



Foreword

The final Central Valley Project (CVP) water rates for contract year (CY) 2021 and the final CVP annual contractor accountings for fiscal year (FY) 2019 have been posted to the Bureau of Reclamation website.

The final water rates and final annual contractor accountings for the years 2004 through 2021 can be found at <https://www.usbr.gov/mp/cvpwaterrates/ratebooks/index.html>.

If you have any questions or need additional information, please contact Jesus Reynoso at 916-978-5362 or by e-mail at jreynoso@usbr.gov.

Ability to Pay Studies

Certain Sacramento River settlement contractors have Ability-to-Pay (ATP) relief that expired on March 30, 2019, and a new study has not been completed. In the interim, the water rates for these contractors are based on the results of the expired study as presented in Schedule A-1. Once a new ATP study is completed, any changes to the Sacramento River Settlement Water contractor's water rates and CVPIA Restoration Fund charges will be communicated to affected contractors and incorporated into water rates; however, the results of the forthcoming ATP study will be applied over the entire period of analysis (April 1, 2019 to March 30, 2024).

In addition, Sutter MWC, Natomas Central MWC and Pelger MWC have ATP relief that expire on March 31, 2021. Until a new study is completed, the water rates for these contractors are based on the results of the previous study as presented in Schedule A-1. Once a new ATP study is completed, any changes to Sutter MWC, Natomas Central MWC, and Pelger MWC's water rates and CVPIA Restoration Fund charges will be communicated to affected contractors and incorporated into water rates; however, the results of the forthcoming ATP study will be applied over the entire period of analysis (April 1, 2021 to March 30, 2026).

Many CVP water contractors are utilizing provisions of WIIN 4006 to convert their water service contracts to repayment contracts and prepay their outstanding construction obligations. When the contracts are signed, the contractor makes an agreement to execute the contract with the understanding that the construction will be paid under a 9d contract and as such there will not be applicable rates for construction and there would be no associated ATP relief for the intended repayment per PEC TRMR--122.

CVP Final Cost Allocation - Implementation

The Final CVP Cost Allocation (FCA) was completed in January 2020 and has been incorporated in the plant-in-service and O&M cost allocations that are used in the water ratesetting process. The FCA is based on both historic and current operations of the CVP using a two-period two cost allocation methodology, and the resulting cost allocation factors are used to allocate the construction costs of CVP facilities and also incorporated in the allocation of projected OM&R costs. As this is the first year of implementing the FCA into CVP water rates, there are instances of substantial shifts in costs relative to previous years, which were based on the interim cost allocation updated most recently in 1975. However, in addition to the FCA, there are other factors that affect the allocation of costs across project beneficiaries year over year, primarily new costs that have been incurred in the CVP (and their associated purpose) and shifts in project operations (i.e., water deliveries and hydropower generation) that are used to true-up the cost allocation over time. As a result, it is difficult to isolate the role of the FCA on water rates, but some general observations can be made.

The effect of the FCA on CVP water rates can be viewed across cost pools and the distribution of water supply costs between irrigation and M&I water users. For construction costs, the effect on cost pools is driven by changes in facility-level cost allocations, where the cost of each facility is first allocated among the authorized purposes of the CVP, including water supply, which in turn is sub-allocated based on use of the water and assigned to a particular cost pool depending on the characteristics of each facility. Similarly, O&M costs are allocated individually and assigned to an applicable cost pool.

For the construction component of 2021 water rates (which is based on the FY-19 plant-in-service allocation), the following costs pools realized a decrease in water costs: Storage, Conveyance, and Conveyance Pumping, as well as Project Use Energy costs. Conversely, water costs in the Other cost pool increased. Costs were stable in the Direct Pumping and San Luis Drain cost pools, which are unaffected by the FCA. The cumulative effect is a decline of \$40.9 million in construction costs allocated to water users in the CVP. However, when evaluated from the perspective of project beneficiaries, irrigation water users experienced a decline in allocated costs, while M&I users realized an increase in costs. This disparity among water users is attributed to relatively higher water deliveries to M&I contractors compared to irrigation contractors under current and prospective operations of the CVP.

