



**CENTRAL ARIZONA PROJECT  
Board of Directors  
February 7, 2019 - 10:00 AM**

**Central Arizona Project  
23636 N. 7th Street  
Phoenix, Arizona  
Board Room**

**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. Presentation on Arizona's Open Meeting Law (*Leadership and Public Trust: CAP Board Leadership^*) - Danee Garone, Arizona Ombudsman-Citizens' Aide (10:05)
3. Consideration of Action to Approve Items on the Consent Agenda\*\* (10:35)
  - a. Minutes of the January 3, 2019 Regular Meeting - Atkins
  - b. Minutes of the January 17, 2019 Nominating Committee Meeting - Lewis
  - c. Minutes of the January 17, 2018 Water Quality Standards Task Force Meeting - Arboleda/Goddard
  - d. Minutes of the January 24, 2019 Special Meeting - Atkins
  - e. Consulting Agreement for CAGRD Water Supply Acquisition Program Professional Services - Ticknor/Grignano
  - f. Additional Contract Authority for Legal Engagement of Law Firm Defending Pending Litigation - Johnson
4. Consideration of Action to Approve Items Removed from the Consent Agenda
5. Reports of Committees and Possible Consideration of Committee Recommendations (10:40)
  - a. Public Policy Committee - Cesare
    - i. Possible Consideration of Action on Policy Issues that Could Impact CAP
  - b. Finance, Audit and Power Committee - Holway
  - c. CAGRD and Underground Storage Committee - Megdal
  - d. Water Quality Standards Task Force - Arboleda/Goddard
    - i. Discussion and Consideration of Action on Delivery and Introduction Standards for a Broad Suite of Water Quality Constituents - Dent
6. Report on January 17, 2019 Arizona Water Banking Authority Meeting - Atkins (11:00)
7. Report on Transmission System Projects - Francom (11:10)
8. Report on Colorado River Conditions (*Water Supply: Reliability of the CAP Water Supply^*) - Mahmoud (11:20)
9. Update on Drought Contingency Planning (*Water Supply: Reliability of the CAP Water Supply^*) - Ticknor (11:30)
10. Report on Legal Matters (*Leadership & Public Trust: Relationships-Customers^*) - Johnson (12:00)
11. Nominations and Election of Officers and Executive Committee Members (*Leadership and Public Trust: CAP Board Leadership^*) (12:10)

- a. Report of Nominating Committee - Lewis
  - b. Acceptance of Nominations from the Floor - Atkins
  - c. Consideration of Action to Elect Officers and Executive Committee Members - Atkins
12. Appointment of Board Members to CAP Committees and as Representatives to the Arizona Water Banking Authority Commission and the Arizona Water Protection Fund Commission (*Leadership and Public Trust: CAP Board Leadership*^) - Board President (12:40)
13. Directors' Report on Current Events (12:45)
14. Future Agenda Items (1:00)
15. President's Report on Current Events - Atkins (1:05)
16. General Manager's Report on Current Events - Cooke (1:15)
17. Public Comment (1:20)
18. 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.*)\*\*\*
  - a. Pursuant to A.R.S. §38-431.03.A.1 to discuss matters pertaining to the goals and performance of the General Manager; and
  - b. 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
19. Reconvene in Open Session
20. Consideration of Action Regarding Items Discussed in Executive Session
21. Adjourn

*CAP Board members are elected by the voters in Maricopa, Pima and Pinal Counties. Visit [cap-az.com/board](http://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.

# ARIZONA OPEN MEETING LAW

Danee Garone  
Staff Attorney  
Arizona Ombudsman – Citizens' Aide



## ROLE OF THE STATE OMBUDSMAN

- Generally: Take and investigate complaints about the administrative acts of *state* agencies.
- Public Access
  - A.R.S. § 41-1376.01
  - Investigate complaints relating to public access law for state and most other Arizona government entities.
  - Train public officials and educate the public on the rights of the public under the public access laws.
  - Prepare materials and provide training on public access laws.



# OPEN MEETING LAW

- What is it?
- Set of laws that were intended to:
  - Maximize public access to the governmental process.
  - Open deliberations and proceedings to the public.
  - Prevent public bodies from making decisions in secret.
- Found at A.R.S. §§ 38-431 through -431.09.



# ENFORCEMENT AUTHORITY

- Arizona Attorney General's Open Meeting Law Enforcement Team (OMLET)
  - Investigate complaints
  - Enforcement authority
  - Arizona Agency Handbook, Chapter 7 (Revised 2013)
    - Available online: [www.azag.gov](http://www.azag.gov)
  - **Only entity that can commence suit against individual for open meeting law violations.**
- County Attorney's Office
- The Courts – Only entity with power to penalize public bodies and members.





## WHO MUST COMPLY?

- “Public Bodies” – A.R.S. § 38-431(6)
  - All councils, boards, commissions of the state or political subdivisions
  - Multimember governing bodies of departments, agencies, institutions and instrumentalities of the state or political subdivisions
  - Includes corporations or other instrumentalities whose boards of directors are appointed or elected by state or political subdivision



## THE DEFINITION ALSO INCLUDES...

- Standing committees
- Special committees
- **Advisory committees**
- **Subcommittees**
  - of or appointed by the public body



## ADVISORY COMMITTEES AND SUBCOMMITTEES ARE DEFINED AS...

- Any entity, **however designated**
- Officially established
  - on motion or order of the public body
  - **or** by presiding officer of the public body
- For purpose of making a recommendation concerning a decision to be made or a course of conduct to be taken by the public body



## STATUTORY REQUIREMENTS

- Secretary of State, Clerk of the County Board of Supervisors, and City/Town clerks must conspicuously post open meeting law materials prepared and approved by the Attorney General's Office on their website.
  - Chapter 7 of the Arizona Agency Handbook
  - Revised July 2010
- All persons elected or appointed to a public body must review the materials at least one day before taking office.
- May be other requirements elsewhere in law or in a public body's governing documents. E.g., A.R.S. 48-803(H) for fire districts.



## \*WHAT MUST A PUBLIC BODY DO?\*

- Provide notice
- Have an agenda
- Meet in public
- Permit public to attend
  - Exception: authorized executive sessions
- Take all action in public
- Create/ prepare meeting minutes or a recording.



## WHAT IS A MEETING?

- A.R.S. § 38-431(4)
- “Meeting” is a **gathering**, in person or through technological devices
- of a **quorum** of a public body
  - Discuss
  - Propose
  - Deliberate
  - Take legal action



## WHAT IS A MEETING? (CONT'D)

- **A.R.S. § 38-431(4)(b) - Includes:**
  - **“(i) A one-way electronic communication by one member of a public body that is sent to a quorum of the members of a public body and that proposes legal action.”**
  - **“(ii) An exchange of electronic communications among a quorum of the members of a public body that involves a discussion, deliberation or the taking of legal action by the public body concerning a matter likely to come before the public body for action.”**



## THE “INITIAL” NOTICE (AKA DISCLOSURE STATEMENT)

- **A.R.S. § 38-431.02**
- **Tells public where individual meeting notices will be posted (must include both physical and electronic locations).**
- **Must be posted on public body’s website.**
  - **Cities and Town may use association of cities and towns website.**
  - **Special districts may file it with the County Clerk.**



# NOTICE OF MEETINGS

A.R.S. § 38-431.02(C)

Provided 24 hours in advance of meeting

- To all members of the public body
- To the general public
- 24 hours may include Saturdays IF the public has access to the physical posting location. May not include Sundays or other legal holidays prescribed under A.R.S. § 1-301

Exceptions:

- Recess and resume
- Actual emergencies

13

# CONTENTS OF NOTICE



- The name of the public body
- Date, Time, and Place
  - Address and room number
- Must include an agenda OR inform the public how to obtain a copy of the agenda

14

## POSTING THE NOTICE



- Must be posted in all location identified in the initial notice (disclosure statement). This must be a location where the public has access.
- Must post it on website (see exception for special districts).
- Must give additional notice that is reasonable and practicable.

15

## SOCIAL EVENTS & SEMINARS



- You might consider posting a “courtesy agenda” announcing event and explain that a quorum might be present
- Identify date, time, and purpose (location details will vary depending on event)
- State that no business of the public body will be discussed and no legal action will be proposed or taken
- Members must be scrupulous to avoid improper discussion

16

## **THE AGENDA**

### **A.R.S. § 38-431.02(H)**

- Must list the specific matters to be:
  - discussed,
  - considered or
  - decided
- Must include information reasonably necessary to inform the public
- All discussion must be reasonably related to an adequately described agenda item.



## **IF IT'S NOT ON THE AGENDA...**

- You cannot discuss it!
- New items must wait for a future meeting.



## PUBLIC'S RIGHTS

- Attend
- Listen
- Tape record
- Videotape



19

## PUBLIC HAS NO RIGHT TO:

- Speak
- Disrupt



### Practical Pointer:

- make a good record of warnings

20



## CALLS TO THE PUBLIC

A.R.S. § 38-431.01(H)

- Optional (unless required by other laws)
- Time, manner, place restrictions
  - Can limit time (egg timer)
  - Ban Repetition
    - May require speakers on the same side with no new comments to select spokesperson
  - prohibit disruptive behavior



21

## COMMON PITFALL OF CALLS TO THE PUBLIC

- Discussing matters not listed on the agenda.
- If it's not an agenda item, public body's response is limited to:
  - Direct staff to study the matter
  - Ask that a matter be placed on a future agenda
  - Respond to criticism

Note: These three responses must take place at the **conclusion** of the call to the public!

22

## EXECUTIVE SESSIONS

- Public excluded
- Only permitted for specific matters
  - A.R.S. §§ 38-431.03(A)(1) through (7)
- Must include possibility of executive session in the meeting notice and agenda
- Must have public, majority vote to enter executive session
- Discussion is confidential
- No action permitted!
- Must have minutes or recording

23

## EXECUTIVE SESSIONS

- Just because you CAN have one, should you?
- Public suspicion vs. actual need



24

## EXECUTIVE SESSION NOTICE/AGENDA

- Notice must include the statutory section authorizing the executive session
- Agenda must provide a general description of the matters to be discussed or considered
  - Needs to be more than a statutory citation
  - Need not contain information that would:
    - Defeat the purpose of the executive session
    - Compromise the legitimate privacy interests of a public officer, appointee, or employee
    - Compromise the attorney-client privilege

25

## WHO MAY ATTEND EXECUTIVE SESSIONS

- A.R.S. § 38-431(2)
  - Members of public body
  - Persons subject to a personnel discussion
  - Auditor general
  - Individuals **whose presence is reasonably necessary** in order for the public body to carry out its executive session responsibilities
    - Clerk to take minutes/run tape
    - Attorney to give legal advice

*Tip: Put on the record why individuals attending are reasonably necessary.*

26

# EXECUTIVE SESSION PITFALLS

- Inappropriate disclosure
  - What happens in executive session stays in executive session!
  - Chair must remind members about the confidentiality requirement every time.
    - A.R.S. § 38-431.03(C)
- Taking legal action.
  - All votes must take place in public!



27

# PERSONNEL MATTERS

- May discuss and consider employment, assignment, appointment, promotion, demotion, dismissal, salaries, discipline or resignation
- Of an officer, appointee, or employee of the Board
  - Must be able to identify a specific individual

28

## MORE CONSIDERATIONS REGARDING PERSONNEL MATTERS

- If the matter is noticed for a possible executive session, separate written notice to employee at least 24 hours before meeting.
- Employee may require meeting be held in public (does not include individual salary discussions).
- Employee does not have the right to attend executive session, but may. (Regardless, employee has access to portion of executive session meeting minutes.)



## COMMON QUESTIONS

*Q: May you conduct personnel evaluations in executive session?*

A: Yes. See Ariz. Att'y Gen. Op. I96-012

*Q: May a board interview applicants in executive session?*

A: Yes, if position is one appointed by the board. See Ariz. Att'y Gen. Op. I83-050.

Note: Must vote for appointment in public session



## CONFIDENTIAL INFORMATION

- Discussion or consideration of records exempt by law from public inspection
- Can receive and discuss information and testimony that state or federal law requires to be maintained as confidential
- Discussion may occur in open session when confidential information is adequately safeguarded (i.e. use initial for medical patients)

31

## LEGAL ADVICE



- Discussion or consultation for legal advice with attorneys **for the public body**
- Exchange of communication between lawyer and client
- Members may not discuss among themselves the merits or what action to take:
  - **Debate** over what action to take,
  - **pros and cons, or**
  - **policy implications** of competing alternative courses of action.

32

## OTHER POSSIBLE REASONS FOR EXECUTIVE SESSION

- Discuss and consult with attorneys to consider litigation, contract negotiations, and settlement. Can instruct attorney regarding public body's position.
- Discussion or consultation with designated representatives regarding negotiation with employee organizations about salary. Can instruct representatives regarding public body's position.
- International, Interstate, and Tribal Negotiations.
- Discussion or consultations with designated representatives regarding negotiations for the purchase, sale, or lease of real property. Can instruct representatives about public body's position.



## MINUTES

### A.R.S. § 38-431.01(B)

- Minutes or recording required
  - Tape recordings – if created/used to transcribe minutes, must be retained for at least 3 months “[a]fter date of meeting and after minutes transcribed or summarized and approved.”



## CONTENT OF PUBLIC MEETING MINUTES

- A.R.S. § 38-431.01(B)

1. Date, time and place of meeting
2. Members present & absent
3. General description of matters considered
4. Accurate description of “all legal actions proposed, discussed or taken”
5. **A record of how each member voted**
6. Names of members who propose each motion
7. Names of persons, as given, making statements or presenting material to the public body; and
8. A reference to the legal action about which they made statements or presented material



## ACCESS TO PUBLIC MEETING MINUTES

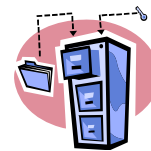
- Minutes or a recording shall be open to public inspection **3 working days** after the meeting
- NOT AFTER APPROVAL





## EXECUTIVE SESSION MEETING MINUTES

- Shall have written minutes or a recording
  - Burden of proof – *Fisher* case
- Shall include the following:
  - Date, time and place of meeting
  - Members present & absent
  - General description of matters considered
  - An accurate description of all instructions given
  - Such other matters as deemed appropriate by the public body
- Shall be kept confidential (A.R.S. § 38-431.03(B))



37

## ACCESS TO EXECUTIVE SESSION MEETING MINUTES

- Meeting minutes of executive session shall only be released to:
  - Members of the public body
  - Officers, appointees, or employees who were the subject of discussion or consideration (only that portion)
  - Auditor general in connection with an audit
  - County attorney, attorney general or ombudsman when investigating alleged violations

38

## CIRCUMVENTION



- Cannot use any device to circumvent the law.
- “Splintering the quorum”:
  - Serial communications (verbal, written, electronic, etc.)
  - Meeting with individual members and then reporting what others said with enough to constitute a quorum
  - Polling the members

39

## STAFF & OTHER PERSONS

- Cannot direct staff to communicate in violation of the open meeting law – A.R.S. § 38-431.01(I)
- Sanctions may be imposed upon any person who knowingly aids, agrees to aid or attempts to aid another person in violating this article – A.R.S. § 38-431.07(A).

