FINAL AGENDA

Times shown are approximate. Some items may take more or less time than scheduled, or the President may grant requests to hear items in an order other than shown.

1. Pledge of Allegiance, Moment of Silence and Safety Minute - Cesare (10:00)
2. Guest Speaker - AMWUA 50th Anniversary - Gilbert Councilmember Eddie Cook, AMWUA Board President (10:05)
3. Consideration of Action to Approve Items on the Consent Agenda** (10:20)
   a. Minutes of the January 9, 2020 Regular Meeting - Megdal
   b. Professional Services Contract for System Use Agreement Feasibility Study, Phase 1 - Francom
4. Consideration of Action to Approve Items Removed from the Consent Agenda
5. Reports of Committees and Possible Consideration of Committee Recommendations (10:30)
   a. Public Policy Committee - Cesare
      i. Possible Consideration of Action on State Issues that Could Impact CAP, including but not limited to HB2101, HB2617/SB1145, HB2618/SB1494, HB2677, HCM2004, and HR2003 (Leadership and Public Trust: Relationships Other Stakeholders^) - Gray
   b. Finance, Audit and Power Committee - Goddard
   c. CAGRD and Underground Storage Committee - Megdal
7. Discussion on Establishing a Board Policy on the Collection of Fixed OM&R Costs for System Conservation - Cullom (11:00)
   a. Update on Snowpack Augmentation Research and Verification - Mahmoud
   b. Review of Colorado River Modeling - Morfin
10. Directors’ Report on Current Events (11:45)
11. Future Agenda Items (12:00)
12. President’s Report on Current Events - Atkins (12:05)
15. Consideration of Action to go into Executive Session of the Board for the following purposes:
    (The discussions and minutes of the executive session shall be kept confidential. The executive session of the Board is not open to the public.)***

Materials have been added to agenda item 5ai.
a. Pursuant to A.R.S. §38-431.03.A.1 to discuss matters pertaining to the goals, performance and contract of the General Manager; and

b. Pursuant to A.R.S. §38-431.03.A.4. and A.7, for discussion or consultation with the attorneys of the District in order to consider its position and instruct its attorneys regarding water acquisition negotiations, and to discuss and consult with its representatives concerning such negotiations; and

c. Pursuant to A.R.S. §38-431.03.A.3 to obtain legal advice from the District’s attorneys on any matter listed on the agenda

16. Reconvene in Open Session

17. Consideration of Action Regarding Items Discussed in Executive Session

18. Adjourn

CAP Board members are elected by the voters in Maricopa, Pima and Pinal Counties. Visit cap-az.com/board to learn more about the Board. Those interested in meeting with a Board member may contact the member directly to schedule an appointment. Space will be made available at CAP Headquarters.

** Items listed in the Consent Agenda may be acted on by the Board without discussion. Any item listed on the Consent Agenda may be removed from the Consent Agenda and acted on separately by the Board.

*** The Executive Session is expected to last approximately one hour and will not be open to the public.

^ Linkage to 2016 CAWCD Board of Directors Strategic Plan.

In accordance with the Americans with Disabilities Act (ADA), if you need reasonable accommodations due to a disability, please contact the CAP office at (623.869.2333) or TDD (623.869.2183) at least seventy-two (72) hours in advance of the meeting.
The regular meeting of the Central Arizona Project ("CAWCD" or "CAP") Board of Directors was called to order by President Lisa Atkins on January 9, 2020, at 10:07 a.m. The meeting was held at Central Arizona Project Headquarters, located at 23636 North Seventh Street, Phoenix, Arizona, in the Board Room.

Board Members present: President Lisa A. Atkins, Maricopa County; Vice President Terry Goddard, Maricopa County; Secretary Sharon B. Megdal, Pima County (via teleconference); Alexandra Arboleda, Maricopa County; Jennifer Brown, Maricopa County; Karen Cesare, Pima County; Jim Hartdegen, Pinal County; Pat Jacobs, Pima County; Mark Lewis, Maricopa County; Heather Macre, Maricopa County; Jennifer Martin, Maricopa County; April Pinger, Maricopa County (via teleconference); Mark Taylor, Pima County.

Board Members not present: Benjamin W. Graff, Maricopa County; and Jim Holway, Maricopa County.

Staff members present were Ted Cooke, General Manager; Robert Moody, Assistant General Manager; Jay Johnson, General Counsel; Bridget Schwartz-Manock, Director, Public Affairs; Brian Buzard, Director, Centralized Maintenance and Reliability; Patrick Dent, Director, Water Policy; Christopher Hall, Director, Finance & Administration; Darrin Francom, Director, Operations, Power and Engineering; Philip Rettinger, Director, Field Maintenance; Bonnie Stone, Director, Employee Services; Doug Dunlap, Manager, Finance and Accounting; Ken Seasholes, Manager, Resource Planning and Analysis; Laura Grignano, Manager, CAGRD; Chuck Cullom, Manager, Colorado River Programs; Brian Young, Manager, Power Programs; Jeff Gray, Manager, Legislative Affairs; Mohammed Mahmoud, Senior Policy Analyst; Marcus Shapiro, Water Systems Supervisor; Austin Carey, Planning Analyst; Megan Casey, Public Affairs Management Analyst; and Jennifer Miller, Board Support Specialist.

1. **PLEDGE OF ALLEGIANCE, MOMENT OF SILENCE AND SAFETY MINUTE - BROWN**

Board Member Brown led the Board Members and public in reciting the Pledge of Allegiance and observing a moment of silence, and gave a safety minute on cyber security.

2. **CONSIDERATION OF ACTION TO APPROVE ITEMS ON THE CONSENT AGENDA**

On a motion (Board Member Taylor) and a second (Board Member Jacobs), approved the minutes of the December 5, 2019 regular meeting; approved the award of a construction contract to MGC Contractors Inc. in the amount of $522,900 plus an additional $78,435 (15%) for contingencies (totaling $601,335), for the construction of the sand filters replacement project at the Hassayampa Pumping Plant, and authorized the General Manager, or his designee, to execute the contract and administer the contingency; and approved the award of an equipment purchase contract to NGH Power Systems for $439,098 plus an additional $44,000 (10%) for contingencies (totaling $483,098), for the
UPS and backup battery replacements at 30 turnout sites, and authorized the General Manager, or his designee, to execute the contract and administer the contingency. Motion passed.

Voting yes: Lisa A. Atkins, Terry Goddard, Sharon B. Megdal, Alexandra Arboleda, Jennifer Brown, Karen Cesare, Jim Hartdegen, Pat Jacobs, Mark Lewis, Heather A. Macre, Jennifer Martin, April Pinger, Mark Taylor

3. CONSIDERATION OF ACTION TO APPROVE ITEMS REMOVED FROM THE CONSENT AGENDA

None.

4. REPORTS OF COMMITTEES AND POSSIBLE CONSIDERATION OF COMMITTEE RECOMMENDATIONS

4.a. PUBLIC POLICY COMMITTEE - CESARE

Board Member Cesare gave a report on the January 9 Public Policy Committee meeting. She gave an update on federal issues, noting the passage of the federal Budget and an overview of provisions of interest to CAP. She also shared an update on H.R. 4318 (Providing Recovery Opportunities and Mitigating Industry's Shifting Economics). Board Member Cesare also shared an update on state issues, noting the start of the legislative session and the outreach CAP conducted during the interim. She noted that the Arizona Department of Water Resources (ADWR) is scheduled for a sunset hearing in January.

4.a.i. POSSIBLE CONSIDERATION OF ACTION ON STATE ISSUES THAT COULD IMPACT CAP, INCLUDING BUT NOT LIMITED TO DIRECT DISTRIBUTION OF AWBA LONG-TERM STORAGE CREDITS

Board Member Cesare reported that the Committee recommended a position of support on a discussion draft of a bill that will be proposed by the Arizona Municipal Water Users Association (AMWUA) with support from CAP's municipal and industrial (M&I) subcontractors, which would change statute to allow the direct transfer of Arizona Water Banking Authority (AWBA) credits to M&I subcontractors to allow them to perform independent recovery during times of Colorado River shortage when the AWBA is to firm M&I users. She noted that CAP staff conferred with AMWUA, ADWR and AWBA on the proposed statutory changes, and will monitor the bill once it is introduced and will bring it back to the Committee if any substantial changes are proposed.

Secretary Megdal asked how CAP much would know about transactions that occur with the change to allow CAP to appropriately plan recovery. Ken Seasholes, Resource Planning and Analysis Manager, noted that subcontractors who use the new mechanism for transfers take responsibility for their own recovery. He noted that a planning process would be ongoing to monitor CAP's recovery capacity needs. In response to a question from Secretary Megdal, Mr. Seasholes explained that subcontractors may enter into partnerships for recovery. Secretary Megdal commented that she sees the bill as advantageous but would like to make sure CAP is not left with unnecessary recovery investment as a result.

In response to questions from Board Member Jacobs, Jeff Gray, Legislative Affairs Manager, noted that the legislation would not alter any other provisions in statute.
Board Member Martin expressed concern about relinquishing oversight of the allocation of funds generated from taxes that CAP levies. Mr. Seasholes explained that distribution of credits comes from calculations of a defined formula and noted that oversight comes from CAP, AWBA and ADWR to ensure that credits are going to the intended beneficiary. He also noted that M&I subcontractors will have the option to take responsibility for their own recovery, or continue to work through CAP for recovery. He stated that the bill would allow more efficient distribution of credits, but doesn't change the equity among contractors or the end beneficiaries.

In response to a question from Board Member Taylor, Mr. Seasholes explained that CAP's role in the current process is operational to either transfer credits or deliver water as requested by the subcontractor, and that under the new mechanism, credits cannot be sold but could be transferred for recovery.

Board Member Lewis expressed concerns about moving long-term storage credits that are paid for by the four-cent tax without any accountability, and said he would want to see how many credits there are and who will get them before supporting the bill. Mr. Seasholes stated that there is a full and complete accounting of all credits that were earned with the four-cent tax, and reiterated that no other provisions in statute would be altered. He noted the bill is a narrow change that will allow more flexibility for recovery. Board Member Lewis commented that he would prefer a pilot program of start to evaluate how it will work.

Ted Cooke, General Manager, affirmed that the Board is not relinquishing any control or discretionary decision-making authority by making this change, and noted that the Board makes an annual decision on how four-cent tax revenues are provided to AWBA. He noted that the decisions about when to deploy credits, to whom and in what quantity are all made by AWBA. He also reiterated that the new provision is voluntary for those M&I subcontractor that desire to do their own recovery. Mr. Cooke stated that participating subcontractors assume complete financial responsibility for recovery.

Several individuals submitted public testimony:
Warren Tenney, AMWUA, spoke in support of the motion, noting that the change is desired to provide flexibility for subcontractors. He expressed appreciation to CAP, ADWR and AWBA for collaboration on the language. Board Member Brown commented that she had been contacted with concerns on how this might impact other cities, and how any changes would be handled. Mr. Tenney replied that AMWUA does not want to add any other provisions to the language, and committed that any proposed changes would be brought back to the Board. Board Member Martin commented that M&I subcontractors can already do everything that the bill will enable and asked why a statutory change is needed. Mr. Tenney replied that the main objective is for a simple process for M&I subcontractors that want to pursue independent recovery.

Cynthia Campbell, City of Phoenix, submitted a blue card in support of the motion.

Brett Fleck, City of Peoria, submitted an electronic blue card in support of the motion.
Wally Wilson, Metro Water District, submitted an electronic blue card in support of the motion, noting that the Southern Arizona Water User Association members support the proposed language.

