

[SUMMARY OF FINAL SUBMITTED VERSION]

PROGRESS REPORT BY PERMITTEE FOR 2010

Primary Owner: CALIF DEPT OF WATER RESOURCES

Application Number: A005630

Permit Number: 016478

Date Submitted: 2011-06-30

Compliance with Permit Terms and Conditions	
I have reviewed my water right permit	Yes
I am complying with all terms and conditions	Yes
Description of noncompliance with terms and conditions	
Intake location has been changed	
Description of intake location changes	
Type of use has changed	
Description of type of use changes	
Place of use has changed	
Description of place of use changes	

Permitted Project Status	
Project Status	Not Complete
Construction work has commenced	Yes
Construction is completed	No
Beneficial uses of water has commenced	Yes
Project will be completed within the time period specified in the permit	No
Explanation of work remaining to be done	<p>Construction of the East Branch Extension of the California Aqueduct is not yet complete. The facilities link the SWP at the Devil Canyon power plant to the eastern part of San Bernardino Valley Municipal Water District and San Geronio Pass Water Agency. Phase 1 of the East Branch Extension project is complete. DWR certified the Final Environmental Impact Report for Phase 2 of the East Branch Extension and approved the project on March 2, 2009. Work has begun on Phase 2 with completion of major construction activities currently projected for late 2014. Other facilities may be required depending on the outcome of current efforts to address issues in the Sacramento/San Joaquin Delta. Maximum annual diversion to storage at Lake Oroville and peak rate of direct diversion authorized under Permit 16478 have been reached. However, additional time is required to maximize the total annual diversion and beneficial use authorized under Permit 16478 and the remaining permits governing SWP operations at Oroville and in the Delta, Permits 16479, 16481, 16482 and 16483. Annual diversions to storage are dependent on numerous factors including end of season storage, annual hydrology, SWP demands and regulatory constraints. Maximum diversion rate, total annual diversion to storage and maximum annual use are expected to increase as demands within the SWP service area increase. DWR filed a Petition for Time Extension with the State Water Resources Control Board on December 31, 2009. There are a number of factors creating uncertainty as to the ultimate demands for project water and the quantities available and timing of diversions including the current Bay-Delta Conservation</p>

	Plan process. At this time, DWR is requesting a 5 year extension to allow time for the current planning processes to be completed. Following completion of the BDCP process DWR should be better able to estimate future demands for Project water.
Estimated date of completion	12/31/2035

Purpose of Use	
Other	salinity control
Industrial	mixed industrial
Domestic	0
Recreational	boating, fishing, water contact sports
Fish and Wildlife Protection and/or Enhancement	streamflow enhancement, fish & wildlife protection
Irrigation	750000 Acres Mixed Crop Types
Incidental Power	1876 MW
Municipal	25000000

Month	Amount directly diverted or collected to storage (Acre-Feet)	Amount used (Acre-Feet)
January	180936	31170
February	195086	65
March	4235	132
April	159	159
May	0	0
June	0	0
July	0	312265
August	0	36626
September	0	0
October	52	52
November	5	5
December	380041	41
Total	760514	380515

Month	Maximum Rate of Diversion (CFS)
January	2
February	2
March	3
April	3
May	0
June	0
July	0
August	0
September	0
October	3
November	1
December	1

Reservoir name	Spilled this year	Feet below spillway at maximum storage	Completely emptied	Feet below spillway at minimum storage	Method used to measure water level
Oroville	No	0	No	0	nitrogen bubbler

Conservation of Water	
Are you now employing water conservation efforts?	Yes
Description of water conservation efforts	Since 1979, DWR has provided information and assistance to water users. The Department's Office of Water Use Efficiency provides expertise to local agencies and individuals regarding agricultural and urban water and energy conservation, reclamation and reuse of water, land and water use, and drainage management. The office also manages the California Irrigation Management Information System (CIMIS), assists in establishing mobile laboratories that conduct irrigation system evaluations, carries out data analysis, demonstration projects, and research to achieve energy and water use efficiency, and provides loans and grants to make more efficient use of water and energy resources. In addition to DWR's efforts, the agencies receiving SWP water implement local water conservation programs.
Amount of water conserved	0 Acre-Feet

Water Quality and Wastewater Reclamation	
During the period covered by this Report, did you use reclaimed water from a wastewater treatment facility, water from a desalination facility, or water polluted by waste to a degree which unreasonably affects the water for other beneficial uses?	No
Amount of reclaimed, desalinated, or polluted water used	

Conjunctive Use of Groundwater and Surface Water	
During the period covered by this Report, were you using groundwater in lieu of available surface water authorized under your permit?	No
Amounts of groundwater used	

Additional Remarks
See Attached Remarks

Attachments	
File Name	Size
2010 FRSA Deliveries attachment.pdf	14 KB
2010 SWP Deliveries attachment.pdf	17 KB
2010 SWP operations attachment.pdf	23 KB
A5630 Additional Remarks.pdf	11 KB