The allocation of projected O&M costs follows similar patterns across cost pools and water users, although it is less dependent on the FCA because many O&M costs are allocated based on Reclamation policy and applicable laws and legislation. Overall, allocated O&M costs increased for both irrigation and M&I water users, primarily due to the increase in total O&M costs in the CVP. The relative increase is higher for M&I users (compared to irrigation users) similar to construction costs.

The CVP Cost Allocation Study Cost have been included annually in the Water Marketing cost component. The following table includes the total amount of which a share is recovered through

the Water Marketing O&M. Since the study is considered complete, there will not be an estimate for the 2021 Water Rates.

Fiscal Year	Estimated Cost	Actual Cost	Difference (Over)/Under
2010	\$750,886	\$433,553	\$317,333
2011	\$700,000	\$665,700	\$34,300
2012	\$700,000	\$390,000	\$310,000
2013	\$740,091	\$487,197	\$252,894
2014	\$2,120,635	\$848,450	\$1,272,185
2015	\$1,797,383	\$1,031,142	\$766,241
2016	\$1,416,525	\$1,005,766	\$410,759
2017	\$1,000,000	\$1,325,757	\$(325,757)
2018	\$1,000,000	\$751,676	\$248,323
2019	\$1,000,000	\$420,426	\$579,574
2020	\$ 500,000	TBD	TBD
2021	\$ 0	TBD	TBD

CVP Cost Recovery Improvement

Based on the results of a 2013 audit conducted by the Office of the Inspector General, a recommendation was made for Reclamation to improve the current rate setting practices to better recover CVP construction costs on an annual basis. Reclamation continues to work collaboratively with stakeholders to develop a revised process for projecting future water deliveries that serve as the basis for estimating water rates.

The process to estimate deliveries for setting O&M water rates has been improved from the original process included for the 2016 Water Rates. The new process provides more flexibility in the determination of the deliveries for setting O&M water rates. A decision document is to be updated and included in the water contractor notices section of the Reclamation website at http://www.usbr.gov/mp/cvpwaterrates/wtr_ctr_notices/. Provided is the improved process:

O&M

1. Consider using the 7-year average of historical water deliveries as the basis for projecting future deliveries for calculating the Irrigation and M&I operation and maintenance (O&M) component of the water rate.
 - a. Depending on whether or not reservoir levels are below normal, the 7-year average of water deliveries could be further reduced based on specific criteria.
2. Consult with Central Valley Operations Office to see if this average is appropriate for the calculation of the water rates.
3. If CVO recommends considering an alternative to the 7-year average due to their estimate being considerably different, consider using an alternative approach.

In consultation with our Central Valley Operations Office, the interpretation is that it is appropriate for M&I and irrigation estimated deliveries to use a 7-year average for 2021.

Construction

Using a 7-year average of historical water deliveries as the basis for projecting future deliveries for calculating the Irrigation and M&I construction component of the water rate. There is no further reduction to deliveries based on lower than normal reservoir levels.

Exception: If a contractor has taken water 3 times or less in a 7 – year period, Reclamation will use the higher of the 7-year average or 14% of the contractor’s contract entitlement.

Extraordinary Operation and Maintenance (XO&M) Cost

CVP XO&M costs are included in the current year CVP water rates along with annual O&M costs. While Public Law 111-11 (enacted March 30, 2009) provides Reclamation the authority to offer extended repayment of XO&M costs through the use of repayment contracts; the Mid-Pacific Region is still in the process of drafting a basis of negotiation to seek approval from the Commissioner to allow for the extended repayment of XO&M cost through the use of existing water service contracts. Reclamation and stakeholders are working collaboratively to develop a process for the extended repayment of XO&M costs through the water rate process. The following tables show the estimated and actual XO&M costs for the period 2009 through 2021 for both Irrigation and M&I. These are cost that specifically have been identified to be recovered as O&M.

There will be a further review of our Financial Statement to determine if there is a repayment adjustment for Plant in Service cost that have historically been included as capitalized cost and recovered as part of the Plant but need to be considered for cost recovery as O&M. This review is planned for the fiscal year 2021 and 2022 years (fiscal year is October through September). As this process proceeds, it will be discussed with the Financial Affairs Committee and further informed to water users through the Financial Management Division California Great Basin, Bureau of Reclamation WEB site.