Andrew Greenhill, City of Tucson, submitted an electronic blue card in support of the motion.

Board Member Jacobs explained his vote in support of the motion, stating that it allows the local community to do recovery.

Board Member Lewis explained his vote in opposition to the motion, stating that he generally supports the concept of more tools for water management but that he would need a limitation on how many credits could be transferred in order to support the motion.

On a motion (Board Member Cesare) and a second (Board Member Brown), adopted a position on the following pending state legislation of interest to CAP: Direct Distribution of AWBA Long-Term Storage Credits discussion draft (SUPPORT). Motion passed.

Voting yes: Lisa A. Atkins, Terry Goddard, Sharon B. Megdal, Alexandra Arboleda, Jennifer Brown, Karen Cesare, Jim Hartdegen, Pat Jacobs, Heather A. Macre, Jennifer Martin, Mark Taylor

Voting no: Mark Lewis, April Pinger

4.b. **FINANCE, AUDIT AND POWER COMMITTEE - GODDARD**
Vice President Goddard reported that the FAP Committee did not meet in December. He shared agenda items planned for the January and February Committee meetings.

4.c. **CAGRD AND UNDERGROUND STORAGE COMMITTEE - MEGDAL**
Secretary Megdal reported that the CAGRD Committee did not meet in December. She reported that the draft Mid-Plan Review was posted online for public comment through January 24. She noted there will not be a January Committee meeting, and shared agenda items planned for February and March Committee meetings.

5. **DISCUSSION AND CONSIDERATION OF ACTION TO APPROVE ESTABLISHMENT OF SYSTEM USE IMPLEMENTATION RESERVE FUND - DUNLAP**
Doug Dunlap, Finance and Accounting Manager, reviewed the previous discussion on financing activities related to the System Use Agreement, and the proposal to establish a special reserve fund of $5 million for those activities. He noted that the $5 million would be refunded back to the general fund once wheeling contracts are issued and payments are received. In response to a question from Board Member Martin, Mr. Dunlap explained that the $5 million figure is based on anticipated expenses over the next three to five years. He noted that any contracts to spend the funds would come back to the Board for approval.

Board Member Martin explained her vote in opposition to the motion, commenting that she would like to see the Board have a discussion on wheeling non-project water and how that benefits CAP’s stakeholders before committing any funds.
On a motion (Vice President Goddard) and a second (Board Member Jacobs), approved establishing a System Use Reserve and provided initial funding of $5 million from strategic reserves. Motion passed.

Voting yes: Lisa A. Atkins, Terry Goddard, Sharon B. Megdal, Alexandra Arboleda, Jennifer Brown, Karen Cesare, Pat Jacobs, Mark Lewis, Heather A. Macre, April Pinger, Mark Taylor

Voting no: Jennifer Martin

Not voting: Jim Hartdegen

6. REPORT ON 2019 OUTAGE WORK ACTIVITIES - BUZARD

Brian Buzard, Director of Centralized Maintenance, gave a report on work accomplished during the summer and fall outages in 2019. He explained how CAP plans for outages, noting that the CAP system was designed to allow flexibility for operations and maintenance. He stated that the western pumping plants were designed with two discharge lines, which allows half of the plant to be taken out of service for maintenance while still allowing water to flow through the other half. He reviewed 2019 outage projects, including Mark Wilmer Pumping Plant Unit 6, the Salt River Siphon repairs and noted that the summer outage included 230 work orders, and the fall outage included 398 work orders. Mr. Cooke noted that Mr. Buzard and Assistant General Manager Bob Moody would be presenting to the Board in March, April and May to review the full asset management program.

The meeting recessed from 11:34 am to 11:48 am.

7. REPORT ON AZ SOLAR 1 PROJECT - FRANCOM

Darrin Francom, Director of Operations, Power and Engineering, gave a report on the AZ Solar 1 Project (Project), noting the Project is a result of the power purchase agreement for a 30MW solar energy generation station approved by the Board in June 2018. He noted the Project is in Salome, Arizona, which is near to the CAP Harcuvar transmission line. He reviewed the terms of the agreement as a 20-year fixed rate of approximately $25 per MWh, which has a positive impact on CAP's overall pumping energy rate. Mr. Francom reviewed the details and shared photos and a video of the 210-acre site, which includes over 90,000 solar panels. He reported that the Project was operational as of December 24, 2019 and is performing well to date.

In response to a question from Board Member Hartdegen, Mr. Francom stated that the cost of the Project is included in the $25 rate, and the vendor operates the site. Board Member Taylor asked for information on Phase 2 of the Project, and Mr. Francom said that will be a 20 MW site with 60MWh of battery storage, to be constructed in 2022 for operation in 2023. In response to a question from Board Member Jacobs, Brian Young, Power Programs Manager, stated the land for the Project is privately owned. Board Member Lewis expressed interest in non-battery solutions for Phase 2 of the Project. Mr. Francom responded that CAP will not have influence on the technology being used, as CAP’s involvement will only be a purchaser of the power produced by the site. In response to a question from Vice President Goddard, Mr. Francom said that Origis Energy is the parent company for the Project.
8. **REPORT ON PINAL AMA ACTIVITIES - SEASHOLES/CAREY/GRIGNANO**

Mr. Seasholes reviewed the two primary issues that have been prominent in the Pinal Active Management Area (AMA), which are the reduced availability of CAP water and difficulties in satisfying the physical availability criterion of ADWR's Assured Water Supply (AWS) Rules. He reviewed CAP's roles and relationships in the Pinal AMA and the water use in the Pinal AMA. He also gave an overview of ADWR's model for AWS and a recent report that indicates there is insufficient groundwater in the Pinal AMA to support all existing AWS determinations. Mr. Seasholes displayed a graphic that shows the underground basins in the Pinal AMA.

In response to a question from Board Member Lewis, Mr. Seasholes reported that there are active discussions about potential solutions to both the regulatory issue and the physical issues. Board Member Lewis commented that it seems like the issue is more about infrastructure availability than water availability. Secretary Megdal commented that there is a lot of information gathering being conducted to identify feasible solutions to this complex issue. In response to a question from Board Member Taylor, Mr. Seasholes said that the AWS modeling doesn't affect the ability develop to future recovery facilities, but regional groundwater levels could make it more difficult.

Austin Carey, Resource Planning Analyst, provided an update on the Eloy and Maricopa-Stanfield Basin Study. He noted that CAP participates on the Study's Supply and Demand Committee, and uses its service area model to employ a scenario approach to assessing supply and demand. He reviewed the major factors affecting supply and demand identified by the Committee and showed two example scenarios using the model. Mr. Carey shared the Committee's initial results and analysis and the next steps for the Study.

Laura Grignano, CAGR Manager, provided an update on the Pinal AMA Water Supply Stakeholder Group, including the purpose and membership of the Group. She summarized the first two meetings and noted the dates of upcoming meetings.

9. **REPORT ON COLORADO RIVER CONDITIONS - MAHMOUD**

Mohammed Mahmoud, Senior Water Policy Analyst, gave an update on the status of the reservoirs in the Colorado River System. He noted the elevation of Lake Mead at the end of 2019 was just above 1,090 feet, and explained that the end-of-year level does not affect the determination of Tier 0 under the Drought Contingency Plan (DCP) for 2020. He also reported on snow accumulation forecasts, noting that forecasts are above normal for the beginning of the winter season. He presented information the Basin-wide Weather Modification Agreement in effect through 2026 and annual process for identifying and conducting weather modification activities. Dr. Mahmoud reviewed the activities for the current winter season in Utah, Colorado and Wyoming.

Board Member Cesare commented the weather modification programs are not well known and she supports more communication about them. Vice President Goddard asked how it is determined that the activities produce a greater result than natural conditions, and Dr. Mahmoud replied that data is compared to previous historical information before any weather modification activities occurred, which show increased precipitation over natural conditions.
10. **REPORT ON 2019 WATER OPERATIONS UPDATE AND 2020 WATER OPERATIONS PLAN - SHAPIRO**

Marcus Shapiro, Water Systems Supervisor, gave a report on 2019 water operations. He reviewed water deliveries for 2019 and factors that affected the demand. He noted that overall deliveries were very close to what was planned for the year. He also showed the actual 2019 Colorado River diversions in comparison to planned amounts. Mr. Shapiro gave an overview of Arizona’s contributions to support Lake Mead conservation efforts in 2019 and reviewed Lake Pleasant operations for 2019. In response to a question from Board Member Taylor, Mr. Shapiro reviewed how the canal capacity is used to meet deliveries.

Mr. Shapiro also gave a report on the 2020 Annual Operating Plan and planned diversions and deliveries for the coming year. He also presented the conservation activities that are planned for 2020. Board Member Jacobs asked about water volumes being delivered to storage, and Mr. Shapiro said he would find that information.

11. **REPORT ON LEGAL MATTERS - JOHNSON**

Jay Johnson, General Counsel, provided an update on the New Mexico unit of the Central Arizona Project, giving background of the project. He reported that the Secretary of the Interior did not issue a record of decision or extend the deadline to do so, which meant that $34 million from the Lower Basin Development Fund will not be available for the project, though other funds for the project are available from other sources. He noted that CAWCD opposed the deadline extension because the failure to issue a Record of Decision by the deadline was due to delays within the control of New Mexico and the Arizona Water Settlements Act does not allow an extension under such circumstances. He also noted that the proposed project would divert Gila River water that would otherwise be available to Arizona Gila River users, and that CAWCD would be required to provide water to such users out of the existing Colorado River water supply. He answered clarifying questions from Board Members Jacobs and Taylor.

Mr. Johnson also provided an update on the Utah pipeline project, giving an overview of the proposed pipeline. He reported that CAWCD is submitting comments for the NEPA scoping process that include the need for proper accounting, the use of a defensible model for hydrologic determinations and clarification of other elements of the project.

12. **DIRECTORS’ REPORT ON CURRENT EVENTS**

Vice President Goddard and Board Members Arboleda, Brown, Cesare, Jacobs, Lewis, Martin, Macre, Pinger and Taylor shared updates on recent CAP activities.

13. **FUTURE AGENDA ITEMS**

Board Member Martin requested a presentation on the efficacy of cloud seeding and weather modification. Vice President Goddard echoed the request, commenting that he would like to see hard evidence of increased supply. Board Member Pinger also echoed the request.

Board Member Hartdegen requested a presentation on the new solar program before any new agreements are signed.

Board Member Lewis requested a presentation on who holds credits in Lake Mead.
14. **PRESIDENT’S REPORT ON CURRENT EVENTS - ATKINS**
   President Atkins expressed appreciation to the congressional staff that attended the meeting. She also congratulated General Manager Cooke and ADWR Director Tom Buschatzke on being named "Arizonans of the Year" by *The Arizona Republic*. President Atkins gave an update on the Board’s outreach activities for 2019. She gave an update on the strategic planning process, including a survey of CAP employees and the upcoming Board Retreat on February 5. She reported the next CAP Water User Roundtable is scheduled for January 23, the Board will be going on an energy tour on January 30 and reviewed upcoming meeting dates.

15. **GENERAL MANAGER’S REPORT ON CURRENT EVENTS - COOKE**
   Mr. Cooke gave a report on items that will be on the February consent agenda, including a professional services contract for the System Use Agreement Study and a purchase order for flow meters at turnout sites.

16. **PUBLIC COMMENT**
   None.

