

**[SUMMARY OF FINAL SUBMITTED VERSION]****PROGRESS REPORT BY PERMITTEE FOR 2014**

Primary Owner: CALIF DEPT OF WATER RESOURCES

Primary Contact: Nancy Quan

Date Submitted: 2015-06-30

Application Number: A014443

Permit Number: 016479

|                                       |                   |              |
|---------------------------------------|-------------------|--------------|
| Source(s) of Water                    | POD Parcel Number | County       |
| FEATHER RIVER                         |                   | Butte        |
| FEATHER RIVER                         |                   | Butte        |
| FEATHER RIVER                         |                   | Butte        |
| SACRAMENTO SAN JOAQUIN DELTA CHANNELS |                   | Contra Costa |

MAX Direct Diversion Rate: 7545.0 CFS

MAX Collection to Storage: 3542100.0 AC-FT

Face Value: 9004510.2 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 |
| Municipal                                       | 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                                                | Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 6c. Beneficial uses of water has commenced                                   | Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 6d. Project will be completed within the time period specified in the permit | Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 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 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 mid-2017. Other facilities may be required depending on the outcome of current efforts to address issues in the Sacramento/San Joaquin Delta. Additional time is required to maximize the diversion and beneficial use authorized under the permits governing SWP operations at Lake Oroville and in the Delta, Permits 16478, 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. 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                                        | See Remarks                                        |
| 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 (Acre-Feet) | Amount diverted or collected to storage (Acre-Feet) | Amount used (Acre-Feet) |
|-------|--------------------------------------|-----------------------------------------------------|-------------------------|
|       |                                      |                                                     |                         |

|           |        |        |        |
|-----------|--------|--------|--------|
| January   | 0      | 0      | 63221  |
| February  | 51771  | 7561   | 51771  |
| March     | 57314  | 108444 | 46323  |
| April     | 30831  | 160346 | 49861  |
| May       | 11318  | 0      | 50118  |
| June      | 0      | 0      | 13097  |
| July      | 0      | 0      | 129681 |
| August    | 0      | 0      | 58673  |
| September | 0      | 0      | 66746  |
| October   | 0      | 0      | 118387 |
| November  | 23654  | 0      | 57167  |
| December  | 8363   | 57443  | 8363   |
| Total     | 183251 | 333794 | 713408 |
| Comments  |        |        |        |

### Water Transfers

|                                     |        |
|-------------------------------------|--------|
| 8e. Water transfered                | No     |
| 8f. Quantity transfered (Acre-Feet) |        |
| 8g. Dates which transfer occurred   | / to / |
| 8h. Transfer approved by            |        |

### Water Supply Contracts

|                                                                    |    |
|--------------------------------------------------------------------|----|
| 8i. Water supply contract                                          | No |
| 8j. Contract with                                                  |    |
| 8k. Other provider                                                 |    |
| 8l. Contract number                                                |    |
| 8m. Source from which contract water was diverted                  |    |
| 8n. Point of diversion same as identified water right              | No |
| 8o. Amount (Acre-Feet) authorized to divert under this contract    |    |
| 8p. Amount (Acre-Feet) authorized to be diverted in 2014           |    |
| 8q. Amount (Acre-Feet) projected for 2015                          |    |
| 8r. Exchange or settlement of prior rights                         | No |
| 8s. All monthly reported diversion claimed under the prior rights  | No |
| 8t. Amount (Acre-Feet) of reported diversion solely under contract |    |

