Understanding CAP’s Strategic Reserve

What is the “Strategic Reserve”?  
The Strategic Reserve is not a single fund, but rather a collection of individual accounts that have been established for a variety of specific purposes. Some, like the Master Contract Reserve, are required by law or contract. Others, like the Operating Reserve, were created as a matter of prudent business practice to deal with potential unknown costs (known costs are included in CAP’s biennial budget). One, the Working Capital Reserve, is essentially CAP’s checkbook—it is used to receive incoming revenues and pay ongoing expenses. Collectively, these various reserve accounts are known as the Strategic Reserve. Ideally, with the exception of the Working Capital Reserve, the Strategic Reserve accounts would never have to be used.

What determines the size of the Strategic Reserve?  
The Strategic Reserve strategy and targets are reviewed, at a minimum, every two years as part of CAP’s financial planning cycle. Based on that review, the Board establishes an overall target amount for the Strategic Reserve. In March 2016, the Board set the Strategic Reserve target at $222 million. The measurement date for Strategic Reserve accounts is December 31, which is generally the highest point during the year for the reserves.

As noted above, the Strategic Reserve is not a single fund, and the $222 million overall target is merely the sum of the various individual reserve accounts, shown here:

<table>
<thead>
<tr>
<th>Individual Reserve Accounts</th>
<th>Target ($M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master Contract Reserve</td>
<td>$40</td>
</tr>
<tr>
<td>Emergency OM&amp;R</td>
<td>6</td>
</tr>
<tr>
<td>Operating Reserve</td>
<td>66</td>
</tr>
<tr>
<td>Capital Reserve (combined)</td>
<td>65</td>
</tr>
<tr>
<td>Contingency Reserve</td>
<td>10</td>
</tr>
<tr>
<td>Working Capital Reserve</td>
<td>35</td>
</tr>
<tr>
<td><strong>Overall Strategic Reserve Target</strong></td>
<td><strong>$222</strong></td>
</tr>
</tbody>
</table>

Under the 1988 repayment contract between CAWCD and the United States, CAP is required to maintain a repayment reserve account (the Master Contract Reserve) in the amount of $40 million. Any interest accruing on that balance becomes a part of CAP’s general funds. The repayment contract also requires CAP to maintain an Emergency Operations, Maintenance & Replacement (OM&R) reserve of at least $4 million, and provides that any interest accruing on that balance shall remain in that reserve account. Proposed expenditures from either of these reserve accounts must be submitted to the United States for prior approval. Approved expenditures from either account must be replaced in fairly short order (at least $4 million per year for the Master Contract Reserve).

By law, CAP is required to maintain a reserve account to support the liquidity of the Captive. This accounts for $5 million (50%) of the Contingency Reserve.

Based on input from staff, the Board determines the appropriate target for the remaining reserve accounts, principally the Operating Reserve, Capital Reserve and Working Capital Reserve.
The $131 million target for the combined Operating and Capital reserves represents about 50% of CAP’s annual operating and capital cash expenditures. These reserves are intended to cover costs in the event of a business interruption (water delivery revenues cease) and/or to repair catastrophic property loss.

The Capital Reserve target of $65 million is based on two times the moving average of annual capital expenditures. The annual expenditure variable is a reliable “yardstick” on which to base the calculation. The Capital Reserve’s purpose is to have a source of funds to make unplanned repairs to infrastructure. This reserve needs to be between 0% and 100% of the cost to replace the CAP. Each year’s capital expenditure currently represents about 1% of the cost of replacing the entire replaceable portion of the CAP system. The “two times” factor arises for two reasons:

- The first reason is a theoretical risk management concept. The probability of a single unplanned event is “X” percent. There is also a lesser probability of a second unplanned event, and an even lesser probability for a third, etc. The “two times” factor is to approximate the combined probability of multiple unplanned events.
- The second reason for the “two times” factor is more pragmatic. If an unplanned event occurs, there needs to be money to make repairs and to fund ongoing planned capital needs if there is a business interruption. The funds that are used must be replaced, so additional funds need to be available to continue operations until replacement money (e.g., borrowing or revenue) is in place.

