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[SUMMARY OF FINAL SUBMITTED VERSION]

PROGRESS REPORT BY PERMITTEE FOR 2012

Primary Owner: CALIF DEPT OF WATER RESOURCES
Primary Contact: Nancy Quan

Date Submitted: 2013-06-28

Application Number: A005630
Permit Number: 016478

Source(s) of Water	POD Parcel Number	County
FEATHER RIVER		Butte
FEATHER RIVER		Butte
FEATHER RIVER		Butte
ITALIAN SLOUGH		Contra Costa
SACRAMENTO RIVER DELTA CHANNELS		Sacramento

MAX Direct Diversion Rate: 1400.0 CFS
MAX Collection to Storage: 380000.0 AC-FT
Face Value: 1393568.5 AC-FT

Permitted Use(s)	Acres	Direct Diversion Season	Storage Season
Domestic	0.0	01/01 to 12/31	09/01 to 07/31
Fish and Wildlife Protection and/or Enhancement	0.0	01/01 to 12/31	09/01 to 07/31
Incidental Power	0.0	01/01 to 12/31	09/01 to 07/31
Industrial	0.0	01/01 to 12/31	09/01 to 07/31
Irrigation	999999.9	01/01 to 12/31	09/01 to 07/31
Irrigation			
Municipal	0.0	01/01 to 12/31	09/01 to 07/31
Other	0.0	01/01 to 12/31	09/01 to 07/31
Recreational	0.0	01/01 to 12/31	09/01 to 07/31

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	No
6c. Beneficial uses of water has commenced	Yes
6d. Project will be completed within the time period specified in the permit	No
6e. Explanation of work remaining to be done	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 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	49051	46687
February	99	2463
March	330987	2004
April	18	18
May	69	11642
June	5	275584
July	0	87122
August	0	35079
September	0	0
October	5	5
November	84513	64518
December	295630	137
Total	760377	525259
Comments		

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

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of water conservation efforts	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
2012 FR Settlement Contract Deliveries.pdf		35 KB
2012 SWP Project Deliveries.pdf		37 KB
2012 SWP Reservoir Operations.pdf		48 KB
5630 Additional Remarks 2012.pdf		21 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

Deliveries to SWP Settlement Contractors from Thermalito Afterbay/Feather River 2012

Month	Thermalito Deliveries	Feather River Deliveries	Total
Jan	44,288	168	44,456
Feb	0	4	4
Mar	0	858	858
Apr	696	435	1,131
May	141,574	8,923	150,497
Jun	155,709	6,203	161,912
Jul	179,046	6,912	185,958
Aug	157,394	5,375	162,769
Sep	64,423	2,862	67,285
Oct	62,580	3,954	66,534
Nov	121,857	199	122,056
Dec	65,805	0	65,805
Total	993,372	35,893	1,029,265

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
2012

Month	Deliveries from Feather	North Bay Aqueduct	Downstream of Banks Pumping Plant	Recreation	Total
Jan	59	0	193,123	107	193,289
Feb	115	0	140,536	88	140,739
Mar	20	0	124,769	107	124,896
Apr	18	0	182,730	89	182,837
May	134	0	279,267	163	279,564
Jun	153	0	357,758	245	358,156
Jul	1,446	0	411,691	206	413,343
Aug	1,606	5,066	412,876	213	419,761
Sep	205	0	283,338	200	283,743
Oct	164	0	287,619	81	287,864
Nov	12	0	184,436	61	184,509
Dec	137	0	88,727	60	88,924
Total	4,069	5,066	2,946,870	1,620	2,957,625

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 in effect 8/2/13 through 8/31/13; North Bay Aqueduct diversions outside Term 91 period 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
2012

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	2,545,089	49,028	227,746	972,523	166,923	283,869	71,577	68,868	140,955
Feb	2,519,619	0	103,822	0	165,955	281,990	70,998	73,953	56,744
Mar	2,942,527	432,476	89,877	1,067,630	168,446	292,553	68,679	73,953	18,265
Apr	3,422,152	479,625	79,544	1,061,870	166,630	296,359	68,986	73,840	0
May	3,499,634	102,157	100,348	931,404	168,061	308,036	73,195	73,840	0
Jun	3,225,685	0	88,607	925,961	166,566	299,104	71,720	71,809	0
Jul	2,672,943	0	347,953	907,040	167,345	284,201	70,970	71,642	0
Aug	2,229,076	0	360,987	847,929	165,156	271,695	70,120	73,129	0
Sep	1,976,756	0	276,634	874,049	168,819	264,266	71,235	72,013	12,849
Oct	1,826,563	0	227,043	968,194	164,030	238,029	72,255	73,129	8,444
Nov	1,861,755	84,507	176,734	915,386	164,283	257,062	72,197	74,253	1,932
Dec	2,525,097	663,342	260,252	964,224	167,908	291,312	70,016	69,417	0
Total		1,811,135	2,339,547						239,189

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

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 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 2: SWP water rights permit terms and conditions are specified in D1641. There was one minor exceedence of the Export/Inflow criteria in 2012. The E/I ratio exceeded 65% (actual 68%) for one day on October 28, 2012 due to an error in the preliminary Jones Pumping Plant export data and difference between real time and predicted depletions. The exceedence was reported to the State Water Resources Control Board on November 27, 2012. The EC objective at the Old River at Tracy Road Bridge station was exceeded on three occasions in 2012; March 8 through April 29, April 30 through May 25 and August 6 through August 31. The exceedences were due to degradation within the Delta channels downstream of Vernalis. DWR does not contribute towards and has no ability to control salinity levels within the South Delta. The exceedences were reported to the SWRCB on April 2, May 11 and August 20, respectively.

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.

Item 8: The quantities shown in Item 8 reflect diversion and use allocated to 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 2011/2012 and 2012/2013 water 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 2012 for all authorized purposes of use. Total diversion to storage in 2012 at Lake Oroville under Permits 16478 and 16479 was 1,811,135 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.

Item 10: Water level at minimum storage during 2012 was 53.6 feet below the sill of the gated spillway for Oroville Dam (Elevation 813.60 feet). Water level at maximum storage was 899.0 feet (85.4 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.