Contact Information of the Person Submitting the Form	
First Name	Nancy
Last Name	Quan
Relation to Water Right	Agent
Has read the form and agrees the information in the report is true to the best of his/her knowledge and belief	Yes

**2010 Deliveries to Feather River Water Rights
Settlement Contractors from Lake Oroville**

Month	Thermalito Deliveries (AF)	Feather River Deliveries (AF)	Total (AF)
Jan	44,864	0	44,864
Feb	0	2	2
Mar	0	2	2
Apr	0	299	299
May	126,744	4,449	131,193
Jun	142,012	5,728	147,740
Jul	175,589	4,155	179,744
Aug	154,655	5,041	159,696
Sep	64,465	829	65,294
Oct	52,879	3,069	55,948
Nov	106,560	0	106,560
Dec	73,465	0	73,465
Total	941,233	23,574	964,807

Deliveries to water rights settlement contractors on Feather River shown in the above table are made through SWP facilities with a combination of natural flow and storage releases. Only those quantities made available through release of SWP water are reported in Item 7.

2010 Deliveries to Long Term State Water Project Contractors

Month	Deliveries from Feather River (AF)	North Bay Aqueduct (AF)	Downstream of Harvey O. Banks Pumping Plant (AF)	Recreation (AF)	Total (AF)
Jan	82	0	68,435	72	68,589
Feb	66	0	36,606	15	36,687
Mar	134	0	70,285	23	70,442
Apr	162	0	115,854	52	116,068
May	3	0	182,868	113	182,984
Jun	6	0	262,909	147	263,062
Jul	1,184	3,207	329,270	182	333,843
Aug	1,393	6,145	363,790	158	371,486
Sep	40	0	283,423	102	283,565
Oct	15	0	223,742	117	223,874
Nov	7	0	202,772	111	202,890
Dec	46	0	186,278	75	186,399
Total	3,138	9,352	2,326,232	1,167	2,339,889

The quantities shown represent SWP deliveries from water appropriated under Permits 16478, 16479, 16481, and 16482 only.

SWP Deliveries at North Bay appropriated under Permit 16483 and from Lake Davis under Permits 15254 and 15255 are reported under those individual permits.

Quantities shown represent SWP deliveries only.

Quantities do not include deliveries of water under water rights settlement agreements or for fish and wildlife, maintenance of water quality or other environmental purposes.

2010 State Water Project Major Facilities Operations

Month	Oroville End of Month Storage ¹⁾ (AF)	Diversion to Storage at Oroville (AF)	Barker Slough Pumping Plant (AF)	Harvey O. Banks Pumping Plant ²⁾ (AF)	San Luis Reservoir End of Month Storage (AF)	Pyramid Lake End of Month Storage (AF)	Castaic Lake End of Month Storage (AF)	Silverwood Lake End of Month Storage (AF)	Lake Perris End of Month Storage (AF)	Total Diversion to Storage from Delta ³⁾ (AF)
Jan	1,190,546	180,876	921	247,157	567,198	166,770	260,133	60,656	63,629	219,566
Feb	1,385,567	195,021	1,171	167,856	693,804	168,190	274,049	70,676	58,914	147,247
Mar	1,649,826	264,259	549	224,635	834,324	167,754	265,934	70,148	66,743	112,889
Apr	2,113,446	463,620	1,467	40,736	813,067	168,575	259,891	70,865	65,816	0
May	2,493,585	380,139	4,369	59,904	687,721	169,927	246,696	72,686	63,734	0
Jun	2,719,221	228,382	5,860	197,011	603,975	164,308	249,658	70,195	63,053	0
Jul	2,407,823	0	6,555	304,707	516,050	167,025	255,448	70,752	62,635	0
Aug	2,039,725	0	6,434	396,108	473,463	166,184	258,868	70,544	61,768	0
Sep	1,755,194	0	6,104	335,463	414,268	164,308	259,734	69,960	61,200	0
Oct	1,701,555	0	5,131	291,871	436,476	169,992	285,714	66,319	60,736	25,420
Nov	1,637,596	0	4,101	295,476	527,892	166,439	279,419	70,412	64,260	73,330
Dec	2,180,369	546,164	1,380	420,748	802,501	164,321	291,467	71,796	69,271	288,344
Total		2,258,461	44,042	2,981,672						866,796

Notes:

SWP Operations authorized under Permits 16478, 16479, 16481, 16482, and 16483.