17. **CONSIDERATION OF ACTION TO GO INTO EXECUTIVE SESSION OF THE BOARD FOR THE FOLLOWING PURPOSES: PURSUANT TO A.R.S. §38-431.03.A.1 TO DISCUSS MATTERS PERTAINING TO THE GOALS, PERFORMANCE AND CONTRACT OF THE GENERAL MANAGER; AND PURSUANT TO A.R.S. §38-431.03.A.3 TO OBTAIN LEGAL ADVICE FROM THE DISTRICT’S ATTORNEYS ON ANY MATTER LISTED ON THE AGENDA**
   On a motion (Board Member Taylor) and a second (Board Member Jacobs), convened in Executive Session at 2:04 p.m. for the purposes listed on the agenda. Motion passed.
   Voting yes: Lisa A. Atkins, Terry Goddard, Sharon B. Megdal, Alexandra Arboleda, Jennifer Brown, Karen Cesare, Benjamin W. Graff, Jim Hartdegen, Pat Jacobs, Mark Lewis, Heather A. Macre, Jennifer Martin, April Pinger, Mark Taylor

18. **RECONVENE IN OPEN SESSION**
   The Board reconvened in open session at 3:17 p.m.

19. **CONSIDERATION OF ACTION REGARDING ITEMS DISCUSSED IN EXECUTIVE SESSION**
   None.

20. **ADJOURN**
   There being no further business to come before the Board, the meeting adjourned at 3:17 p.m.

___________________________
Sharon B. Megdal
Board Secretary
Agenda Number 3.b.

CONTACT:  
Darrin Francom  623-869-2276  dfrancom@cap-az.com  
Ryan Johnson  623-869-2223  rjohnson@cap-az.com

MEETING DATE:  Thursday, February 6, 2020

AGENDA ITEM:  Professional Services Contract for System Use Agreement Feasibility Study, Phase 1 - Francom

RECOMMENDATION:  Staff recommends that the Board of Directors award a Professional Services Contract for System Use Agreement Feasibility Study, Phase 1, and authorize the General Manager, or his designee, to execute an agreement up to $1,055,899 (10% contingency).

FISCAL IMPLICATIONS:  No

Impact on Budget:  
This variance will be managed within the overall project budget for 2020 and 2021:

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Additional spending authority requested: None required.

Impact on Reserves:  
Funded through the System Use Implementation Reserve. No impact on Strategic Reserves.

Impact on Rates:  
No impact of Fixed OM&R.

LINKAGE TO STRATEGIC PLAN, POLICY, STATUTE OR GUIDING PRINCIPLE:  
New Water Supplies for CAP Service Area.

System Use Agreement Between the Central Arizona Water Conservation District and the United States.

PREVIOUS BOARD ACTION/ACTIVITY:  
January 2020  Board approved the reserve fund for System Use Implementation
December 2019  Board was provided report on System Use Implementation activities
November 2019  Board was provided report on System Use Implementation activities
February 2017  System Use Agreement was fully executed by CAWCD and the United States
ISSUE SUMMARY/DESCRIPTION:
CAWCD has entered into agreement with the United States regarding the use of the CAP system to wheel non-project water, commonly called the System Use Agreement. The System Use Agreement defines that System Improvement Projects, which increase the Operational Capability of the CAP system, be identified and then proposed to the Bureau of Reclamation. The Bureau of Reclamation will analyze the proposed System Improvement Project and make a determination of the Projected Additional Operational Capability, quantified in acre-feet per annum. Once a determination has been made as to the Additional Operational Capability provided by a System Improvement Project, CAWCD may deliver non-project water pursuant to executed Wheeling Contracts and further stipulations within the System Use Agreement.

This professional services contract is to facilitate the identification of the most advantageous system improvement projects and quantify the probable cost and schedule to physically execute the identified modifications to the CAP system. Staff anticipates this to be the first of three studies, with a focus area starting at the outlet of the Bouse Hills Pumping Plant and ending at the Hassayampa Pumping Plant. CAP system improvements within this first study are anticipated to focus on increasing the height of the canal lining; modifications to check gates, siphons and tunnels; and associated impacts to cross-drainage structures and transportation crossings.

SUGGESTED MOTION:
I move that the Board of Directors approve the Award of a Professional Services Contract for the System Use Agreement Feasibility Study to HDR Inc., and authorize the General Manager, or his designee, to execute an agreement up to $1,055,899.

ATTACHMENTS:
None
Agenda Number 5.a.i.

CONTACT: Bridget Schwartz-Manock 623-869-2150 bschwartzmanock@cap-az.com 
Jeff Gray 623-869-2425 jgray@cap-az.com

MEETING DATE: Thursday, February 6, 2020

AGENDA ITEM: Possible Consideration of Action on State Issues that Could Impact CAP, including but not limited to HB2101, HB2617/SB1145, HB2618/SB1494, HB2677, HCM2004, and HR2003 (Leadership and Public Trust: Relationships Other Stakeholders*) - Gray

RECOMMENDATION: See attached documents and proposed staff recommendations.

FISCAL IMPLICATIONS: No

Impact on Budget:
None

Additional spending authority requested: None

Impact on Reserves:
None

Impact on Rates:
None

LINKAGE TO STRATEGIC PLAN, POLICY, STATUTE OR GUIDING PRINCIPLE:
2016 Board Strategic Plan

- Leadership & Public Trust: Relationships – Improve Relationships with Customers and Stakeholders
- Leadership & Public Trust: CAP Board Leadership – Equip Board Members to Effectively Represent CAP and its Position
- Water Supply: Optimize Reliability and Sustainability of CAP Water Supply

PREVIOUS BOARD ACTION/ACTIVITY:
November 7, 2019 Public Policy Committee previewed and discussed the draft proposed 2020 State Legislative Agenda
December 5, 2019 Board adopted 2020 State Legislative Agenda

ISSUE SUMMARY/DESCRIPTION:
This report describes CAP's state legislative agenda and provides an update on those issues. In addition, this update reports on and requests guidance on bills being considered by the State Legislature.

See attached documents and issue descriptions.
SUGGESTED MOTION:
I move that the Board adopt a position on the following pending state legislation of interest to CAP: (staff recommendations in parentheses)

- HB2101 (SUPPORT)
- HB2617/SB1145 (SUPPORT)
- HB2618/SB1494 (SUPPORT)
- HB2677 (SUPPORT)
- HCM2004 (SUPPORT)
- HR2003 (SUPPORT)

ATTACHMENTS:
1. HB2101
2. HB2617/SB1145
3. HB2618/SB1494
4. HB2677
5. HCM2004
6. HR2003
HB 2101

Introduced by
Representatives Griffin: Nutt

AN ACT

APPROPRIATING MONIES TO THE ARIZONA WATER PROTECTION FUND.

(TEXT OF BILL BEGINS ON NEXT PAGE)
Be it enacted by the Legislature of the State of Arizona:

Section 1. Appropriation; Arizona water protection fund

The sum of $1,000,000 is appropriated from the state general fund in fiscal year 2020-2021 to the Arizona water protection fund established by section 45-2111, Arizona Revised Statutes.
AN ACT

AMENDING SECTION 45-615.01, ARIZONA REVISED STATUTES; RELATING TO THE GROUNDWATER CODE.

(TEXT OF BILL BEGINS ON NEXT PAGE)
Be it enacted by the Legislature of the State of Arizona:

Section 1. Section 45-615.01, Arizona Revised Statutes, is amended to read:

45-615.01. Temporary groundwater and irrigation efficiency projects fund; purpose; report; definition

A. The temporary groundwater and irrigation efficiency projects fund is established for the purpose of funding projects for the construction and rehabilitation of wells and related infrastructure for the withdrawal and efficient delivery of groundwater by qualified irrigation districts in the Phoenix active management area, the Pinal active management area and the Harquahala irrigation non-expansion area. The fund consists of legislative appropriations, groundwater withdrawal fees collected in the Pinal active management area pursuant to section 45-611, subsection C, paragraph 5, grants from federal agencies and monies deposited in the fund by qualified irrigation districts in the Phoenix active management area, the Pinal active management area and the Harquahala irrigation non-expansion area. Groundwater withdrawal fees deposited in the fund shall be accounted for separately from other monies in the fund and shall be used only for constructing and rehabilitating wells and related infrastructure in the Pinal active management area. Monies in the fund are continuously appropriated for the purposes of this section.

B. The director may accept and deposit into the fund monies, grants, gifts, contributions and devises to assist in carrying out the purposes of this section.

C. The director shall administer the fund. On notice from the director, the state treasurer shall invest and divest monies in the fund as provided by section 35-313, and monies earned from investment shall be credited to the fund.

D. The director may grant monies from the fund to qualified irrigation districts established pursuant to title 48, chapter 19 in the Phoenix active management area, the Pinal active management area and the Harquahala irrigation non-expansion area for the purposes described in subsection A of this section. In granting monies from the fund, the director may give preference to wells and related infrastructure that would be used to recover stored water. Grants made to qualified irrigation districts are exempt from title 41, chapter 24.

E. Before December 31 of each year, the director shall submit to the speaker of the house of representatives and the president of the senate a written report describing the activities of the department for the preceding fiscal year related to expenditures from the fund. The report shall include an accounting for expenditures from the fund and how the monies were used to finance projects for the construction and rehabilitation of wells and related infrastructure for the withdrawal and efficient delivery of groundwater by qualified irrigation districts in the
Phoenix active management area, the Pinal active management area and the
Harquahala irrigation non-expansion area.

F. Except as provided in subsection G of this section, monies in
the fund are exempt from the provisions of sections SECTION 35-190
relating to lapsing of appropriations.

G. On June 30, 2027, any unencumbered monies in the fund shall be
proportionally distributed to the fund’s contributors by December 31, 2027
according to the total amount of monies deposited in the fund by each
contributor. The proportion of the unencumbered monies attributable to
groundwater withdrawal fees levied under section 45-611, subsection C,
paragraph 5 shall be deposited in the Arizona water banking fund
established by section 45-2425 and shall be used only in the Pinal active
management area in the same manner as groundwater withdrawal fees
collected in the Pinal active management area pursuant to section 45-611,
subsection C, paragraph 3.

H. All monies deposited in the temporary groundwater and irrigation
efficiency projects fund shall be held in trust. The monies in the fund
may be used only for the purposes prescribed in this section and may not
be appropriated or transferred by the legislature to fund the general
operations of this state or to otherwise meet the obligations of the state
general fund. This subsection does not apply to any taxes or other levies
that are imposed pursuant to title 42 or 43.

I. For the purposes of this section, “qualified irrigation
district” means an irrigation district that meets all of the following
requirements:

1. The irrigation district received central Arizona project water
in any year after calendar year 2014 other than through a groundwater
savings facility permit issued under chapter 3.1 of this title.

2. There are at least nine thousand acres that may be lawfully
irrigated within the boundaries of the irrigation district.

3. FOR AN IRRIGATION DISTRICT LOCATED IN THE PHOENIX ACTIVE
MANAGEMENT AREA ONLY, the district did not deliver surface water other
than central Arizona project water in calendar year 2017.

4. The irrigation district submitted an application to the
department for monies from the fund established by this section to
construct an irrigation efficiency project in the Phoenix active
management area, the Pinal active management area or the Harquahala
irrigation non-expansion area.
HB 2618

Introduced by
Representative Griffin

AN ACT

REPEALING SECTION 41-3020.10, ARIZONA REVISED STATUTES; AMENDING TITLE 41, CHAPTER 27, ARTICLE 2, ARIZONA REVISED STATUTES, BY ADDING SECTION 41-3028.10; RELATING TO THE DEPARTMENT OF WATER RESOURCES.

