



United States Department of the Interior

BUREAU OF RECLAMATION
Central Valley Operations Office
3310 El Camino Avenue, Suite 300
Sacramento, California 95821

IN REPLY
REFER TO:

CVO-400
WTR-4.10

OCT 28 2015

VIA ELECTRONIC MAIL ONLY

Ms. Barbara Evoy
Deputy Director, Division of Water Rights
State Water Resources Control Board
P.O. Box 2000
Sacramento, CA 95812

Subject: Monitoring and Reporting Program on Water Rights Order No. 90-5 (Water Rights)

Dear Ms. Evoy:

For the month of September, the temperature control point was set at Clear Creek, per the recommendation of the Sacramento River Temperature Task Group.

During September 2015, the average daily water temperature compliance of 58.0° F or less was met at the Clear Creek compliance point on the Sacramento River.

The objective is to target 57.0° F at Clear Creek and not to exceed 58.0° F. This purpose is to give the flexibility of temperature fluctuation during heat waves. Approximately 98% of Redds have been observed above HW 44 Bridge which is about 12 miles upstream of the Clear Creek compliance point on the Sacramento River.

During the month of September 2015, the average monthly water temperature was 56.7° F at Clear Creek.

Enclosed is the monitoring report for September 2015, under Order No. 90-5. The report contains the following data:

| Station | Description |
|--------------------------|--|
| Shasta Inlets (R-1) “ | Water Temperature Profile Turbidity, monthly, ntu |
| Shasta Dam (R-2) “ | Water Temperature, daily average, degrees F Turbidity, ntu, monthly |
| Shasta Dam (R-2a) | Flow, average daily, cfs |
| Keswick (R-3) “ | Water Temperature, daily average, degrees F Turbidity, ntu, monthly |

| Station | Description |
|--|---|
| Keswick (R-3a) | Flow, average daily, cfs |
| Spring Creek Power plant (R-4) “ | Water Temperature, daily average, degrees F Turbidity, ntu, monthly Flow, average daily cfs |
| Jellys Ferry (R-5) (Control Point) | Water Temperature, daily average, degrees F Turbidity, ntu, monthly |
| Sacramento at Delta (R-6) | Water Temperature, monthly, degrees F Turbidity, ntu, monthly |
| McCloud (R-7) “ | Water Temperature, monthly, degrees F Turbidity, ntu, monthly |
| Pit River (R-8) “ | Water Temperature, monthly, degrees F Turbidity, ntu, monthly |
| Lewiston (R-9) | Water Temperature, daily average, degrees F |
| Lewiston (R-9a) | Flow, average daily, cfs |

Please contact Ms. Thuy Washburn at 916-979-2193, should you have any questions regarding this data.

Sincerely,



Elizabeth Kiteck
Chief Water Operations

Enclosures

cc: Mr. Kenneth Emanuel
Division of Water Rights
State Water Resources Control Board
P.O. Box 2000
Sacramento, CA 95812
(w/encl)

Subject: Monitoring and Reporting Program on Water Rights Order No. 90-5 (Water Rights)

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bc: Regional Solicitor

Pacific Southwest Region
2800 Cottage Way, Room E-1712
Sacramento, CA 95821

Paul Zedonis
NC-312
Northern California Area Office
16349 Shasta Dam Boulevard
Shasta Lake, CA 96019

Ms. Robin Schrock
NC-150
P.O. Box 1300
Weaverville, CA 96093
(w/encl to each)

Stacey Smith
3310 El Camino Ave.
Sacramento, CA 95821

Central Valley Operations Office
 *Data obtained from the California Data Exchange Center
 **Data calculated by the Central Valley Operations Office
 ***Measurements taken by the Northern CA Area Office Personnel
Water Temperature Data in Degrees F
September 2015