40

## COMMUNICATIONS WITH THE PUBLIC

- Members may express opinions and discuss issues with the public at a venue other than a public meeting, personally, through the media or other public broadcast so long as it is not intended to circumvent the open meeting law



## WHEN IN DOUBT?



- RESOLVE ALL DOUBTS IN FAVOR OF OPENNESS.
- Remember: legal action taken during a meeting held in violation of any provision of the open meeting law is null and void unless ratified.



## RATIFICATION – A.R.S. § 38-431.05

- Within 30 days after discovery of the violation or when should have been discovered with reasonable diligence
  - ***Tanque Verde Unified School Dist. v. Bernini***, 206 Ariz. 200, 76 P.3d 874 (App. 2003) (30 days after court ruling OK)



## PENALTIES - A.R.S. § 38-431.07(A)

- Individual members who violate and any persons who aid, attempt, or agree to aid – must be “knowingly”
  - **Civil penalty (paid by individual) up to \$500 second violation.**
  - **Up to \$2,500 penalty for third violation and on.**
  - Such equitable relief as the court deems appropriate
  - Reasonable attorneys’ fee
- Public body may not pay or reimburse for penalty imposed on individual
- **Only AG can commence suit against individual.**
- **It person who is otherwise liable “objected to the action of the public body and the objection is noted on a public record, the court may choose not to impose a civil penalty on that person.”**



## PENALTIES - A.R.S. § 38-431.07(A)

- If “knowingly” violated “with intent to deprive the public of information” –
  - Court may remove public officer from office and
  - Charge officer and any person that aided, agreed to aid, or attempted to aid, all the costs and attorney’s fees



## KEY RESOURCES

- Arizona Agency Handbook, Chapter 7, [www.azag.gov](http://www.azag.gov)
- Ombudsman Publications
- Ombudsman website [www.azoca.gov](http://www.azoca.gov)
- Department of Library, Archives, and Public Records  
<https://www.azlibrary.gov/>
- Case law
- Attorney General Opinions [www.azag.gov](http://www.azag.gov) or  
<http://azmemory.lib.az.us/>





**CENTRAL ARIZONA WATER CONSERVATION DISTRICT  
REGULAR MEETING OF THE BOARD OF DIRECTORS  
January 3, 2019**

The regular meeting of the Central Arizona Project ("CAWCD" or "CAP") Board of Directors was called to order by President Lisa Atkins on January 3, 2019, at 10:03 AM. The meeting was held at Central Arizona Project Headquarters, located at 23636 North Seventh Street, Phoenix, Arizona, in the Board Room.

Board members present were President Lisa Atkins, Maricopa County; Vice President Jim Holway, Maricopa County; Secretary Sharon Megdal, Pima County; Alexandra Arboleda, Maricopa County; Jennifer Brown, Maricopa County; Karen Cesare, Pima County; Terry Goddard, Maricopa County; Jim Hartdegen, Pinal County; Pat Jacobs, Pima County; Mark Lewis, Maricopa County; Heather Macre, Maricopa County; Heather Martin, Maricopa County; April Pinger, Maricopa County and Mark Taylor, Pima County.

Staff members present were Ted Cooke, General Manager; Jay Johnson, General Counsel; Phil Cook, Director, Technology; Chris Hall, Director, Finance & Administration; Bridget Schwartz-Manock, Director, Public Affairs; Suzanne Ticknor, Director, Water Policy; Brian Buzard, Director, Centralized Maintenance and Reliability; Ken Seasholes, Manager, Resource Planning and Analysis; Laura Grignano, Manager, CAGR; Patrick Dent, Manager, Water Control; Chuck Cullom, Manager, Colorado River Programs; Jeff Gray, Manager, Legislative Affairs; Megan Casey, Public Affairs Management Analyst; and Jennifer Miller, Board Support Specialist.

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

Board Member Alexandra Arboleda led the Directors and public in reciting the Pledge of Allegiance and observing a moment of silence, and gave a safety minute on cybersecurity.

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

On a motion (Secretary Megdal) and a second (Board Member Hartdegen), the Board approved the minutes of the November 15, 2018 Special Meeting; approved the minutes of the December 6, 2018 Regular Meeting; awarded a contract to CDW-G Inc. in the amount of \$1,022,346.56 plus \$204,469 (20% contingency) totaling \$1,266,815.26 for the Microsoft Enterprise License Agreement; approved the staff recommendation for short-term action plans for Customer Service Task Force Recommendations 1, 2 and 4; and authorized the General Manager to execute the associated Forbearance Letter Agreement and Funding Agreement for the Colorado River Indian Tribes 2019 PSCP Project as part of the approved and ongoing PSCA. Motion passed.

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

*Not voting: Terry Goddard*

**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 an update on the January 3 meeting of the Public Policy Committee, including a federal update with details on the partial shutdown, an update on the 2018 Farm Bill and reported on a new proposed "Waters of the United States" rule. She also gave a state update, noting that the Legislature will begin session on January 14 and that 35 bills have been pre-filed, including HB 2013, which would appropriate \$1 million to the Water Protection Fund. Board Member Cesare reported that the Committee voted to recommend support of HB 2013.

**4.a.i. POSSIBLE CONSIDERATION OF ACTION ON STATE ISSUES THAT COULD IMPACT CAP INCLUDING BUT NOT LIMITED TO HB 2013**

**On a motion (Board Member Cesare) and a second, (Board Member Hartdegen), the Board adopted a position of support on the following pending state legislation of interest to CAP: HB 2013 appropriation; Arizona water protection fund. Motion passed.**

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

*Not voting: Terry Goddard*

**4.b. FINANCE, AUDIT AND POWER COMMITTEE - HOLWAY**

Vice President Holway reported that the FAP Committee did not meet in December but will meet in January. He shared a schedule of proposed agenda items for the 2019 FAP meetings that will be discussed at the January meeting.

**4.c. CAGRD AND UNDERGROUND STORAGE COMMITTEE - MEGDAL**

Secretary Megdal reported that the CAGRD Committee did not meet in December and is scheduled to meet next in February 2019. She reviewed upcoming agenda items, including the mid-plan review for the CAGRD Plan of Operation, a report on 2018 Member Land and Member Service Area enrollment and activation activity, and a report on the CAGRD Conservation Plan process.

**4.c.i. UPDATE ON RECOVERY PLANNING ADVISORY GROUP (RPAG) - LOHSE**

Angie Lohse, Senior Policy Analyst, Resource Planning and Analysis, reviewed the purpose and objective of the RPAG, and an overview of the meetings that have taken place since the Group began. She noted that the RPAG conducted a near-term recovery exercise, and at the last meeting, provided an analysis on credit stability for each AMA, discussed the intended purpose of AWBA storage, and stakeholders' current perspectives. She reported that good progress has been made on a framework for how credits will be distributed and recovered. Ms. Lohse said that any proposals brought to the RPAG will also be brought to the Board through the CAGRD Committee. She also noted that all RPAG meeting materials are available on ADWR's website.

In response to a question from Vice President Holway, Ms. Lohse clarified that RPAG is focused on AWBA stored credits. Vice President Holway requested a briefing on larger recovery issues and how infrastructure proposed for Pinal County agriculture under DCP could be used for recovery as well.

**4.d. WATER QUALITY STANDARDS TASK FORCE - ARBOLEDA/GODDARD**

Board Member Arboleda reported that the next meeting of the Task Force is on January 17, noting that a full list of the proposed numeric standards for the water quality standards will be posted to the CAP website in advance of the meeting.

**5. REPORT ON NOVEMBER 6-8, 2018 ARIZONA WATER PROTECTION FUND COMMISSION MEETING - JACOBS**

Board Member Jacobs reported on the November Commission meeting to review 23 grant applications. He noted that nine applications were approved, including one for research. He shared the full list of awards and funding.

**6. REPORT ON COLORADO RIVER CONDITIONS - CULLOM**

Chuck Cullom, Colorado River Programs Manager, provided an update on current Colorado River conditions. He provided the volumes of the major reservoirs within the system, noting that Lake Powell is nearing elevation 3575', which would trigger a reduction in releases from Lake Powell to Lake Mead that would, in turn, trigger shortage in Lake Mead. Mr. Cullom reported that system conservation from California and Nevada resulted in a higher than projected elevation in Lake Mead at the end of the water year. He also reported on snowpack conditions and the resulting inflow, which are lower than normal but improved over last year. Mr. Cullom also reported on the 90-day precipitation outlook.

In response to a question from Board Member Taylor, Mr. Cullom noted that each of the major reservoirs in Upper Basin are regulated to maintain the flow rate required to protect endangered species, and noted that the Bureau of Reclamation monitors what is actually in the reservoirs and how that affects the overall system.

**7. DISCUSSION AND POSSIBLE CONSIDERATION OF ACTION ON DROUGHT CONTINGENCY PLANNING - TICKNOR**

Suzanne Ticknor, Director of Water Policy, gave a presentation and answered questions from the Board. She reviewed the details of the Interim Mitigation Proposal approved at the November 15, 2018 Special Board Meeting, as well as the details of the Implementation Plan presented at the November 29, 2018 DCP Steering Committee. She also reviewed the actions taken at the December 6, 2018 Board meeting to support the DCP Implementation Plan and regarding signatures on the DCP agreements. Ms. Ticknor reported on the BOR Commissioner's announcement of a deadline of January 31, 2019 to complete the DCP at the Colorado River Water Users' Association Conference in December. She also shared the status of discussions that occurred since that time, which will be presented at the upcoming January 8, 2019 DCP Steering Committee meeting. She noted that potential legislative changes are being discussed, as well as an acceptable approach to the signature issue and ongoing discussion about groundwater infrastructure for Pinal County agriculture. Ms. Ticknor noted that the initial estimate for infrastructure is about \$30-\$35 million, with a commitment for new federal dollars of up to \$15 million subject to matching local funds, of which the Governor has committed to request \$5 million. She also said that ADWR is looking at repurposing groundwater fees, and Pinal Agriculture Districts have said they will commit money, in addition to anything CAP may contribute. Ms. Ticknor also reviewed upcoming meetings, including an ADWR public workshop on Arizona ICS exhibits, the January 8 DCP Steering Committee meeting, the start of the Legislative session on January 14 and a possible Special Session, and a tentative Special Meeting of the CAP Board on January 17 or January 24.



Secretary Megdal commented that she has heard that some customers were not aware that the Board's Interim Mitigation Proposal on November 15 contemplated funding for agriculture infrastructure, and noted that it has been discussed at subsequent meetings as well. She commented that assumed CAP would make a contribution to that package.

**Board Member Brown made a motion, seconded by Secretary Megdal, that the Board authorize the commitment of up to \$5 million in ad valorem taxes for the CAP Ag Pool Groundwater Infrastructure Program, subject to participation by other non-federal cost share partners and the development of a definitive program proposal.** In response to a comment from Board Member Goddard, Board Member Brown withdrew the motion so that the Board could hear the rest of Ms. Ticknor's presentation.

Board Member Arboleda asked for clarification on what is included in the Groundwater Infrastructure and Efficiency Program. Ms. Ticknor replied that the primary focus is on additional wet water supplies for the agriculture districts, but the details on the program are still being negotiated.

Board Member Lewis expressed concern about a potential legislative change to the water storage tax. He also expressed support for the partial repeal of WaterBUD. Vice President Holway expressed a preference for a very narrow scope of a partial repeal of WaterBUD.

Board Member Jacobs commented that no other public body has formally committed to provide money for DCP. Ms. Ticknor summarized the verbal commitments for funding made to date, noting that the DCP process is still unfolding and not yet complete. General Manager Ted Cooke agreed and reviewed the various items that the Steering Committee is still working on.

Secretary Megdal commented that there is a need to communicate the details of DCP to a broader audience and asked when the Board may have a special meeting to hear the details of the legislative proposals. President Atkins replied that the date will depend on the work of the Steering Committee.

Board Member Martin commented that she has heard from constituents that find it strange that CAP would contribute funds to groundwater infrastructure when CAP's role is to deliver Colorado River Water, and asked if there is clarity on where the funding would go. Ms. Ticknor replied that the groundwater infrastructure is aimed to provide water to agriculture users that will lose CAP water under DCP, and is an element of mitigation in the DCP Implementation Plan. Board Member Lewis provided details on CAP water stored in Pinal County, and noted that there is not currently a way to recover that water. Ms. Ticknor added that the infrastructure could be used for recovery as well, and that has been an important part of the discussions to date.

Several individuals submitted public testimony:

Tom Buschatzke, Director of ADWR, spoke and clarified details of Governor Ducey's funding commitment to DCP. He stated the purpose of reallocating the groundwater withdrawal fees to be used for agriculture infrastructure is to get additional water supplies of 70kaf and provided details on re-purposing those funds. He said that he views the use of CAP ICS for the SRP exchange to be one of the key elements of the DCP Implementation Plan. He also provided some details on the partial repeal of WaterBUD, and details of the January 7 public meeting on ICS exhibits. Mr. Buschatzke also shared information on AWBA credits in the Pinal AMA for M&I firming. Secretary Megdal commented that groundwater pumping in the Pinal AMA is consistent with the Groundwater Management Act and agriculture users have that right in perpetuity. Vice President Holway commented that the expense to recover water should be quantified and reflected in how risk is

distributed for the potential use of water storage tax funds for purchasing water from GRIC. He also commented that there may be a need for more long-range scenario planning for Pinal County.

Warren Tenney, AMWUA, spoke in support of the DCP Implementation Plan. He noted that it is a delicate compromise, and expressed concern with statements that more can be done for agriculture or developers, and that it could unravel the whole agreement. He noted that most of the ad valorem tax money comes from Maricopa County, which makes it hard to justify spending that money on agriculture infrastructure in Pinal County. Mr. Tenney said that he does support agriculture mitigation, but does not CAP spending more than the \$60 million already committed. Secretary Megdal commented that CAP has always considered contributing to the agriculture infrastructure and that she believed federal officials expect CAP to make a contribution. She also commented that recovery infrastructure is important for CAP to meet recovery obligations. In response to a question from Secretary Megdal, Ms. Ticknor clarified details of developer mitigation discussions. General Manager Cooke reminded the Board that they have already allocated \$10 million for recovery infrastructure in the past, and that AMWUA was supportive. Board Member Arboleda commented that providing certainty for Pinal agriculture users is an important piece of the overall DCP agreement, and it is in the interest of all users to make sure that the agreement moves forward. Mr. Tenney clarified that AMWUA's objection is to CAP spending money on groundwater infrastructure, not that infrastructure is part of the agreement. Ms. Ticknor stated that CAP could explore ways to designate any contributed funds to be used for recovery infrastructure. In response to a question from Board Member Jacobs, Ms. Ticknor stated that CAP is the recovery partner for AWBA for M&I firming and for interstate purposes, and credits have been stored in the Pinal AMA, and recovery of those credits could be used for a Phoenix AMA user.

