

# RECLAMATION

*Managing Water in the West*

Central Valley Project, California

## Department of the Interior Central Valley Project

### Municipal & Industrial Water Ratesetting Policy



U.S. Department of the Interior  
Bureau of Reclamation  
Mid-Pacific Region

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## **Mission Statements**

The mission of the Department of the Interior is to protect and provide access to our Nation's natural and cultural heritage and honor our trust responsibilities to Indian Tribes and our commitments to island communities.

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

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# INTRODUCTION

This Department of the Interior (Interior) policy prescribes principles, methods and procedures for recovery of reimbursable costs allocated to Central Valley Project (CVP) Municipal and Industrial (M&I) water service contractors. This policy is referred to as the Department of Interior (Interior) CVP M&I Ratesetting Policy (Policy). The Policy will be applied prospectively from the date of approval by the Assistant Secretary of the Interior for Water and Science (AS/WS).

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# DESCRIPTION OF THE CENTRAL VALLEY PROJECT

The Project was authorized by the Act of August 26, 1937 and new features and operations have been subsequently authorized. The Project was designed for coordinated operation of its surface reservoirs and canals with existing rivers, streams and ground water supplies. Project operations are coordinated to maximize water yield and delivery and efficiency of operations. The Project catches and stores the mountain runoff and, through a complex web of storage and diversion dams, pumping plants, canals and distribution facilities, delivers water throughout its authorized service area.

The Project provides multiple benefits associated with water resources management activities. The authorized project purposes are: Fish and Wildlife, Flood Control, Navigation, Power, Recreation, Water Quality, and Water Supply. The Western Area Power Administration of the Department of Energy operates the power transmission features, while the power generation features and all other Project functions are the responsibility of Reclamation.

Passage of the Central Valley Project Improvement Act (CVPIA) in October 1992 increased the emphasis on operating the Project in a more environmentally sensitive manner requiring improved water conservation and expanded use of voluntary water transfers, and use of a balanced approach to meeting the competing demands for Project water by fish and wildlife, agricultural, M&I and power components of the Project.

The plant-in-service cost allocation is updated each year to reflect additions to and retirements from Project facilities, as well as facilities held in abeyance, as reflected in Reclamation's plant investment accounts. Annual updates may also reflect changes in forecasts of future Project water deliveries. Deficits are also updated on an annual basis.

In 2010, a process to develop a new and final cost allocation for the Project was initiated. The last major cost allocation was completed in 1970, with a minor update in 1975. Since that time, the 1975 allocation has been subject to minimal annual adjustments related to Project water and power uses. The new and final cost allocation will replace the 1975 allocation in its entirety, and could result in a changes to the amounts allocated to the M&I function and the status of M&I repayment.

The repayment requirements for the M&I water supply function are set forth in Federal Reclamation law.

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# BACKGROUND AND LEGISLATIVE HISTORY

The U.S. Congress authorized construction of the initial CVP facilities in the Rivers and Harbors Act of August 30, 1935 (49 Stat. 1028, 1038). The Act authorized the U.S. Army Corps of Engineers to construct the following project facilities: the Shasta, Keswick, and Friant Dams, the Tracy (a.k.a. Jones) Pumping Plant, the Delta-Mendota and Friant-Kern Canals, and the Contra Costa Canal and related facilities. On September 10, 1935, the President signed an Executive Order which transferred \$20 million of Emergency Relief Act funds to the Department of the Interior for construction of the Friant Dam and the other features of the initial CVP. The finding of feasibility on which to base the reauthorization of the CVP under provisions of the Reclamation Act of June 17, 1902 (32 Stat. 388), and all acts amendatory and supplementary thereto, was approved by the Secretary of the Interior and the President on October 26, 1935 and December 2, 1935, respectively.

Congressional reauthorization of the initial CVP facilities under Reclamation law was provided for in Section 2 of the River and Harbors Act of August 26, 1937 (50 Stat. 844) and in the River and Harbors Act of October 17, 1940 (54 Stat. 1198). Since then, Congress has authorized the construction and operation of several additional CVP units, divisions and facilities.