| Req. Sampling Frequency - Daily Average (Reading indicates daily average) | | | | | | | Req. Sampling Frequency - Monthly | | | |
|--|---------------|---------------|----------------|----------------|---------------|----------------|--|-----------------|-----------------|--|
| | | | | | | | Control Pt 9/1 to 9/30 | | | |
| Date | Sta 2 Shd* | Sta 3 Kwk* | Sta 4 Spp** | Sta 5 Ccr** | Sta 9 Lws* | Sta 10 Dgc* | Sta 6 Dlt*** | Sta 7 Mss*** | Sta 8 Pmn*** | |
| 1 | 52.3 | 55.2 | 58.8 | 56.9 | 53.7 | 56.5 | | | | |
| 2 | 52.3 | 54.8 | 58.8 | 56.3 | 53.6 | 56.0 | | | | |
| 3 | 52.2 | 54.9 | 58.8 | 56.5 | 53.5 | 55.6 | | | | |
| 4 | 52.2 | 54.7 | 58.8 | 56.1 | 53.6 | 55.1 | | | | |
| 5 | 52.6 | 54.6 | 58.7 | 55.9 | 53.9 | 55.0 | | | | |
| 6 | 52.9 | 54.5 | 58.7 | 56.0 | 53.6 | 55.4 | | | | |
| 7 | 53.0 | 54.8 | 58.6 | 56.2 | 53.5 | 55.6 | | | | |
| 8 | 53.1 | 55.1 | 58.6 | 56.6 | 53.6 | 55.7 | | | | |
| 9 | 53.1 | 55.5 | Out of Service | 56.9 | 53.8 | 55.0 | | | | |
| 10 | 53.4 | 55.3 | 58.6 | 56.9 | 53.8 | 55.0 | Per Northern California Area Office Staff, site visits not accomplished at Mss & Pmn in September 2015 | | | |
| 11 | 53.5 | 55.1 | 59.1 | 56.6 | 53.6 | 55.2 | | | | |
| 12 | 53.8 | 54.9 | 58.5 | 56.2 | 53.7 | 55.4 | | | | |
| 13 | 53.9 | 55.5 | 58.5 | 56.5 | 53.4 | 55.5 | | | | |
| 14 | 53.3 | 55.3 | 58.5 | 56.0 | 53.1 | 54.4 | | | | |
| 15 | 53.4 | 54.9 | 58.5 | 56.0 | 52.6 | 53.6 | | | | |
| 16 | 54.1 | 54.7 | 58.6 | 55.0 | 52.4 | 52.4 | | | | |
| 17 | 54.2 | 55.0 | 58.6 | 56.2 | 52.2 | 54.1 | | | | |
| 18 | 54.5 | 55.8 | 58.5 | 57.0 | 52.4 | 53.9 | | | | |
| 19 | 54.2 | 55.9 | 58.5 | 57.2 | 53.1 | 54.8 | | | | |
| 20 | 54.4 | 55.9 | 58.4 | 57.5 | 53.5 | 56.5 | | | | |
| 21 | 54.4 | 56.0 | 58.3 | 57.5 | 53.6 | 57.2 | | | | |
| 22 | 54.3 | 56.1 | 58.2 | 57.6 | 53.2 | 56.8 | 63.6 | | | |
| 23 | 54.4 | 55.9 | 58.2 | 57.3 | 52.8 | 55.8 | | | | |
| 24 | 54.8 | 55.8 | 58.2 | 57.2 | 53.1 | 56.2 | | | | |
| 25 | 54.6 | 55.9 | 58.2 | 57.2 | 52.7 | 56.0 | | | | |
| 26 | 54.1 | 56.1 | 58.1 | 57.5 | 52.6 | 56.2 | | | | |
| 27 | 54.4 | 55.6 | 58.1 | 57.2 | 52.6 | 55.7 | | | | |
| 28 | 54.6 | 55.6 | 58.1 | 57.0 | 52.9 | 55.8 | | | | |
| 29 | 54.8 | 55.5 | 58.1 | 56.8 | 52.5 | 55.6 | | | | |
| 30 | 55.4 | 55.7 | 58.0 | 56.3 | 52.1 | 54.3 | | | | |

Control Point: 56.0 degrees at Clear Creek from 4/1/2015 to 4/17/2015.
58.0 degrees at Clear Creek from 4/18/2015 to 5/14/2015.
56.0 degrees at Clear Creek from 5/15/2015 to 6/4/2015.
Target 57.0 degrees not to exceed 58.0 degrees at Clear Creek from 6/5/2015 to 9/30/2015.

Cross Channel Gate Operation:
 September 1 - 30 open

**Measurements taken by the Northern CA Area Office Personnel
September 2015**

| TEMPERATURE | | | | |
|--|--|--|---|---|
| Sampling Frequency | | | | |
| Every two weeks May 1 through November 30. | | | | |
| Lake Elev | Sample 1 9/2/2015 Temperature Degrees F | Sample 2 9/9/2015 Temperature Degrees F | Sample 3 9/15/2015 Temperature Degrees F | Sample 4 9/30/2015 Temperature Degrees F |
| MSL | | | | |
| | (400 Feet Upstream of Dam) | | | |
| | Time: 9:15 | Time: 10:31 | Time: 10:00 | Time: 12:30 |
| 625 | 47.2 | 47.2 | 47.3 | 47.4 |
| 650 | 47.3 | 47.3 | 47.4 | 47.4 |
| 675 | 47.4 | 47.4 | 47.4 | 47.6 |
| 700 | 47.5 | 47.5 | 47.5 | 47.8 |
| 725 | 47.7 | 47.7 | 47.8 | 48.3 |
| 750 | 48.1 | 48.1 | 48.2 | 48.8 |
| 775 | 48.7 | 48.7 | 48.9 | 50.0 |
| 800 | 49.4 | 49.8 | 50.4 | 54.8 |
| 825 | 52.4 | 53.6 | 56.8 | 62.6 |
| 850 | 59.3 | 61.5 | 63.6 | 66.0 |
| 875 | 65.6 | 67.5 | 67.8 | 67.8 |
| 900 | 69.7 | 73.3 | 72.3 | 71.3 |
| 925 | 75.4 | 73.7 | 73.8 | 71.4 |
| 950 | | | | |
| 975 | | | | |
| 1000 | | | | |
| 1025 | | | | |
| 1050 | | | | |
| Lake Surface | 944.06' 75.4 | 940.76' 73.9 | 938.25' 73.9 | 932.74' 71.6 |