Irrigation Extraordinary Operations and Maintenance Costs (XO&M)

Fiscal Year	Estimated Cost	Actual Cost	Variance
2009	-	\$4,192,153	\$(4,192,153)
2010	-	\$3,451,716	\$(3,451,716)
2011	-	\$3,385,405	\$(3,385,405)
2012	\$2,016,701	\$3,466,279	\$(1,449,578)
2013	\$2,166,051	\$2,088,288	\$77,763
2014	\$2,208,368	\$3,336,697	\$(1,128,329)
2015	\$2,862,681	\$2,610,238	\$252,443
2016	\$3,515,700	\$4,857,366	\$(1,341,666)
2017	\$5,516,875	\$1,238,095	\$4,278,780
2018	\$6,236,549	\$196,538	\$6,040,011
2019	\$6,118,000	\$7,745,741	\$(1,627,741)
2020	\$8,432,204	TBD	TBD
2021	\$8,216,208	TBD	TBD

M&I Extraordinary Operations and Maintenance Costs (XO&M)

Fiscal Year	Estimated Cost	Actual Cost	Variance
2009	-	\$510,567	\$(510,567)
2010	-	\$495,409	\$(495,409)
2011	-	\$391,926	\$(391,926)
2012	\$253,151	\$518,316	\$(265,165)
2013	\$317,704	\$361,150	\$(43,446)
2014	\$327,031	\$623,990	\$(296,959)
2015	\$417,859	\$418,594	\$(735)
2016	\$1,705,800	\$923,456	\$782,344
2017	\$2,136,706	\$169,622	\$1,967,085
2018	\$890,154	\$85,023	\$805,131
2019	\$795,720	\$4,084,412	\$(3,288,692)
2020	\$1,236,940	TBD	TBD
2021	\$4,370,769	TBD	TBD

Interest during Construction & Interests on Investment Adjustment

Per FIN 07-21, when construction of the project is determined to be substantially complete, a Final Cost Allocation (FCA) is required. The Central Valley Project FCA study was completed and finalized in January 2020, hence per FIN 07-21, requires Reclamation to adjust Interest during Construction (IDC) on CVP facilities. Once IDC is adjusted, we will recalculate Interest on Investment (IOI) as required per FIN 06-32. Reclamation is currently working internally on these topics and as we have more information to share, we will communicate with stakeholders.

Federal Investments

Provided is the CVP Construction Allocation by Function and the Repayment through September 30, 2019, identifiable to Irrigation and M&I. These cost take into account the implementation of the Final Cost Allocation Study.

Construction Cost Allocation by Function thru FY 2019 (excludes DMC Intertie)

Function	Allocation	Repayment	Unpaid	% Repaid
Water Service				
Irrigation	\$1,126,674,307	\$818,259,733*	\$308,414,569	72.63%
M&I	\$148,654,230	\$124,836,395	\$23,817,835	83.98%
Other Purposes				
Commercial Power	\$906,336,013			
Federal Taxpayer	\$1,164,662,068			
State of California	\$255,989,917			
Local Entities	\$261,400			
	\$3,602,577,935			

*Ability to pay relief is included as repayment in the amount of \$64,620,853.

Based on the new method to determine the estimated deliveries (see Cost Recovery Improvement section), Reclamation anticipates improved construction repayment starting with the 2016 Water Year. In order for improved recovery, the estimated deliveries for setting O&M and construction rates have to be lower than or equal to the actual deliveries. Included is a summary of the Fiscal Year 2016 deliveries forward for irrigation and the summary of irrigation construction repayment by year.

Year	Actual IRR Deliveries in Acre-Feet	Projected Irrigation Deliveries in Acre-Feet	Difference (Over)/Under
O&M			
2016	1,087,556	1,549,749	(462,193)
2017	2,295,294	2,574,135	(278,841)
2018	2,543,787	1,920,756	623,031
2019	2,861,259	1,713,135	1,148,124
2020	TBD	1,928,932	TBD
2021	TBD	1,616,424	
Construction			
2016	1,087,556	1,949,621	(862,065)
2017	2,295,294	1,545,547	749,747
2018	2,543,787	1,607,776	936,011
2019	2,861,259	1,552,257	1,309,002
2020	TBD	1,529,480	TBD
2021	TBD	1616,424	