1. Oroville Storage represents water use authorized under Permits 16478 and 16479.

2. Banks Pumping represents SWP pumping only authorized under Permits 16478, 16479, 16481, and 16482.

3. Quantities shown do not include redirection of Oroville Storage

Additional Remarks

All data is preliminary and subject to change. Water diversion and use have been allocated to the individual Permits 16478, 16479, 16481, 16482, and 16483 governing the primary operations of the State Water Project (SWP) consistent with the water rights priorities. However, SWP operations are not segmented by individual permit. The SWP is operated as a single coordinated project consistent with the joint terms and conditions specified in Water Rights Decision 1641 (D1641) and the criteria specified in the biological opinions for the protection of Delta smelt and anadromous fishes. Operations are also coordinated with the U.S. Department of Interior, Bureau of Reclamation consistent with the provisions of the Coordinated Operations Agreement (COA) dated November 24, 1986. The SWP is a large complex project with nearly 700 miles of aqueduct, numerous storage and regulating reservoirs, multiple diversion facilities, and several different water supply sources. Allocating diversion and use to individual permits requires numerous simplifying assumptions due to the complexity of the project, the substantial geographic distribution of facilities, multiple water sources, numerous rediversion and delivery locations and multiple authorized purposes of use, both consumptive and non-consumptive. Those assumptions do not necessarily reflect actual project operations or the physical environment. In order to allow allocation of diversion and use to individual permits for purposes of annual reporting, project operations were assumed to be instantaneous at all locations throughout the project on any given day. While it is recognized that there is substantial time lag between diversions and releases at Lake Oroville, the Sacramento/San Joaquin Delta and deliveries throughout the SWP, the assumption is necessary to allow allocation of diversion and use to individual permits and is considered sufficient for annual reporting purposes. Quantities for diversion to storage do not include quantities for the smaller reregulating reservoirs.

- Item 2: SWP water rights permit terms and conditions are specified in D1641. There was one minor exceedence of the D1641 Export/Inflow criteria in 2010. The E/I ratio exceeded 65% (actual 68%) for two days on October 11 and 12, 2010. The exceedence was reported to the State Water Resources Control Board on October 25, 2010. The exceedence was the result of lower than expected inflows to the Delta due to a shift in timing of Mokelumne River pulse flows.
- Item 7: The SWP is a large complex water supply system consisting of 29 dams, 30 pumping and generating plants and approximately 675 miles of aqueducts. DWR diverts water under its permits for irrigation, industrial, municipal, domestic, incidental power, recreation, salinity control and fish and wildlife enhancement purposes. The SWP delivers water to 29 long-term water supply contractors serving approximately 25 million people and providing irrigation to approximately 750,000 acres of farmland. Recreation opportunities at SWP facilities include boating, fishing, water contact sports and camping, among others. DWR generates incidental power under permits 16478, 16479, 16481, and 16482 at the Gianelli, Alamo, Warne, Mojave Siphon, and Devil Canyon powerplants. (total installed capacity 626 MW) Power is also generated by the flows appropriated under the above permits at the Castaic Powerplant owned and operated by Los Angeles Department of

Additional Remarks

- Water and Power (1250 MW). Specific information regarding SWP operations and deliveries are contained in DWR Bulletin 132. The Division of Water Rights receives a copy of Bulletin when it is released. It is also available online at <http://www.water.ca.gov/swpao/bulletin.cfm>.
- Item 8: The quantities shown in Item 8 reflect those diverted under Permit 16478 only. The data contained in the attached tables reflect the overall operation of the SWP and include water use under Permits 16478, 16479, 1648, 16482 and 16483 which authorize use for irrigation, domestic, municipal, industrial, salinity control, recreational and fish and wildlife enhancement purposes, both consumptive and nonconsumptive purposes. The authorized season of diversion to storage at Oroville under Permits 16478 and 16479, September 1 through July 31, does not coincide with the annual reporting period of January 1 through December 31. The calendar year reporting period encompasses portions of the 2009/2010 and 2010/2011 water years. Season for direct diversion is January 1 through December 31 of each year. The quantities shown in item 8 reflect the water directly diverted or diverted to storage consistent with the terms and conditions of Permit 16478 during each month of calendar year 2010 for all authorized purposes of use. Total diversion to storage in 2010 at Lake Oroville under Permits 16478 and 16479 was 2,258,461 acre-feet.
- Item 9: Direct diversion is authorized under Permit 16478 at both the Oroville/Thermalito complex and from the Sacramento San Joaquin Delta channels. The quantities shown reflect diversions at both locations.
- Item 10: Lake Oroville did not spill in 2010. Water level at minimum storage during calendar year 2010 was 148.2 feet below the sill of the gated spillway of Oroville Dam (Elevation 813.60 feet). Water level at maximum storage was 29.7 feet above the sill of the gated spillway. Normal operating maximum elevation for Oroville Reservoir is 899.0 feet. The SWP reservoirs south of the Delta are designed for offstream storage and are operated to avoid spill. Water may be directly diverted from the Delta channels or rediverted from Lake Oroville. Water levels fluctuate substantially throughout the year as DWR diverts or rediverts water to individual reservoirs depending on Project supplies and regional demands.