Approximately $35 million of the Capital Reserve consists of excess proceeds (“ARC revenues”) from bond transactions in the early 1990s related to the construction of New Waddell Dam. Use of these funds is restricted under the Repayment Stipulation for major repair and replacement of CAP features only. They may not be used for other purposes such as operating costs or shortfalls in repayment. This component of the Capital Reserve is entitled the “Major Repair and Replacement Reserve.”

The Operating Reserve target of $66 million is based on one year of “net expenditures”—the annual operating budget expenses, less non-cash items (amortization and depreciation) and variable cost (power), less the amount of revenues from the 10-cent ad valorem property tax.

The Government Finance Officers Association (GFOA) Best Practice for operating reserves recommends maintaining a balance of not less than two months of either operating revenues or operating expenditures. The Best Practice goes on to say that the government should also consider a variety of factors, including predictability and volatility of expenditures, exposure to significant one-time costs, whether the government is a general government or an enterprise fund, etc., and that the appropriate level may be significantly in excess of the two month minimum. CAP’s target for Operating Reserves of one year of “net expenditures” is approximately equal to 3.5 months of operating expenditures, well within the GFOA Best Practice.

What is the current status of the Strategic Reserve?

At the end of 2015, the cumulative balance of all Strategic Reserve accounts was $169 million—$54 million below the current target. To understand the “shortfall” it is necessary to look at the status of each of the individual reserve accounts.

<table>
<thead>
<tr>
<th>Individual Reserve Accounts</th>
<th>Target (SM)</th>
<th>Balance (12/31/15)</th>
</tr>
</thead>
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<tr>
<td>Master Contract Reserve</td>
<td>$40</td>
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<td>0</td>
</tr>
<tr>
<td>- Capital Reserve</td>
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</tr>
<tr>
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<td>36</td>
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</tr>
<tr>
<td>Contingency Reserve</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Working Capital Reserve</td>
<td>35</td>
<td>17</td>
</tr>
<tr>
<td>Overall Strategic Reserve Target</td>
<td>$222</td>
<td>$169</td>
</tr>
</tbody>
</table>

* Note that as of December 31, 2015, the target for the Operating Reserve was $60 million and for the Capital Reserve was $70 million.
As the foregoing table shows, the Master Contract Reserve, Emergency OM&R Reserve and Contingency Reserve are all being maintained at their established targets, and the Operating Reserve was at the target that was in effect at that time. So the current Strategic Reserve “shortfall” is essentially related to the Capital Reserve and Working Capital Reserve.

**Why are the Capital Reserve and Working Capital Reserve significantly below their targets?**

Just as the Lower Colorado River operates under a structural deficit—using more water each year than it receives—CAP currently operates under its own financial structural deficits.

Most CAP revenues accrue to the Working Capital Reserve, which is then used to cover ongoing costs, including fixed OM&R and CAP’s annual repayment to the United States. When revenues to the Working Capital Reserve exceed ongoing expenses, the surplus can be used to replenish or build other Strategic Reserve accounts. But when revenues are insufficient to cover costs—as has been the case for the past few years—then CAP must draw from its other Strategic Reserve accounts. To date, the Capital Reserve has been tapped to cover the deficit; but there are no more available funds in that reserve account so the Operating Reserve is now being used to cover shortfalls.

**Ag Settlement Program Deficit**

CAP’s Strategic Reserves have also been depleted in recent years because the cost of the CAP Ag Settlement Program has exceeded the 6 cents of ad valorem tax revenue dedicated for that purpose.

Ad valorem taxes were more than sufficient to cover the entire cost of the Ag Settlement Program through 2011, with the surplus being used to cover the annual repayment deficit and even contributing toward CAP Strategic Reserves on occasion. But ad valorem tax revenues declined noticeably beginning in 2011 as the effects of the recession were manifested in property values and, more recently, the impacts of Proposition 117. Recent increases in CAP fixed OM&R and particularly energy rates, coupled with the need to keep water prices affordable for agriculture, have driven the costs of the Ag Settlement Program sharply higher. For 2014 and 2015, the deficit between available tax revenues and Ag Settlement Program costs averaged $13 million per year, resulting in a drain on Strategic Reserves.