(TEXT OF BILL BEGINS ON NEXT PAGE)
Be it enacted by the Legislature of the State of Arizona:

Section 1. Repeal

Section 41-3020.10, Arizona Revised Statutes, is repealed.

Sec. 2. Title 41, chapter 27, article 2, Arizona Revised Statutes, is amended by adding section 41-3028.10, to read:

41-3028.10. Department of water resources; termination July 1, 2028

A. THE DEPARTMENT OF WATER RESOURCES TERMINATES ON JULY 1, 2028.

B. TITLE 45, CHAPTER 1, ARTICLE 1 AND THIS SECTION ARE REPEALED ON JANUARY 1, 2029.

Sec. 3. Purpose

Pursuant to section 41-2955, subsection B, Arizona Revised Statutes, the legislature continues the department of water resources to:

1. Focus the responsibility for water management and administration of water-related programs in this state.

2. Stabilize the use of water resources in this state according to management practices, procedures, standards and plans provided for by statute.

3. Compile and maintain information that is necessary for effective management, administration and planning for water resources and programs.

Sec. 4. Retroactivity

Sections 1 and 2 of this act apply retroactively to from and after July 1, 2020.
REFERENCE TITLE: groundwater replenishment reserves

State of Arizona
House of Representatives
Fifty-fourth Legislature
Second Regular Session
2020

HB 2677

Introduced by
Representative Griffin

AN ACT

AMENDING SECTIONS 48-3701 AND 48-3772, ARIZONA REVISED STATUTES; RELATING TO MULTI-COUNTY WATER CONSERVATION DISTRICTS.

(TEXT OF BILL BEGINS ON NEXT PAGE)
Be it enacted by the Legislature of the State of Arizona:

Section 1. Section 48-3701, Arizona Revised Statutes, is amended to read:

48-3701. Definitions
In this chapter, unless the context otherwise requires:
1. "Active management area" means an active management area established under title 45, chapter 2, article 2.
2. "Board" means the board of directors of a multi-county water conservation district.
3. "Contract replenishment obligation" means an amount of groundwater that the district contracts to replenish in a year on behalf of a municipal provider pursuant to a contract authorized under section 48-3772, subsection B, paragraph 9.
4. "Credits" means any groundwater in addition to the amount of groundwater that may be used at a member land or delivered within a member service area for use within the member service area pursuant to the applicable assured water supply rules adopted by the department of water resources.
5. "Declaration" means an instrument recorded against real property and conforming to the requirements prescribed by section 48-3774, subsection A, paragraph 5.
6. "District" means a multi-county water conservation district organized under the authority of this chapter.
7. "Excess groundwater" means an amount of groundwater equal to that amount of groundwater delivered to a member land in a calendar year or delivered within a member service area by the municipal provider for that member service area in a calendar year in excess of the amount of groundwater that may be used at the member land in that calendar year or that may be delivered by the municipal provider for use within the member service area in that calendar year and consistent with the applicable assured water supply rules adopted by the department of water resources for the active management area where the member land or the member service area is located.
8. "Excess groundwater increment" means the amount by which excess groundwater reported for a member service area under section 48-3775, subsection B in any year exceeds the maximum amount of excess groundwater reported for that member service area in any prior year.
9. "Groundwater replenishment obligation" means, for each active management area in which member lands or member service areas are or may be located, the total of the cumulative parcel replenishment obligation of all parcels of member land in that active management area for a particular calendar year plus the cumulative service area replenishment obligation of all member service areas in that active management area for a particular calendar year.
10. "Member land" means any real property that meets the
requirements of section 48-3774.

11. "Member service area" means the service area of a municipal
provider that qualifies as a member service area under section 48-3780,
including any additions to or extensions of the service area.

12. "Multi-county water conservation district" means a district
composed of three or more counties that have joined together for the
creation of a district.

13. "Municipal provider" means a city, town or private water company
or an irrigation district that supplies water for non-irrigation use.

14. "Parcel of member land" means any portion of member land for
which the tax assessor for the county in which the member land is located
has issued a separate county parcel number.

15. "Parcel replenishment obligation" means, with respect to any
particular parcel of member land, an amount of groundwater that is equal
to the amount of groundwater delivered to the parcel of member land in a
calendar year multiplied by the percentage that the excess groundwater of
the applicable member land for that year bears to the total amount of
groundwater delivered to the applicable member land during that year.

16. "Population" means the population determined in the most recent
United States decennial census.

17. "Private water company" has the same meaning prescribed in
section 45-402.

18. "Projected one hundred year replenishment obligation" means for
each active management area, the district's total projected annual
groundwater replenishment obligation at active management area build-out,
multiplied by one hundred FOR EACH OF THE ONE HUNDRED YEARS FOLLOWING
SUBMISSION OF THE DISTRICT PLAN OF OPERATION.

19. "Replenish" means to increase the amount of groundwater in an
aquifer through water storage pursuant to title 45, chapter 3.1 for the
purpose of meeting the obligations of article 4 of this chapter.

20. "Reserve target" means the volume calculated for each active
management area as prescribed by section 48-3772, subsection E.

21. "Resolution" means a resolution adopted by the governing body of
a city or town, by the board of directors of a private water company that
is a corporation, by the general partners of a private water company that
is a partnership or by the individual owners of a private water company
that is individually owned.

22. "Secretary" means the secretary of the interior of the United
States of America.

23. "Service area" has the same meaning prescribed in section
45-402.

24. "Service area replenishment obligation" means, with respect to
any particular member service area, the excess groundwater of that member
service area in a particular calendar year reduced by the replenishment
credits, if any, applied by the municipal provider with respect to the member service area under section 48-3772, subsection H.

25. "Water storage" has the same meaning prescribed in section 45-802.01.

Sec. 2. Section 48-3772, Arizona Revised Statutes, is amended to read:

48-3772. Duties and powers of district regarding replenishment

A. The district shall:

1. Establish annually the costs and expenses to replenish groundwater pursuant to this article with respect to all parcels of member lands and all member service areas located in each active management area, including capital expenses, debt service expenses, the operation, maintenance, replacement and administrative costs and expenses of the district, replenishment reserve costs and expenses as provided in subsection E of this section and reasonable reserves. Separate calculations of costs and expenses shall be made for each active management area in which member lands or member service areas are located and for each membership category. Costs and expenses attributed by the district to contract replenishment obligations shall not be included in these calculations.

2. Provide for the payment of all costs and expenses to replenish groundwater pursuant to this chapter and the payment of operation, maintenance, replacement and administrative costs and expenses and debt service expenses of the district.

3. Levy an annual replenishment assessment against each parcel of member land pursuant to section 48-3778 and an annual replenishment tax against each municipal provider that has a member service area pursuant to section 48-3781 to pay the district's costs and expenses as established pursuant to paragraph 1 of this subsection.

4. Levy a contract replenishment tax against municipal providers that are parties to contracts authorized under subsection B, paragraph 9 of this section to pay the district's costs and expenses to replenish groundwater based on contract replenishment obligations.

5. Establish and maintain reserve accounts in amounts as may be deemed necessary to perform the district's obligations under this article.

6. Fulfill all obligations under resolutions adopted pursuant to subsection B, paragraph 10 of this section.

7. Levy an activation fee as follows:

(a) For subdivisions within member lands and member service areas that are enrolled before May 6, 2004 and that had not been issued a public report before August 12, 2005, the district shall levy a one-time ONETIME activation fee against each housing unit to be constructed within the subdivision.
(b) For subdivisions within member lands and member service areas that are enrolled on or after May 6, 2004, the district shall levy a one-time ONETIME activation fee against each housing unit to be constructed within the subdivision.

(c) The activation fee shall be paid to the district according to either of the following schedules, whichever the subdivider elects:
   (i) Paid in full before issuance of a public report for each real estate subdivision identified in subdivision (a) or (b) of this paragraph.
   (ii) One-half paid before issuance of a public report for each real estate subdivision identified in subdivision (a) or (b) of this paragraph and the remaining amount paid no later than one year after the issuance of the public report. The total amount of the activation fee must be the amount of the activation fee in effect at the time of the initial payment. Payment of the initial one-half of the activation fee pursuant to this item constitutes sufficient payment of applicable fees for notice of intent to subdivide as prescribed in section 32-2181, subsection C and for issuance of a public report as prescribed in section 32-2183, subsection G and section 45-576, subsection C, except that on failure to pay the remaining amount, the commissioner shall suspend the public report for that subdivision pursuant to section 32-2183.

(d) The activation fee shall be established annually by the district. The amount of the activation fee to be paid to the district under subdivision (c) of this paragraph must be the amount of the activation fee in effect at the time of payment. Revenues from the activation fee together with revenues from other sources that are legally available to the district for those uses shall be used by the district to acquire, lease or exchange water or water rights and develop infrastructure necessary for the district to perform its replenishment obligations.

8. For any year, set all of its rates and charges associated with the acquisition, lease or exchange of water or water rights and development of infrastructure necessary for the district to perform its replenishment obligations, other than the annual membership dues established pursuant to section 48-3779, so that the total projected revenues from revenue sources other than the annual membership dues, that are legally available to the district in that year to pay costs associated with the acquisition, lease or exchange of water or water rights and development of infrastructure necessary for the district to perform its replenishment obligations, shall be at least three times the total projected revenues from the annual membership dues in that year. For the purposes of this paragraph, costs associated with the acquisition, lease or exchange of water or water rights do not include the annual costs associated with delivery of water for replenishment purposes.
B. The district may:

1. Acquire, develop, construct, operate, maintain, replace and acquire permits for water storage, storage facilities and recovery wells for replenishment purposes.

2. Acquire, transport, hold, exchange, own, lease, store or replenish water, except groundwater withdrawn from an active management area, subject to the provisions of title 45, for the benefit of member lands and member service areas.

3. Acquire, hold, exchange, own, lease, retire or dispose of water rights for the benefit of member lands and member service areas.

4. Require municipal providers to provide such information, in such form and within the time limits prescribed by the district, as may be necessary to carry out the purpose of this chapter.

5. Levy and collect assessments, fees, charges, taxes and other revenues as are provided in this chapter for the financing of replenishment activities.

6. Contract for or perform feasibility studies of water storage, storage facilities and recovery wells for replenishment purposes.

7. Acquire real and personal property for water storage, storage facilities and recovery wells for replenishment purposes by purchase, lease, donation, dedication, exchange or other lawful means.

8. Use any facilities and any excess storage capacity of any state demonstration projects undertaken pursuant to title 45, chapter 3.1 for water storage for replenishment purposes.

9. Subject to subsection G of this section, contract with any municipal provider having a member service area to replenish groundwater on behalf of the municipal provider and with respect to the member service area in an amount in excess of the sum of the service area replenishment obligations applicable to the member service area for all years in which the district has not completed the replenishment of the groundwater replenishment obligation for the member service area.

10. Adopt resolutions granting water availability status to a member service area of a city, town or private water company and committing to replenish a specified average annual volume of water in a location where the city, town or private water company may physically access the water for service to its customers, if all of the following apply:

(a) The district has reviewed its requirements for transportation of central Arizona project water, its contracts, subcontracts, letter agreements, excess water contracts and other contractual obligations and its member service area and member land requirements and has determined that the district can meet those obligations and that capacity remains in the central Arizona project to meet the obligations undertaken through the resolution.
(b) The resolution acknowledges that the commitment to replenish the specified average annual volume of water in the location cited in the resolution shall be a permanent obligation of the district, unless one of the following applies:

(i) A permanent substitute supply of water is found for the city, town or private water company and the substitution is approved by the director of water resources, thus terminating the water availability status of the member service area.