In many cases, the legislation authorizing the construction and operation of a new CVP unit, division or facility included language reauthorizing the entire CVP. Regardless of whether or not the entire CVP was reauthorized, however, the authorizing legislation consistently contained language requiring the new unit, division or facility to be operated and repaid as an integral part of the CVP.

Additional units and facilities authorized as integral parts of the CVP include: the American River Division (Folsom, Nimbus, and Sly Park Dams and related facilities) (Act of October 14, 1949, 63 Stat. 852); the Sacramento Valley irrigation canals (Red Bluff Diversion Dam, Corning Canal, and Tehama-Colusa Canal) (Act of September 26, 1950, 64 Stat. 1036); the Trinity River Division (Act of August 12, 1955, 69 Stat. 719); the San Luis Unit (June 3, 1960, 74 Stat. 156); the New Melones, Hidden and Buchanan Projects (October 23, 1962, 76 Stat. 1191 and 1192); the Auburn-Folsom South Unit (Act of September 2, 1965, 79 Stat. 615); the San Felipe Division (Act of August 27, 1967, 81 Stat. 173); the Black Butte Project (Act of October 23, 1970, 84 Stat. 1097); and the Allen Camp Unit (Act of September 28, 1976, 90 Stat. 1328).

The Secretary's authority to execute irrigation and M&I water service contracts and statutory requirements for recovering costs allocated through such contracts are prescribed by the Reclamation Project Act of 1939 (53 Stat. 1187) as amended, and other provisions of Federal Reclamation Law. In addition, the Acts of July 2, 1956 (Public Law 84-643, 70 Stat. 483) and June 21, 1963 (Public Law 88-44, 77 Stat. 68) contain provisions applicable to the renewal of Federal Reclamation water service contracts.

The first CVP water service contracts were executed by Reclamation during the late 1940's. The initial CVP water rate structure consisted of a graduated scale, ranging from \$2.00 per acre-foot for irrigation water in the Sacramento Valley (near the source of supply) to \$3.50 per acre-foot for irrigation water service in the San Joaquin Valley (south of the Delta formed by the

Sacramento and San Joaquin Rivers). The same water rates applied to all of the contractors in each service area regardless of the contract date. While contracts did not include provisions for rate changes, uniform contract expiration dates were used in some service areas in order to facilitate service area contract negotiations upon renewal.

By the mid-1960's, the repayment status of the CVP indicated that water rates for both irrigation and M&I water service contracts were insufficient to recover both increasing annual operation and maintenance (O&M) costs and the capital investment costs for the CVP within the prescribed terms of the contract. Reclamation honored the terms of the then-existing contracts and withheld any action to adjust the fixed-rate or impose any additional charge or rate for those contracts to recover the accumulated O&M deficits pending contract renewal. However, Reclamation did require that any new contracts include provision for rate adjustments to promote the recovery of Reclamation's escalating cost of operations.

In 1986, Congress enacted the Coordinated Operations Act (COA) (P. L. No. 99-546, 100 Stat. 3050-56) which included several provisions for addressing the CVP cost recovery deficiency. In particular:

- **Section 105** established 2030 as a firm repayment deadline for contractors to repay all construction costs and O&M deficits existing as of 1986 and required contracts to include provisions for adjusting rates if it is found that the rate in effect may not be adequate to recover Federal investments.
- **Section 106** established specific requirements for calculating individual contractor O&M deficits and required the Secretary of the Interior include provisions in each new or amended CVP contract for recovery of such accumulated O&M deficits.

To ensure compliance with P.L. 99-546, Reclamation began reformulating a comprehensive CVP Irrigation Ratesetting Policy. The Irrigation Ratesetting Policy was initiated first because the first-expiring CVP contracts were exclusively irrigation contracts. On May 4, 1987, the Assistant Secretary of the Interior for Water and Science (AS/WS) proposed the Component with Individual Contractor Deficits Ratesetting Method as the new Irrigation Ratesetting Policy for the CVP. Adoption of the proposed policy was subject to the results of a 60 day public review and comment period with the policy to become final in 120 calendar days unless the public comments justified reconsideration of the proposed policy.