Cynthia Campbell, City of Phoenix, spoke in support of the DCP implementation Plan and commented that questioning key terms will upset the balance and introduces uncertainty. She expressed concern that CAP is considering negotiations to key provisions or creating new provisions and urged that changes should happen publicly. Board Member Brown commented that the presentation today is consistent with what was approved in December, noting that the details currently being finalized were always part of the Plan and that CAP has conducted its discussions publicly and in support of the Steering Committee. Board Member Taylor commented that he hasn't seen or heard anything that indicates that the Board is straying away from anything it approved in December. Ms. Campbell referenced the SRP exchange for 50kaf and a second amount of 50kaf, as well as discussion on further developer mitigation. General Manager Cooke clarified that the additional 7kaf per year that Ms. Campbell referenced for developer mitigation would not be needed with the approval of the CAGR/GRIC/GRWS contract. Board Member Jacobs commented that the Board should be judged on their actions. Secretary Megdal expressed concern with the suggestion that the Board is doing something it is not, noting that there is not a proposed action of these items for today's meeting. Board Member Goddard clarified that there is no second amount of 50kaf, and that the SRP exchange has always been part of the agreement. Board Member Arboleda echoed the comments that the Board remains committed to its actions of the past couple of meetings. Vice President Holway commented that he agreed with Board Member Brown's remarks.

Paul Orme, general counsel to 4 CAP irrigation districts that combine to be 70% of Ag Settlement Pool, spoke to clarify some of the questions about the groundwater infrastructure program. He noted that agriculture has never agreed to the reduction in mitigation after 3 years. He stated that, by participating in the groundwater infrastructure program, CAP is actually providing far less money than it would if there was no drought and the Ag Pool continued. Mr. Orme also stated that the estimates for cost of the program will be closer to \$50 million. He said that the agriculture community is

discussing a contribution of \$5 million and requested that CAP contribute \$10 million over 2 years, noting that the cost sharing will help to secure federal funding. He said that he envisions the facilities to be shared for recovery purposes. In response to a question from Secretary Megdal, Mr. Orme said that he could recommend his clients support the DCP Plan if the local share for groundwater infrastructure is sufficient to have a good chance to obtain federal funding. In response to a question from Board Member Arboleda, Mr. Orme provided additional details on the scope of the Groundwater and Efficiency Infrastructure Program. Board Member Taylor requested additional details on the Program as they become available, and commented that water quality standards for the water should be taken into consideration as well. Vice President Holway expressed support for contributing to the groundwater infrastructure program and commented that if there are extra ad valorem tax funds, he prefers to reduce the tax rate.

In response to a question from Board Member Brown, Brian Betcher, Maricopa Stanfield Irrigation and Drainage District, provided details on why the cost estimate for the infrastructure program increased from \$30-35 million to \$50 million, noting that water is currently used mostly during a six-to-seven month period and the growers can currently order that water when needed. He stated that the well infrastructure will have less flexibility that will add costs, and that there is a risk in drilling wells that don't yield the amount of water anticipated

**Secretary Megdal made a motion, seconded by Board Member Lewis, that the Board authorize the commitment of up to \$5 million in ad valorem taxes for the CAP Ag Pool Groundwater Infrastructure Program, subject to participation by other non-federal cost share partners and the development of a definitive program proposal that incorporates the need for recovery infrastructure.**

Board Member Jacobs asked if the issue should be referred to FAP to identify a source of funding. General Manager Cooke clarified that taxes and rates are the only funding sources available, noting that using rates would upset the balance on the agreement. He also noted that there is no analysis on whether rates could be used for this purposed, but he is confident that taxes could be used. Secretary Megdal commented that customers would oppose using rates, and that there is not time to send the issue to FAP.

Board Member Taylor asked when the funds would be spent. Secretary Megdal commented that there is work to be done to finalize the details. General Manager Cooke added that the motion is subject to a definitive program proposal, which would determine when the funds would be allocated.

**Board Member Arboleda offered a friendly amendment to the motion refer to the program as "CAP Ag Pool Groundwater Infrastructure and Efficiency Program." The friendly amendment was accepted by Secretary Megdal and Board Member Lewis, and added to the motion.**

Board Member Brown clarified that the Board will have the opportunity to view the details of the Program as they are developed.

Vice President Holway expressed support for the motion, and commented that he wants to continue scrutiny of efficiency issues.

Board Member Jacobs expressed support for the motion.

Board Member Goddard expressed concern for this action, and explained that he will vote in favor of the motion because he views it as part of the larger DCP agreement. He commented that the original creation of CAP was a result of the depletion of the groundwater supply, and expressed concern that this program could result in groundwater depletion and should be carefully monitored.

Board Member Martin expressed opposition to the motion, noting that CAP should not be paying for infrastructure to pump groundwater and that pumping groundwater is an unintended step backward for water security. She also noted that the lifespan of the infrastructure will outlive the lifespan of DCP.

**On a motion (Secretary Megdal) and a second (Board Member Lewis), the Board authorized the commitment of up to \$5 million in ad valorem taxes for the CAP Ag Pool Groundwater Infrastructure and Efficiency Program, subject to participation by other non-federal cost share partners and the development of a definitive program proposal that incorporates the need for recovery infrastructure.**

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

*Voting no: Jennifer Martin*

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

No report for this agenda item.

**9. APPOINTMENT OF NOMINATING COMMITTEE - ATKINS**

President Atkins reminded the Board that officer elections will be held at the February Board meeting, and pursuant to the Board Bylaws, appointed a Nominating Committee to make recommendations for the Board officer and Executive Committee positions. She appointed Board Member Lewis as Chair of the Committee, and Board Members Hartdegen and Jacobs as members. She noted that the Committee will likely meet on January 17.

Board Member Lewis asked that Board Members with an interest in any of the open positions to submit an email to him with their interest and a sentence or two on why they want the position.

**10. DIRECTORS' REPORT ON CURRENT EVENTS**

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

**11. FUTURE AGENDA ITEMS**

None.

**12. PRESIDENT'S REPORT ON CURRENT EVENTS - ATKINS**

President Atkins presented an updated map showing outreach by Board members in 2018. She also shared photos from the CRWUA Annual Conference and the CAP Employee Steak Fry in December. She announced the suspension of the Excess Water Task Force, which has not met since January 2018, noting that any remaining issues surrounding excess water will be addressed by the full Board, and that the recommendations on expanded accounting, reporting and publication of information have already been implemented. President Atkins also closed out the service of Board Champions on Climate Adaptation, noting the conclusion of that process and thanking Vice President Holway and Board Member Brown for their work as Champions.

13. **GENERAL MANAGER'S REPORT ON CURRENT EVENTS - COOKE**

Mr. Cooke reported that there are no items to report on for the February consent agenda.

14. **PUBLIC COMMENT**

No additional public comment.

15. **CONSIDERATION OF ACTION TO GO INTO EXECUTIVE SESSION OF THE BOARD FOR THE FOLLOWING PURPOSES: PURSUANT TO A.R.S. §38-432.03.A.3, A.4 AND A.6, DISCUSSION, CONSULTATION AND CONSIDERATION OF NEGOTIATIONS RELATING TO DROUGHT CONTINGENCY, AND DISCUSSION AND CONSULTATION FOR LEGAL ADVICE AND TO CONSIDER ITS POSITION AND INSTRUCT THE DISTRICT'S ATTORNEYS REGARDING SUCH NEGOTIATIONS; AND PURSUANT TO A.R.S. §38-431.03.A.1 TO DISCUSS MATTERS PERTAINING TO THE GOALS AND PERFORMANCE 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**

Having no business to conduct, the Board did not convene in Executive Session.

16. **RECONVENE IN OPEN SESSION**

17. **CONSIDERATION OF ACTION REGARDING ITEMS DISCUSSED IN EXECUTIVE SESSION**

18. **ADJOURN**

There being no further business to come before the Board, the meeting adjourned at 2:40pm.

---

Sharon B. Megdal  
Board Secretary



**CENTRAL ARIZONA WATER CONSERVATION DISTRICT  
Nominating Committee  
January 17, 2019**

The meeting of the Central Arizona Project ("CAWCD" or "CAP") Nominating Committee was called to order by Chair Mark Lewis on January 17, 2019, at 09:13 AM. The meeting was held via teleconference.

Board members present were Mark Lewis, Maricopa County; Jim Hartdegen, Pinal County; and Pat Jacobs, Pima County.

Staff members present were Ted Cooke, General Manager; Bridget Schwartz-Manock, Director, Public Affairs; Kim Grouse, Senior Attorney; Megan Casey, Public Affairs Management Analyst; and Jennifer Miller, Board Support Specialist.

**1. REVIEW NOMINATION REQUESTS FOR BOARD OFFICER AND EXECUTIVE COMMITTEE POSITIONS - LEWIS**

Board Member Lewis asked members to review the statements of interest received by the Committee, noting that only one statement for each open officer position was received, and three statements for the Executive Committee.

**2. DISCUSSION AND CONSIDERATION OF ACTION TO RECOMMEND TO THE BOARD NOMINEES FOR BOARD OFFICERS AND EXECUTIVE COMMITTEE MEMBERS - LEWIS**

On a motion (Board Member Hartdegen) and a second (Board Member Lewis), the Nominating Committee recommended to the Board the following nominees for Board Officer positions: President: Lisa Atkins, Vice President: Terry Goddard, and Secretary: Sharon Megdal. Motion passed.

*Voting yes: Lewis, Hartdegen*

*Not present for vote: Jacobs*

Board Member Lewis noted that there are three Executive Committee positions open, one for Pinal County if desired. Board Member Hartdegen said that he would like to serve on the Executive Committee. Board Member Lewis noted that there is one at-large seat, and one seat for the Immediate Past President. Since the Immediate Past President is no longer on the Board, that seat will be elected at-large.

On a motion (Board Member Lewis) and a second (Board Member Hartdegen), the Nominating Committee recommended to the Board the following nominees for Executive Committee positions: Alexandra Arboleda, Jim Hartdegen and Mark Taylor. Motion passed.

*Voting yes: Lewis, Hartdegen*

*Not present for vote: Jacobs*

**3. PUBLIC COMMENT**

Board Member Jacobs joined the meeting after the votes. Board Member Lewis read the slate of nominees that was approved by the Committee. Board Member Jacobs commented that he supports the slate of nominees as approved by the Committee.

**4. ADJOURN**

Meeting adjourned at 9:21 a.m.

---

Mark Lewis  
Chair



**CENTRAL ARIZONA WATER CONSERVATION DISTRICT  
Water Quality Standards Task Force  
January 17, 2019**

A meeting of the Water Quality Standards Task Force ("Task Force") of the Central Arizona Water Conservation District's ("CAP" or "CAWCD") Board of Directors was called to order by co-Chairs Alexandra Arboleda and Terry Goddard on January 17, 2019, at 12:35 p.m. The meeting was held at the Central Arizona Project, 23636 North Seventh Street, Phoenix, Arizona, in the Board Room.

Task Force members present were Co-Chair Alexandra Arboleda, Maricopa County, Co-Chair Terry Goddard, Maricopa County; and Jim Hartdegen, Pinal County.

There were approximately 20 members of the public in attendance.

Staff Members present were Ted Cooke, General Manager; Bridget Schwartz-Manock, Director of Public Affairs; Suzanne Ticknor, Director of Water Policy; Kim Grouse, Senior Attorney; Ken Seasholes, Manager of Resource Planning and Analysis; Patrick Dent, Manager of Water Control; Megan Casey, Public Affairs Management Analyst; Jennifer Miller, Board Support Specialist; and Leslie Olsen, Executive Secretary.

The meeting was called to order at 12:35 p.m.

**1. CONSIDERATION OF ACTION TO APPROVE THE MAY 1, 2018 MINUTES OF THE WATER QUALITY STANDARDS TASK FORCE - ARBOLEDA/GODDARD**

On a motion (Board Member Hartdegen) and a second (Board Member Goddard), the approved the minutes of the May 1, 2018 Water Quality Standards Task Force. Motion passed.

*Voting yes: Arboleda, Goddard, Hartdegen*

**2. REVIEW OF THE APPROVED JUNE 7, 2018 CONSENSUS PROPOSAL FOR WATER QUALITY STANDARDS - SEASHOLES**

Ken Seasholes, Resource Planning and Analysis Manager, presented an overview of the consensus proposal and noted the central role of the delivery standards and the role of the Stakeholder Group. He noted that the proposal adopted a comprehensive approach that includes monitoring, modeling, data sharing, project evaluation and design, numeric standards, project approvals along with enforcement.

**3. DISCUSSION AND POSSIBLE CONSIDERATION OF ACTION ON DELIVERY AND INTRODUCTION STANDARDS FOR A BROAD SUITE OF WATER QUALITY CONSTITUENTS - DENT**

Patrick Dent, Water Control Manager, discussed the development of an expanded set of numeric water quality standards for a broader suite of constituents. He reported that a Water Quality Working Group was formed to review each constituent and their individual standards.



Mr. Dent shared that the group came up with a philosophy for the numeric criteria to maintain a consistent delivery supply of the CAP water and acknowledged that some mixing and blending would occur as water supplies were being introduced. He said the objective was to maintain a water supply that the end users would receive that is consistent with what they have seen historically in terms of water quality. He also reviewed the new standards table that CAP samples on a quarterly basis.

Several individuals submitted public testimony:

Brian Beisemeyer, Water Resources Director of City of Scottsdale, spoke in support of the motion, stating that the results from the Task Force are positive.

Peter Mock, Hydrologist representing the Gila River Indian Community, stated that he felt that a good workable process had been reached, and the hard work has yet to come for CAP staff.

Melody Lawyer, Planning Administrator for Tucson Water, spoke in support of the motion, stating that Tucson Water looks forward to assisting CAP for laying out the program and details.

Wally Wilson, Water Resource Manager for Metro Water District and on the behalf of the Southern Arizona Water Users Association, spoke in support of the motion, expressing gratitude for being able to participate in both the Stakeholder Group and working group that followed.

Warren Tenney, Director of Arizona Municipal Water Users Association, spoke in support of the motion, and expressed gratitude to the Task Force and staff that participated in getting to this point and their willingness to stay at the table and keep talking until all found something that worked. He added that the cities of AMWUA will continue to work with CAP staff as on the next steps.

**On a motion (Board Member Goddard) and a second (Board Member Hartdegen), recommended that the Board of Directors approve the Proposed Numeric Criteria for a Broad Suite of Water Quality Constituents. Motion passed.**

*Voting yes: Arboleda, Goddard, Hartdegen*

#### **4. NEXT STEPS**

Chair Arboleda stated that, after reviewing the objectives that were set for the Task Force, the Co-Chairs believe that the adoption of the expanded list of numeric criteria successfully completes the work of the Task Force. She expressed appreciation to staff and stakeholder for the commitment of time and effort. She invited Mr. Dent to discuss the implementation work and next steps.