(ii) The requirements of section 45-576.07, subsection A are not met, and thus the director of water resources does not issue an order granting or maintaining the city, town or private water company as having an assured water supply based in whole or in part on section 45-576.07. If no order is issued within two years of the district adopting the resolution, the resolution may be repealed, and the district shall be relieved of all obligations under the resolution.

(c) The average annual volume of water specified in the resolution, when added to the average annual volume of water specified in all other resolutions adopted pursuant to this paragraph, does not exceed twenty thousand acre-feet.

(d) The district has entered into an agreement with the city, town or private water company under which the city, town or private water company will hold for the district's future use, and provide to the district when needed, sufficient water to meet the obligations undertaken by the district through the resolution.

(e) The district determines that the obligations undertaken by the district through the resolution will not increase annual replenishment assessment rates or costs to central Arizona project contract and subcontract holders and its member service areas and member lands.

(f) The director of water resources has found, pursuant to section 45-576.07, subsection H, that the district has the capability to grant water availability status to member service areas.

11. Provide in resolutions adopted pursuant to paragraph 10 of this subsection that the district may fulfill its obligations under the resolution in any year by directly delivering to the city, town or private water company the water that otherwise would have been replenished pursuant to the resolution, if all of the following apply:

(a) The district has reviewed its requirements for transportation of central Arizona project water, its contracts, subcontracts, letter agreements, excess water contracts and other contractual obligations AND its member service area and member land requirements and has determined that the district can meet those obligations and that capacity remains in the central Arizona project to make direct deliveries pursuant to this paragraph.
(b) The district determines that the delivery will not increase annual replenishment assessment rates or costs to central Arizona project contract and subcontract holders, its member service area and member lands.

12. Enter into agreements with a city, town or private water company that will have water made available to it through a resolution adopted pursuant to paragraph 10 of this subsection and under which the city, town or private water company compensates the district for the costs and fair value of the water supply provided by the district.

13. Issue revenue bonds pursuant to article 3 of this chapter to fund the costs and expenses of the district for the acquisition, lease or exchange of water or water rights and the development of infrastructure necessary for the district to perform its replenishment obligations subject to the following:

   (a) The principal of, interest and premiums, if any, on revenue bonds issued pursuant to article 3 of this chapter to acquire, lease or exchange water or water rights and develop infrastructure necessary for the district to perform its replenishment obligations are not payable from any revenues of the district other than revenues generated or collected pursuant to this article that are legally available to the district for those purposes and revenues from the investment of the proceeds of the bonds.

   (b) The district may not use the proceeds of the bonds to acquire or lease:

      (i) Groundwater, as defined in section 45-101, except as expressly authorized in sections 45-547, 45-553 and 45-554.

      (ii) Surface water, as defined in section 45-101, that is the subject of a general adjudication pursuant to title 45, chapter 1, article 9.

   (c) Nothing in subdivision (b) of this paragraph prohibits the district from acquiring or leasing central Arizona project water.

14. Except as provided in section 48-3780.01, subsection B, in addition to any other assessments, fees, charges or taxes levied and collected under this chapter, or under any declaration, contract or agreement entered into under this chapter, charge annual dues for membership pursuant to section 48-3779 against each parcel of member land and each municipal provider that has a member service area.

C. The functions of the district under subsection B, paragraph 1 of this section may be performed on behalf of the district by other persons under contract with the district.

D. The capital costs of the facilities of any state demonstration projects used by the district pursuant to subsection B, paragraph 8 of this section shall not be included in the capital costs and expenses established by the district under subsection A, paragraph 1 of this section.
E. The district shall establish and maintain a replenishment reserve as follows:

1. The district shall calculate a reserve target for each of the three active management areas within the district and shall identify the reserve target in the plan of operation prepared pursuant to section 45-576.02. The reserve target for each active management area shall be calculated as follows:

   (a) Establish **FOR EACH ACTIVE MANAGEMENT AREA, ADD TOGETHER the** projected one hundred year replenishment obligation for each active management area **OF THE ONE HUNDRED YEARS FOLLOWING SUBMISSION OF THE PLAN OF OPERATION.** For the purposes of this subdivision, each active management area's projected one hundred year replenishment obligation does not include replenishment obligations under resolutions adopted pursuant to subsection B, paragraph 10 of this section or replenishment obligations for category 2 member lands.

   (b) Subtract from the **SUM OF THE active management area's projected one hundred year replenishment obligation OVER THE ONE HUNDRED YEAR PERIOD AND** the sum of the following volumes of water derived from sources identified in the plan as water that the district plans to use to meet its replenishment obligations for that active management area:

      (i) The annual volume of each nondeclining, long-term municipal and industrial subcontract for central Arizona project water multiplied by one hundred.

      (ii) The annual volume of water under leases or contracts that can be made physically and legally available to the district consistent with the rules adopted pursuant to section 45-576, subsection H, multiplied by the number of years, not to exceed one hundred, in which the water is to be made available to the district. The water need not be continuously available to be included in this item. A lease or contract shall not be considered under this item if the water to be made available under the lease or contract is for a term of less than twenty years.

      (iii) The total volume of groundwater that the district plans to transport to the active management area during the next one hundred years as allowed by title 45, chapter 2, article 8.1.

      (iv) The total volume of all sources of water not identified in items (i), (ii) or (iii) of this subdivision that will not be held by the district under a lease or contract. Volumes to be included under this item must be consistent with the rules adopted by the director pursuant to section 45-576, subsection H.

   (c) Multiply the result from subdivision (b) of this paragraph by twenty percent **PERCENT.** The result is the reserve target for the active management area.

2. The reserve target for an active management area may be adjusted by the district, subject to the approval of the director of water resources, based on changes in either of the following:
(a) The active management area's projected one hundred year replenishment obligation.

(b) The volumes of water identified in the plan of operation prepared pursuant to section 45-576.02 as water that the district plans to use to meet its replenishment obligations for that active management area.

3. The district shall include a replenishment reserve charge in the annual replenishment assessment levied against all parcels of category 1 member land as provided in section 48-3774.01 and in the annual replenishment tax levied against all municipal providers that have member service areas as provided in section 48-3780.01. The replenishment reserve charge for each active management area is established annually by the district based on the reserve target for that active management area.

4. The district shall levy a replenishment reserve fee against category 1 member lands pursuant to section 48-3774.01 and against member service areas pursuant to section 48-3780.01. For category 1 member lands the fee is equal to twice the applicable replenishment reserve charge multiplied by the total projected average annual replenishment obligation for the member lands as reported by the director of water resources pursuant to section 45-578, subsection F. For member service areas the fee is equal to twice the applicable replenishment reserve charge multiplied by the excess groundwater increment. With the approval of the district and the director of water resources, long-term storage credits as defined in section 45-802.01 may be assigned to the district's replenishment reserve subaccount in lieu of paying the replenishment reserve fee.

5. The district shall use replenishment reserve charges and replenishment reserve fees collected within each active management area together with all interest earned on the charges and fees to store water in that active management area in advance of groundwater replenishment obligations for the purpose of developing long-term storage credits as defined in section 45-802.01 that shall be credited to the replenishment reserve subaccount for that active management area as provided in section 45-859.01.

6. Beginning on January 1, 2030 or earlier, on approval of the director of water resources pursuant to section 45-859.01, subsection K, the district may transfer credits from a replenishment reserve subaccount to a conservation district account as provided in section 45-859.01 to satisfy its groundwater replenishment obligations.

7. If the district transfers credits from the replenishment reserve subaccount for an active management area pursuant to section 45-859.01, subsection E, the district shall include in the annual replenishment assessment levied against all parcels of category 1 member land in that active management area and, except as provided in section 48-3780.01, subsection B, in the annual replenishment tax levied against all municipal providers that have member service areas in that active management area a
reserve replacement component to fund the replacement of the transferred credits. The district shall use all monies from the reserve replacement component collected within an active management area together with all interest earned on the monies to develop long-term storage credits as defined in section 45-802.01 within that active management area to be credited to the replenishment reserve subaccount for that active management area as provided in section 45-859.01.

8. For the purposes of establishing and maintaining the replenishment reserve, the district shall have access to excess central Arizona project water equivalent to but **not** more than the access the Arizona water banking authority has for the purposes specified in section 45-2401, subsection H, paragraph 2.

F. Groundwater replenished by the district pursuant to a contract to replenish groundwater under subsection B, paragraph 9 of this section shall not be credited to a replenishment reserve subaccount established under section 45-859.01.

G. The district shall not enter into a contract authorized under subsection B, paragraph 9 of this section unless the district has determined that the contract will not adversely affect the district's ability to fulfill its obligations under this chapter. For each contract entered into under subsection B, paragraph 9 of this section, the district shall perform its contract replenishment obligations in the active management area in which the service area of the municipal provider that is the party to the contract is located.

H. If the district replenishes groundwater on behalf of a municipal provider pursuant to a contract to replenish groundwater under subsection B, paragraph 9 of this section, the amount of groundwater so replenished shall be a replenishment credit to the municipal provider that may be applied by the municipal provider on notice to the district to reduce the service area replenishment obligations applicable to the municipal provider.

I. In the Phoenix active management area, the district, to the extent reasonably feasible, shall replenish groundwater in the east portion of the active management area and in the west portion of the active management area in the approximate proportion that the groundwater replenishment obligation attributable in a particular year to member lands and member service areas located in the east portion of the active management area bears to the groundwater replenishment obligation attributable in that year to member lands and member service areas located in the west portion of the active management area. For the purposes of this subsection, the boundary between the east Salt river valley subbasin and the west Salt river valley subbasin is the boundary between the east and west portions of the active management area.
J. The costs and expenses charged by the district to an active management area water district established under chapter 28 of this title for delivery of surplus central Arizona project water to such active management area water district for replenishment purposes shall not exceed the costs and expenses for delivery of such water that are or would be included by the district in the costs and expenses of replenishment for member lands and member service areas within the active management area in which such active management area water district is situated.
A CONCURRENT MEMORIAL

URGING THE SECRETARY OF THE UNITED STATES DEPARTMENT OF THE INTERIOR TO IMMEDIATELY TAKE ALL NECESSARY MEASURES TO OPERATE THE YUMA DESALTING PLANT.

(TEXT OF BILL BEGINS ON NEXT PAGE)
To the Secretary of the United States Department of the Interior:

Your memorialist respectfully represents:

Whereas, under a treaty agreement entered into in 1973, the United States is required to ensure that water delivered to Mexico as part of Mexico's allocation of Colorado River water meets certain water quality standards; and

Whereas, in accordance with this agreement, the United States Congress enacted the Colorado River Basin Salinity Control Act of 1974, which directed and authorized the Secretary of the United States Department of the Interior to construct, operate and maintain a desalting plant to treat drainage water from the Wellton-Mohawk Irrigation and Drainage District and deliver the treated water to Mexico; and

Whereas, construction of the Yuma Desalting Plant was completed in 1992; and

Whereas, the Yuma Desalting Plant is capable of treating 100,000 acre-feet of water annually; and

Whereas, except for limited, initial operations in 1993, a demonstration run completed in 2007 and a nine-month pilot run completed in 2011, the federal government has failed to operate the Yuma Desalting Plant for most of its existence; and

Whereas, the United States Department of the Interior is using 100,000 acre-feet of water from Lake Mead to fulfill its water quality obligations to Mexico, rather than conserving an equivalent amount of water through the operation of the Yuma Desalting Plant; and

Whereas, the Colorado River system is in its 20th consecutive year of drought; and

Whereas, as a result of these drought conditions, the United States Department of the Interior is projecting that a shortage on the Colorado River is increasingly likely; and

Whereas, the Colorado River Basin Water Supply and Demand Study released by the Bureau of Reclamation in December 2012 concluded that there will be a future imbalance between the supply and demand for Colorado River water and cited measures such as water conservation, reuse and augmentation to stave off future shortages on the Colorado River; and

Whereas, the Central Arizona Project is a junior priority rights holder to Colorado River water and would bear the largest reduction of Colorado River water in times of shortage; and

Whereas, by abdicating its obligation to operate the Yuma Desalting Plant, the federal government has caused the loss of more than 1,300,000 acre-feet from Lake Mead, placing the State of Arizona at increased risk of water shortage; and

Whereas, if the federal government were to operate the Yuma Desalting Plant, it would conserve 100,000 acre-feet per year, equivalent to the water needed to supply more than 250,000 Arizona homes with water annually.
Wherefore your memorialist, the House of Representatives of the State of Arizona, the Senate concurring, prays:

1. That the Secretary of the United States Department of the Interior immediately take all necessary measures to operate the Yuma Desalting Plant.