Informal workshops to further explain the proposed CVP Irrigation Ratesetting Policy and the applicable supporting calculations were held on June 1 and 4, 1987 and a public hearing was held on June 16, 1987. After a thorough review of the comments, it was determined that the expressed concerns were not significant enough to justify reconsideration or amendment of the proposed policy. The AS/WS subsequently approved the final CVP Irrigation Ratesetting Policy in 1988.

In the early 1990's, Reclamation initiated a corresponding process to develop and implement a CVP M&I Ratesetting Policy. That process was to be similar to the methodology of the CVP Irrigation Ratesetting Policy that was adopted. In addition, the M&I Ratesetting Policy was to be interest bearing for unpaid construction costs and O&M from the date M&I CVP water was taken. The calculation of M&I O&M deficit interest for years before 1986, led to extensive

litigation which was eventually settled at the Department level. O&M is calculated on unpaid balances from 1986 forward using the same interest rates that are applicable to irrigation and using the year 2030 as the repayment period for unpaid balances as mandated by P.L. 99-546.

In addition to complying with the statutory mandate, Reclamation also had to contend with audits and reviews by the Department of the Interior (Interior) Office of Inspector General (OIG) and Government Accountability Office (GAO); and extraordinary interest by the general public, other project stakeholders, Congressional Committees and individual members of Congress.

Because of the volatility and extent of these four factors (statutory requirements, OIG/GAO findings, contractor opposition, Congressional and stakeholder interest) the AS/WS exercised direct oversight of the M&I ratesetting development process, and reserved final approval authority over the completed CVP M&I Ratesetting Policy. The policy was approved on an interim basis by the AS/WS on March 14, 1995. The approval memorandum from the AS/WS does not delegate any authority to Reclamation to formally modify or amend or implement a Final CVP M&I Ratesetting Policy without further approval by the AS/WS.

CVP M&I contractors subsequently litigated Reclamation's calculation of the O&M deficit required by the COA. That litigation was eventually settled by the parties (M&I Settlement Agreement, Case No. CIV-F-03-5359 OWW SMS, dated March 3, 2005). The Settlement Agreement established terms for payment of obligations to the United States with interest. Paragraph 3(A) (2) through 3(A) (5) of the Agreement outlines CVP contractors responsibilities for CVP construction costs; as well as allocable operation and maintenance (O&M) costs; including interest on the unpaid balances.

The policy was approved as interim pending completion of the Programmatic Environmental Impact Statement (PEIS) on the CVP pursuant to Public Law 102-575. The broad scope of the PEIS encompassed both the project's Irrigation and M&I water ratesetting policies, making them subject to modification based on the results of the PEIS.

The PEIS was completed in October 1999 and a final Record of Decision (ROD) was issued on January 9, 2001. The ROD resulted in no modification to either of the CVP ratesetting policies. However, finalization of the Interim Policy did not move forward pending (1) completion of Endangered Species Act (ESA) section 7 consultation with the National Marine Fisheries Service (NMFS) and U.S. Fish and Wildlife Service (F&WL) on an updated CVP Operations Criteria Plan; and (2) the settlement of the lawsuit brought about by CVP M&I contractors. As previously mentioned, the lawsuit was settled in 2005, and the principles of the M&I Settlement Agreement have been incorporated into the Interim Policy and the proposed final M&I policy. However, the initial (2004) and successive NMFS and F&WL Biological Opinions (BiOps) were the subject of extended litigation lasting nearly twelve years. Finalizing the Interim Policy was deferred throughout that entire period.

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# ATTRIBUTES OF THE M&I RATESSETTING POLICY

## Applicability

Both the irrigation and M&I functions of the Project are integral water delivery operations governed by common requirements, criteria, and principles. The integrated operations and common characteristics dictate consistency and uniformity in the ratesetting policies for these two functions wherever possible. Accordingly, Irrigation Ratesetting Policy provided the broad framework upon which the approved Interim and the proposed Final M&I Policy are based.

