

Understanding the CAP Repayment Obligation

What is the CAP Repayment Obligation?

The Central Arizona Project was designed and constructed as a multi-purpose project to address a wide range of objectives: water supply, flood control, fish and wildlife, commercial power, recreation, safety of dams, etc. Generally speaking, those purposes are categorized as either "federal" or "non-federal."

The Central Arizona Water Conservation District was created to contract with the United States for repayment of the "non-federal" share of CAP construction costs—specifically, the costs related to non-federal water supply and commercial power, plus interest during construction. The sum of those non-federal costs is what we refer to as the CAP Repayment Obligation.

The costs associated with supplying water to Indian tribes are considered federal costs and are not included in the CAP Repayment Obligation.



How was the CAP Repayment Obligation determined?

Under CAWCD's master repayment contract—before the CAP repayment stipulation—the Bureau of Reclamation was required to allocate CAP construction costs among the various project purposes using the "separable costsremaining benefits" (SCRB) methodology. The costs allocated to water supply were then further sub-allocated among federal (Indian), municipal and industrial (M&I) and non-Indian irrigation uses in proportion to the water estimated to be used for each purpose during the repayment period. The water supply sub-allocation was to be performed again every seven years throughout the repayment period—or more frequently if it appeared to Reclamation that there was a significant change in CAP water deliveries—with the CAP Repayment Obligation being adjusted accordingly, either up or down, with corresponding changes in CAWCD's payment amortization schedule.

The portion of the CAP Repayment Obligation attributed to M&I water supply and commercial power bears interest at the rate of 3.342%, while the portion associated with the non-Indian agricultural water supply is interest-free.

In its final cost allocation before initiation of CAP repayment, Reclamation calculated that the cost allocable to CAWCD was \$2.46 billion, which was offset partially by \$260,000 in interim power revenues, leaving a net CAP Repayment Obligation of \$2.2 billion. Costs allocated to M&I water supply comprised 61% of the total, about \$1.34 billion. Commercial power costs were 23%, and non-Indian irrigation was 16%.

CAWCD challenged the methodology and results of Reclamation's CAP cost allocation, as well as the amount of the CAP Repayment Obligation, in the repayment litigation. The stipulated agreement that resolved that dispute eliminated the cost allocation and water supply sub-allocation processes entirely in favor of a fixed repayment obligation with a fixed split between interest-bearing and non-interest-bearing costs.



What is the amount of the CAP Repayment Obligation?

CAWCD's original 1972 master repayment contract established a ceiling on the CAP Repayment Obligation of \$1.2 billion. Once construction of the CAP was underway, however, it was obvious to all that the eventual costs would be higher, so the repayment ceiling was increased in a 1988 revision to the CAP master repayment contract. By CAWCD's reading of the 1988 contract, the CAP Repayment Obligation was limited to \$1.781 billion for the CAP water supply system, New Waddell Dam and modified Roosevelt Dam; under the U.S. interpretation, the repayment ceiling for those CAP features was \$2.0 billion.

As noted above, Reclamation's 1993 cost allocation concluded that CAWCD owed \$2.2 billion, which exceeded either party's interpretation of the 1988 master contract repayment ceiling. That led to two years of negotiation followed by five years of litigation before a settlement of the repayment dispute was reached in 2000. It then took another seven years to satisfy the conditions to that settlement, which included enactment of the Arizona Water Settlements Act, execution of the Arizona Water Settlement, completion of the Gila River Water Rights Settlement Agreement and other related agreements.

In the end, the settlement established the CAP Repayment Obligation at \$1.646 billion. The key provisions of the settlement agreements, as they relate to the CAP Repayment Obligation, were:

- Non-Indian CAP agricultural subcontractors relinquished their long-term CAP entitlements in exchange for CAWCD's commitment to deliver a declining pool of Excess Water through 2030 at energy-only rates (the Ag Settlement Pool), as well as federal debt and regulatory relief and other consideration.
- The agricultural relinquishments made nearly 300,000
 acre-feet of CAP non-Indian agricultural (NIA) priority
 water available for reallocation to other uses, with
 roughly two-thirds being dedicated for current and future
 Indian settlements and one-third for future M&I uses.
- Transferring nearly 200,000 acre-feet of CAP water from nonfederal to federal use allowed the CAP Repayment Obligation to be reduced to \$1.646 billion, since the obligation is directly linked to non-federal water use.
- In recognition of the anticipated non-Indian agricultural use under the Ag Settlement Pool, the United States agreed to classify 27% of the CAP Repayment Obligation principal as "non-interest-bearing" or interest-free. That percentage will remain constant throughout the CAP repayment period, no longer subject to change every seven years through the water supply sub-allocation process. The value of this interest-free classification is approximately \$650 million. The remainder of the CAP Repayment Obligation principal continues to bear interest at the original contract rate of 3.342%.