2. That the Secretary of State of the State of Arizona transmit copies of this Memorial to the Secretary of the United States Department of the Interior, the President of the United States, the President of the United States Senate, the Speaker of the United States House of Representatives and each Member of Congress from the State of Arizona.
A RESOLUTION

DESIGNATING APRIL 12-18, 2020 AS ARIZONA WATER PROFESSIONALS APPRECIATION WEEK.

(TEXT OF BILL BEGINS ON NEXT PAGE)
Whereas, Arizona has diverse water resources, including groundwater preserved in vast underground aquifers, runoff from mountain rainfall and snowmelt collected in reservoirs, Colorado River water moved through hundreds of miles of canals around the State of Arizona and recycled wastewater treated to drinking water standards; and
Whereas, every community and every sector of this state's economy, from farming to mining, requires safe and reliable water to thrive; and
Whereas, streams, springs, rivers and riparian corridors are important water-dependent environmental resources that contribute to Arizona's natural beauty and unique recreational opportunities; and
Whereas, Arizona has been a leader in sustainable management of groundwater resources and has pioneered innovations such as water banking, water recharge and expanding the reuse of treated wastewater to replenish aquifers and improve local water supply reliability; and
Whereas, local public water and wastewater agencies invest annually in local water-related programs and projects that provide drinking water and sanitary services, protect public health and the environment, improve local water supply reliability and replenish and clean up groundwater basins; and
Whereas, protecting water resources is essential to this state's future and requires a well-trained workforce of water professionals; and
Whereas, Arizona's water industry offers a wide variety of rewarding career opportunities in engineering, hydrology, water operations, biology, policy, economics, business administration, law and communications; and
Whereas, thousands of water, wastewater and recycled water industry professionals in this state are dedicated to ensuring that these water resources are safe and reliable for use by Arizonans and are well managed for future generations.

Therefore

Be it resolved by the House of Representatives of the State of Arizona:
That the Members of the House of Representatives designate April 12-18, 2020 as Arizona Water Professionals Appreciation Week and extend sincere gratitude and appreciation to the water professionals who are on the front line of delivering Arizona's safe and reliable water.
January 23, 2020 Meeting

Committee Members present were: Chair Terry Goddard, Maricopa County; Vice Chair Mark Taylor, Pima County; Jennifer Brown, Maricopa County; Karen Cesare, Pima County; Pat Jacobs, Pima County; and Jennifer Martin, Maricopa County (participating by phone).

Discussion and Consideration of Action to Approve 2020-2021 Internal Audit Plan and Audit Update

Ramon Ramirez, Internal Auditor, presented the final reports for the PV Morgan Transmission Line Project audit and the Accounts Payable audit. He discovered no significant findings and indicated that he was working with staff to address areas for improvement. Mr. Ramirez also presented his upcoming Audit proposal for 2020-2021 and requested Committee approval. The Committee voted to approve the 2020-21 Internal Audit Plan. There was no public comment offered.

Report of External Audit Activities

Tanya Luther, Senior Accountant, provided an introduction of the upcoming external financial audit. CliftonLarsenAllen (CLA) will audit the 2019 CAWCD and CAWCD Insurance Company financial statements. They will return to the Committee on April 16 to deliver their report on the financial statements and request publication of the Comprehensive Financial Report (CAFR). Ms. Luther also informed the Committee that CAWCD had recently been notified that it had been awarded the Government Finance Officers Association (GFOA) Certificate of Achievement for Excellence in Financial Reporting for the 2019 CAFR.

Report on Navajo Generating Station (NGS) Closure and Related Costs and Agreements

Darrin Francom, Director of Operations, Power, and Engineering provided a brief overview of the ongoing decommissioning negotiations for both NGS and the Kayenta Mine. While some details were still in negotiation, and therefore not subject to public discussion, CAP staff felt confident giving the Committee an overview of decommissioning costs that appear to be settled.

Doug Dunlap, Finance and Accounting Manager, provided the details of the fiscal impacts, as they were known to date. Previously, CAP estimated that its 24.3% share of the decommissioning costs will have a $133.8 million liability, which it had fully funded. With the ongoing negotiations, to which CAP is not a party, the current liability estimate has increased to $159.5 million.

CAP staff walked through the timeline of when cash had been set aside to eventually pay for decommissioning and the history of negotiations to date. They identified the assets that the Navajo Nation would retain and their associated values. Peabody would retain all the assets at the mine. They explained...
most demolition/remediation activities would be conducted through 2023. Most of the costs beyond 2024 will be related to a land lease to conduct ongoing environmental testing.

Going forward, staff will explore options for funding the additional $25.7 million liability and present recommendations to the Committee for consideration as well as return to request the additional spending authority.

**Report on the Voluntary Supplemental Shortage Stabilization Program**

Doug Dunlap, Finance and Accounting Manager, presented a brief overview of the Voluntary Supplemental Rate Stabilization program. The program, which has 26 participants, includes $7 million in an account to smooth rates, should a shortage be declared. The program was established in 2015, with the condition that if a shortage had not been called within five years, the funding would be returned to participants and to CAWCD, with associated interest. With no shortage through the end of 2020, the program is scheduled to end and CAP staff will be engaging participants on their desire for the program’s continuation and/or refunds. Mr. Dunlap noted that a Stakeholder Roundtable would be held later in the day to begin engaging stakeholders on this issue. Subsequently, at the roundtable, there appeared to be unanimous consent from the limited number of program participants in attendance that they would prefer the program’s continuation over a refund.

**Contact for more information:**

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Director, Finance and Administration
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chall@cap-az.com
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MEETING DATE: Thursday, February 6, 2020

AGENDA ITEM: Discussion on Establishing a Board Policy on the Collection of Fixed OM&R Costs for System Conservation - Cullom

LINKAGE TO STRATEGIC PLAN, POLICY, STATUTE OR GUIDING PRINCIPLE:
Optimize reliability and sustainability of CAP water supply.

PREVIOUS BOARD ACTION/ACTIVITY:
None.

ISSUE SUMMARY/DESCRIPTION:
As part of the implementation of the Lower Basin Drought Contingency Plan and the Agreement Regarding Lower Basin Drought Contingency Plan Obligations, CAWCD staff identified the need to develop a consistent policy regarding the collection of Fixed OM&R Equivalency Charge on System Conservation Projects with CAP supplies. In order to capture a range of perspectives, CAWCD hosted a roundtable discussion on January 23rd to discuss approaches to collection of Fixed OM&R for System Conservation Projects.

Staff provided a briefing document in advance of the roundtable and presented a PowerPoint at the meeting, see attached. Staff outlined the key considerations as follows:

1. System Conservation projects require a reduction from an existing beneficial use and the demonstration of a persistent history of use.
2. To effectuate this reduction, the contractor or subcontractor must order the water and then submit an amended order reducing the quantity ordered by the amount of intended system conservation.
3. For System Conservation projects involving Project Water to contribute to Lake Mead, CAWCD must agree to refrain from re-marketing the conserved water to junior priority CAP water users who would otherwise pay the Fixed OM&R charge for the re-marketed water.
4. Forgoing re-marketing the conserved water, including forbearance by CAWCD, will result in increased Fixed OM&R Charges for all CAP ratepayers, unless a Fixed OM&R equivalency charge is paid to offset the increased costs.

Staff outlined the policy question as follows:

- Who should pay the Fixed OM&R Equivalency Charge for system conservation projects using Project Water?
Staff identified three approaches to the policy question:

1. **Contractor/Subcontractor Pays**
2. **Funder Pays**
3. **All CAP Water Users Contribute**

The attendees at the roundtable expressed strong support for alternative three. Representatives of M&I subcontractors, AMWUA and tribal representatives stated their willingness to voluntarily pay higher Fixed OM&R rates to facilitate additional system conservation. They recognized that the additional system conservation is not required to implement Arizona’s DCP contributions and the DCP offset programs in Arizona. In addition, the attendees suggested additional discussions to plan for future system conservation activities so that the potential impacts and benefits of such programs can be better understood.

The next step in the process is for staff to prepare a policy recommendation for discussion at the February 20th Finance, Audit and Power Committee, and consideration and action at the March CAWCD Board meeting.

**ATTACHMENTS:**

1. Discussion Paper
2. Presentation
3. FMYN Comment
Purpose and Goal: The purpose and goal of the Roundtable is as follows:

- Outline issues, approaches and options regarding a policy for consideration by the CAWCD Board to address the collection of a Fixed OM&R equivalency charge on System Conservation Projects within the CAP Service Area.
- Gather CAP customer and stakeholder input for consideration as staff prepare a draft policy proposal for consideration by the CAWCD Board.
- Staff will provide background, context and initial concepts, and seek additional ideas and concepts from CAP customers and stakeholders.

Background and Context: CAP contractors and subcontractors hold water delivery contracts for the delivery of CAP Project Water. The CAP contractors and subcontractors exercise their water delivery contract through the annual water order process, ordering water for their use (within their entitlement volume). Project Water that is unordered by higher priority water users is available to be delivered to junior priority CAP water users who will pay the Fixed OM&R Charge for that water.

CAP contractors and subcontractors are required to pay a Fixed OM&R Charge for water scheduled for delivery. CAWCD determines the Fixed OM&R Rate annually by “dividing CAWCD’s estimated Fixed OM&R Costs for the following year by the total amount of Project Water that CAWCD estimates will actually be delivered through Project Works in the following year.” See Stipulation for Judgment at ¶ 4(d)(i), Central Arizona Water Conservation Dist. v. United States, No. Civ. 95-625-TUC-WDB, 95-1720-PHX-EHC (Consolidated) (D. Ariz., Nov. 21, 2007). When a higher priority water user does not schedule delivery of its full Project Water entitlement, that water is available to be delivered to junior priority CAP water users who will pay the Fixed OM&R Charge for that water.

With system conservation projects involving Project Water, the quantity of Project Water delivered is reduced, thereby increasing the Fixed OM&R Charge for all CAP ratepayers.

For recent Pilot System Conservation projects (2015 – 2018) and for other system conservation projects, CAWCD has dealt with this impact on Fixed OM&R Charges from conserved water in different ways. For example, in 2015, the Pilot System Conservation Project funders (BOR, MWD, SNWA, Denver Water and CAWCD) paid the Fixed OM&R Charge on the Tohono O’Odham conservation project, thereby avoiding rate increases for other CAP water users. In 2017, all CAP ratepayers paid increased Fixed OM&R Charges resulting from system conservation projects funded by BOR, City of Phoenix, Walton Family Foundation/EDF, and ADWR with the Gila River Indian Community. In addition, pursuant to the Arizona
ICS Framework Agreement, CAWCD will collect the Fixed OM&R Charge\(^1\) from the individual contractors creating ICS from Project Water at the time of ICS creation.