- CVP water service contracts. Consistent with terms and conditions of CVP M&I water service contracts, this Policy and cost-of-service water rates apply to all types of water within the CVP, including storage and/or conveyance of non-project water in CVP facilities.
- Transferred Works. Consistent with Reclamation policy, most of the O&M for major CVP conveyance and conveyance pumping facilities have been transferred to non-Federal operating entities through agreement with Reclamation. Under the terms of these agreements, the non-Federal entity calculates water rates sufficient to recover its costs in operating and maintaining the facilities for the benefit of member districts. The agreement and associated methodologies adopted by the non-Federal operating entities to recover cost will be in lieu of recovering cost through this M&I Ratesetting Policy.
- Repayment Contracts. In 2010, Friant Division contractors converted to 9(d) repayment contracts as part of the San Joaquin River Settlement. Contractors that entered into the agreements are still responsible for the allocated cost but pay in conformance with the contract terms which identify the timing of paying the construction repayment responsibility. Construction costs are still allocated to these contractors annually through the M&I Ratesetting Policy and any unpaid costs identified are interest bearing as an annual expense.
- Repayment Periods
  - In accordance with Public Law 99-546, the repayment period for the main Project water system facilities, referred to as in-basin facilities, ends in 2030. The repayment period commenced in 1981 the year after the last major facility, the New Melones Dam and Reservoir, was placed in service.
  - Out of basin facilities. A separate repayment period of 1987-2036 has been established for the costs of the San Felipe Division facilities, also referred to as the out-of-basin facilities. The repayment period for the out-of-basin facilities commenced the year after these facilities were substantially completed. For repayment purposes, the Proposed Policy isolates the costs of the San Felipe Division out-of-basin facilities. The San Felipe Division contractors have sole repayment responsibility for the out-of-basin costs.

- Capitalized facilities constructed after the date of this approved Policy. Reclamation will request new legislation to provide guidance for the repayment periods of new facilities. Reclamation will assist in this process as part of the feasibility studies that are conducted. Major rehabilitation's could be up to 50 years.
- Extraordinary Operation and Maintenance (XOM). Title IX, Subtitle G, Section 9603(b) of P.L. 111-11, (Omnibus Public Land Management Act of 2009) dated March 30, 2009, establishes requirements relating to repayment of extraordinary operation and maintenance work performed by the United States. Projects meeting criteria outlined in this legislation will be repaid within 50 years, with interest. A process for the extended repayment of XOM costs has not yet been established. Business Practice Guidelines will be developed in coordination with stakeholders to document the process.
- Dam Safety Projects. The Reclamation Safety of Dams Act of 1978, as amended, established requirements for recovery of a portion of the costs associated with the modification of Reclamation dams due to dam safety concerns. The Act provides for repayment of the Safety of Dams modification costs that are allocable to Project beneficiaries over a period not to exceed 50 years.

## Method

Two fundamental concepts underlie the CVP M&I Ratesetting Policy consistent with P.L. 99-546: Individual Contractor Accounting and, Cost of Service water rates.

1. Individual Contractor Accounting refers to (1) determination of annual water charges (2) the annual accounting for O&M, and (3) interest expenses and the accumulation of deficit and/or surplus balances by individual contractor. Under this concept, each contractor has repayment responsibility for the costs applicable to its M&I water deliveries and, if a deficit occurs, the individual contractor has continuing repayment responsibility for that deficit. This concept was codified by Public Law 99-546, which requires annual accountings of net income or deficit for each individual Project water contractor, as follows:

**“The Secretary of the Interior shall include in each new or amended contract for the delivery of water from the Central Valley project provisions ensuring that any annual deficit (outstanding or hereafter arising) incurred by a Central Valley project water contractor in the payment of operation and maintenance cost of the Central Valley project is repaid by such contractor under terms of such new or amended contract...”**

2. Cost of Service refers to the determination of annual water rates based upon the cost to the United States of storing, conveying and pumping M&I water to the individual contractor's designated delivery point. This includes recovery, within the authorized repayment period, of: (1) annual O&M costs, (2) interest costs, (3) any individual contractor deficit balances, and (4) construction costs.