| TURBIDITY | | | | |
|--|--|--|---|---|
| Sampling Frequency | | | | |
| Monthly, except weekly May 1 through Sep 30, when turbidity at Station 2 is equal to or greater than 10 NTU | | | | |
| Lake Elev | Sample 1 9/2/2015 Turbidity ntu | Sample 2 9/9/2015 Turbidity ntu | Sample 3 9/15/2015 Turbidity ntu | Sample 4 9/30/2015 Turbidity ntu |
| MSL | | | | |
| | (400 Feet Upstream of Dam) | | | |
| | Time: 9:15 | Time: 10:31 | Time: 10:00 | Time: 12:30 |
| 625 | 2.9 | Per NCAO | 2.7 | 2.7 |
| 650 | 2.7 | staff | 2.5 | 2.9 |
| 675 | 2.6 | no | 2.6 | 2.8 |
| 700 | 2.7 | turbidity | 2.8 | 2.7 |
| 725 | 2.8 | data | 2.8 | 2.4 |
| 750 | 2.9 | | 2.8 | 1.8 |
| 775 | 2.5 | | 2.1 | 1.1 |
| 800 | 1.7 | | 1.2 | 0.8 |
| 825 | 1.1 | | 0.9 | 0.7 |
| 850 | 0.8 | | 0.6 | 0.4 |
| 875 | 0.5 | | 0.6 | 0.3 |
| 900 | 0.6 | | 0.4 | 0.4 |
| 925 | 1.0 | | 0.5 | 0.5 |
| 950 | | | | |
| 975 | | | | |
| 1000 | | | | |
| 1025 | | | | |
| 1050 | | | | |
| Lake Surface | 944.06' 0.8 | | 938.25' 0.5 | 932.74' 0.5 |

UNITED STATES DEPARTMENT OF THE INTERIOR
 U.S. BUREAU OF RECLAMATION-CENTRAL VALLEY PROJECT-CALIFORNIA
SHASTA LAKE, DAM AND POWERPLANT