While some have called for agricultural users “to pay a greater share,” the bulk of the cost of the Ag Settlement Program is due to CAP’s covering the fixed OM&R costs of Ag Settlement Pool deliveries, which was a key part of the consideration to CAP non-Indian agricultural subcontractors under the 2004 Arizona Water Settlement Agreement. Under that settlement, non-Indian agricultural subcontractors relinquished their long-term CAP subcontract rights in return for CAP’s commitment to deliver a declining pool of excess water through 2030 at energy-only rates, federal debt relief and other consideration. The CAP water that they relinquished then became available to resolve current and future Indian water rights claims, most of which were against Municipal & Industrial (M&I) water users in CAP’s service area. A smaller portion of the cost of the Ag Settlement Program is the discretionary “Ag Incentive Program” authorized by the CAP Board.

The structural deficit related to the Ag Settlement Program should resolve itself within the current CAP budget cycle. Under the terms of the Arizona Water Settlement Agreement, the Ag Settlement Pool will decline from 400,000 acre-feet to 300,000 acre-feet in 2017, which will reduce CAP’s cost to a point where it is roughly equivalent to the 6 cents of ad valorem tax revenues.
Delay in reallocation of CAP NIA water

ADWR has proposed an initial reallocation of 46,629 acre-feet of CAP Non-Indian Agricultural (NIA) Priority water pursuant to the Arizona Water Settlement Agreement. When that water is subcontracted to its new users, CAP will begin to receive back capital charges along with accumulated interest. That contract action is anticipated to bring CAP about $10 million per year for five years, which can be used to help replenish the Strategic Reserve.

Because the reallocation process has taken longer than expected to complete, the positive impact on CAP reserves has been delayed. It is important to note, however, that back capital charges from the NIA reallocation will provide a one-time cash infusion, but will not eliminate the annual deficit.

Repayment Deficit

The most significant impact on the Strategic Reserve has been from the structural deficit related to CAP repayment. Revenues from the three sources available for repayment—Basin Development Fund revenues (primarily from Navajo Surplus sales), M&I capital charges and ad valorem taxes—are insufficient to cover CAP’s annual repayment to the United States, so Strategic Reserves are being mined to make up the difference. For 2015, that deficit was $17 million. Based on early projections, the shortfall for 2016 could be $21 million or more.

It is no coincidence that the repayment structural deficit grew when M&I capital charges dropped. Capital charges were reduced from $21 per acre-foot in 2008 to $15 per acre-foot for 2010 through 2013. At the same time, the repayment structural deficit grew from $3.5 million to $20 million per year or more.

The decision to lower M&I capital charges was based on an anticipated increase in Basin Development Fund revenues from the sale of Navajo Surplus energy after the Four Party Agreement ended in September 2011. But natural gas prices declined sharply after 2008 and have fallen even lower since then, keeping market prices for electricity very low as well. As a direct result, Navajo Surplus sales that were anticipated to create substantial revenues for CAP’s annual repayment have instead resulted in significant losses to the Basin Development Fund, offsetting in part the $27+ million in annual revenue from the long-term sale of Navajo Surplus to SRP.
The poor energy market, and its impact on CAP repayment and energy costs, was the primary driver behind the transfer of $45 million from accumulated 4-cent tax revenues to CAP’s Strategic Reserve in 2013 (approximately half of that balance was used to replenish shortfalls in the annual CAP repayment and half to offset the reconciliation of the 2012-2013 CAP Energy Rate that would otherwise be collected from customers). Since the transfer of $45 million in 2013, approximately $40 million in Strategic Reserves have been used to make up the Repayment Deficit.

Will the Strategic Reserve recover on its own without intervention?

As long as there is a structural deficit in CAP’s annual finances, the Strategic Reserve can only go down, not up. The current projections (chart below) show the Strategic Reserve starting to recover around 2017 to 2018. Much of the apparent recovery is due to the influx of back capital charges associated with the reallocation of CAP NIA priority water. But those back capital charges provide a one-time infusion into the Strategic Reserve spread over five years. Once the back capital charges have been paid, the Strategic Reserve will again respond to CAP’s negative annual cash flow.