Deficits or surpluses, as well as the updating of accumulated deficit or surplus balances, are determined for each fiscal year. M&I O&M costs are compiled and grouped into cost components for Water Marketing, Storage, Conveyance, Conveyance Pumping, and Direct Pumping. The cost components are described in detail beginning on page 18. Costs in each component are allocated to those contractors utilizing that component, based on each contractor's respective share of the total annual water deliveries for that component. Total costs applicable to each contractor, including applicable interest, are compared with the corresponding revenues of each contractor. The result is either a net surplus or deficit for that fiscal year. Contractor revenues are applied in the following order:

- 1<sup>st</sup> – Current Year O&M Expenses
- 2<sup>nd</sup> – Current Year Interest Expense
- 3<sup>rd</sup> – Interest-Bearing O&M Deficit
- 4<sup>th</sup> – Construction Costs

This order in the application of contractor revenues is a change from the Interim M&I Ratesetting Policy which had construction costs before interest bearing O&M deficits.

## **Rate Development**

Annual M&I water rates are developed based on the reimbursable portion of budgeted O&M cost; as well as each contractor's outstanding balance of construction cost, for each pool or component; including applicable interest, and the outstanding deficit balance, if any. The O&M cost components include the annual labor, supervision, materials, and other types of O&M costs associated with each of the five O&M cost components – Water Marketing, Storage, Conveyance, Conveyance Pumping, and Direct Pumping. Where O&M agreements exist, the servicing authority recovers costs from contractors and expenses for these facilities are not included in Reclamation costs. A preliminary step in the determination of annual O&M and construction cost component rates is to accumulate the total pooled cost and the acre-feet of water deliveries applicable to each component. Once the costs and acre-feet applicable to each component have been determined, the basic methodology for computing annual water rates is to divide each component's pooled cost by its corresponding acre-feet of water deliveries.

1. For the O&M cost components, the annually determined rates are computed by dividing the pooled annual costs by the corresponding projected annual water deliveries for each component, respectively. O&M cost components are assigned to contractors on the basis of the services used to deliver their water supply.<sup>1</sup> All M&I water deliveries require water marketing and storage services.

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<sup>1</sup> During the Interim M&I Ratesetting Policy, there were several contractors that operated and maintained the storage and conveyance facilities that provided their water service at their own expense. As a result, they were not charged these pooled cost components. The title to these facilities have since been transferred and are no longer included in the pooled cost components.

2. The in-basin construction cost components are determined by accumulating all M&I plant-in-service costs by component, as of the most recently completed fiscal year, and then dividing each component's costs by its total historical and projected acre-feet for the authorized repayment period of 1981-2030. The resultant component construction rates are then combined as applicable by individual contractor.
3. Annual CVP M&I Cost of Service water rates are comprised of the following components:
  - a. **O&M Cost Component** – Water Marketing and O&M costs associated with Storage, Conveyance, Conveyance Pumping, and Direct Pumping Facilities.
  - b. **Construction Cost Component**<sup>2</sup> – Construction costs associated with Storage, Conveyance, Conveyance Pumping, and Direct Pumping facilities. M&I construction costs are an interest-bearing obligation. Interest on the outstanding balance is computed annually and recorded as an annual expense.
  - c. **Deficit Component** – Unpaid O&M and interest costs. Deficit costs are an interest-bearing obligation. Interest of the outstanding balance is computed annually and recorded as an annual expense.

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<sup>2</sup> Certain construction costs are determined to be reimbursable and benefit users CVP wide (such as Programmatic Environmental Impact Statement Cost). As such, a separate cost component, referred to as "Other" in the applicable water rate books, is developed to recover these costs.



# DESCRIPTION OF WATER RATE COMPONENTS

A general description of each of the M&I water rate components, computational mechanics, and other specifics is provided below.