RUN DATE: October 7, 2015

QG
GENERATION RELEASE, CFS
WATER YEAR OCTOBER 2014 TO SEPTEMBER 2015

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|--------------|---------------|----------------|---------------|---------------|---------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|
| 1 | 1,560 | 2,718 | 3,566 | 2,892 | 1,946 | 1,961 | 3,189 | 5,370 | 6,118 | 5,034 | 5,313 | 4,912 |
| 2 | 1,679 | 2,423 | 3,348 | 2,079 | 2,006 | 2,637 | 3,141 | 4,929 | 6,220 | 5,391 | 5,472 | 5,409 |
| 3 | 1,082 | 4,236 | 2,346 | 3,469 | 4,376 | 3,292 | 2,783 | 5,231 | 6,000 | 5,725 | 5,693 | 5,690 |
| 4 | 1,059 | 4,576 | 3,089 | 2,624 | 2,040 | 3,153 | 2,857 | 5,294 | 6,513 | 6,339 | 5,187 | 5,791 |
| 5 | 1,426 | 4,669 | 3,132 | 2,979 | 3,571 | 3,371 | 2,888 | 5,963 | 6,645 | 5,909 | 5,313 | 5,536 |
| 6 | 1,647 | 4,864 | 2,135 | 2,181 | 1,649 | 2,804 | 2,830 | 5,643 | 6,290 | 5,945 | 5,409 | 6,099 |
| 7 | 1,511 | 4,950 | 1,989 | 2,654 | 357 | 2,947 | 2,978 | 4,673 | 6,374 | 5,617 | 5,397 | 5,600 |
| 8 | 2,679 | 4,736 | 2,685 | 2,828 | 523 | 1,936 | 3,424 | 5,949 | 6,706 | 5,863 | 5,423 | 5,673 |
| 9 | 3,874 | 4,876 | 2,767 | 3,081 | 2,433 | 3,270 | 2,203 | 5,558 | 5,741 | 5,457 | 5,333 | 4,936 |
| 10 | 4,003 | 4,855 | 763 | 3,047 | 376 | 2,581 | 2,811 | 5,758 | 5,781 | 5,768 | 5,031 | 6,059 |
| 11 | 3,435 | 4,221 | 296 | 3,068 | 1,779 | 3,489 | 2,586 | 5,616 | 6,038 | 6,037 | 5,347 | 6,288 |
| 12 | 3,015 | 4,796 | 710 | 3,064 | 1,109 | 3,321 | 2,199 | 5,509 | 5,643 | 6,229 | 5,104 | 5,397 |
| 13 | 3,726 | 4,469 | 1,719 | 4,159 | 1,187 | 3,126 | 3,105 | 5,811 | 6,249 | 5,849 | 5,350 | 5,801 |
| 14 | 3,496 | 4,828 | 765 | 3,504 | 1,026 | 3,253 | 2,776 | 5,503 | 5,931 | 6,111 | 6,369 | 6,270 |
| 15 | 4,156 | 4,621 | 1,510 | 2,374 | 1,213 | 3,332 | 3,051 | 5,414 | 6,835 | 5,731 | 5,953 | 5,102 |
| 16 | 3,146 | 4,289 | 1,887 | 2,705 | 1,956 | 1,985 | 2,714 | 5,542 | 6,377 | 5,693 | 5,259 | 4,733 |
| 17 | 3,618 | 4,151 | 2,167 | 2,413 | 1,504 | 3,281 | 3,353 | 5,536 | 5,939 | 5,749 | 5,388 | 4,826 |
| 18 | 3,358 | 4,209 | 712 | 2,676 | 974 | 3,103 | 3,148 | 5,814 | 5,964 | 5,895 | 4,632 | 4,866 |