By the end of 2016, Strategic Reserves are anticipated to be approximately $20 million below projections in 2013 ($180 million), when $45 million was transferred from the 4-cent tax reserve to Strategic Reserves. This has led some observers to conclude, incorrectly, that the only change since then is the two-year, $20 million slippage of the NIA revenues, and that other factors (Ag program costs and the poor energy market) have already been adequately taken into account. However, by the end of 2018, the Strategic Reserves shortfall is anticipated to widen to $30 million below the 2013 projection ($212 million). It will take until mid-2021 to get back to $212 million and the end of 2022 to get to the current target ($222 million). The lengthening and deepening trend in Strategic Reserves is due to the structural deficit for repayment described above. Insufficient revenues are available from the three sources available for repayment—Basin Fund revenues (primarily Navajo Surplus sales), capital charges and property taxes—so the Strategic Reserves are being mined to make up the difference.
As discussed above, after 2017 the 6 cents of ad valorem tax revenue dedicated to the Ag Settlement Program should cover the cost of that program and contribute something toward the Strategic Reserve. But ad valorem tax revenues cannot cover both the cost of the Ag Settlement Program and the annual repayment structural deficit. Through the payment for 2015, ad valorem taxes have already covered $208 million of CAP repayment.

**What are the consequences of CAP drawing down its Strategic Reserve accounts?**

Due to the structural deficit in repayment revenues, CAP has become reliant on reserves to make up the shortfall—reserves that were established for other purposes. This is not a sustainable practice, and will eventually not only deplete reserves, but also impact CAP’s bond rating. While CAP currently enjoys outstanding ratings (AA/Aa2/AA+), reflective of excellent financial management practices, ongoing practices will be scrutinized even more closely now that CAP has issued debt. Bonded indebtedness includes covenants (promises) to the lenders/underwriters, typically including covenants to maintain reserves and to achieve specified debt coverage (collection of sufficient revenues to pay scheduled debt). Under such covenants, the borrower is required to increase rates as necessary to insure sufficient revenues are collected each year to service debt. Failure to do so, or improper use of debt reserves, can result in a default. While the federal repayment is not bonded indebtedness, and the Strategic Reserves are not pledged to bonds, the use of Strategic Reserves to make up revenue shortfalls for federal debt service is not a model that will work for the bonded debt that will become an increasingly important factor in CAP’s financial management.

The Working Capital Reserve, Capital Reserve and now Operating Reserve are bearing the brunt of the structural deficits related to repayment and the Ag Settlement Program. That has diminished their effectiveness for their intended purposes. In other words, because the balances of these reserves have been reduced as they have been used to make up for shortfalls on repayment and OM&R, there is less money available for working capital and in the event that CAP was to experience a business interruption or a catastrophic property loss. In fact, there is effectively no money left in the Capital Reserve. In addition, interest earnings are negatively impacted, further reducing CAP revenues.

**Why should CAP take corrective action now to improve its Strategic Reserve?**

For CAP’s Strategic Reserves targets to be meaningful, CAP needs to have a plan for maintaining reserves at the specified level and for restoring reserves to the target if actual levels deviate (higher or lower). Some observers point out that being under the Strategic Reserve target should not be of much concern, because CAP has “other reserves” to which it can turn (e.g., 4-cent tax reserve, extraordinary cost reserve). In fact, it is to those other reserves that CAP must turn so long as the structural deficit for repayment continues to exist. If, in fact, these other reserves are to be made available, the necessary amounts should reside in the Strategic Reserves so that they can count towards the target and reflect good fiscal policies and practices.

Advice to “just wait” until Strategic Reserves recover on their own, or to wait until rating agencies or underwriters identify deficiencies at some point in the future is not sound, especially if that advice comes from entities with their own solid credit ratings. Those ratings take work to achieve and maintain, and it is disingenuous to suggest that CAP follow practices that other parties certainly do not follow on their own behalf.

Some observers have suggested that the way to “fix” the shortfall in Strategic Reserves is simply to reduce the target. On the surface, that is at best a temporary fix, since the structural deficit in repayment, if not corrected, will continue to drive down Strategic Reserves, and CAP will again be under target, no matter how much the target is reduced.

CAP has followed a consistent Strategic Reserve target methodology for nearly 15 years, during which time the methodology has been reviewed many times. The Board has the prerogative to review the methodology any time and change it if appropriate.

Taking action now to reduce or eliminate CAP’s annual financial structural deficits will improve the outlook for the Strategic Reserve and reduce or eliminate the need to repeatedly seek infusions of funds from other reserves.