## Water Marketing

The water marketing O&M cost component includes costs such as (but not limited to) monitoring, administering and negotiating water service contracts, maintaining water delivery and payment records, accounting for the annual financial results for Project water operations, developing annual water rates, and related types of activities.

Dividing total water marketing costs by the total projected water deliveries for the corresponding water year results in the average cost per acre-foot for this component.

## Storage

The storage O&M and construction cost components represent the costs of project facilities associated with the collection and storage of Project water. These facilities consist primarily of the Project's dams and reservoirs, such as Shasta, Folsom and New Melones.

All contractors receiving storage services are assigned a Project-wide construction rate, except for San Felipe Division users whose storage capital rate includes an adjustment for the costs of the W.R. Gianelli Pumping-Generating Plant. Because the W.R. Gianelli Pumping-Generating Plant serves as a pumping-only facility for the San Felipe Division, the costs of this facility are assigned to the San Felipe Division as direct pumping costs, rather than as storage costs.

Storage O&M costs include the project use energy costs associated with storage pumping water at the W.R. Gianelli Pumping-Generating Plant, the Columbia- Mowry System, and the Folsom Pumping Plant.

## Conveyance

The conveyance O&M and construction cost components include the costs associated with Project facilities designed and used for transporting water throughout the Project. Canals such as the Delta-Mendota, San Luis, and Friant- Kern Canals, are the primary type of facilities included in this cost component. All contractors receiving conveyance services are assigned the same Project-wide O&M and construction rates. Folsom-South Canal is the only routine O&M cost to be recovered. Currently, "other" routine O&M is performed and recovered through the agreements established with non-Federal operating entities. If "other" routine O&M were to be included as part of Reclamation's cost, a rate per acre-foot would be calculated for total conveyance O&M for the fiscal year that CVP water had conveyance services.

## **Conveyance Pumping**

The conveyance pumping O&M and construction cost components include the costs of the three main Project pumping facilities used to move M&I water through the Project; the Jones Pumping Plant (formerly Tracy Pumping Plant), the O'Neill Pumping-Generating Plant, and the Dos Amigos Pumping Plant. These costs include project use energy costs.

Project use energy costs are charged on the energy used to pump water at each of the pumping plants. The amount of energy required to pump an acre-foot of water varies at each of the three facilities because of the different lift requirement at each facility. The greater the lift requirement, the more energy required to pump each acre-foot of water and the more pumping O&M costs are associated with that acre-foot of water.

Total conveyance pumping costs are assigned to pumping plants based on each plant's prorated share of project use energy used.

Separate conveyance pumping construction rates are calculated for each of the three pumping plants based on the recorded construction costs as of the end of the most recently completed fiscal year. A rate per acre-foot is calculated for each facility based on its total historic and projected deliveries over the 50-year repayment period. The rates for each of the main pumping facilities used by a contractor are totaled to determine the contractor's construction rate for conveyance pumping.

Currently, routine O&M is performed and recovered through the agreements established with non-federal operating entities. If routine O&M were to be included as part of Reclamation's cost, a rate per acre-foot would be calculated for each of the facilities O&M for the fiscal year that CVP water went through the facility.

A portion of the Jones Pumping Plant's construction and O&M costs are assigned to the Friant-Kern Canal and Madera Canal contractors. Construction costs are assigned on the basis of the historical and projected deliveries to the Exchange contractors located in the Delta-Mendota Pool service area. O&M costs are recovered through the agreements with the non-Federal Operating entities.

## **Direct Pumping**

The direct pumping O&M and construction cost components are based on the costs associated with re-lift pumping plants which pump water exclusively for specific contractors. These facilities were constructed by Reclamation and are now operated and maintained by the local water districts whose water they pump. These facilities and the operating entities are as follows:

<b>Pumping Plant</b>	<b>Operator</b>
Wintu Pumping Plant	Bella Vista Water District
Contra Costa Canal Pumping Plant	Contra Costa Water District
Ygnacio Pumping Plant	Contra Costa Water District
Clayton Pumping Plant	Contra Costa Water District
San Luis Relift Pumping Plant	San Luis Water District
Westlands Relift Pumping Plant	Westlands Water District
Pleasant Valley Pumping Plant	Westlands Water District
Pacheco Pumping Plant	Santa Clara Valley Water District
Coyote Pumping Plant	Santa Clara Valley Water District

The direct pumping construction costs as of the end of the most recently completed fiscal year are allocated to the contractors using the facilities. A per acre-foot rate is calculated for each plant based on the total of the historical and projected deliveries over the 50-year repayment period.