Mr. Dent presented the expansion of the existing CAP water quality monitoring program and the further development of implementation guidelines by establishing procedures and practices of monitoring and reporting. He noted that the Bureau of Reclamation will engage with their consultation process with the Tribes and CAP will support the process as needed. He also discussed the newly formed Water Transmission Group at CAP. Mr. Seasholes reviewed the process that will take place to allow non-project water into the CAP system going forward.

Jim Beadnell, Bureau of Reclamation, discussed the next steps for the Bureau, which include a tribal consultation process. He indicated that the development of the expanded list of standards was a positive step, and that Reclamation would continue to work with CAP staff to further refine the standards and processes as necessary.

**5. PUBLIC COMMENT**

No additional public comment.

**6. ADJOURN**

There being no further business to come before the Task Force, the meeting adjourned at 1:41 p.m.

---

Alexandra Arboleda  
Co-Chair

---

Terry Goddard  
Co-Chair



**CENTRAL ARIZONA WATER CONSERVATION DISTRICT  
SPECIAL MEETING OF THE BOARD OF DIRECTORS  
January 24, 2019**

The Special Meeting of the Central Arizona Project ("CAWCD" or "CAP") Board of Directors was called to order by President Lisa Atkins on January 24, 2019, at 10:08 AM. The meeting was held at Central Arizona Project Headquarters, located at 23636 North Seventh Street, Phoenix, Arizona, in the Board Room.

Board members present were President Lisa Atkins, Maricopa County; Vice President Jim Holway, Maricopa County; Secretary Sharon Megdal, Pima County; Alexandra Arboleda, Maricopa County; Jennifer Brown, Maricopa County; Karen Cesare, Pima County; Benjamin Graff, Maricopa County; Jim Hartdegen, Pinal County; Pat Jacobs, Pima County; Mark Lewis, Maricopa County; Heather Macre, Maricopa County; Jennifer Martin, Maricopa County (*via teleconference*); and Mark Taylor, Pima County.

Staff members present were Ted Cooke, General Manager; Tom McCann, Deputy General Manager; Jay Johnson, General Counsel; Bridget Schwartz-Manock, Director, Public Affairs; Phil Cook, Director, Technology; Brian Buzard, Director Centralized Maintenance and Reliability; Chris Hall, Director, Finance & Administration; Suzanne Ticknor, Director, Water Policy; Chuck Cullom, Manager, Colorado River Programs; Jeff Gray, Manager, Legislative Affairs; Megan Casey, Public Affairs Management Analyst; and Jennifer Miller, Board Support Specialist.

President Atkins commended the CAWCD Board on its consistent leadership in championing a Drought Contingency Plan (DCP) since 2016. She expressed appreciation to CAP General Manager Ted Cooke and ADWR Director Tom Buschatzke for their leadership of the DCP Steering Committee to reach a consensus on the framework for the Arizona DCP Implementation Plan, noting the open and transparent process of the Steering Committee and the work of all the members. She reiterated her appreciation for the work of the CAWCD Board and noted that CAWCD has the opportunity to be the first agency to formally support legislation to implement DCP in Arizona.

**1. REPORT ON SPECIAL PUBLIC POLICY COMMITTEE MEETING - CESARE**

Board Member Cesare shared an update from the January 24 Special Meeting of the Public Policy Committee, noting that the Committee reviewed the draft legislative language for a DCP Legislative Package and a DCP Joint Resolution. She noted that CAWCD and ADWR have been working hard to finalize these drafts, and that CAP staff will be carefully tracking the legislation and will ensure the Board is aware of any substantive changes from the drafts reviewed at the meeting. She noted that the Committee recommends that the Board support both the DCP Legislative Package and the DCP Joint Resolution.

**1.a. DISCUSSION AND CONSIDERATION OF ACTION ON DROUGHT CONTINGENCY  
PLANNING DRAFT LEGISLATION - GRAY**

Jeff Gray, Legislative Affairs Manager, reviewed the details of the DCP Legislative Package, which includes five issues:

1. AWBA Credit Exchange, which provides authorization for Arizona Water Banking Authority (AWBA) to exchange some of its existing credits between Active Management Areas (AMAs) and allow ADWR to waive transfer fees through 2026.
2. Managed Recharge and Effluent, which increases accrual of long-term storage credits (LTSCs) for managed recharge from 50% to 95%, allowing those credits to be applied to assured water supply determinations, and extending ability to accrue LTSC for effluent beyond 2025. Chuck Cullom, Colorado River Programs Manager, provided potential volumes for the various locations. Vice President Holway commented that he sees this issue as a significant change to groundwater management, and he would like to see it limited to the term of the DCP agreement. He noted that he would like to have the recommendation split for each issue and suggests the Board take a neutral position on this issue. Secretary Megdal and Board Members Cesare and Taylor each commented that the issues are a package and should not be separated. Board Member Jacobs commented that he supports this issue because it puts water back into the aquifer.
3. Limited repeal of WaterBUD, which would allow for a limited exemption if water is stored in a groundwater savings facility and the ADWR Director determines that storage provides a water management benefit to the AMA where the water was stored.
4. Groundwater and Irrigation Efficiency Project Fund, which creates a temporary Fund (through 2026) within ADWR 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 irrigation districts in the Pinal AMA and the Harquahala Irrigation non-expansion area. It includes a \$5 million General Fund appropriation and the repurposing of the Pinal withdrawal fee for groundwater infrastructure in the Pinal AMA. Board Member Lewis commented that he hesitates to support this issue without future funding identified.
5. Arizona System Conservation Fund, which includes a \$30 million General Fund appropriation and gives ADWR the authority to act as the fiscal agent for contributions by non-governmental organizations through 2026.

Mr. Gray also reviewed the details of the DCP Joint Resolution, which authorizes the ADWR to sign the DCP agreements on behalf of Arizona. In response to a question from Board Member Lewis, Mr. Cooke said that the DCP agreement contains a provision for mutual forbearance among the contractors in the Lower Basin States to not take intentionally created surplus (ICS) created by another state, identical to what was included in the 2007 Guidelines, with no allowance for interstate transfers of credits.

Several individuals submitted public testimony:

Tom Buschatzke, Director of ADWR, spoke in support of the DCP Legislative Package and Joint Resolution. He expressed appreciation for the work that CAWCD staff has done alongside ADWR and noted that the outcome is a good compromise. He provided clarification of some of the details included in the Package. Board Member Lewis expressed appreciation

to Mr. Buschatzke and Mr. Cooke for their work on the DCP. Mr. Buschatzke noted that CAWCD's commitment of funding was a key moment during negotiations that led to the momentum to reach a consensus. In response to a question from Vice President Holway, Mr. Cooke said that CAWCD and ADWR have come to an agreement on the signature issue that allows both entities to preserve their positions for the future. Mr. Buschatzke added that the Joint Resolution language is neutral on the signature issue, and both organizations are conceptually on the same page, with attorneys working on the formal agreements.

Joshua Rees, Acting Attorney General for Tohono O'odham Nation, spoke to clarify facts about effluent credits. He noted that the effluent credits that the Bureau of Reclamation receives may only be used to fulfill their firming obligation to the Tohono O'odham Nation. He commented that the proposed change to state law would significantly increase the Bureau's ability to fulfill that obligation.

Several individuals spoke in support of the draft DCP Legislative Package and the DCP Joint Resolution, and expressed appreciation for the work of CAWCD and ADWR:

- Wade Noble, Coordinator for Yuma County Agriculture Coalition. Mr. Noble also noted that the Coalition will not support any changes to the draft language.
- Chris Kuzdas, EDF/Water for Arizona Coalition
- Colette Moore, SRP
- Patrick Cunningham, Mohave County and Mohave County Water Authority
- Andrew Greenhill, City of Tucson
- Cynthia Campbell, City of Phoenix
- Cheryl Lombard, Valley Partnership
- Brett Fleck, AMWUA
- Doug Dunham, EPCOR USA
- Brian Biesemeyer, City of Scottsdale Water

Paul Orme, General Counsel to four Pinal County irrigation districts, spoke in support of the DCP Joint Resolution and the vast majority of the DCP Legislative Package. He noted that his clients still have concerns about the Groundwater and Irrigation Efficiency Project Fund, and what happens if the federal funding component for the infrastructure doesn't come through. He noted that, without that infrastructure, Pinal County agriculture won't receive anywhere near the mitigation included in the DCP Implementation Plan. Mr. Orme expressed appreciation for the work of CAWCD and ADWR.

Board Member Martin explained her vote, noting her opposition to the DCP Legislative Package. She commented that she doesn't think CAWCD should take a position. She noted that she doesn't think this plan represents a good direction for water management in the State of Arizona.

Vice President Holway explained his vote, noting that he will abstain on voting on the DCP Legislative Package. He commented that he does not want to oppose the Package, but remains concerned about the groundwater management elements.

**On a motion (Board Member Cesare) and a second (Board Member Lewis), the Board adopted a position of support on the DCP Legislative Package, including the five items discussed today.** Motion passed.

*Voting yes: Lisa A. Atkins, Sharon B. Megdal, Alexandra Arboleda, Jennifer Brown, Karen Cesare, Benjamin W. Graff, Jim Hartdegen, Pat Jacobs, Mark Lewis, Heather A. Macre, Mark Taylor*

*Voting no: Jennifer Martin*

*Abstaining: Jim Holway*

**On a motion (Board Member Cesare) and a second (Board Member Lewis), the Board adopted a position of support on the DCP Joint Resolution.** Motion passed.

*Voting yes: Lisa A. Atkins, Sharon B. Megdal, Alexandra Arboleda, Jennifer Brown, Karen Cesare, Benjamin W. Graff, Jim Hartdegen, Jim Holway, Pat Jacobs, Mark Lewis, Heather A. Macre, Jennifer Martin, Mark Taylor*

**2. DISCUSSION AND POSSIBLE CONSIDERATION OF ACTION REGARDING TERM SHEETS AND DRAFT AGREEMENTS RELATING TO DROUGHT CONTINGENCY PLANNING ISSUES, INCLUDING MITIGATION, ICS AND SIGNATURE - JOHNSON/ADAMS**

Jay Johnson, General Counsel, gave an update on the status of 15 draft agreements relating to the DCP process, noting that the agreements are not yet ready for consideration of action by the Board. He provided an update on four outstanding issues that were reviewed at the January 8, 2019 DCP Steering Committee meeting. Mr. Johnson reported on the current status of negotiations, noting that ADWR and CAWCD and many others are working to finalize the agreements necessary to implement DCP in Arizona by the January 31 deadline. He further noted that CAWCD is not a party to all 15 agreements, just the first eight.

Greg Adams, Senior Attorney, reviewed the first six agreements:

1. Arizona Implementation Agreement, which ties together all the agreements necessary to implement DCP in Arizona. The draft is in the early stages and still under negotiation.
2. CAP Ag Mitigation Program Agreement, which is a detailed term sheet of the program. He noted it has been discussed with all the parties and is close to final.
3. CAP NIA Mitigation Agreement, which is a detailed term sheet of the program. He noted good progress has been made and the elements are still under discussion.
4. CAWCD-SRP Exchange Agreement, which exchanges 50kaf of SRP water for CAWCD ICS as part of the offset program. He noted that the agreement has been drafted and the details of repayment are still under discussion.
5. Arizona ICS Framework Agreement, which develops a program for the creation, accumulation and delivery of ICS by Arizona Section V contractors, on-river contractors and CAP settlement tribes as part of the offset program and includes CAP forbearance of right to ICS created by others.

6. CRIT System Conservation Agreement, which is related to the legislation providing state funding for up to 150kaf of CRIT water and requires CAP forbearance. He noted that the agreement has not yet been drafted.

Mr. Johnson reviewed the remaining agreements, noting that agreements 7-8 are related to the resolution of the signature issue:

7. US Agreement with CAWCD regarding Lower Basin DCP Obligations, which CAP will enter into with the US for mutual enforcement of obligations.
8. CAWCD-ADWR Exchange of Letters, which CAP will enter into with ADWR where both retain their respective legal arguments for the future, and that this temporary solution will not create precedent going forward.

Mr. Johnson noted that agreements 9-11 are related:

9. GSF-GSF Agreement, which relates to the limited repeal of WaterBUD to allow EPCOR to store water in the Pinal County AMA with permission of the ADWR Director.
10. USF-GSF Agreements, which allows Maricopa County users to exchange LTSCs with Pinal County users.
11. AWBA Recovery Agreements, which facilitates recovery of LTSCs.

Mr. Johnson stated that agreements 12-13 are related as part of the offset program:

12. US-GRIC "Pre-Firming" Agreement, which provides funds to GRIC to create ICS to be used for US firming obligations to the Tohono O'odham Nation.
13. AWBA-GRIC "Pre-Firming" Agreement, which provides AWBA payments to GRIC to create ICS to satisfy a portion of the AWBA firming obligations.

Mr. Johnson reviewed agreements 14-15 related to the Interstate DCP Agreements:

14. Interstate ICS Borrowing Capacity Agreement, which allows a state that has reached its ICS capacity to create more capacity by borrowing from another state.
15. Interstate Aggregate ICS Capacity Agreement, which allows entities in Nevada and California to make ICS accumulation space available to contractors in Arizona.

In response to a question from Board Member Lewis, Mr. Cullom gave an update on the status of other Lower Basin States on implementing Interstate and Intrastate agreements related to DCP.

### **3. NEXT STEPS**

President Atkins noted that the Board may have another special meeting on January 31 if needed.

### **4. PUBLIC COMMENT**

No additional public comment.

5. **CONSIDERATION OF ACTION TO GO INTO EXECUTIVE SESSION OF THE BOARD FOR THE FOLLOWING PURPOSES: PURSUANT TO A.R.S. §38-432.03.A.3, A.4 AND A.6, DISCUSSION, CONSULTATION AND CONSIDERATION OF NEGOTIATIONS RELATING TO DROUGHT CONTINGENCY PLANNING AGREEMENTS, AND DISCUSSION AND CONSULTATION FOR LEGAL ADVICE AND TO CONSIDER ITS POSITION AND INSTRUCT THE DISTRICT'S ATTORNEYS REGARDING SUCH NEGOTIATIONS AND AGREEMENTS; 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**

None.

6. **RECONVENE IN OPEN SESSION**

None.

7. **CONSIDERATION OF ACTION REGARDING ITEMS DISCUSSED IN EXECUTIVE SESSION**

None.

8. **ADJOURN**

There being no further business to come before the Board, the meeting adjourned at 12:13 p.m.

