WD	38,812			469	39,281	8,161	47,442	4,840		52,282	20,000	3,100	75,382
San Joaquin Valley													
Castaic Lake WA (SJV)	4,424				4,424	1,647	6,071			6,071			6,071
County of Kings	4,924			43	4,967	305	5,272	474		5,746			5,746
Dudley Ridge Water District	26,937	9/6/9		269	34,182	2,000	36,182	8,953		45,135			45,135
Empire-West Side ID	397				397	515	912	1,172		2,084			2,084
Kern County WA	337,443	18,214		4,683	360,340	19,645	379,985	99,861		479,846	5,740	25,296	510,882
Oak Flat Water District	3,430			27	3,457	69	3,526	41		3,567			3,567
Tulare Lake Basin WSD	51,127	6,145		450	57,722	16,459	74,181	12,902		87,083			87,083
Central Coastal													
San Luis Obispo County FC&WCD	3,752				3,752		3,752	24		3,776			3,776
Santa Barbara County FC&WCD	24,760	520			25,280	1,390	26,670	1,070		27,740			27,740
Southern California													
Antelope Valley-East Kern WA	74,039	1,800			75,839	4,364	80,203			80,203			80,203
Castaic Lake WA	32,350		8,200		40,550	2,569	43,119			43,119		11,000	54,119
Coachella Valley WD	72,660			298	73,228		73,228			73,228			73,228
Crestline-Lake Arrowhead Water	1 768				1 768		1 768			1 768		125	1893
Desert Water Agency	30.000			234	30.234		30,234			30.234		!	30.234
Littlerock Creek ID	0				0		0			0			
Metropolitan Water District of SC	1,047,046			8,962	1,056,008	28,098	1,084,106	166,517	115,204	1,365,827	149,211		1,515,038
Mojave Water Agency	19,372				19,372	737	20,109			20,109	-		20,109
Palmdale Water District	12,780			100	12,880	985	13,865	843		14,708		4,926	19,634
San Bernardino Valley MWD	26,406	30,710			57,116		57,116			57,116			57,116
San Gabriel Valley MWD	4,024				4,024		4,024			4,024			4,024
San Gorgonio Pass WA	4,009				4,009		4,009			4,009			4,009
Ventura County WPD	3,000				3,000		3,000			3,000			3,000
Total	1,897,510	64,365	8,200	16,380	1,986,455	94,762	2,081,217	309,973	125,772	2,516,962	179,951	77,042	2,773,955