Because each pumping plant is operated by a local water district at its expense, the only project O&M costs to be recovered are the project use energy costs. Project use energy costs are charged directly to the user of the direct pumping facility.

## **Interest – Construction Costs**

M&I is an interest-bearing function, and interest is computed annually on the individual contractor's unpaid construction cost. Annual interest on general (non-specific) plant-in-service is calculated using a composite interest rate for the Project. A composite interest rate is developed each year which weighs each of the authorized interest rates by the expenditures to date for the in-service facilities.

The composite interest rate is updated annually to reflect any additions to the Project plant-in-service accounts and their authorized interest rates.

## **Deficits and Interest on Deficit**

The deficit balance for an individual contractor refers to the accumulation of annual un-paid O&M costs, including applicable interest expenses. Deficits are incurred when a contractor's annual revenue is not sufficient to repay their allocable share of O&M costs. In accordance with the terms of condition of settlement reached, a zero interest rate is used on deficit balances through 1986. For years 1986 forward, pursuant to P.L. 99-546, the treasury rate is applied to any annual obligation incurred for each year. Deficit balances are updated annually to reflect repayment, additional deficit incurred and the annual interest expense.

## **Deferred Interest Method**

A potential inequity in the allocation of interest was identified during the early development of the Proposed Policy. This inequity stems from a disproportionate allocation of interest costs.

In the first years of M&I water deliveries, few contractors were taking water from a system ultimately designed for many contractors. Initially, all the plant-in-service costs of the M&I function and the repayment interest for the early years would be allocated to few contractors. The contractors would not be ultimately responsible for repaying all the construction costs, as the construction costs would be reallocated each year based upon the then current contractors receiving water services. Accordingly, the contractors should not be forever burdened with the repayment obligation for the entire interest amount computed for the earlier years.

The need for a method to equitably allocate historic interest costs during completion of the many features of the Project led to the development of the Deferred Interest Method.

The Deferred Interest Method established the period 1949 to 1987 as the period during which inequitable plant-in-service allocations and interest computations occurred. As such, M&I plant-in-service costs, annual plant-in-service interest, O&M deficits, and deficit interest applicable to that period were recomputed under the Deferred Interest Method.

Interest for the early project years, 1949 through 1987, under the Deferred Interest Method is considerably less than the amount of interest originally computed and allocated to contractors. The Deferred Interest Method ensures recovery of the deferred amount by amortizing these charges as an additional construction cost component to be repaid over the remaining Project repayment period. By doing this, it permits the reallocation of construction costs and the resultant computation of a substantially lower amount of interest as of 1987, while still providing full recovery of the interest amount. This is accomplished by capitalizing the deferred interest at the applicable composite interest rate, and including a deferred interest component in M&I rates to recover such amount.

Both the Deferred Interest Method and the original interest computation method yield essentially the same financial result to the U.S. Government. The difference between the two methods lies in the procedures for computing interest costs by contractor and in the timing and method for recovering such interest costs. The Deferred Interest Method erases the inequity in computing contractor annual interest for years prior to 1988, and provides for recovery of the deferred interest, through the capitalized Deferred Interest Method. The Deferred Interest Method is the procedure that has been utilized in the Interim M&I Ratesetting Policy and will continue to be used in the Final M&I Ratesetting Policy.