Year	Actual IRR Construction Recovery	Projected Annual Average Construction Recovery	Difference (Over)/Under
2003	\$17,053,906	\$37,051,890	\$(19,997,984)
2004	\$21,751,380	\$37,404,088	\$(15,652,708)
2005	\$18,070,693	\$38,527,038	\$(20,456,345)
2006	\$24,305,293	\$39,211,192	\$(14,905,899)
2007	\$19,598,561	\$39,610,443	\$(20,011,882)
2008	\$14,194,121	\$41,578,408	\$(27,384,287)
2009	\$4,251,593	\$31,640,202	\$(27,388,609)
2010	\$14,877,772	\$33,202,989	\$(18,325,217)
2011	\$25,444,957	\$34,695,494	\$(9,250,537)
2012	\$19,365,287	\$35,113,081	\$(15,747,794)
2013	\$13,781,066	\$34,987,828	\$(21,206,762)
2014	\$4,229,536	\$36,864,266	\$(32,634,730)
2015	\$2,631,789	\$37,174,567	\$(34,542,781)
2016	\$5,695,535	\$39,328,648	\$(33,633,113)
2017	\$60,544,218	\$42,253,883	\$18,290,335
2018	\$94,243,950	\$46,218,850	\$48,025,100
2019	\$80,983,138	\$44,719,334	\$36,263,804

Folsom-South Canal

The Folsom-South Canal costs have been reclassified from construction in abeyance to Plant-in-Service. For repayment purposes, the Operation and Maintenance costs and the Construction costs are being reviewed by the Bureau of Reclamation. For 2019 M&I O&M and the 2021 M&I Construction and O&M Water Rates, the Folsom-South Canal costs were identified 16.4% as recoverable.

Full Cost (FC) Water Rates

The practice for calculating estimated deliveries for setting FC water rates has been improved for 2017 and forward years in order to be consistent with how deliveries are estimated for Cost of Service (COS) water rates. Previous calculations of FC water rates used estimated deliveries at contract entitlement without adjustment. For 2017 and forward, historical (1981 to present) and projected deliveries that are used to pro-rate construction cost by contractor for COS water rates will also be used for calculating FC water rates. Reclamation will still amortize construction costs over a 50-year period and use the weighted interest rates as required by the Reclamation Reform Act. The annualized construction amount by contractor will then be developed into a FC water rate. To develop the FC construction rate, Reclamation will use the improved practice for estimating deliveries established in 2016 which uses a 7-year average. This brings the FC water rates up to date

in its calculation and in line with the Reclamation Reform Act legislation while also incorporating consistent practices in the calculation of both FC and COS water rates.

Note that the components for the COS water rates and the FC water rates are the same, with the only exception being that interest is added to CVP construction for the FC water rates.

COS Water Rate Components	FC Water Rate Components
Annual O&M	Annual O&M
O&M Deficit	O&M Deficit
Interest on O&M Deficit	Interest on O&M Deficit
Construction	Construction
	Interest on Construction

Friant Surcharge and Associated Water Rate Offset

Public Law 111-11, Title X, provides a provision for Friant Division water contractors to receive a temporary reprieve in their Friant Surcharge if the Secretary of the Interior does not need those funds for the ongoing federal costs of the San Joaquin River Restoration Settlement Act Program (Program). The Public Law identifies that this could occur in Fiscal Year (FY) 2020. However, Reclamation has determined that for FY 2020 and FY 2021 the surcharge should not be reduced as it is necessary for the Program. Since Reclamation will include the surcharge at a rate of \$7.00 per acre-foot, and not reduce the rate (up to a \$3.00 reduction), Reclamation will offset Water Marketing for the Friant Division contractors to the extent allowed by the Federal law. Please refer to Schedules A-8, A-2A, and A-1 of the water rate books to identify the offset.

Project Use Energy (PUE) Costs for FY 2019 Accountings

The PUE costs included in the FY 2019 annual CVP contractor accountings process are based on estimated costs. These costs are for Reclamations routine O&M costs and Western Area Power Administration Transmission related costs and do not include Reclamations extra ordinary O&M costs (XM) which are handled separate and recovered solely by Reclamation. This year's contractor accountings also includes a true-up of FY 2018 PUE costs. The breakdown of the PUE expenses are shown below:

Estimated PUE Costs for FY 2019	\$35,006,106
FY 2018 PUE True-up Adjustment	\$285,981
Total Irrigation and M&I PUE Expenses in FY 2019	\$35,292,087
2019 XM PUE Recovered by Reclamation	\$3,595,619