| 19 | 3,309 | 3,526 | 214 | 4,264 | 1,802 | 2,936 | 2,734 | 6,321 | 6,177 | 5,001 | 5,368 | 5,036 |
| 20 | 2,894 | 3,499 | 1,252 | 3,002 | 2,015 | 3,266 | 3,120 | 5,568 | 5,649 | 5,965 | 5,149 | 5,975 |
| 21 | 2,876 | 4,345 | 1,780 | 2,849 | 1,783 | 2,986 | 3,370 | 6,849 | 5,758 | 4,840 | 5,635 | 5,339 |
| 22 | 3,540 | 3,900 | 2,119 | 1,750 | 2,152 | 2,582 | 3,476 | 6,872 | 6,350 | 5,367 | 5,648 | 4,847 |
| 23 | 4,896 | 4,292 | 1,739 | 3,308 | 2,181 | 3,094 | 3,685 | 6,414 | 5,580 | 5,693 | 4,695 | 5,054 |
| 24 | 2,343 | 3,858 | 531 | 3,517 | 2,214 | 3,216 | 4,420 | 6,317 | 5,882 | 5,240 | 5,993 | 5,907 |
| 25 | 2,453 | 3,537 | 833 | 1,984 | 2,659 | 2,866 | 4,383 | 6,321 | 5,644 | 5,240 | 5,381 | 5,344 |
| 26 | 4,158 | 3,784 | 1,638 | 2,219 | 2,774 | 3,285 | 5,734 | 6,469 | 5,786 | 5,583 | 5,276 | 5,668 |
| 27 | 4,106 | 3,682 | 1,345 | 4,244 | 2,869 | 2,877 | 4,926 | 6,709 | 5,647 | 5,559 | 4,655 | 4,904 |
| 28 | 4,414 | 3,803 | 1,384 | 2,099 | 2,851 | 3,161 | 5,032 | 7,413 | 5,992 | 5,280 | 5,445 | 5,012 |
| 29 | 2,666 | 3,601 | 2,135 | 3,614 | 2,013 | 3,333 | 6,931 | 6,931 | 5,779 | 6,057 | 5,494 | 5,460 |
| 30 | 2,337 | 3,771 | 2,568 | 3,519 | 3,244 | 3,244 | 4,828 | 6,521 | 5,047 | 5,474 | 4,918 | 4,991 |
| 31 | 4,519 | | 2,705 | 3,610 | | 2,729 | | 6,735 | | 5,438 | 5,343 | |
| TOTAL | 92,981 | 124,065 | 55,829 | 91,776 | 53,325 | 91,097 | 103,077 | 184,553 | 180,655 | 175,079 | 165,973 | 162,525 |
| MEAN | 2,999 | 4,136 | 1,801 | 2,961 | 1,904 | 2,939 | 3,436 | 5,953 | 6,022 | 5,648 | 5,354 | 5,418 |
| MAX | 4,896 | 4,950 | 3,566 | 4,264 | 4,376 | 3,489 | 5,734 | 7,413 | 6,835 | 6,339 | 6,369 | 6,288 |
| MIN | 1,059 | 2,423 | 214 | 1,750 | 357 | 1,936 | 2,199 | 4,673 | 5,047 | 4,840 | 4,632 | 4,733 |

WATER YEAR TOTALS

| | |
|-------------------|------------|
| TOTAL | 1,480,935 |
| DAILY MEAN | 4,057 |
| DAILY MAX | 7,413 |
| DAILY MIN | 214 |
| | 05/28/2015 |
| | 12/19/2014 |

UNITED STATES DEPARTMENT OF THE INTERIOR
 U.S. BUREAU OF RECLAMATION-CENTRAL VALLEY PROJECT-CALIFORNIA
KESWICK DAM, RESERVOIR, AND POWERPLANT