**Key Considerations and Policy Question:** There appear to be four key considerations for system conservation activities with Project Water:

1. System Conservation projects require a reduction from an existing beneficial use and the demonstration of a persistent history of use.
2. To effectuate this reduction, the contractor or subcontractor must order the water and then submit an amended order reducing the quantity ordered by the amount of intended system conservation.
3. For System Conservation projects involving Project Water to contribute to Lake Mead, CAWCD must agree to refrain from re-marketing the conserved water to junior priority CAP water users who would otherwise pay the Fixed OM&R charge for the re-marketed water.
4. Forgoing re-marketing the conserved water, including forbearance by CAWCD, will result in increased Fixed OM&R Charges for all CAP rate payers, unless a Fixed OM&R equivalency charge is paid to offset the increased costs.

The policy question is:

- **Who should pay the Fixed OM&R Equivalency Charge for system conservation projects using Project Water?**

**Identified Approaches:** CAWCD staff have identified three approaches to the collection of a Fixed OM&R Equivalency Charge for System Conservation Projects with Project Water. Staff recognize that there may be other approaches developed or outlined through the roundtable discussion and through stakeholder comment. In the consideration of the three approaches, staff acknowledge the current operational and policy framework provided through the implementation of the Lower Basin Drought Contingency Plan and the Arizona LBDCP Framework Agreement. In summary, the current operational and policy framework includes the following:

- CAWCD Lake Mead contributions are clearly defined and no longer voluntary, resulting in projected increases in the Fixed OM&R unit cost. CAWCD does not contemplate additional system conservation projects to meet Lake Mead contributions for LBDCP.
- Arizona Offset components are defined and the collection of Fixed OM&R Charges is outlined in the Arizona ICS Framework Agreement for projects involving Project Water.
- Going forward, system conservation projects using Project Water are discretionary.

The three approaches regarding the collection of Fixed OM&R are outlined below:

- **Contractor/Subcontractor Pays:** The CAP contractor or subcontractor forgoing delivery of water for system conservation would pay a Fixed OM&R Equivalency Charge equal to the amount of the Fixed OM&R Charge that would have been paid for the water had it been delivered. The Fixed OM&R Equivalency Charge collected will defray Fixed OM&R Costs and prevent an increase in the Fixed OM&R Rate for other CAP water users.

\(^{1}\) In contrast to system conservation water, which is not delivered, ICS will be delivered to the ICS creator in a future year.
- **Funder Pays:** The entity funding the system conservation project would pay a Fixed OM&R Equivalency Charge equal to the amount of the Fixed OM&R Charge that would have been paid for the water had it been delivered. The Fixed OM&R Equivalency Charge collected will defray Fixed OM&R Costs and prevent an increase in the Fixed OM&R Rate for other CAP water users.

- **All CAP Water Users Contribute:** No Fixed OM&R Equivalency Charge would be assessed. CAP ratepayers would bear the Fixed OM&R cost of the system conservation project through incremental increases in Fixed OM&R Charges for the conserved water.

Staff suggest that the policy to be coterminous with the 2007 Guidelines and LBDCP agreements.

**Additional Considerations:** In addition to the approaches outlined above, staff are seeking input from CAP customers and stakeholders on additional considerations that are inform the development of a draft policy proposal. The additional considerations acknowledge that CAP customers and stakeholders may have different sensitivities and concerns under different shortage conditions or under different levels of cost impacts. These additional considerations include:

- **Should there be volume limits considered for System Conservation projects during different operating conditions (Tier Zero vs Tier 1 for example)?**

- **Is there sensitivity to the range of impacts to the OM&R Charge due to System Conservation projects?**

**Proposed Timeline:** January 23rd Roundtable discussion, February 2020 Board information briefing, February 2020 FAP Committee Briefing, March 2020 Board consideration for action.
CAP Water User Roundtable:
Collection of Fixed OM&R Equivalency Charge on System Conservation Projects with CAP Supplies
January 23, 2020

Agenda Overview

1. Welcome and Introductions
2. Purpose and Goals of Roundtable
3. Background and Context
4. Overview of Identified Options
5. Round Table Discussion
6. Next Steps and Timeline
7. Call to the Audience
Purpose and Goals

• Outline issues, approaches and options regarding a policy for consideration by the CAWCD Board to address the collection of a Fixed OM&R equivalency charge for System Conservation Projects with CAP water

• Gather CAP customer and stakeholder input for consideration in the development of the policy proposal

• Staff are providing background, context and initial approaches and seek additional ideas and input through this roundtable

Nature of CAP Water Delivery Contracts/subcontracts

• CAP contracts/subcontracts are for the delivery of CAP Project Water

• Customers exercise their contract through the annual water ordering process

• Water that is unordered is available to the next priority pool for delivery

• Customers are required to pay Fixed OM&R charges on all water scheduled for delivery

• CAWCD determines the Fixed OM&R charge by dividing the estimated Fixed OM&R costs by the estimated amount of Project Water to be delivered
Key Elements to Consider

1. System Conservation Projects require a reduction in an existing beneficial consumptive use and a persistent history of use.

2. To conserve CAP Project Water, the water must be ordered for use, and then the order amended to reflect the reduction in intended beneficial use.

3. CAWCD must agree to forgo remarketing the conserved water to the water uses in junior priority pools who pay the Fixed OM&R charge on the remarketed water.

4. Forgoing remarketing the conserved water will result in an increase in Fixed OM&R charge on CAP rate payers, unless a Fixed OM&R equivalency fee is collected.

Policy Question

Who should pay the Fixed OM&R equivalency fee for System Conservation Projects with CAP Project Water?
Three Approaches

• **Contractor/subcontractor pays**
  • fixed OM&R Equivalency Charge equal to the amount of the Fixed OM&R Charge that would have been paid for the water had it been delivered
  • avoids increased costs to all other CAP users

• **Funder pays**
  • fixed OM&R Equivalency Charge equal to the amount of the Fixed OM&R Charge that would have been paid for the water had it been delivered
  • avoids increased costs to all other CAP users

• **All CAP Users Contribute**
  • no Fixed OM&R equivalency charge will be assessed
  • CAP users will bear the incremental increased costs

Additional Considerations

• Staff recommend policy be coterminous with the LBDCP agreements, i.e. through 2026

• Should we consider volume limitations for System Conservation Projects at different operating conditions?

• Is there sensitivity to the range of impacts resulting from System Conservation Projects?
Next Steps and Timeline

• Collect input from this meeting

• February Board Meeting - Informational briefing on the Round Table Discussion

• February FAP Committee Meeting – Informational briefing on draft Policy Proposal

• March Board Meeting – Consideration for action on Policy Proposal
January 28, 2020

Via email: latkins@cap-az.com, tgoddard@cap-az.com, smegdal@cap-az.com, aarboleta@cap-az.com, jbrown@cap-az.com, kcesare@cap-az.com, bgrafl@cap-az.com, jhartdecan@cap-az.com, jholway@cap-az.com, pjacob@cap-az.com, mark.lewis@cap-az.com, hmacre@cap-az.com, JLMartin@cap-az.com, apinger@cap-az.com, mtaylor@cap-az.com, tcooke@cap-az.com

Lisa A. Atkins, President
Terry Goddard, Vice President
Board Members
Theodore Cooke, General Manager
CENTRAL ARIZONA WATER CONSERVATION DISTRICT
P.O. Box 43020
Phoenix, Arizona 85080-3020

Re: Fort McDowell Yavapai Nation’s Comments on Policy Development Regarding the Collection of a Fixed OM&R Equivalency Charge on System Conservation Projects with CAP Supplies

Dear Ms. Atkins, Mr. Goddard, Board Members and Mr. Cooke:

On behalf of the Fort McDowell Yavapai Nation (Nation), please accept this letter as follow-up comments from the Nation related to the CAP Water User Roundtable discussion regarding collection of a Fixed OM&R Equivalency Charge on System Conservation Projects with CAP Supplies that was held on Thursday, January 23, 2019.

As was the consensus of the stakeholders at the January 23 meeting, the Nation also does not support the assessment of a Fixed OM&R equivalency charge for CAP water supplies that are used by the United States Bureau of Reclamation (Reclamation) for meeting its goal under the Lower Basin Drought Contingency Plan (LBDCP) to conserve up to 100,000 acre-feet of Colorado River water per year through December 31, 2026. It was clear from the January 23 meeting that where System Conservation water is not otherwise delivered through the CAP canal, CAP users support absorbing any potential incremental increase in their Fixed OM&R pricing as a contribution to the overall efforts related to System Conservation as adopted under the LBDCP.
Following adoption of the LBDCP in May 2019, Reclamation and the Nation were negotiating an agreement to undertake System Conservation in 2020. Ultimately, this was the only System Conservation done by Reclamation this year. That agreement was put in jeopardy when it was announced at the August Central Arizona Water Conservation District (CAWCD) Board Meeting that there was a possibility that Fixed OM&R could be charged on water stored for System Conservation as this cost component had not been factored into the on-going negotiations. The additional cost of a Fixed OM&R fee two months before CAP water orders were due could have made it infeasible for the Nation and Reclamation to successfully negotiate an acceptable agreement.

In 2019, the Nation had participated in the Pilot System Conservation Program with Reclamation (with the agreement of CAWCD) to conserve 13,683 acre-feet of water and no Fixed OM&R fee was asserted or assessed by CAWCD. Additionally, Fixed OM&R had not been assessed by CAWCD for several other System Conservation projects, including the Nation’s prior Drought Response Agreement with Reclamation to conserve 13,933 acre-feet in calendar year 2016. Thus, the Nation was proceeding in its negotiations with Reclamation with the understanding that Fixed OM&R would not be asserted for System Conservation water. Fortunately, the Nation was able to negotiate an agreement with Reclamation to ensure that System Conservation would still take place in 2020 while this new issue was to be brought up by CAWCD with the CAP stakeholders.

To be clear, the Nation’s legal position is that Fixed OM&R cannot be assessed on CAP water that is not delivered through the CAP canal, as the definition of “Fixed OM&R” in the 2007 Stipulation for Judgment is “the charge per acre-foot of Project Water imposed by CAWCD each year for the recovery of Fixed OM&R Costs of water deliveries.” See Stipulation for Judgment dated September 27, 2007, ¶ 4(b), Central Arizona Water Conservation District v. United States, et al., CIV 95-625-TUC-WDB (EHC), CIV 95-1720-PHX-EHC [emphasis added]; see also, id. at 4(d)(i) (“CAWCD’s Fixed OM&R Charge shall not be more than the amount determined by dividing CAWCD’s estimated Fixed OM&R Costs for the following year by the total amount of Project Water that CAWCD estimates will actually be delivered through Project Works in the following year.”) [emphasis added]; see also, id. at ¶ 4(d)(iii) (“...charges for any delivery of Project Water for Federal purposes shall be no more than the sum of the Fixed OM&R Charge and the Pumping Energy Charge...”) [emphasis added].

Notwithstanding the foregoing legal principle, the policy position expressed by the CAP stakeholders during the January 23 meeting is a reflection that the CAP water users recognize the importance of engaging in and supporting System Conservation in order to prevent an even deeper crisis if a shortage on the Colorado River is declared by the Secretary of the Interior. Indeed, the cost of Fixed OM&R for the remaining CAP users in the event of a declaration of shortage could be extreme if hundreds of thousands of acre-feet of CAP water cannot be delivered through the CAP canal due to shortage.