M&I Cost Recovery as of September 30, 2015

Construction			Deficit
Total CVP Construction Costs Allocated to M&I	Cumulative Repayment of M&I Construction Costs	Percentage of M&I Construction Costs Repaid	Cumulative M&I Deficit Balance
\$117.7 Million	\$113 Million	96%	\$23.7 Million

# GLOSSARY

**Annual O&M:** Annual O&M costs, annual interest expense related to the outstanding M&I construction costs and, where applicable, annual interest on the deficit.

**Construction Cost:** In this document, plant-in-service and construction cost are used interchangeably to refer to construction costs that have been placed into service for recovery purposes.

**Cost of Service:** The determination of annual water rates based on the Government's cost of providing M&I water to the individual contractor's designated delivery point.

**Deficit:** The accumulation of annual O&M and interest costs in excess of the total revenues received from the sale of water under existing water service and/or repayment contracts.

**Extraordinary Operation and Maintenance (XOM):** Major, nonrecurring maintenance to Reclamation-owned or operated facilities, or facility components, that is—intended to ensure the continued safe, dependable, and reliable delivery of authorized project benefits; and greater than 10 percent of the contractor's or the transferred works operating entity's annual operation and maintenance budget for the facility, or greater than \$100,000.

**Fiscal Year:** The federal government's fiscal year that runs from October 1st through September 30th.

**Historical and Projected Water Deliveries:** All paid water and Project water, with the exception of non-storable 215 water, expected to be delivered by Project facilities within the Project's repayment period. The time frame extends from the beginning of the first year in which water was delivered through the end of the repayment period.

**In-Basin Facilities:** The main Project water storage and delivery system facilities located in the Central Valley Basin of California.

**Individual Contractor Accounting:** The process of determining each contractor's net financial position for the fiscal year just ended. This process accounts for each contractor's recorded water revenues against allocated costs and applicable interest to the contractor based upon their respective water deliveries.

**Interim Renewal Contract(or):** In accordance with section 3409 of the Central Valley Project Improvement Act (CVPIA), a contractor who is receiving Project water under a water service or repayment contract having an interim term period not to exceed 3 years in length, and for successive interim periods of not more than 2 years in length.

**Long-Term Contractor:** A contractor who is receiving Project water under a water service or repayment contract having a term of greater than 10 years.

**Net Repayment:** Accumulation of annual water payments in excess of the amount required to cover the annual O&M and interest costs. The revenue available to reduce a contractor's deficit and construction cost.

**Out-of-Basin Facilities:** The Project water system facilities located outside the Central Valley Basin of California, i.e., those Project facilities located in the San Felipe Division service.

**Paid Water:** This term refers to all Project water supplies required to be paid under water service and/or repayment (9d) contracts.

**Present Worth:** A financial term referring to the time value of money. The present worth concept recognizes that the interest earning capability of money makes \$1 in the future worth less than \$1 today. As an example, if \$1 was deposited today at a 10 percent interest rate, it would be worth \$1.10 in 1 year. Thus, \$1 in 1 year would be worth something less than \$1 today.

**Present Worth of Future Deliveries:** The same concept as indicated in the preceding Present Worth definition, only as applied to a stream of water deliveries rather than monetary payments. Similar to the concept that money earns interest, M&I costs must be repaid with interest; and hence, as \$1 is worth more today than in the future, an acre-foot of water today is worth more than an acre-foot sold at the same price in the future. Because of this, the time value of future deliveries must be considered in determining construction and deficit water rates required to repay these costs within the repayment period. The present value of future deliveries is computed by discounting such deliveries by the applicable interest rate over the remaining repayment period.

**Projected Water Deliveries:** All Project water expected to be delivered for revenue producing purposes during the remainder of the repayment period.

**Repayment Period:** The time allowed for the recovery of the construction invested in a project. For main project feature, the repayment period began in fiscal year 1981 and continues through fiscal year 2030. Separate repayment periods may be established for major rehabilitation or new facilities.

**Water Rate(s):** As discussed throughout this document, general use of these terms refers to the cost of M&I water expressed on a cost per acre-foot basis. When other meanings are intended in the use of the words "rate" or "rates", such as in referring to an interest rate, such clarifying words are provided in the text as appropriate.