What is the annual payment on the CAP Repayment Obligation?

The amortization schedule for the CAP Repayment Obligation is set forth in Exhibit A to the repayment stipulation. On average, the annual payment owed by CAWCD is approximately \$55 million per year through 2029, declining to \$44 million through 2043 with the final payment of \$9.2 million occurring in 2045. At that point the CAP water supply system will have been repaid and CAWCD will only be paying for CAP regulatory storage features.

What revenues are available to satisfy the CAP Repayment Obligation?

CAWCD has three revenue sources that it can use to make its annual payments: surplus revenues in the Lower Colorado River Basin Development Fund, ad valorem taxes and M&I capital charges.

DEVELOPMENT FUND REVENUES

A traditional Reclamation project consists of a dam that generates power and makes water available for irrigation through a distribution system. In such a project, hydropower revenues are used to repay the costs of construction in excess of the irrigators' ability to pay.

CAP is fundamentally different from the traditional Reclamation model in that it does not include a hydropower facility and it must pump project water uphill. In the case of CAP, the U.S. interest in the Navajo Generating Station was intended to provide both the power needed to pump CAP water and revenues to assist in repayment.

Under the master repayment contract and stipulation, net revenues to the Development Fund are applied annually toward CAWCD's annual payment. Through 2019, such revenues were derived primarily from the sale of Navajo Surplus energy and a surcharge on Hoover and Parker-Davis energy sold in Arizona. Additional credit in the Development fund can also result from the use, rental, sale or exchange of CAP lands. During the early to mid-2000s, it was contemplated that the NGS surplus sales would cover the entire repayment. However, from 2010 through 2012, NGS surplus and shaping and displacement revenues failed to materialize, the energy market had softened and there were significant new regulatory programs that began to impact the cost of generation at NGS. Then in 2017, it was determined that the cost of NGS was significantly higher than open market purchases and the NGS owners made the decision to close the plant. NGS ceased operations in November 2019. With the closure, net surplus power sales of \$20-\$25 million per year that were applied to the federal payment also ended.

CAWCD estimates that \$7-9 million in net Development Fund revenues may be available annually against the repayment leaving the balance of the payment to be made up from its only two other sources: ad valorem taxes and capital charges.

AD VALOREM TAXES

CAWCD is authorized to levy two ad valorem property taxes across its three-county service area. The first, limited to 10 cents per \$100 of assessed valuation, may be used for any authorized CAP purpose. The second, sometimes referred to as the "water storage tax," is limited to 4 cents per \$100 of assessed valuation and is available to be used for CAP repayment and OM&R costs; if not needed for those purposes, the 4-cent tax revenues are to be transferred to the Arizona Water Banking Fund. CAWCD currently levies both ad valorem taxes at the maximum authorized amount. In 2024, 1-cent of tax is equivalent to approximately \$7.2 million. As part of the Arizona Water Settlements Act, CAWCD must cover the Ag Settlement pool Fixed Operation, Maintenance and Replacement costs, but there will be no Ag Consideration in a Tier 1 or lower shortage on the Colorado River.

The 4-cent "water storage tax" had historically been used to cover the OM&R costs of delivering and storing CAP water for the Arizona Water Banking Authority. In recent years, with the lack of excess water, the tax revenues have been available for the Arizona Water Banking Authority to purchase long-term storage credits. In 2013, CAWCD used \$13 million of the accumulated 4-cent tax revenues and another \$8.7 million in 2021 to cover shortfalls in annual revenue for repayment.

M&I CAPITAL CHARGES

The M&I subcontracts provide for the payment of a capital charge to effect repayment of that portion of the CAP Repayment Obligation attributed to the M&I function—61% of the total CAP Repayment Obligation in Reclamation's 1993 cost allocation, which would equate to about \$1 billion of the current \$1.646 billion obligation or approximately \$33 million of the average annual payment of \$55 million. The subcontracts provide that CAWCD may adjust the M&I capital charge to reflect all sources of revenue

Because all CAP construction costs associated with federal uses—including Indian water deliveries—have already been paid by the United States and are not part of the CAP Repayment Obligation, CAP Indian contractors and their lessees do not pay capital charges or otherwise contribute toward the CAP Repayment Obligation.