---

Sharon B. Megdal  
Board Secretary



# ACTION BRIEF

## BOARD OF DIRECTORS



### Agenda Number 3.e.

**CONTACT:** Suzanne Ticknor                      Laura Grignano  
623-869-2410                                      623-869-2113  
sticknor@cap-az.com                              lgrignano@cap-az.com

**MEETING DATE:** Thursday, February 7, 2019

**AGENDA ITEM:** Consulting Agreement for CAGR Water Supply Acquisition Program Professional Services - Ticknor/Grignano

**RECOMMENDATION:** Staff recommends that the Board approve the award of contract between CAWCD and WestWater Research LLC for professional consulting services for the CAGR Water Supply Acquisition Program and authorize the General Manager to execute the contract in an amount not to exceed \$235,000.

---

#### **FISCAL IMPLICATIONS:** Yes

##### **Impact on Budget:**

The fund request of \$235,000 is already included in the 2019 CAGR budget.

Additional spending authority requested: None.

##### **Impact on Reserves:**

No additional impact on CAGR Reserves.

##### **Impact on Rates:**

No additional impact on CAGR Rates. These services are incorporated in the current rate schedule.

---

#### **LINKAGE TO STRATEGIC PLAN, POLICY, STATUTE OR GUIDING PRINCIPLE:**

- 2016 CAWCD Board of Directors Strategic Plan
  - Replenishment: Obtain sufficient water supplies to meet replenishment obligation
  - Replenishment: Review CAGR status as compared to projections in the Plan of Operation
- A.R.S. 45-3771 et seq. - CAGR requirement to replenish groundwater to meet obligations and authority to acquire water supplies

#### **PREVIOUS BOARD ACTION/ACTIVITY:**

11/2/2017	Approval of the CAWCD 2018-2019 Biennial Budget which included funding for this contract.
3/03/2016	Award of contract to WestWater Research LLC for professional consulting services. Current contract through March 2019 after 2 no-cost extensions.
8/07/2014	Award of contract to WestWater Research LLC for professional consulting services.
9/06/2012	Award of contract to WestWater Research LLC for CAGR Water Supply Acquisition Program Implementation Plan consulting services.
3/03/2011	Award of contract for CAGR Water Supply Acquisition Program Study.

**ISSUE SUMMARY/DESCRIPTION:**

In March 2011, after issuing a Request for Proposal (RFP No. C1082) that solicited proposals for Water Supply Acquisition Consulting Services, the CAWCD Board authorized CAGRD to conduct a Water Supply Acquisition Study and awarded a professional services contract to Montgomery & Associates and their subcontractor WestWater (WW) Research LLC to perform this work.

The results of the Water Acquisition Supply Study were presented to the Board in April of 2012 and in June of that same year, CAGRD staff provided a business plan to the Board that included organization restructuring with the addition of newly dedicated CAGRD staff, exclusively to water acquisition, supplemented by outside professional consulting services to provide technical support in specialized areas where CAP lacked in-house expertise. This plan laid the foundation for CAGRD's Water Supply Program (WSP) as it is known today.

WW was subsequently awarded contract C1248 in September 2012 to provide services supporting the initial implementation of the WSP. Their specialized knowledge of Arizona's emerging water market, full service support staff plus their familiarity with the CAGRD/CAWCD staff and management made them uniquely qualified to continue supporting the acquisition program.

Since September 2014, WW has been awarded 2 additional consecutive contracts (C1461 and C1620), spanning 19 and 36 months respectively (includes several no-cost extensions) for a combined total cost of approximately \$2.2 M. In large part, due to WW's technical expertise and support, CAGRD has completed numerous transactions that have significantly increased the quantity and diversity of CAGRD's supply portfolio. Since the inception of the WSP, the contract and associated scope of work (SOW) for WW has remained relatively unchanged.

Over the last seven years, working closely with WW staff, CAGRD WSP staff have gained valuable experience in water acquisitions such as acquisition strategic planning, negotiations and transactional experience. With WW's current contract expiring in March of 2019 and WSP staff established and more experienced, it appears to be a good time to reevaluate and restructure the contract SOW and to reduce the "not to exceed" contract cost from previous contracts.

Primary objectives of this restructuring are to transition more of the long term acquisition planning tasks and responsibilities from WW to WSP staff, while maintaining our relationship with WW to advise and support WSP staff on complex transactions and economic analysis when needed as well as provide bi-annual market updates on Arizona water market trends.

The total cost of services under the requested annual contract will not exceed \$235,000 and is invoiced on an hourly basis for the actual services completed. The average hourly billing rate in 2019 remains identical to the 2018 and 2017 hourly rates and will be based on the actual hours worked by administrative, professional/technical and senior staff level staff. The contract term is from March 1, 2019 through February 29, 2020.

**SUGGESTED MOTION:**

I move that the Board approve the award of contract between CAWCD and WestWater Research LLC for professional consulting services for the CAGRD Water Supply Acquisition Program and authorize the General Manager to execute the contract in an amount not to exceed \$235,000.

**ATTACHMENTS:**

1. C83038 – CAGRD Water Supply Acquisition Program

# CONTRACT NO. C83038

## PROFESSIONAL SERVICES CONTRACT

This Contract is entered into as of March 1, 2019 by and between WestWater Research LLC., herein referred to as the "Consultant" and Central Arizona Water Conservation District herein referred to as CAWCD.

### ARTICLE 1 DESCRIPTION OF SERVICES

The Consultant shall provide professional services for the CAGRD Water Supply Acquisition Program as described the attached Scope of Work (ATTACHMENT A).

### ARTICLE 2 TERM OF THE CONTRACT

This Contract is effective on the date written above and shall remain in effect until February 29, 2020.

### ARTICLE 3 PAYMENT FOR SERVICES

The Consultant shall submit to CAWCD invoices for charges payable in accordance with the items and terms specified in this Contract. Each invoice shall be identified with CAWCD's contract number and shall be itemized to reflect the services performed.

The total cost of services shall not exceed \$235,000. Payment will be made based on an hourly basis (hourly rate as per Rate Schedule below; plus reasonable travel expenses) for services rendered.

Rate Schedule

Personnel	2019 Hourly Rates	2020 Hourly Rates
Managing Directors	\$285	\$285
Principals	\$242	\$242
Sr. Associates	\$195	\$195
Associates	\$105	\$105
Analysts	\$85	\$85
GIS Analyst and Data Management	\$110	\$110
Administrative and Support Staff	\$73	\$73

All invoices shall be paid on a Net 30 basis upon receipt of an accurately prepared invoice and must be emailed to the following address: [invoices@cap-az.com](mailto:invoices@cap-az.com). A 1% discount will be credited to the monthly invoice amount if paid within 10 days of receipt by CAWCD.

## **ARTICLE 4 STANDARD OF PERFORMANCE**

The Consultant shall perform all services in accordance with industry standards of care, skill, diligence, practices, and procedures customarily followed by a professional in the performance of the same or similar services.

Prior to entering into an agreement with a new client that could pose potential conflict of interest with CAWCD, the Consultant must provide CAWCD written notice of its intent to enter into the agreement.

## **ARTICLE 5 COMPLIANCE WITH LAWS**

The Consultant agrees to comply with all applicable federal, state and local laws, statutes, ordinances, codes, and regulations, including all licensing requirements that are in effect at the time the services are performed under this Contract.

## **ARTICLE 6 INSURANCE**

### **REQUIREMENTS:**

Consultant and subcontractors shall procure and maintain insurance against claims for injury to persons or damage to property which may arise from or in connection with the performance of the work hereunder by the Consultant, his agents, representatives, employees or subcontractors, until all of their obligations have been discharged, including any warranty periods under this Contract are satisfied.

The insurance requirements herein are minimum requirements for this Contract and in no way limit the indemnity covenants contained in this Contract. CAWCD in no way warrants that the minimum limits contained herein are sufficient to protect the Consultant from liabilities that might arise out of the performance of the work under this contract by the Consultant, its agents, representatives, employees or subcontractors, and Consultant is free to purchase additional insurance.

**NOTICE OF CANCELLATION:** Each insurance policy required by the insurance provisions of this Contract shall provide the required coverage and shall not be suspended, voided, canceled, or reduced in coverage or in limits except after thirty (30) days prior written notice has been given to CAWCD. Such notice shall be sent directly to **(Central Arizona Water Conservation District, Risk and Insurance Administrator, P. O. Box 43020, Phoenix, AZ 85080-3020).**

**ACCEPTABILITY OF INSURERS:** Insurance is to be placed with duly licensed or approved non-admitted insurers in the state of Arizona with an "A.M. Best" rating of not less than A- VII. The Central Arizona Water Conservation District in no way warrants that the above-required minimum insurer rating is sufficient to protect the Consultant from potential insurer insolvency.

**VERIFICATION OF COVERAGE:** Consultant shall furnish the Central Arizona Water

Conservation District with certificates of insurance (ACORD form or equivalent) as required by this Contract. The certificates for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf.

All certificates and endorsements are to be received and approved by the Central Arizona Water Conservation District before work commences. Each insurance policy required by this Contract must be in effect at or prior to commencement of work under this Contract and remain in effect for the duration of the project. Failure to maintain the insurance policies as required by this Contract, or to provide evidence of renewal, is a material breach of contract.

All certificates required by this Contract shall be sent directly to **(Central Arizona Water Conservation District, Risk & Insurance Administrator, P. O. Box 43020, Phoenix, AZ 85080-3020)**. The Contract number and Contract description shall be noted on the certificate of insurance. The Central Arizona Water Conservation District reserves the right to require complete, certified copies of all insurance policies required by this Contract at any time.

**SUBCONTRACTORS:** Consultant's certificate(s) shall include all subcontractors as insured's under its policies or Consultant shall furnish to the Central Arizona Water Conservation District separate certificates and endorsements for each subcontractor. All coverage's for subcontractors shall be subject to the minimum requirements identified above.

**APPROVAL:** Any modification or variation from the **insurance requirements** in this Contract shall be made in writing as a formal Contract amendment.

**EXCEPTIONS:** In the event the Consultant or sub-contractor(s) is/are a government entity, then the **Insurance Requirements** shall not apply. Such government entity shall provide a Certificate of Self-Insurance.

**A. MINIMUM SCOPE AND LIMITS OF INSURANCE:** Consultant shall provide coverage with limits of liability not less than those stated below.

**1. Commercial General Liability – Occurrence Form**

Policy shall include bodily injury, property damage, personal injury and broad form contractual liability coverage.

- General Aggregate \$ 2,000,000
- Products – Completed Operations Aggregate \$ 2,000,000
- Personal and Advertising Injury \$ 1,000,000
- Blanket Contractual Liability – Written and Oral \$ 1,000,000
- Fire Legal Liability \$ 50,000
- Each Occurrence \$ 1,000,000

- a. Using form CG 2010 (10/01) and CG 2037 (10/01), or equivalent, the policy shall be endorsed to include the following **Additional Insured** language: **“Central Arizona Water Conservation District**, its officers, directors, employees, agents and consultants, and each and any of them shall be named as **Additional Insured** with respect to liability arising out of the activities performed by or on behalf of the Consultant.”
- b. The policy shall be endorsed with Aggregate Limits of Insurance CG

2504 or 2503 as appropriate on the Commercial General Liability policy.

2. **Automobile Liability**

Bodily Injury and Property Damage for any owned, hired, and/or non-owned vehicles used in the performance of this Contract.

Combined Single Limit (CSL).....\$ 1,000,000

3. **Worker's Compensation and Employers' Liability**

Workers' Compensation..... Statutory

Employers' Liability

Each Accident ..... \$ 1,000,000

Disease – Each Employee ..... \$ 1,000,000

Disease – Policy Limit ..... \$ 1,000,000

a. Policy shall contain a **waiver of subrogation** against the Central Arizona Water Conservation District, its officers, directors, employees, agents and consultants for losses arising from work performed by or on behalf of the Consultant.

b. This requirement shall not apply to: Separately, EACH Consultant or subcontractor exempt under A.R.S. 23-902, AND when such Consultant or subcontractor executes the appropriate waiver (**ARS.23-961(P) Sole Proprietor/Independent Consultant**) form.

4. **Professional Liability (Errors and Omissions Liability)**

Each Claim ..... \$ 1,000,000

Annual Aggregate ..... \$ 2,000,000

a. In the event that the professional liability insurance required by this Contract is written on a claims-made basis, **Consultant warrants that any retroactive date under the policy shall precede the effective date of this Contract**; and that either continuous coverage will be maintained or an extended discovery period will be exercised for a period of two (2) years beginning at the time work under this Contract is completed.

b. The policy shall cover work included in the Scope of Work of this Contract.

5. **Commercial Umbrella or Excess Liability – occurrence form**

Each Occurrence.....\$ 1,000,000

a. ***This coverage is optional. It may be used in conjunction with underlying coverage to meet the minimum limits as outlined above.***

**ARTICLE 7  
INDEMNIFICATION**

To the extent permitted by law, Consultant shall indemnify and hold harmless the United States of America, CAWCD and its directors, officers, other agents and employees against all liability, losses, damages, costs, charges, expenses, including reasonable attorneys'

fees, claims, demands and causes of action, based upon or arising out of any injury (including death) or damage to any persons or property, which the United States of America, CAWCD or its directors, officers, agents or employees may incur or be subjected to as a result of any negligent acts in connection with the project. The indemnity provided herein shall survive the termination of the Contract.

To the extent permitted by law, CAWCD shall indemnify and hold harmless the Consultant and its directors, officers, other agents and employees against all liability, losses, damages, costs, charges, expenses, including reasonable attorneys' fees, claims, demands and causes of action, based upon or arising out of any injury (including death) or damage to any persons or property, which the Consultant or its directors, officers, agents or employees may incur or be subjected to as a result of any negligent acts in connection with the project or reuse of product for any project not connected with this Contract. The indemnity provided herein shall survive the termination of the Contract.

## **ARTICLE 8 OWNERSHIP OF DOCUMENTS**

A. Except as otherwise provided in this Article 8, all Work Product produced and delivered by Consultant in the performance of this Contract, including confidential information provided to the Consultant by CAWCD, is the property of CAWCD. Work Product is defined as those items identified as "program planning and technical support", "acquisition and transaction services" and "research and economic support" in the project scope of work, and project performance reporting, can be electronic or hard copy, and includes, but is not limited to, any drawings, tables, survey data, reports, studies, specifications, estimates, maps, computations, databases and other similar documents specified in the project scope of work. All Work Product apart from Background Technology (as defined below) prepared and delivered by the Consultant in the performance of this Contract may not be used by the Consultant for the purposes of other clients without the prior written approval of CAWCD. However, Consultant may retain copies of such materials for information and reference in connection with the work performed under this Contract.