Increase in Project Use Energy (PUE) Costs

Due to the expiration of Reclamation's contract with PG&E on April 1, 2016, PUE costs have increased. In fiscal year 2021, there will be costs projected to be approximately \$14.4 million and are included in the 2021 water rates

Project Use Energy (PUE) O&M Cost in the Water Rates

At the Financial Affairs Committee (FAC) Meeting on November 20, 2015, the Bureau of Reclamation proposed removing Project Use Energy (PUE) charges from the Central Valley Project (CVP) water rates due to Reclamation's inability to continue to record the PUE charges as revenue. The PUE charges that are collected through the CVP water rates is revenue that belongs to Western Area Power Administration. In the current Ratesetting process, PUE is included in the water rates along with CVP O&M costs, and when payment is remitted (CVP water rate x acre feet) the entire amount is recorded as revenue.

Water contractors requested that Reclamation continue to collect PUE charges through the Ratesetting process. To prevent recording the PUE charges as revenue in the future, a proposal was made that the PUE charges be paid separately by a select few contractors. These select few contractors (identified below) graciously accepted Reclamation's proposal and agreed to pay direct pumping PUE and storage PUE costs in advance, on behalf of all CVP contractors, as part of their CVP water rates. The impact to these contractors is only in how they will remit their water payments in the future. Their water payments will separately identify direct pumping PUE and "other" PUE as components of their cost of service rate. The "other" PUE component is specifically to identify the amount of PUE charges that are being paid on behalf of other contractors, and in which a like credit will be given to offset the O&M component of their water rate. Overall, contractors' cost of service water rates will remain the same. This proposed future process for PUE will allow Reclamation to easily identify PUE revenue and deposit it to a separate account for payment to Western Area Power Administration.

The select few contractors are:

1. Westland's Water District (Irrigation, M&I)
2. Santa Clara Water District (Irrigation, M&I)
3. San Benito Water District (Irrigation, M&I)
4. Colusa County Water District (Irrigation, M&I)
5. Kanawha Water District (Irrigation, M&I)
6. Orland Artois Water District (Irrigation)
7. San Luis Water District (Irrigation, M&I)
8. Contra Costa WD (M&I)

Other contractors will still pay their share of Project Use Energy for Storage and Direct Pumping as offset revenue, rates developed for this purpose, to cover the credit in O&M the 8 contractors will receive for paying on their behalf.

Site Security Costs

Projected costs for security guards and patrols for FY 2021 are included in the water rates. The estimated total projected costs for Irrigation and M&I are \$2,984,692 and \$581,099 respectively.

Trinity Public Utility District (TPUD) Assessment

In accordance with Public Law 106-377, Section 203, Reclamation is required to collect annually \$162,000 (indexed) for payment to the Trinity Public Utility District. For the period March 2021

through February 2022 the TPUD rate will be \$0.15 per Acre-Foot. This assessment along with the CVP Restoration Fund charges and Friant surcharges are due within 30 days after the delivery of water.

Water Marketing

Water marketing costs included in the CVP water rates include general expense. For 2021, the budgeted costs were \$684,000 and those allocated to Irrigation and M&I were estimated at \$388,278 and \$61,918, respectively.

WIIN Act Repayment Contracts

Public Law 114-322, Section 4011 directs that upon request of the contractor, certain water service contract(s) shall be converted to repayment contract(s). As part of this process, the requesting contractor(s) will enter into an amended or integrated form of contract which includes among other things repayment of construction balances that are properly assignable to the contractor and in effect at the time of contract conversion. Once the contract is converted, the water rates will be updated under the amended contract for the month following the execution date to exclude the construction component of the water rate. Note that the Rates that were in effect as of January 1st are included in the water rate website. A separate schedule will be developed and updated for the contractors that convert after January 1st, 2020. This Schedule will be posted as an update each quarter (i.e., April 1st, July 1st, and October 1st) with the first month the new rates are applicable. This schedule will be posted on this site and identified as rates for WIIN Act contract conversions.

Questions

Please direct any questions regarding the CVP 2021 final water rates or the CVP 2019 annual contractor accountings to Jesus Reynoso at 916-978-5362 or by email at jreynoso@usbr.gov.