The original M&I subcontracts (before they were modified in accordance with the Arizona Water Settlements Act) set out a defined schedule that provided for M&I capital charges to increase steadily over time, topping out at \$40 per acre-foot from 2024 through the end of the subcontract.

By the time repayment was about to commence in October 1993, it was apparent that: (1) initiation of CAP repayment and enforcement of take-or-pay provisions of the non-Indian agricultural subcontracts would pose serious financial problems for CAP irrigation districts (likely resulting in bankruptcy filings); (2) continued agricultural use of CAP water was necessary to maintain the financial and operational viability of the CAP, because without agricultural water use CAWCD's repayment obligation would increase and M&I and Indian water users would have to pay more of the CAP fixed OM&R costs; and (3) some form of financial restructuring of the CAP was required.

In October 1993 the CAWCD Board approved a program for repayment adjustment, commonly referred to as the Target Pricing Program, which included two key elements. First, CAWCD made available to agriculture three pools of CAP water that were priced below cost. By encouraging continued agricultural use of CAP water in this way, the program protected the interest-free status of a significant portion of the CAP Repayment Obligation, resulting in substantial repayment savings. Second, the program provided for a \$9 per year increase in the M&I capital charge rate for the next 6 years, raising capital charges from \$12 per acre-foot in 1994 to \$54 per acre-foot in 2000 and holding at that level through 2011.

The M&I capital charge schedule established by the Target Pricing Program remained in effect through 1999. At that time, because CAWCD and the United States were discussing a potential settlement of the CAP repayment dispute that would likely alter many of the financial assumptions upon which the Target Pricing Program was based, the Board elected to forgo the final \$9 increase and hold capital charges at \$48 per acre-foot for another year, even though that would result in a projected decline in CAP reserves over the next 10 years.

After the initial CAP repayment stipulation was approved in 2000, CAWCD reduced M&I capital charges to \$43 for 2001. The Board also reduced the ad valorem tax rate from 10 cents to 9 cents per \$100 of assessed valuation. Financial projections at the time indicated that both of these adjustments could be made without significantly impacting near term reserve levels.

The capital charge rate remained at \$43 through 2003 as there was some continued uncertainty over whether the conditions of the repayment stipulation would be satisfied by the original 2003 deadline. But the stipulation was extended in 2003 and ultimately satisfied in 2007. Over that period, as CAWCD's financial uncertainty declined, the M&I capital charge rate was further reduced (as was the ad valorem tax rate), anticipated to level off at \$21 per acre-foot, based on estimates of Navajo Surplus revenues at the time.

Beginning in 2009, M&I capital charges were reduced further, down to \$15 per acre-foot, in the expectation of rising power markets that might eventually allow Navajo Surplus revenues to cover all of the annual Repayment Obligation and eliminate M&I capital charges altogether (originally forecasted to be \$0 by 2016 in the 2010 rate case). Although M&I capital charges were reduced in advance of anticipated power market increases, such increases never materialized and the exact opposite happened, as natural gas prices—which drive electricity prices—fell from more than \$9 per million Btu in 2009 to less than \$2 in 2015. M&I capital charges remained at \$15 per acre-foot from 2010 through 2013. Strategic Reserves had not recovered to target by 2016, so the 2016 rate case discussion was a protracted one, with much discussion on the use of taxes and setting appropriate Capital Charges. Several options were discussed through both the preliminary and final rate-setting cycle. Ultimately, capital charges were increased significantly for 2018 and 2019. Annually, the CAWCD Board of Directors evaluate tax use alternatives and determine if any taxes are applied toward repayment. The capital charge is set to cover any remaining estimate of the cash makeup payment. As the repayment amount fluctuates year-to-year it can cause fluctuation in the capital charge rate.

How much of the Repayment Obligation has been covered by each source of revenue available for Repayment?

From the start of repayment in October 1993 through the most recent scheduled payment to the U.S. (January 2024), approximately \$120 million (7% of the total paid to date) has been covered by ad valorem property taxes, \$813 million (49%) has been covered by Navajo Surplus and other Development Fund revenues and \$730 million (44%) has been covered by capital charges (\$716 million from M&I and \$14 million from Aq).