B. CAWCD acknowledges and agrees that Consultant and its subcontractors possess special knowledge in the area of water resource development and water valuation and that the Consultant, and its subcontractors, have expended and continue to expend, as part of their general business practice, significant time and expense in developing certain proprietary and confidential information and technology, referred to herein as "Background Technology," and more fully defined below. The parties further acknowledge and agree that Work Product may comprise, contain or have incorporated into it elements of Background Technology to render it usable for CAWCD's purposes. Notwithstanding the presence or incorporation of Background Technology in any Work Product delivered under this Contract, the parties agree that, as between themselves, Background Technology is the sole and exclusive property of Consultant and, as appropriate, its subcontractors, and that CAWCD has no interest in or any right with regard to any Background Technology except as expressly provided in the immediately following sentence. The Consultant, on behalf of itself and its subcontractors, hereby grants CAWCD a royalty-free, irrevocable license and right to use, modify, and make derivative works of any and all Background Technology contained in, integrated with or comprising any Work Product delivered under



this Contract, except for that Background Technology delivered hereunder that comprises the water transactions database (the "Special Background Technology"). With respect to the Special Background Technology, the Consultant, on behalf of itself and its subcontractors, hereby grants CAWCD a royalty-free, limited license and right to use the Special Background Technology, which license will expire upon the expiration or earlier termination of this Agreement. The foregoing rights and licenses do not include any right or license to reproduce, distribute, transfer, share, disclose, or sell any Background Technology or any products made using any Background Technology nor any right to use the Background Technology to provide to any third party services of the kind generally provided by Consultant and its subcontractors. Any use of Background Technology beyond the rights and licenses expressly granted to CAWCD hereunder requires a separate written license agreement.

C. "Background Technology" means any and all drawings, data, databases, analyses, reports, inventions, know-how, trade secrets, designs, methods, expressions, applications, software, software programs, software tools, system files, flow diagrams, file structures, database architecture, internal program structures, operating system software and architecture: (a) that existed before the date of this Contract; (b) that are developed outside the work under this Contract; or (c) created or used by Consultant or subcontractors, in the course of the work under this Contract but that have general application in providing services of the type performed by Consultant or its subcontractors and are not specific to CAWCD, CAWCD's business strategies, or its use of the Work Product delivered under this Contract and do not contain any information pertaining to CAWCD or obtained only from CAWCD. Background Technology includes the right to use or register any of the foregoing, owned or controlled (in the sense of being able to grant licenses to others to use) by Consultant or any third party, including its subcontractors. Background Technology is deemed confidential information of Consultant for purposes of this Contract and subject to protection as provided in Section 11.D below.

D. This Article shall survive the termination of this Contract.

## **ARTICLE 9 TERMINATION**

The CAWCD or Consultant may terminate this Contract at any time upon ten (10) calendar days advance written notice. In the event of termination, Consultant shall be compensated for services and CAWCD shall be provided with all Work Product performed hereunder up to the termination date.

## **ARTICLE 10 CHANGES**

Unless modified in writing and agreed to by both parties, the Consultant's services shall be limited to those specifically set forth in the Contract. If, during the course of the performance of this Contract, CAWCD and the Consultant agree to changes in the services to be rendered, such changes shall be incorporated into this Contract by Contract modification.

## **ARTICLE 11 CONFIDENTIALITY**

- A. The Both Parties acknowledge that CAWCD is a multi-county water conservation district and political subdivision of the state of Arizona organized pursuant to A.R.S. §48-3701 et seq. and as such, must comply with the Arizona Public Records laws pursuant to A.R.S. §39-101 et seq.
- B. Notwithstanding the Arizona Public Records Law, the Parties agree that the Work Product prepared pursuant to this Contract contains information that if released to the public could cause substantial harm to CAWCD or Consultant or place either CAWCD or Consultant at a competitive disadvantage. Therefore, neither Party, except as ordered by a court of competent jurisdiction, may release, distribute or allow inspection by any third party of the Work Product (including any Background Technology comprising, contained in or integrated with that Work Product) or any other work or documents prepared and delivered pursuant to this Contract. The Consultant must promptly notify CAWCD in writing of any written third party requests for confidential information during the course of this Contract or any prior contracts related to the CAGR Water Supply Acquisition Program or for twelve months thereafter, including any term extensions or renewals of this Contract.
- C. All information provided to Consultant by CAWCD that CAWCD believes to be confidential must be clearly marked "Confidential to CAWCD", and Consultant must keep such information confidential unless it falls within the exceptions provided below in Paragraph F of this Article 11. All information and documents produced by the Consultant under this Contract that CAWCD, in its sole discretion, deems to be confidential information must be clearly marked "Confidential". The Consultant agrees and shall require all of its employees, agents, representatives, assignees, subcontractors or other persons having an interest or duty in this Contract to hold in strict confidence, and not to use or disclose or permit the use or disclosure of, directly or indirectly, to any third party, any confidential information obtained from CAWCD, provided to CAWCD or generated in the performance of services rendered under this Contract (but exclusive of any Background Technology) without CAWCD's prior written consent.
- D. All discussions and negotiations with representatives or owners of assets for potential acquisition are to be confidential. Consultant will enter into a non-disclosure agreement with all parties to a potential transaction prior to any discussions, negotiations, due diligence or any other activity that may be or could be perceived as initiating or pursuing the acquisition of a target asset.
- E. CAWCD hereby agrees to maintain in absolute and strict confidence all Background Technology and not to use it for any purpose except as necessary to utilize the Work Product for its intended and stated purposes, and then only to the extent within the rights and license to Background Technology granted above. CAWCD must require all its employees, agents, representatives, assignees, or other persons having an interest or duty in this Contract or using the Work Product ("CAWCD Representatives") to hold in strict confidence, and not to use or disclose or permit the use or disclosure of, directly or indirectly, to any third party, any

Background Technology without Consultant's prior written consent. However, with regard to the Special Background Technology, as defined in Article 8 (B) above, any disclosure contemplated by the immediately preceding sentence must be limited to CAWCD employees, except to the extent the Consultant provides prior written consent to further disclosure, which consent may be withheld in the Consultant's sole discretion.

- F. The obligations of this Article 11 shall not apply as to any portion of the confidential information exchanged by the Parties that: (i) is or becomes generally available to the public other than from disclosure by the receiving party, its representatives or its affiliates; (ii) is or becomes available to the receiving party or its representatives or affiliates on a non-confidential basis from a source other than the disclosing party when the source is not, to the best of the receiving party's knowledge, subject to a confidentiality obligation to the disclosing party; (iii) is required to be disclosed by law, a valid legal process; or (iv) is approved for disclosure in writing by an authorized representative of the disclosing Party.
- G. This Article shall survive the termination of this Contract.

## **ARTICLE 12 INDEPENDENT CONSULTANT STATUS**

The Consultant agrees it is an independent consultant and not an agent or employee of CAWCD.

## **ARTICLE 13 CONFLICTS OF INTEREST**

The Consultant acknowledges that CAWCD considered conflicts of interest in selecting the Consultant. Consultant agrees not to be retained by or perform any work for any new client during the term of this Contract that is or could reasonably be determined to be adverse to CAWCD's interest within the scope of this Contract. Consultant agrees not to expand the scope of work for any existing client during the term of this Contract that is or could reasonably be determined to be adverse to CAWCD's interest within the scope of this Contract. CAWCD acknowledges that the Consultant and its subcontractors will be allowed to continue to provide normal professional services to new and existing clients during the term of this Contract, with the understanding that the Consultant and its subcontractors agree not to engage new clients during the term of this Contract in projects that include comprehensive water acquisition planning efforts that are or could reasonably be determined to be adverse to CAWCD's interest within the scope of this Contract.

## **ARTICLE 14 GOVERNING LAW**

This Contract shall be formed, construed and governed by the laws of the state of Arizona, both as to interpretation and performance.

## **ARTICLE 15 ENTIRE CONTRACT**

This Contract, including any schedules, exhibits, riders, attachments, addenda or modifications that are attached constitute the entire agreement between the parties, and no understandings or obligations not expressly set forth in this Contract shall be binding upon them. No modification, amendment, or alteration of this Contract shall be valid unless it is in writing and signed by both parties. This Contract is not subject to modification, amendments, or alterations by Consultant's preprinted forms. No verbal agreements with any officer, agent or employee of CAWCD or Consultant shall affect or modify any of the terms or obligations set forth in the Contract.

## **ARTICLE 16 NOTICES**

Unless otherwise provided, all notices shall be in writing and may be given in person, by electronic mail, or by United States mail, and shall become effective at the earliest of actual receipt by the party to whom notice is given, delivered to the designated address of the party, or if mailed, three (3) business days after deposit in the United States mail addressed as shown below or to such other address as such party may from time to time designate in writing.

To CAWCD: Central Arizona Water Conservation District  
P.O. Box 43020  
Phoenix, Arizona 85080-3020  
Attn: Contract and Procurement Services Supervisor

To Consultant: WestWater Research LLC  
4747 N. 7th Street, Suite 412  
Phoenix, AZ 85014  
Attn: Clay Landry

## **ARTICLE 17 SEVERABILITY**

In the event any provision of this Contract shall be declared invalid, such provision shall be deemed severable from the remaining provisions of this Contract, which shall remain in full force and effect.

## **ARTICLE 18 ASSIGNMENT**

The Consultant shall not assign this Contract without the written consent of CAWCD. Subject to the foregoing, this Contract shall be binding upon and inure to the benefit of the Parties and their respective successors and permitted assigns.

## **ARTICLE 19 WEAPON FREE WORKPLACE**

It is the intention of CAWCD to maintain a safe and productive work environment free from threats or acts of violence. CAWCD is committed to maintaining a workplace free from violence for all employees, consultants, vendors, customers, and visitors. All CAWCD employees, third-party contract workers, consultants, vendors, and visitors are prohibited from bringing or possessing firearms, explosives, or dangerous or offensive weapons on CAP property or in any vehicles. Only public law enforcement officials with proper and documented training or CAWCD Protective Services employees are authorized to carry firearms. This provision shall not create an obligation on the part of CAWCD to take any action beyond what is required by applicable law.

Consultants shall notify CAWCD's Contract and Procurement Services Supervisor when a Contract requires explosives, nail guns, or similar items be brought on to CAWCD property.

## **ARTICLE 20 ADDITIONAL ELIGIBILITY DATA UNDER A.R.S. SECTION 41-4401**

Pursuant to Arizona Revised Statute ("ARS") Section 41-4401 Consultant shall comply with and ensure that each subcontractor complies with the federal immigration laws and regulations that relate to their employees and the provisions of ARS Section 23-214, subsection A. By submitting an offer or accepting a purchase order, the Consultant agrees that it shall comply and ensure that each subcontractor complies with all of the following provisions:

a) Consultant and each and every subcontractor warrants their compliance with all federal immigration laws and regulations that relate to their employees and their compliance with ARS Section 23-214, subsection A.

b) A breach of a warranty under this Section shall be deemed a material breach of this Contract that is subject to penalties up to and including termination of this Contract.

c) CAWCD retains the legal right to inspect the papers of any Consultant or subcontractor employee who works on the Contract to ensure that Consultant or any subcontractor is complying with the warranty under this section.

d) The Consultant will cooperate with CAWCD to develop a process to verify the Consultant's and subcontractors' employment records to comply with this provision. CAWCD, at its sole discretion, will determine the method of verification. Consultant shall comply and cooperate with any procedures established by CAWCD to conduct random verification of the employment records of Consultant and any subcontractor to ensure that the Consultant and subcontractors are complying with their warranties. If Consultant or any of its subcontractors employs any subcontractor(s) in performance of this Contract, Consultant shall notify CAWCD in writing and shall provide evidence of each subcontractor's agreement to the requirements of this Section by providing a certification satisfactory to CAWCD.

e) CAWCD shall not deem Consultant or any of its subcontractors in material breach of this Contract if Consultant or any affected subcontractor(s) establishes that it has complied with the E-verify program prescribed by sections 274a and 274b of the Federal Immigration and Nationality Act and the E-verify requirements prescribed by Arizona Revised Statutes Section 23-214, subsection A.

f) All costs necessary to verify compliance with this Section are the responsibility of the Consultant.

g) For the purposes of this Section:

(1) "E-verify program" means the employment verification pilot program as jointly administered by the United States Department of Homeland Security and the Social Security Administration or any of its successor programs.

(2) "Services" means the furnishing of labor time or effort in this state by a Consultant or Subcontractor.

## **ARTICLE 21 TIME IS OF THE ESSENCE**

Time is of the essence respecting performance under this Contract.

**In witness whereof**, the parties have executed this Contract as of the day and year first written above.

**WESTWATER RESEARCH LLC**

By: \_\_\_\_\_

Printed Name and Title: \_\_\_\_\_

**CENTRAL ARIZONA WATER CONSERVATION DISTRICT**

By: \_\_\_\_\_

Printed Name and Title: Ted Cooke, General Manager

## **ATTACHMENT A SCOPE OF WORK**

1. CAGRD Water Supply Program Planning, Analysis and Technical Support Services:

The consultant will research, obtain, evaluate and manage water resources and economic data required to support the Water Supply Acquisition Program. Tasks include:

- a. Support transitioning the Water Asset Database to CAP. Update water supply inventory information and project reporting as requested by CAGRD.
- b. Support CAGRD development of an updated 2019 Acquisition Strategy and Implementation Plan.
- c. Utilize current economic data and perform analysis to determine most current fair market value of water supplies under consideration for acquisition.
- d. Support transitioning the CAGRD Financial/Water Supply model to CAP and support CAP in evaluating current and projected transactions as requested by CAP.

2. CAGRD Water Asset Acquisition and Transaction Support Services: The consultant will advise and support CAGRD staff, as requested, on the development, negotiation and completion of water supply transactions. Tasks include:

- a. Evaluate and research water assets under consideration for acquisition; perform due diligence review; characterize risks; conduct independent water right appraisals and financial analysis.
- b. Propose and assist in development of transaction structures, deal terms and conditions; preparation of partnership proposals, contracts and agreements; participate in negotiations with potential sellers.
- c. Plan and perform select stakeholder outreach including presentations to public meetings and seller(s) council's and/or boards of directors.
- d. Advise and support regulatory approval of water supply transactions.
- e. Evaluate and provide due diligence support for unsolicited assets submitted to the program for acquisition.

3. Water Supply Market Research and Economics Support Services: The consultant, as requested, will conduct research and provide technical support and advisory services relating to Arizona water market trends, water trading and financing. Tasks include:

- a. Provide analytical support for assessments of regional economic and third-party impacts of proposed water transfers.
- b. Provide biannual updates to CAGRD staff on Arizona Water Market pricing and trading trends, as well as recently-executed market transactions. Provide CAGRD Committee and Board briefings when requested.
- c. Provide economic analysis and transactional support to evaluate CAGRD water asset financing options.



# ACTION BRIEF

## BOARD OF DIRECTORS



### Agenda Number 3.f.

**CONTACT:** Jay Johnson  
623-869-2374  
jjohnson@cap-az.com

**MEETING DATE:** Thursday, February 7, 2019

**AGENDA ITEM:** Additional Contract Authority for Legal Engagement of Law Firm Defending Pending Litigation - Johnson

**RECOMMENDATION:** Legal staff recommend that the contract authority for the legal engagement of Cohen Dowd Kennedy be raised by \$35,000.