RUN DATE: October 7, 2015

QT
TOTAL RELEASE, CFS

WATER YEAR OCTOBER 2014 TO SEPTEMBER 2015

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|--------------|----------------|----------------|----------------|---------------|---------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|
| 1 | 4,500 | 4,519 | 3,849 | 2,991 | 3,090 | 3,063 | 3,055 | 6,686 | 7,019 | 7,095 | 6,824 | 6,904 |
| 2 | 4,647 | 4,520 | 3,450 | 2,966 | 3,090 | 3,064 | 3,253 | 7,097 | 7,082 | 7,105 | 6,828 | 6,901 |
| 3 | 4,409 | 4,549 | 3,375 | 2,963 | 3,088 | 3,093 | 3,138 | 7,109 | 7,078 | 7,109 | 6,837 | 6,908 |
| 4 | 4,403 | 4,606 | 3,308 | 2,985 | 3,088 | 3,059 | 3,044 | 7,103 | 7,037 | 7,109 | 6,835 | 6,909 |
| 5 | 4,395 | 4,495 | 3,326 | 2,967 | 3,090 | 3,061 | 2,962 | 7,103 | 7,080 | 7,109 | 6,836 | 6,902 |
| 6 | 4,504 | 4,454 | 3,310 | 2,967 | 3,104 | 3,063 | 2,878 | 7,046 | 7,084 | 7,110 | 6,836 | 6,910 |
| 7 | 4,462 | 4,406 | 3,306 | 2,940 | 4,733 | 3,062 | 2,745 | 7,074 | 7,087 | 7,105 | 6,834 | 6,904 |
| 8 | 4,542 | 4,400 | 3,196 | 2,940 | 4,479 | 3,062 | 2,719 | 7,081 | 7,026 | 7,107 | 6,864 | 6,905 |
| 9 | 4,490 | 4,394 | 3,190 | 3,003 | 3,634 | 3,063 | 2,964 | 7,088 | 7,023 | 7,073 | 6,858 | 6,905 |
| 10 | 4,512 | 4,373 | 3,066 | 3,179 | 3,121 | 3,052 | 2,968 | 7,086 | 7,031 | 7,065 | 6,805 | 6,905 |
| 11 | 4,545 | 4,267 | 4,723 | 3,168 | 3,041 | 3,093 | 2,969 | 7,083 | 6,997 | 7,059 | 6,781 | 6,943 |
| 12 | 4,535 | 4,162 | 4,178 | 3,180 | 3,039 | 3,121 | 2,971 | 7,083 | 6,977 | 7,116 | 6,676 | 6,908 |
| 13 | 4,536 | 4,144 | 3,909 | 3,179 | 3,043 | 3,119 | 2,968 | 7,088 | 6,973 | 7,106 | 6,678 | 6,907 |
| 14 | 4,544 | 4,127 | 3,862 | 3,172 | 3,038 | 3,120 | 2,967 | 7,122 | 6,931 | 7,097 | 6,598 | 6,903 |
| 15 | 4,521 | 4,177 | 3,854 | 3,066 | 3,041 | 3,118 | 2,967 | 7,200 | 6,887 | 7,027 | 6,900 | 6,693 |
| 16 | 4,545 | 4,110 | 3,054 | 2,911 | 3,038 | 3,105 | 3,332 | 7,170 | 6,879 | 7,021 | 6,895 | 6,670 |
| 17 | 4,533 | 4,015 | 3,062 | 2,910 | 3,039 | 3,099 | 3,716 | 7,140 | 6,894 | 6,999 | 6,923 | 6,672 |
| 18 | 4,538 | 3,992 | 3,281 | 2,914 | 3,041 | 3,105 | 3,690 | 7,134 | 6,934 | 6,980 | 6,919 | 6,760 |
| 19 | 4,533 | 3,924 | 3,558 | 2,911 | 3,039 | 3,101 | 3,689 | 7,168 | 6,929 | 6,984 | 6,906 | 6,709 |
| 20 | 4,535 | 3,928 | 3,467 | 2,912 | 3,040 | 3,013 | 3,689 | 7,162 | 6,929 | 6,938 | 6,922 | 6,709 |
| 21 | 4,528 | 3,958 | 3,305 | 2,868 | 3,038 | 3,017 | 4,187 | 7,142 | 6,929 | 6,953 | 6,897 | 6,687 |
| 22 | 4,528 | 3,989 | 3,072 | 2,866 | 2,996 | 3,016 | 4,689 | 7,182 | 6,926 | 6,950 | 6,898 | 6,690 |
| 23 | 4,540 | 3,933 | 3,125 | 2,865 | 2,975 | 3,016 | 5,320 | 7,152 | 6,924 | 6,950 | 6,898 | 6,706 |
| 24 | 4,527 | 3,959 | 3,067 | 2,815 | 2,988 | 2,930 | 5,868 | 7,103 | 6,923 | 6,953 | 6,870 | 6,633 |
| 25 | 4,504 | 3,976 | 3,024 | 2,815 | 3,036 | 2,750 | 6,263 | 7,106 | 7,024 | 6,951 | 6,905 | 6,591 |
| 26 | 4,420 | 3,987 | 3,040 | 2,815 | 3,105 | 2,738 | 6,676 | 7,115 | 7,035 | 6,621 | 6,899 | 6,578 |
| 27 | 4,449 | 3,981 | 3,038 | 2,812 | 3,064 | 2,733 | 6,683 | 6,916 | 7,048 | 6,836 | 6,903 | 6,551 |
| 28 | 4,450 | 3,982 | 3,042 | 2,816 | 3,063 | 2,732 | 6,740 | 6,910 | 7,059 | 6,951 | 6,914 | 6,545 |
| 29 | 4,443 | 3,985 | 3,040 | 2,828 | 3,063 | 2,734 | 6,693 | 6,919 | 7,073 | 6,952 | 6,906 | 6,545 |
| 30 | 4,449 | 3,982 | 3,016 | 2,981 | 2,981 | 2,732 | 6,680 | 6,917 | 7,081 | 6,891 | 6,908 | 6,542 |
| 31 | 4,503 | 2,991 | 2,991 | 3,090 | 2,732 | 2,732 | 6,916 | 6,916 | 6,890 | 6,890 | 6,910 | 6,542 |
| TOTAL | 139,570 | 125,294 | 104,084 | 91,795 | 89,181 | 92,766 | 122,483 | 219,201 | 209,899 | 217,212 | 212,463 | 202,995 |
| MEAN | 4,502 | 4,176 | 3,358 | 2,961 | 3,185 | 2,992 | 4,083 | 7,071 | 6,997 | 7,007 | 6,854 | 6,767 |
| MAX | 4,647 | 4,606 | 4,723 | 3,180 | 4,733 | 3,121 | 6,740 | 7,200 | 7,087 | 7,116 | 6,923 | 6,943 |
| MIN | 4,395 | 3,924 | 2,991 | 2,812 | 2,975 | 2,732 | 2,719 | 6,686 | 6,879 | 6,621 | 6,598 | 6,542 |

