SJC-085

[SUMMARY OF FINAL SUBMITTED VERSION]

PROGRESS REPORT BY PERMITTEE FOR 2011

Primary Owner: CALIF DEPT OF WATER RESOURCES
Application Number: A005630
Permit Number: 016478
Date Submitted: 2012-06-28

1. Permit Review	
I have reviewed my water right permit	Yes

2. Compliance with Permit Terms and Conditions	
I am complying with all terms and conditions	Yes
Description of noncompliance with terms and conditions	

3. Changes to the Project	
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	
Other changes	
Description of other changes	

4-6. Permitted Project Status	
Project Status	Not Complete
6a. Construction work has commenced	Yes
6b. Construction is completed	Yes
6c. Beneficial uses of water has commenced	Yes
6d. Project will be completed within the time period specified in the permit	No
	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 Gorgonio 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

6e. Explanation of work remaining to be done	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 Plan (BDCP) 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.
6f. Estimated date of completion	12/31/2035

7. 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

8. Amount of Water Diverted and Used		
Month	**Amount directly diverted or collected to storage (Acre-Feet)**	**Amount used (Acre-Feet)**
January	30	30
February	16	16
March	1	2
April	86	86
May	167	199
June	54	67
July	1050	1162
August	0	20077
September	0	4322
October	0	3099
November	0	53092
December	0	88194
Total	1404	170346

9. Maximum Rate of Diversion for each Month	
Month	**Maximum Rate of Diversion (CFS)**
January	0
February	0
March	0
April	1
May	3

June	1
July	19
August	0
September	0
October	0
November	0
December	0

10. Storage					
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	Yes		No	0	Nitrogen Bubbler

Conservation of Water	
11. 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.
12. Amount of water conserved	

Water Quality and Wastewater Reclamation	
13. 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
14. Amount of reclaimed, desalinated, or polluted water used	

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

Additional Remarks
See Attached Remarks

Attachments		
File Name	**Description**	**Size**
2011 Feather River Settlement Deliveries.pdf		40 KB
2011 SWP Deliveries.pdf		42 KB
2011 SWP Reservoir-Pumping Operations.pdf		54 KB
5630 Additional Remarks 2011.pdf		11 KB

Contact Information of the Person Submitting the Form	
First Name	Nancy

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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

Deliveries to SWP Settlement Contractors from Thermalito Afterbay/Feather River 2011

Month	Thermalito Deliveries	Feather River Deliveries	Total
Jan	43,844	0	43,844
Feb	0	4	4
Mar	0	0	0
Apr	8,740	838	9,578
May	151,380	3,877	155,257
Jun	138,639	5,081	143,720
Jul	179,657	4,932	184,589
Aug	168,159	5,149	173,308
Sep	65,441	2,597	68,038
Oct	17,340	1,175	18,515
Nov	122,509	0	122,509
Dec	95,805	0	95,805
Total	991,514	23,653	1,015,167

Note:

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

State Water Project Deliveries
2011

Month	Deliveries from Feather	North Bay Aqueduct	Downstream of Banks Pumping Plant	Recreation	Total
Jan	30	0	235,732	84	235,846
Feb	16	0	219,542	62	219,620
Mar	2	0	228,835	67	228,904
Apr	86	0	228,735	128	228,949
May	199	0	246,919	166	247,284
Jun	67	0	320,233	161	320,461
Jul	1,162	0	461,607	191	462,960
Aug	1,336	0	473,433	206	474,975
Sep	371	3	390,205	167	390,746
Oct	114	0	276,481	108	276,703
Nov	2	0	254,070	150	254,222
Dec	4	0	287,934	103	288,041
Total	3,389	3	3,623,726	1,593	3,628,711

Notes:

The quantities shown represent SWP deliveries from water appropriated under
Permits 16478, 16479, 16481, and 16482 only.
SWP Deliveries from Lake Davis under Permits 15254 and 15255 are reported separately.

Term 91 never declared in 2011; all diversions at NBA below 135 cfs reported under Permit 16483

Quantities shown represent SWP deliveries only.

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

State Water Project Reservoir/Pumping Operations
2011

Month	Oroville End of Month Storage[1)]	Diversion to Storage at Oroville	Banks Pumping Plant - SWP Pumping[2)]	San Luis Reservoir End of Month Storage	Pyramid Lake End of Month Storage	Castaic Lake End of Month Storage	Silverwood Lake End of Month Storage	Lake Perris End of Month Storage	Total Diversion to Storage from Delta [3)]
	(AF)	(AF)	(AF)	(AF)	(AF)	(AF)	(AF)	(AF)	(AF)
Jan	2,438,925	258,556	415,077	972,523	166,770	290,032	58,285	70,333	160,426
Feb	2,683,846	244,921	329,016	1,035,197	168,190	293,840	70,344	73,597	87,786
Mar	2,839,993	339,157	211,645	1,067,630	167,754	309,949	71,235	73,073	43,659
Apr	3,305,228	465,235	231,074	1,061,870	168,575	313,798	71,397	73,747	0
May	3,399,517	103,085	100,218	931,404	169,927	309,340	71,853	72,831	0
Jun	3,514,713	139,482	369,774	925,961	164,308	309,862	72,063	72,384	0
Jul	3,501,203	0	418,936	907,040	167,025	297,740	69,491	69,655	0
Aug	3,311,103	0	425,284	847,929	166,184	293,312	73,060	67,982	0
Sep	3,044,943	0	422,719	874,049	164,308	284,056	70,733	66,012	12,324
Oct	2,895,802	0	403,779	968,194	169,992	278,295	62,703	67,640	66,700
Nov	2,806,470	0	206,675	915,386	166,439	283,043	65,120	73,036	0
Dec	2,544,964	0	318,338	964,224	164,321	277,131	68,020	71,642	20,886
Total		1,550,436	3,852,535						391,781

Notes:

1. Oroville Storage represents water use authorized under Permits 16478 and 16479.
2. Banks Pumping shown represents SWP pumping only authorized under Permits 16478, 16479, 16481, and 16482.
3. Quantities shown do not include rediversion of Oroville Storage

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 substantial geographic distribution of facilities, multiple water sources, numerous rediversion and delivery locations and multiple authorized purposes of use, both consumptive and non-consumptive. 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 any location 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. The simplifying assumptions used for reporting purposes may result in the introduction of small discrepancies between quantities pumped and diverted to storage on a given day. Summary tables for total SWP operations for all relevant permits are attached to this report. The assumptions used were reviewed by SWRCB staff and are considered sufficient for annual reporting purposes.

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, camping, and equestrian 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 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.

Remarks

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 2010/2011 and 2011/2012 water years. The amount of water put to beneficial use may differ substantially from that diverted in any one month due to a shift in timing of diversion to storage and subsequent release for beneficial use. The period between initial storage and ultimate beneficial use may span multiple calendar years. The 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 2011 for all authorized purposes of use. Total diversion to storage in 2011 at Lake Oroville under Permits 16478 and 16479 was 1,550,463 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: Water level at minimum storage during 2011 was 13.3 feet below the sill of the gated spillway for Oroville Dam (Elevation 813.60 feet). Water level at minimum storage during the 2010/11storage season was 68.3 feet below the sill of the gated spillway. Water level at maximum storage was 900.1 feet (87.1 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 built 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.