---

**FISCAL IMPLICATIONS:** No

**Impact on Budget:**

Will be managed within current budget.

Additional spending authority requested: None

**Impact on Reserves:**

None

**Impact on Rates:**

None

---

**LINKAGE TO STRATEGIC PLAN, POLICY, STATUTE OR GUIDING PRINCIPLE:**

Secure reliable, sustainable, cost-effective generation resources

Optimize reliability and sustainability of CAP water supply

**PREVIOUS BOARD ACTION/ACTIVITY:**

09/06/2018      Extended the engagement and the engagement amount for Cohen Dowd Kennedy and Somach Simmons and Dunn

**ISSUE SUMMARY/DESCRIPTION:**

CAWCD hired the firm of Cohen Dowd Quigley to defend the lawsuit brought against CAWCD by Peabody, the Hopi Tribe and United Mine Workers relating to NGS. The firm had not represented CAWCD in the past, but has become familiar with the issues and filed a strong Motion to Dismiss in the matter and has worked well with interveners, including the Gila River Indian Community. At the end of August, CAWCD had estimated that billings for the year would approach \$400,000 and sought Board approval to extend the firm's engagement and raise the engagement amount, which had risen above the \$250,000 Board approval threshold. However, by year's end billings on the matter had exceeded the estimate by less than 10%, approximately \$35,000. CAWCD's contract control procedures and authorization requirements requires approval to come

before the Board.

The firm has provided excellent service on this matter, and gained significant experience and knowledge regarding CAWCD that will benefit the District in future matters.

**SUGGESTED MOTION:**

I move that the Board approve additional contract authority for 2018 legal fees for Cohen Dowd Kennedy in the amount of \$35,000.

**ATTACHMENTS:**

None

# FINANCE, AUDIT AND POWER COMMITTEE **REPORT**



## **January 17, 2019 Meeting**

Board Members present included Vice President Holway, Terry Goddard, Ben Graff, Jennifer Brown, and Mark Taylor.

### **2019-2020 Internal Audit Plan and Update on Internal Audit Activities**

Ramon Ramirez presented his progress on current/completed audits and introduced planned future audits for the upcoming two years.

- The Purchasing Audit reviewed 65 samples from over 7,000 acquisition activities during 2017-2018, accounting for over 40% of the total purchasing value during that period.
- The IT Security Policy Audit reviewed 87 samples for compliance and found 79 were fully compliant and 8 were partially compliant.
- The 2019-2020 Internal Audit plan was unanimously approved by the Committee.
  - 2019: Expense Reimbursement (Q1), Fleet Management (Q1), Palo Verde Morgan Transmission Project (Q2), Purchasing Credit Card Program (Q2), Procurement of Construction Services (Q3), Accounts Payable (Q3), and Professional Service Contracts (Q4)
  - 2020: Asset Disposal Process (Q1), Motor Vehicle and Heavy Equipment Operations (Q1), Land Administration (Q2), Maintenance Agreements (Q2), Captive Insurance Company (Q3), Rate Setting (Q3), and Records Retention (Q4)

### **Tentative 2019 FAP Schedule and Agenda**

Chairman Holway presented the first draft of the 2019 FAP schedule and solicited additional input from his fellow members. Finance and Accounting Manager Doug Dunlap and Finance and Administration Director Chris Hall informed the Committee that additional items relating to taxes and the GRIC/CAGRD deal would likely be forthcoming in the near future. Mr. Dunlap also made note that the CAWCD Reserves were finally at 100% of target.

### **Contact for more information:**

Chris Hall

Director, Finance and Administration

623-869-2632

chall@cap-az.com

### **Financial Planning & Analysis**

[www.CentralArizonaProject.com](http://www.CentralArizonaProject.com)

623-869-2333

# ACTION BRIEF

## BOARD OF DIRECTORS



### Agenda Number 5.d.i.

**CONTACT:** Patrick Dent                      Ken Seasholes  
623-869-2581                      623-869-2476  
pdent@cap-az.com                      kseasholes@cap-az.com

**MEETING DATE:** Thursday, February 7, 2019

**AGENDA ITEM:** Discussion and Consideration of Action on Delivery and Introduction Standards for a Broad Suite of Water Quality Constituents - Dent

**RECOMMENDATION:** Staff recommends that the Board of Directors approve the Delivery and Introduction Standards for a Broad Suite of Water Quality Constituents.

---

**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:**

CAWCD 2016 Board of Directors Strategic Plan

- Water Supply—Optimize reliability and sustainability of CAP water supply

**PREVIOUS BOARD ACTION/ACTIVITY:**

- May 24, 2017 – Water Quality Standards Task Force meeting (“Overview & Context”)
- June 6, 2017 – Water Quality Standards Task Force meeting (“Review of Standards and Operations”)
- September 12, 2017 — Water Quality Standards Task Force meeting (“Stakeholders’ Proposal”)
- February 8, 2018 — Water Quality Standards Task Force meeting (“Process Update and Revised Stakeholder Proposal”)
- May 10, 2018 — Water Quality Standards Task Force meeting (“WQSTF Approval of Consensus Proposal”)
- June 7, 2018 — CAWCD Board Meeting (“Approval of Consensus Proposal”)
- January 17, 2019 — Water Quality Standards Task Force meeting

**ISSUE SUMMARY/DESCRIPTION:**

On June 7, 2018, the CAWCD Board unanimously approved the Consensus Proposal on Water Quality Standards. The Consensus Proposal outlines a framework for managing the quality of Non-Project Water that

is introduced into the CAP system, including major water quality program elements and numeric criteria for six key constituents.

Since the Board's action in June, CAP staff and stakeholders have worked to develop proposed numeric standards for an expanded list of water quality constituents. Those criteria and associated background are contained in the attached technical memo ("Proposed Numeric Criteria for Broad Suite of Water Quality Constituents").

On January 17, 2019, the Water Quality Standards Task Force met to review the additional standards, and unanimously recommended approval by the CAWCD Board. That action successfully completed of the objectives of the Water Quality Standards Task Force. However, staff are committed to a number of follow-on implementation steps, including development of guidance documentation, ongoing engagement with stakeholders, and coordination with the Bureau of Reclamation. As part of that coordination, CAP and Reclamation staff will determine the appropriate form of agreement necessary to satisfy Section 12.1 of the CAP System Use Agreement ("Reclamation and CAWCD shall establish uniform water quality standards for any Non-Project Water introduced into the CAP System"). It is anticipated that that agreement will be brought to the full Board for consideration in 2019.

**SUGGESTED MOTION:**

I move that the Board of Directors approve the Proposed Numeric Criteria for a Broad Suite of Water Quality Constituents.

**ATTACHMENTS:**

1. WQSTF PowerPoint Presentation 011719
2. Numeric Standards\_for\_Broad\_Suite 011719
3. Consensus\_WQSTF\_Recommendation 060718




# Discussion and Possible Consideration of Action on Delivery and Introduction Standards for a Broad Suite of Water Quality Constituents

Water Quality Standards Task Force  
January 17, 2019

Patrick Dent  
Water Operations Manager

## A Comprehensive Approach

The Consensus Proposal adopts the multi-faceted approach that includes:

1. Monitoring, Modeling and Data Sharing
2. Project Evaluation and Design
-  3. Numeric Standards
4. Project Approvals
5. Enforcement



## **Task – Develop Numeric Standards for a Broad Suite of Constituents**

- Following the adoption of the Consensus Proposal, additional work was needed to develop Introductory and Delivery Standards for a comprehensive suite of constituents, including:
  - Trace Metals
  - Common Inorganic Compounds
  - Nutrients
  - Pathogens
  - Industrial and Synthetic Compounds



## **Water Quality Working Group**

- Water Quality Working Group Meetings were coordinated by Warren Tenney and held at AMWUA's offices – Thank you AMWUA for supporting this effort.
- In addition to CAP staff, the working group consisted of technical and water resource staff from CAP Municipalities, SRP and Peter Mock on behalf of the Gila River Indian Community



## Collection and Evaluation of Available Data

- Data sources included
  - CAP Water Quality Program Data
  - Raw water data from the municipalities taken from CAP treatment plants
  - SRP data
  - Groundwater data and statistical analysis of CAP and municipal data provided by Dr. Peter Mock



## Philosophy for Establishing Numeric Criteria

- Standards are targeted to maintain a consistent water quality of delivered water that is within the range of historic CAP water.
- Consideration and review water quality characteristics of potential source waters were considered.





## Methods for Developing Numeric Criteria

- A simple process was followed for establishing the numeric criteria:
  1. Is there sufficient data available to recommend a particular standard
  2. Should the given constituent be prohibited from introduction
  3. Set an appropriate Introductory or Delivery standard



## Developing Numeric Criteria

- If available data was insufficient, the constituent was moved to a “characterize” list and CAP is charged with collecting additional baseline data. There were 19 compounds that were placed on the Characterization list.
- Many of these will likely be added to the Not Allowed/Non Detect list, but as these are naturally occurring compounds, the group felt it was important to conduct additional sampling to get a better picture of the background levels in CAP water.



## Developing Numeric Criteria

- In most cases, both an Introduction and Delivery standard are recommended, though in some cases establishing only one or the other was deemed necessary
- In addition to the standards identified for the six constituents established last June, standards for 25 additional constituents have been recommended.



## Consensus Proposal

- The core element of the Consensus Proposal is the table of Delivery Standards developed by the Stakeholder Group last summer, and which has remained unchanged (With one exception)

Priority Constituents	Point of Delivery Standards
Arsenic ug/l	5
Fluoride mg/l	0.7
Nitrate mg/l	1
TDS mg/l	723
TOC mg/l	4
Turbidity NTU	6



## Summary of Standards

- Summary Memo provided, includes description of the Method outlined and the appropriate tables containing the recommended numeric criteria



## Summary of Standards

Constituent	Units	CAP Introductory Standard	CAP Delivery Standard	Primary MCL	Secondary MCL
<b>General</b>					
Temperature	°F		Non-degradation	-	-
Dissolved Oxygen	mg/L		Non-degradation	-	-
pH		6.5 – 9.5		-	6.5-8.5
Turbidity	NTU	9	6	-	-
Total Dissolved Solids (TDS)	mg/L	1150	747	-	500
<b>Minor and Trace Metals</b>					
Antimony	µg/L	6	Characterize	6	-
Arsenic	µg/L	10	5	10	-
Barium, Total, ICAP/MS	µg/L	2000	230	2000	-
Chromium	µg/L	100	10	100	-
Copper, Dissolved	µg/L	64	64	1300	-
Hexavalent Chromium	µg/L	16	3	-	-
Iron, Dissolved ICAP	µg/L	1000	100	-	-
Lead	µg/L	15	3	15	-
Manganese, Total, ICAP	µg/L	250	27	-	50
Selenium	µg/L	50	20	50	-
Silver Total ICAP/MS	µg/L	100	20	-	100
Thallium, Total	µg/L	0.5	Characterize	0.5	-
Uranium	µg/L	30	5	30	-
Zinc	mg/L	1	0.03	-	5


Rows in grey were previously approved with June 7, 2018 consensus proposal.



# Summary of Standards

Constituent	Units	CAP Introductory Standard	CAP Delivery Standard	Primary	Secondary MCL
				MCL	
<b>Common Inorganic Compounds / Ions</b>					
Alkalinity in CaCO <sub>3</sub> units	mg/L	250	170	-	-
Calcium, Total, ICAP	mg/L	200	160	-	-
Chloride	mg/L	450	170	-	250
Fluoride	mg/L	4	0.7	-	2
Perchlorate	µg/L	15	No standard set	-	-
Sulfate	mg/L	400	250	-	250
<b>Agricultural Concerns</b>					
Boron	mg/L	1	0.15	-	-
Sodium, Total, ICAP	mg/L	350	110	-	-
<b>Nutrients</b>					
Ammonia Nitrogen	mg/L	Not allowed	Non Detect	-	-
Nitrate as Nitrogen	mg/L	10	1	10	-
Phosphorus, Total-P	mg/L	0.1	0.025	-	-
Total Organic Carbon	mg/L	6	4	-	-

Rows in grey were previously approved with June 7, 2018 consensus proposal.