WATER YEAR TOTALS

| | |
|-------------------|-------------------------|
| TOTAL | 1,826,943 |
| DAILY MEAN | 5,005 |
| DAILY MAX | 7,200 05/15/2015 |
| DAILY MIN | 2,719 04/08/2015 |

UNITED STATES DEPARTMENT OF THE INTERIOR
 U.S. BUREAU OF RECLAMATION-CENTRAL VALLEY PROJECT-CALIFORNIA
LEWISTON DAM, LAKE, AND JUDGE FRANCIS CARR POWERPLANT

RUN DATE: October 7, 2015

QR
RELEASE TO RIVER, CFS

WATER YEAR OCTOBER 2014 TO SEPTEMBER 2015

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|--------------|---------------|--------------|--------------|--------------|--------------|--------------|---------------|---------------|---------------|---------------|---------------|---------------|
| 1 | 490 | 315 | 312 | 299 | 311 | 310 | 311 | 1,814 | 1,181 | 458 | 460 | 1,160 |
| 2 | 494 | 301 | 312 | 302 | 301 | 310 | 311 | 2,841 | 1,182 | 454 | 460 | 1,170 |
| 3 | 512 | 317 | 312 | 300 | 311 | 311 | 312 | 3,851 | 1,179 | 451 | 460 | 1,185 |
| 4 | 517 | 312 | 309 | 301 | 313 | 312 | 311 | 4,823 | 1,172 | 450 | 462 | 1,134 |
| 5 | 517 | 301 | 310 | 303 | 314 | 313 | 309 | 4,964 | 1,118 | 449 | 462 | 1,100 |
| 6 | 498 | 304 | 310 | 302 | 315 | 313 | 310 | 4,964 | 1,107 | 450 | 461 | 1,098 |
| 7 | 487 | 305 | 310 | 299 | 316 | 314 | 308 | 4,965 | 1,102 | 449 | 459 | 1,104 |
| 8 | 488 | 305 | 310 | 302 | 310 | 315 | 309 | 4,401 | 991 | 457 | 459 | 1,163 |
| 9 | 488 | 303 | 311 | 300 | 309 | 311 | 310 | 3,114 | 891 | 461 | 457 | 2,886 |
| 10 | 486 | 303 | 311 | 302 | 308 | 306 | 308 | 2,921 | 875 | 458 | 462 | 2,965 |
| 11 | 474 | 303 | 310 | 302 | 307 | 297 | 309 | 2,926 | 782 | 458 | 460 | 1,917 |
| 12 | 454 | 303 | 312 | 301 | 309 | 296 | 309 | 2,773 | 686 | 458 | 461 | 1,300 |
| 13 | 450 | 304 | 310 | 301 | 307 | 297 | 306 | 2,089 | 689 | 458 | 459 | 1,100 |
| 14 | 452 | 305 | 305 | 304 | 308 | 297 | 313 | 2,041 | 685 | 459 | 459 | 1,100 |
| 15 | 399 | 306 | 308 | 304 | 308 | 297 | 319 | 2,034 | 684 | 460 | 462 | 1,100 |
| 16 | 370 | 307 | 312 | 304 | 308 | 298 | 319 | 2,042 | 686 | 459 | 583 | 1,100 |
| 17 | 311 | 309 | 314 | 304 | 310 | 295 | 319 | 2,035 | 684 | 461 | 1,491 | 1,100 |
| 18 | 303 | 311 | 313 | 304 | 311 | 296 | 316 | 2,031 | 684 | 459 | 1,639 | 933 |
| 19 | 302 | 310 | 317 | 304 | 311 | 295 | 318 | 2,037 | 627 | 462 | 1,300 | 485 |
| 20 | 305 | 308 | 315 | 304 | 310 | 295 | 324 | 2,017 | 622 | 462 | 695 | 467 |
| 21 | 298 | 310 | 304 | 305 | 309 | 294 | 322 | 2,004 | 621 | 458 | 668 | 467 |
| 22 | 292 | 309 | 302 | 306 | 309 | 296 | 401 | 2,024 | 628 | 460 | 1,154 | 485 |
| 23 | 307 | 309 | 301 | 306 | 307 | 307 | 492 | 2,038 | 629 | 462 | 1,154 | 467 |
| 24 | 320 | 311 | 301 | 307 | 309 | 314 | 488 | 1,944 | 629 | 462 | 1,152 | 467 |
| 25 | 323 | 307 | 302 | 309 | 311 | 314 | 485 | 1,882 | 629 | 462 | 1,151 | 467 |
| 26 | 318 | 307 | 302 | 309 | 310 | 313 | 486 | 1,802 | 629 | 462 | 1,157 | 466 |
| 27 | 318 | 307 | 302 | 308 | 310 | 313 | 494 | 1,789 | 629 | 465 | 1,154 | 465 |
| 28 | 317 | 310 | 301 | 307 | 309 | 312 | 584 | 1,794 | 629 | 462 | 1,156 | 452 |
| 29 | 317 | 310 | 301 | 305 | 310 | 310 | 723 | 1,805 | 629 | 461 | 1,154 | 440 |
| 30 | 315 | 310 | 298 | 307 | 310 | 311 | 1,093 | 1,626 | 629 | 460 | 1,157 | 438 |
| 31 | 316 | 308 | 301 | 308 | 311 | 311 | 1,252 | 1,252 | 460 | 460 | 1,146 | 438 |
| TOTAL | 12,238 | 9,222 | 9,538 | 9,418 | 8,671 | 9,473 | 11,819 | 80,643 | 23,908 | 14,207 | 24,814 | 30,181 |
| MEAN | 395 | 307 | 308 | 304 | 310 | 306 | 394 | 2,601 | 797 | 458 | 800 | 1,006 |
| MAX | 517 | 317 | 317 | 309 | 316 | 315 | 1,093 | 4,965 | 1,182 | 465 | 1,639 | 2,965 |
| MIN | 292 | 301 | 298 | 299 | 301 | 294 | 306 | 1,252 | 621 | 449 | 457 | 438 |

WATER YEAR TOTALS

| | |
|-------------------|-------------------|
| TOTAL | 244,132 |
| DAILY MEAN | 669 |
| DAILY MAX | 4,965 |
| DAILY MIN | 292 |
| | 05/07/2015 |
| | 10/22/2014 |

UNITED STATES DEPARTMENT OF THE INTERIOR
 U.S. BUREAU OF RECLAMATION-CENTRAL VALLEY PROJECT-CALIFORNIA
WHISKEYTOWN DAM, LAKE, AND SPRING CREEK POWERPLANT