Given the results of the January 23 meeting and the comments made here, the Nation requests that a policy be adopted by the CAWCD Board that Fixed OM&R, including any “Fixed OM&R equivalency fee,” will not be assessed for LBDCP System Conservation through December 31, 2026, including the Nation’s 2020 System Conservation agreement that was negotiated in good faith by the Nation in an effort to help support the health of Lower Colorado River Basin for all Arizonans.
Sincerely,

FORT MCDOWELL YAVAPAI NATION

Bernadine Burnette, President

cc:  Christopher Hall, CAWCD Director of Finance and Administration (chall@cap-az.com)
     Bridget Schwartz-Manock, CAWCD Director of Public Affairs (bschwartzmanock@cap-az.com)
     Patrick Dent, CAWCD Director of Water Policy (pdent@cap-az.com)
     Leslie Meyers, PXAO Area Manager, Bureau of Reclamation (lmeyers@usbr.gov)
     Steve Hvinden, Lower Colorado Region, Bureau of Reclamation (shvinden@usbr.gov)
     Diandra D. Benally, FMYN General Counsel (dbenally@fmyn.org)
     Gerry Walker, FMYN Water Manager (gwalker@fmyn.org)
     Robyn Interpreter, Montgomery & Interpreter, PLC (rinterpreter@milawaz.com)
     Jay Tomkus, Montgomery & Interpreter, PLC (jtomkus@milawaz.com)
## Colorado River Water Supply Report

**System Contents:** 28.98 MAF

1/27/20

<table>
<thead>
<tr>
<th>Reservoir</th>
<th>Current</th>
<th>Change</th>
<th>Maximum</th>
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<tr>
<td>Lake Mead</td>
<td>11.23</td>
<td>+ 0.37</td>
<td>25.90</td>
</tr>
<tr>
<td>Lake Powell</td>
<td>12.32</td>
<td>- 0.30</td>
<td>24.30</td>
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<td>Flaming Gorge Reservoir</td>
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<td>Navajo Reservoir</td>
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<td>Blue Mesa Reservoir</td>
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<td>Fontenelle Reservoir</td>
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<td>Morrow Point Reservoir</td>
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</table>

### Reservoir Capacities (MAF)

- **Lake Mead:** 43%, 11.23 MAF, Mid Elevation Release Tier (1,090’)
- **Lake Powell:** 51%, 12.32 MAF, Maximum (3,700’)
- **Flaming Gorge Reservoir:** 92%, 3.28 MAF
- **Navajo Reservoir:** 77%, 1.31 MAF
- **Blue Mesa Reservoir:** 67%, 0.56 MAF
- **Fontenelle Reservoir:** 52%, 0.18 MAF
- **Morrow Point Reservoir:** 88%, 0.11 MAF
As of 1/27/2020, snow accumulation in the Green River Basin (contributes ~33%) is at 10.4 in. (blue line), which is 113% of the 30-year median for this date of 9.2 in. (purple line) and is greater than last year’s amount (green line).

Snow accumulation in the Upper Colorado River Basin (contributes ~42%) to date is at 9.5 in., which is 108% of the 30-year median for this date of 8.8 in.

Snow accumulation in the San Juan River Basin (contributes ~13%) to date is at 13.0 in., which is 104% of the 30-year median for this date of 12.5 in.

For the overall Colorado River Basin above Lake Powell, the snow accumulation to date is at 10.1 in., which is 110% of the 30-year median for this date of 9.2 in.
Update on Snowpack Augmentation Research and Verification

1. Science and application of winter cloud seeding (snow augmentation)
2. Efficacy of snowpack augmentation programs
3. Potential of extra-area effects
4. Environmental impacts from seeding materials (Silver Iodide)

Conditions Necessary for Winter Cloud Seeding

Meteorological conditions are observed to track the following:

Coverage:
• Targeted clouds must persist long enough for adequate seeding to take place

Winds:
• Forecasted trajectory of orographic (mountain) storm clouds must pass over ground-based generator locations and the target seeding area

Temperature:
• Cloud temperature of less than -8 degrees Celsius (if using Silver Iodide as seeding agent)

Moisture:
• Presence of enough super cooled liquid water
Snow Augmentation Process

Ice Nucleation and Atmospheric Moisture

Cloud Condensation Nuclei (CCN): small particles upon which water vapor condenses

General thermodynamics of orographic cloud systems:

<table>
<thead>
<tr>
<th>Natural Precipitation</th>
<th>Atmospheric Water Vapor</th>
</tr>
</thead>
<tbody>
<tr>
<td>100%</td>
<td>Only 20% of moist air (water vapor) condenses as it cools from being forced upward over mountain ranges</td>
</tr>
<tr>
<td>20%</td>
<td>Winter storms are generally 30% efficient in converting condensed cloud water into precipitation (which equates to 6% of water vapor)</td>
</tr>
<tr>
<td>Enhanced Precipitation</td>
<td>If cloud seeding enhances natural precipitation by 15% (high end) that equates to 0.9% of atmospheric water vapor</td>
</tr>
</tbody>
</table>
Dispersion of Seeding Material

• High elevation ground-based generators or aircrafts
• Preferred seeding agent: silver iodide (most effective for winter seeding @ temperatures < -8 °C)
• Release of silver iodide by burning flares (acts as CCN)
• Approx. 2-3 kg of silver iodide can be released per generator in a season

Wyoming Weather Modification Pilot Program (2005-2014)

Randomized Seeding Experiment (RSE):
• To evaluate the efficacy of cloud seeding in enhancing winter precipitation
• One of two mountain ranges was randomly selected to be seeded when both have achieved the conditions of a seeding criteria:
  – Mountain top temperature colder than -8 degrees Celsius
  – Wind direction that will transport the Silver Iodide into the target clouds
  – Presence of super-cooled liquid water (for droplet formation)
Wyoming Pilot Program: Results

Initial statistical analysis without data correction:
3% increase in precipitation

Data corrections:
- Occurrence of unintended downwind effects on the Medicine Bow by seeding over the Sierra Madre
- Insufficient amounts of silver iodide reaching the intended target (low generator hours threshold)

Assessed seeding effect: 5-15%

Extra-area Effects

What is the impact of seeding beyond the target area?

- Paper assessed multiple cloud seeding studies (> 28) and the extent of seeding effects beyond a target area (up to 250 miles away)
- Evidence of positive seeding effects beyond target area (no decrease in precipitation)
- Extra area impacts affected by local climatology, uncertainty of natural precipitation distribution, level of seeding operations, etc.

Suspension Criteria

- Many snow augmentation programs have suspension criteria conditioned to SWE accumulation in the area (snowpack volume threshold)
Environmental Concerns: Silver Iodide

Background levels of silver from naturally occurring sources in parts per billion (ppb)

- Surface waters: 0.2 – 2.0 ppb
  (ATSDR, 1990. Agency for Toxic Substances and Disease Registry. Toxological Profile for Silver)
- EPA drinking water standard for silver: 100 ppb

Silver levels in precipitation/snow post-cloud seeding

- Studies indicate silver concentrations well below the EPA standard:
  - Sierra Nevada Mountains (2 sites): 0.02-0.4 ppb (post seeding) vs. 0.02 ppb (background)
    (Warburton et al., 1995. How the transport and dispersion of AgI aerosols may affect the detectability and seeding effects by statistical methods)
  - Silver in snow: 0.01-4.5 ppb (cloud seeding) vs. 0-0.02 ppb (unseeded storm)
    (Cooper and Jolly, 1970. Ecological effects of silver iodide and other weather modification agents)
  - San Juan Mountains (3-year study): no significant increase in silver levels
    (Teller et al., 1976. Disposition of silver iodide used as a seeding agent in ecological impacts of snowpack augmentation in the San Juan Mountains of Colorado)

- EPA exposure and risk assessment for silver:
  - Determined that cloud seeding not expected to contribute significant amounts of silver to water from precipitation
3 Colorado River Modeling Tools

Used to characterize the supply of Colorado River water available to CAP

1. 24-Month Study Model
2. Mid-Term Operations Model (MTOM)
3. Colorado River Simulation System (CRSS)

All the models include:
- Hydrology (streamflows),
- Reservoirs (operating rules, laws, etc), and
- Water uses (diversions, returns, and losses).
Modeling Tools:  
**24-Month Model**

- Deterministic (forecast)
- Decision framework model
- Rule-based
  - 2007 Interim Guidelines + DCP
- ≤2 yr operations
- Hydrology Inputs
  - Colorado Basin River Forecast Center
  - “min-”, “max-”, and “most probable”
- Run parameters
  - Duration = 24 mo.
  - Monthly initial conditions
  - Monthly time-step
- Outputs of interest
  - EOM Dec. Lake Mead pool elevation
    - Aug 24MS
  - EOM Sept. & Dec. Lake Powell pool elevation
    - Apr & Aug 24MS

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Modeling Tools:  
**Mid-term Probabilistic Operations Model (MTOM)**

- Probabilistic
- Planning tool
- Rule-based
  - 2007 Interim Guidelines + DCP
- 1-5 yr planning
- Hydrology input
  - LB: observed side inflows 1981-2010
- Run parameters
  - Duration = 5 years
  - Initial conditions: current 24MS results
  - Monthly time-step
- Outputs of interest
  - Lake Mead pool elevation
  - Lake Powell pool elevation
  - Releases
  - Shortages
Modeling Tools:

**Colorado River Simulation System (CRSS)**

- Probabilistic
- Rule-based
  - 2007 Interim Guidelines + DCP
- ≥ 10 yr planning
- Hydrology inputs
  - Observed (112 yr record - 1906-2017)
  - “Stress Test” (1985-2017 extremely dry period)
  - Variable Infiltration Capacity (VIC [climate change scenarios])
  - “Other”
- Run parameters
  - Duration ≤ 40 years
  - Initial conditions: Actual or predicted Jan.
  - Monthly time-step
- Outputs of interest
  - Lake Mead pool elevation
  - Lake Powell pool elevation
  - Conservation volumes
    - State
    - USBR
    - Users

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Modeling Tools:

**Hydrology and Initialization**

- **24 Month Study**
  
  1 hydrology = CBRFC Min OR Most OR Max Probable

  Initialized: current month current CY

  \[ t \rightarrow 24 \text{ mo.} \]

- **MTOM**

  5 day precip. 10 day temp.

  38 hydrologies/mo. = CBRFC Min/Most/Max + “Calibration Period” (1981-2015)

  Initialized: current month current CY

  \[ t \rightarrow 5 \text{ years} \]

- **CRSS**

  112 hydrologies/mo. = DNF (112 year observed), OR “Stress Test” (1988-2017), VICx ...

  Actual or predicted January of next CY
  (If predicted: MTOM-initialized or 24MS-initialized)

  \[ t \rightarrow 40 \text{ years} \]
Uses

- **24 Month Study**
  - Forecast system responses from operation decisions
  - Used to determine operating tier
    - April: for EOM September (Water Year)
    - August: for EOM December (Calendar Year operating tier)

- **MTOM**
  - Bridge from deterministic to stochastic (probabilistic)
  - Aid in initializing CRSS
  - Useful in determining near-term risk

- **CRSS**
  - Useful for planning and evaluating operating regimes and policy decisions
  - Large-scale trends
  - Provides for range(s) of system responses to variations in
    - hydrology
    - climate
    - initial conditions
    - operation decisions

Questions?