### 9. Maximum Rate of Diversion for each Month

| Month     | Maximum Rate of Diversion (CFS) |
|-----------|---------------------------------|
| January   | 0                               |
| February  | 4000                            |
| March     | 4127                            |
| April     | 1605                            |
| May       | 837                             |
| June      | 0                               |
| July      | 0                               |
| August    | 0                               |
| September | 0                               |
| October   | 0                               |
| November  | 236                             |
| December  | 4201                            |

| 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           | No                | 0                                      | No                 | 0                                      | Nitrogen Bubbler                                                  |
| San Luis Reservoir | No                | 0                                      | No                 | 0                                      | Analog Stevens Recorder-Indicating and Recording Water Level Gage |
| Pyramid Lake       | No                | 0                                      | No                 | 0                                      | Prosonic Instrument                                               |
| Castaic Lake       | No                | 0                                      | No                 | 0                                      | Nitrogen Bubbler                                                  |
| Silverwood Lake    | No                | 0                                      | No                 | 0                                      | Prosonic Instrument                                               |
| Perris Lake        | No                | 0                                      | No                 | 0                                      | Prosonic Instrument                                               |

| 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                                                                                                                                                                                               |    |

| Conjunctive 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  |
| <a href="#">14443 Remarks-14.pdf</a> |             | 22 KB |

| Contact Information of the Person Submitting the Form |       |
|-------------------------------------------------------|-------|
| First Name                                            | Nancy |

|                                                                                                                |                         |
|----------------------------------------------------------------------------------------------------------------|-------------------------|
| Last Name                                                                                                      | Quan                    |
| Relation to Water Right                                                                                        | Primary Owner of Record |
| Has read the form and agrees the information in the report is true to the best of his/her knowledge and belief | Yes                     |

**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. 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. The assumptions used were reviewed by SWRCB staff and are considered sufficient for annual reporting purposes. 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. 2014 was a critically dry year and presented significant operational challenges. DWR worked closely with Reclamation, the SWRCB, the National Marine Fisheries Service, U.S. Fish and Wildlife Service and the California Department of Fish and Wildlife, and used the operational flexibility of the coordinated operations to minimize the effects of the severe drought on water supply, fisheries resources and the Delta.

Item 2: SWP water rights permit terms and conditions are specified in D1641. Due to the historically dry conditions, the Governor declared a state of emergency on January 17, 2014. Project Delta operations were very challenging due to the critically dry conditions and low reservoir storage. DWR and Reclamation jointly petitioned the SWRCB for a Temporary Urgency Change to temporarily modify some of the requirements in D1641 including Delta Outflow, Delta Cross Channel Gate operations. The changes were necessary to preserve upstream storage to aid in meeting instream flow and salinity requirements later in the year. The SWRCB issued an order approving the TUC on January 31, 2014. The order was subsequently modified by the SWRCB as necessary to adapt to the unique conditions presented by the drought. The TUC remained in effect through the end of 2014. The joint petitions, SWRCB orders and supporting information can be accessed at [http://www.waterboards.ca.gov/waterrights/water\\_issues/programs/drought/tucp.shtml](http://www.waterboards.ca.gov/waterrights/water_issues/programs/drought/tucp.shtml)

There were some exceedences of the EC objectives and flow in 2014 due to influences beyond the control of DWR. The EC objective at the Old River at Tracy Road Bridge station was exceeded December 30, 2013 through October 16. The EC objective at Old River near Middle River was exceeded from July 12 through August 15. 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. There was a minor exceedence of the monthly average outflow for 5 days

from August 1 through August 31 due to the critically dry conditions. All exceedences were reported to the SWRCB.

- 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 16479 only 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 Permit 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 2013/2014 and 2014/2015 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 16479 during each month of calendar year 2014 for all authorized purposes of use. Total diversion to storage in 2013 at Lake Oroville under Permits 16478 and 16479 was 1,051,694 acre-feet. The quantities shown for beneficial use include water diverted and put to use in 2014 as well as water stored in previous years.
- Item 9: Direct diversion is authorized under Permit 16479 at both the Oroville/Thermalito complex and in the Delta.
- Item 10: Water level at minimum storage during 2014 was 165.9 feet below the sill of the gated spillway for Oroville Dam (Elevation 813.60 feet). Water level at maximum storage was 770.6 feet (43 feet below 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.