RUN DATE: October 7, 2015

QG

GENERATION RELEASE, CFS

WATER YEAR OCTOBER 2014 TO SEPTEMBER 2015

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|--------------|---------------|--------------|---------------|--------------|---------------|--------------|------------|------------|---------------|---------------|---------------|---------------|
| 1 | 545 | 2,062 | 218 | 14 | 14 | 14 | 15 | 14 | 673 | 1,261 | 1,330 | 1,322 |
| 2 | 510 | 2,150 | 15 | 349 | 14 | 14 | 26 | 14 | 675 | 1,542 | 1,330 | 1,250 |
| 3 | 654 | 965 | 1,016 | 14 | 14 | 14 | 14 | 14 | 630 | 1,554 | 1,358 | 1,198 |
| 4 | 689 | 19 | 18 | 27 | 14 | 23 | 15 | 14 | 673 | 821 | 1,565 | 1,162 |
| 5 | 646 | 14 | 14 | 86 | 16 | 14 | 14 | 14 | 674 | 810 | 1,562 | 1,397 |
| 6 | 704 | 14 | 746 | 309 | 899 | 14 | 14 | 14 | 593 | 1,172 | 1,543 | 1,103 |
| 7 | 849 | 14 | 665 | 14 | 1,529 | 18 | 16 | 20 | 368 | 1,224 | 1,516 | 1,394 |
| 8 | 761 | 14 | 228 | 14 | 1,794 | 551 | 16 | 14 | 691 | 490 | 1,545 | 1,239 |
| 9 | 660 | 14 | 727 | 15 | 943 | 22 | 16 | 17 | 1,089 | 973 | 1,279 | 1,531 |
| 10 | 676 | 14 | 1,586 | 14 | 2,015 | 15 | 14 | 14 | 675 | 968 | 1,350 | 857 |
| 11 | 1,266 | 14 | 699 | 17 | 1,900 | 49 | 14 | 14 | 675 | 956 | 1,107 | 14 |
| 12 | 1,240 | 14 | 1,981 | 14 | 1,906 | 46 | 20 | 17 | 755 | 849 | 1,175 | 331 |
| 13 | 1,056 | 14 | 1,536 | 15 | 1,969 | 24 | 19 | 14 | 817 | 1,168 | 1,004 | 1,242 |
| 14 | 997 | 18 | 2,067 | 378 | 705 | 14 | 14 | 14 | 696 | 1,168 | 1,365 | 1,001 |
| 15 | 585 | 14 | 2,132 | 17 | 795 | 14 | 14 | 14 | 434 | 1,243 | 1,268 | 1,514 |
| 16 | 1,185 | 92 | 1,723 | 23 | 1,898 | 27 | 15 | 14 | 677 | 1,077 | 1,226 | 1,398 |
| 17 | 1,106 | 18 | 28 | 16 | 1,940 | 14 | 17 | 14 | 830 | 902 | 1,353 | 1,409 |
| 18 | 1,154 | 14 | 1,849 | 14 | 825 | 112 | 16 | 14 | 1,056 | 1,038 | 1,514 | 1,383 |
| 19 | 1,012 | 97 | 1,374 | 16 | 1,675 | 14 | 20 | 14 | 1,017 | 1,127 | 1,247 | 1,479 |
| 20 | 1,570 | 64 | 1,254 | 93 | 1,297 | 14 | 16 | 17 | 1,083 | 1,222 | 1,171 | 937 |
| 21 | 1,620 | 991 | 299 | 14 | 1,342 | 14 | 14 | 14 | 843 | 786 | 1,285 | 1,589 |
| 22 | 1,662 | 14 | 572 | 14 | 695 | 17 | 14 | 17 | 1,067 | 1,559 | 1,237 | 1,262 |
| 23 | 1,235 | 14 | 805 | 373 | 619 | 15 | 16 | 14 | 929 | 1,451 | 1,884 | 939 |
| 24 | 2,019 | 15 | 1,938 | 288 | 523 | 17 | 14 | 14 | 923 | 1,472 | 1,441 | 950 |
| 25 | 2,068 | 14 | 2,143 | 14 | 560 | 20 | 14 | 51 | 937 | 1,479 | 1,375 | 1,006 |
| 26 | 1,018 | 14 | 770 | 14 | 351 | 14 | 14 | 15 | 1,069 | 1,271 | 1,506 | 984 |
| 27 | 476 | 14 | 1,321 | 14 | 112 | 14 | 14 | 24 | 1,092 | 1,330 | 1,422 | 994 |
| 28 | 178 | 14 | 2,069 | 14 | 14 | 36 | 14 | 91 | 914 | 1,287 | 1,426 | 705 |
| 29 | 1,439 | 159 | 685 | 19 | 14 | 21 | 14 | 14 | 1,222 | 1,013 | 1,456 | 759 |
| 30 | 2,111 | 14 | 17 | 16 | 17 | 17 | 14 | 268 | 1,540 | 1,242 | 1,432 | 948 |
| 31 | 718 | 14 | 14 | 15 | 17 | 17 | 14 | 101 | 1,294 | 1,294 | 1,318 | 14 |
| TOTAL | 32,409 | 6,902 | 30,509 | 2,254 | 26,378 | 1,229 | 467 | 918 | 25,317 | 35,749 | 42,590 | 33,297 |
| MEAN | 1,045 | 230 | 984 | 73 | 942 | 40 | 16 | 30 | 844 | 1,153 | 1,374 | 1,110 |
| MAX | 2,111 | 2,150 | 2,143 | 378 | 2,015 | 551 | 26 | 268 | 1,540 | 1,559 | 1,884 | 1,589 |
| MIN | 178 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 368 | 490 | 1,004 | 14 |

WATER YEAR TOTALS

| | |
|-------------------|-------------------|
| TOTAL | 238,019 |
| DAILY MEAN | 652 |
| DAILY MAX | 2,150 |
| DAILY MIN | 14 |
| | 11/02/2014 |
| | 11/05/2014 |