# Summary of Standards

1,1,1,2-Tetrachloroethane	4-Isopropylbenzene	Bromodichloromethane	Diuron	Metolachlor	Profenofos
1,1,1-Trichloroethane	4-Methyl-2-Pentanone (MIBK)	Bromoethane	Endosulf	Metolachlor ethanesulfonic acid (ESA)	Propoxur
1,1,2,2-Tetrachloroethane	4-Nitrophenol (qualitative)	Bromoforn	Endrin	Metolachlor oxamic acid (OA)	Quinaline
1,1,2-Trichloroethane	Acetophenone	Bromomethane (Methyl Bromide)	Equilenin	Molinate	RDX (Hexahydro-1,3,5-trinitro-1,3,5-triazine)
1,1-Dichloroethane	Acetaldehyde	Butylated hydroxyanisole	Equilin	Monobromobenzene	sec-Butylbenzene
1,1-Dichloroethylene	Acetamide	Captaf	Erythromycin	Monochloroacetic Acid	Silicone
1,1-Dichloropropene	Acetochlor	Carbaryl	Estradiol (17-beta estradiol)	Naphthalene	Simazine
1,2,3-Trichlorobenzene	Acetochlor ethanesulfonic acid (ESA)	Carbofuran (Furadan)	Estrilol	N-Butylbenzene	Styrene
1,2,3-Trichloropropene	Acetochlor oxamic acid (OA)	Carbon Disulfide	Estrone	perfluorooctanesulfonamidoacetic acid (NEFOSAA)	Tebuconazole
1,2,4-Trichlorobenzene	Acifluorfen	Carbon Tetrachloride	Ethinyl estradiol (17-alpha ethinyl estradiol)	Tebufenozide	Tert-Butylbenzene
1,2,4-Trimethylbenzene	Acrolein	Chlorbenzene	Ethionoph	Nitrobenzene	Tetrachloroethene
1,2-Dibromo-3-Chloropropane	Alachlor	Chlorobenzene	Ethyl benzene	Nitroglycerin	Triphenyl Carb
1,2-Dichlorobenzene	Alachlor ethanesulfonic acid (OA)	Chlorobromobenzene	Ethylene Dibromide	"N-methyl"	Thiodicarb
1,2-Dichloropropene	Aldicarb (Temik)	Chlorodibromobenzene	Ethylene glycol	perfluorooctanesulfonamidoacetic acid (NEFOSAA)	Thiophanate-methyl
1,3,5-Trimethylbenzene	Aldicarb sulfoxide	Chloroethane	Ethylene oxide	N-Methyl-2-pyrrolidone	Toluene
1,3-Butadiene	Aldrin	Chloroform (Trichloromethane)	Ethylene thiourea	N-nitro-2-diethylamine (NDEA)	Toluene diisocyanate
1,3-Dichlorobenzene	Alpha-Chloroethane	Chloromethane (Methyl Chloride)	Fluorochloromethane (Freon11)	N-nitro-2-methylamine (NDMA)	Tot DCPA Mono/Diacid Degradate
1,3-Dichloropropene	Alpha-Hexachlorocyclohexane	cis-1,2-Dichloroethane	Fluoromethane	N-nitro-2-di-n-propylamine (NDPA)	Total HaloAcetic Acids (HAAS)
1,3-DichloroPropene	Aniline	Chloroethene	Fluoromethane	N-nitro-2-diethylamine (NPYR)	Total Kjeldahl Nitrogen
1,4-Dichlorobenzene	Aroclor 1016	Cyanoethane	HCFC-22	Nonylphenol	Total PCB
1,4-Dioxane	Aroclor 1221	Dachal	Heptachlor	Nonylphenol	Total TriHaloMethanes
1,4-Methoxyestradiol	Aroclor 1232	Dalapon	Heptachlor Epoxide (isomer B)	Ortho-Xylene	Toxaphene
1-Butanol	Aroclor 1248	Di-(2-Ethylhexyl)adipate	Hexachlorobenzene	Ortho-Xylene	Trans-1,2-Dichloroethene
2,2-Dichloropropene	Aroclor 1254	Di-(2-Ethylhexyl)phthalate (AKABS-2)	Hexachlorobutadiene	o-Toluidine	Trans-1,3-Dichloropropene
2,4,5-T	Aroclor 1260	Di-(2-Ethylhexyl)phthalate, DEHP)	Hexachlorocyclopentadiene	Triphenyl Carb	Trans-Naphthalene
2,4,5-TP (Silvex)	Atrazine	Dibromochloromethane	Hexane	TriChloroAcetic Acid	TriChloroAcetic Acid
2,4-D	Baygon	Dibromomethane	Hydrazine	TriChloroEthene	TriChloroFluoroMethane
2-Butanone (MEK)	Bensulide	Dicamba	Isopropylbenzene	Oxyluorfen	TriChloroFluoroMethane
2-ChloroToluene	Bentazon	Dichloroacetic Acid	Lindane	Paraquat	Triethylamine
2-Methoxyethanol	Benzene	Dichlorodifluoromethane	MP-Xylenes	p-Chlorophenol	Triphenyltin hydroxide (TPTH)
2-Propen-1-ol	Benzyl alcohol	Dichloromethane	m-Dichlorobenzene (1,3-DCB)	p-Chlorophenol	Urethane
3,5-Dichlorobenzoic acid	Benzyl chloride	Dichloropropene	Mestanol	PentaChloroPhenol	Vinclozolin
3-Hydroxy-carbonyl	Bis(2-Ethylhexyl) Phthalate	Diclotophos	Methamidophos	Perfluorobutanesulfonic acid (PFBS)	Vinyl Chloride
4,4'-DDD	Bromobenzene	Dieldrin	Methanol	Perfluorodecanoic acid (PFDA)	Xylenes (total)
4,4'-DDE	Bromochloroacetic Acid	Di-isopropyl ether	Methoxy	Perfluorododecanoic acid (PFDDA)	Ziram
4,4'-DDT	Bromochloromethane	Dimethyl	Methyl	Perfluorooctanoic acid (PFHxA)	
4,4'-Methylenedianiline	Bromodichloroacetic Acid	Dimethyl	Methyl-Tert-butyl ether (MTBE)	Perfluorohexanoic acid (PFHxA)	
4-Chlorotoluene		Diquat			



## Numeric Criteria – Key Points

### Turbidity

The introductory standard for turbidity (9 ntu) is offered as a guideline to be met by operational controls and/or daily averaging.

Significant storms or flooding expected to result in turbid waters will result in operational decisions to discontinue delivery into the CAP system until such an events pass.



## Numeric Criteria – Key Points

### Alkalinity

The City of Tucson raised specific concerns regarding alkalinity increasing over time in their regional aquifer.

After further discussions and evaluation, it was determined that historically CAP water has a very narrow band of fluctuation relative to alkalinity. The narrow band suggests the possibility that there is significant alkalinity buffering occurring in the CAP water supply, and that introduced supplies with higher alkalinity may not raise the median level.

CAP is tasked with analyzing the buffering potential.



## Numeric Criteria – Key Points

### Pathogens

No specific standards on pathogens were set but generally pathogens should not be allowed. The group recommends that pathogens should be addressed in the specific project approval process and continually be part of the water quality review program which would include monitoring



## Numeric Criteria – Key Points

### Salinity

Point of Delivery Standard to be changed to 747 mg/L to reflect Colorado River Basin Salinity Control Forum Numeric Criteria at Parker Dam instead of Hoover Dam.



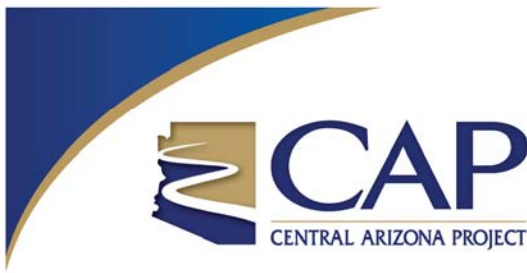
## Next Steps for 2019

1. Expand existing CAP water quality monitoring program
2. Further Develop Implementation guidelines
3. Coordinate with Reclamation and support consultations as needed

Newly formed “Water Transmission Group”



YOUR WATER. YOUR FUTURE.



**DATE:** January 7, 2019  
**TO:** Water Quality Introductory and Delivery Standards  
**SUBJECT:** Proposed Numeric Criteria for Broad Suite of Water Quality Constituents

At the June 7, 2018 CAWCD Board meeting, staff and stakeholders presented a consensus proposal for the introduction of non-Colorado River water into the CAP system. The proposal identified standards for six key constituents and an outline for additional components of a full standard to be developed. The recommendation from the June 7 Board meeting is attached for reference.

Following the approval of the consensus proposal, CAP staff and a subset of subject-matter experts<sup>1</sup> from the broader stakeholder group were tasked with developing a full list of numeric criteria for a broad suite of water quality constituents. That work has been ongoing since June and has largely consisted of a review of available water quality data and supporting analysis. Data collected and reviewed included CAP water quality data as well as available water quality data from potential groundwater and surface water sources that may be introduced into the CAP system.

### **Methodology**

The review included a thorough constituent-by-constituent review and discussion, generally regarding three questions:

1. Is there sufficient data available to make a recommendation to establish numeric criteria?
2. Is the given constituent prohibited from introduction into the CAP system at the current detection level?
3. Does a particular constituent require an introduction or delivery numeric standard?

For a broad number (85%) of the constituents reviewed it was proposed to not permit any introduction at current detection limits. The vast majority of these are synthetic or petrochemical volatile and nonvolatile organics that are not commonly found in the CAP system or other natural water(s) and are generally associated with industrial activities.

There was notable discussion on the role of detection limits that could be applied to many of these compounds. Fundamentally, a particular compound may not be detectable with current laboratory technologies, but detection and quantification limits are constantly improving. Changes in technologies that potentially expose the measurement of a particular compound that had previously been non-detectable does not necessarily render the imported water non-compliant. Rather the new detection

---

<sup>1</sup> Including, Dr. Peter Mock (GRIC); Melodee Loyer, Sandy Elder (Tucson), Brian Biesemeyer Kathy Rall, (Scottsdale), Troy Hayes (Phoenix), Christa McJunkin, Mike Ploughe (SRP), Chris Connor (Chandler), Warren Tenney (AMWUA)



limit would be reviewed in context of any relevant industry practices or emerging science regarding the compound. This review would be a requirement of the water quality monitoring program going forward.

Discussions for each constituent or constituent group were examined based on those fundamental queries. If there was not sufficient data available, or a current Maximum Contaminant Level (MCL) to recommend a specific introductory or delivery standard, a “characterize” response was noted. Characterization is a request to CAP to collect the needed water quality data for further evaluation. Characterization was limited to only 4% of the constituents in the list. Generally, when characterization was recommended it was determined that it is reasonable to allow sufficient time for data collection and review to occur without a significant impact to the overall water quality of the system. Those constituents identified for additional characterization are listed in Table 1.

<b>Table 1 CHARACTERIZATION &amp; MONITORING<sup>2</sup></b>	
Aluminum, Total, ICAP	Molybdenum
Antimony	Nickel
Bromide	Nitrite
Beryllium	Potassium, Total, ICAP
Cadmium	Radium-226+228
Cobalt, Total	Strontium, ICAP
Germanium	Tellurium
Gross Alpha	Thallium
Gross Beta	Vanadium
Mercury	

If sufficient data was available for the compound and the review concluded a reasonable basis for developing criteria, the technical group deliberated on an appropriate introductory and/or delivery standard. The result of those efforts are contained in Table 2 and reflect a continued consensus approach among CAP staff and stakeholders.

<b>Table 2 CAP WATER QUALITY STANDARDS FOR NON-PROJECT WATER</b>			
<b>Constituent</b>	<b>Units</b>	<b>CAP Introductory Standard</b>	<b>CAP Delivery Standard</b>
<b>General</b>			
Temperature	°F		Non-degradation
Dissolved Oxygen	mg/L		Non-degradation
pH		6.5 – 9.5	

<sup>2</sup> These compounds are all naturally occurring, changes in detection limits may make these detectable in imported and project water in the future.

<b>Table 2 CAP WATER QUALITY STANDARDS FOR NON-PROJECT WATER</b>			
<b>Constituent</b>	<b>Units</b>	<b>CAP Introductory Standard</b>	<b>CAP Delivery Standard</b>
Turbidity	NTU	9	6
Total Dissolved Solids (TDS)	mg/L	1150	747
<b>Minor and Trace Metals</b>			
Antimony	µg/L	6	Characterize
Arsenic	µg/L	10	5
Barium, Total, ICAP/MS	µg/L	2000	230
Chromium	µg/L	100	10
Copper, Dissolved <sup>3</sup>	µg/L	64	64
Hexavalent Chromium	µg/L	16	3
Iron, Dissolved ICAP	µg/L	1000	100
Lead	µg/L	15	3
Manganese, Total, ICAP	µg/L	250	27
Selenium	µg/L	50	20
Silver Total ICAP/MS	µg/L	100	20
Thallium, Total	µg/L	0.5	Characterize
Uranium	µg/L	30	5
Zinc	mg/L	1	0.03
<b>Common Inorganic Compounds / Ions</b>			
Alkalinity in CaCO <sub>3</sub> units	mg/L	250	170
Calcium, Total, ICAP	mg/L	200	160
Chloride	mg/L	450	170
Fluoride	mg/L	4	0.7
Perchlorate	µg/L	15	No standard set
Sulfate	mg/L	400	250
<b>Agricultural Concerns</b>			
Boron	mg/L	1	0.15
Sodium, Total, ICAP	mg/L	350	110
<b>Nutrients</b>			
Ammonia Nitrogen	mg/L	Not allowed	Non Detect
Nitrate as Nitrogen	mg/L	10	1
Phosphorus, Total-P	mg/L	0.1	0.025
Total Organic Carbon	mg/L	6	4
Rows in grey were previously approved with June 7, 2018 consensus proposal.			

<sup>3</sup> Standards based on the ADEQ standards for aquatic, warm, ephemeral surface water

### Temperature and Dissolved Oxygen (DO)

For Temperature and DO, no specific standards were identified, but the objective is non-degradation of existing canal water quality. While there is general concern about localized effects on canal biology from imported water that is anoxic or at extreme temperatures, it was concluded that any localized effects would be addressed in the project approval water quality review process.

### Turbidity

Natural variability in turbidity, particularly at lower levels, is common and caused by biological activity and/or short-term event driven circumstances. For example, sensors reading turbidity in real-time can often show a range of 3-15 NTU in a 24 hour period due to algal activity alone. This pattern will generally mimic that of the 24 hour dissolved oxygen cycle observed in shallow surface waters. Additionally, short-term disturbance near a sensor from fish and or floating debris can often show elevated turbidity for several minutes and then pass. Brief rainfall events can also result in short-term but localized higher turbidity events. As such, the introductory standard for turbidity is offered as a guideline to be met by operational controls and/or daily averaging. Discharges during events such as significant storms or flooding that are expected to result in turbid waters would by nature result in operational decisions to discontinue discharges until such events pass.

### Alkalinity

Significant discussion occurred with respect to alkalinity. The City of Tucson raised specific concerns with the long-term median of alkalinity increasing over time in their regional aquifer, and the impacts that are projected to occur in their distribution system unless pH adjustment is implemented. Tucson objects to having to implement any treatment process due to the introduction of non-project water to the canal, and contends that the entity introducing non-project water to the canal should bear the cost of treatment. Consequently, they requested that introduced waters not increase the alkalinity median in the CAP source water.

After further discussions and evaluation, it was determined that historically CAP water has a very narrow band of fluctuation relative to alkalinity. The narrow band suggests the possibility that there is significant alkalinity buffering occurring in the CAP water supply, and that introduced supplies with higher alkalinity may not raise the median level. CAP staff will continue to analyze the buffering potential. Given this discussion, and commitment for further evaluation of buffering potential, Tucson suspended its objections to the proposed introductory and delivery standards. If it is found that buffering in the canal is not effective, pH adjustment of non-project water may be necessary.

### Salinity (TDS)

Salinity was one of the set of six standards addressed under the June 7<sup>th</sup> consensus proposal, and the delivery standard of 723 mg/L was tied to the standard adopted by the Colorado River Basin Salinity Control Forum at Hoover Dam. However, the Forum's standard at Parker Dam (Lake Havasu, where CAP's intake is located) is 747 mg/L. It was acknowledged that the consensus proposal was intended to conform to the standard established by the Forum at the point of CAP diversion, consequently the delivery standard was adjusted to align with the criteria at Parker Dam of 747 mg/L.

### Algal Toxins

Algal toxins will be monitored and measured as needed. Data collected from regional sources will also be incorporated.

### Pathogens

No specific standards on pathogens were set but generally pathogens should not be allowed. The group recommends that pathogens should be addressed in the specific project approval process and continually be part of the water quality review program which would include monitoring. Specific Pathogens reviewed are identified in Table 3

<b>Table 3 PATHOGENS</b>	
Cryptosporidium	E. Coli
Giardia	HPC
Coliform, Total	L. Pneumophilia

## Prohibited Compounds

Compounds that are prohibited from introduction into the CAP system at current detection limits are listed below in Table 4.

Table 4 NOT ALLOWED / NON-DETECT		
1,1,1,2,-Tetrachloroethane	Bromoethane	Metolachlor oxanilic acid (OA)
1,1,1-Trichloroethane	Bromoform	Molinate
1,1,2,2-Tetrachloroethane	Bromomethane (Methyl Bromide)	MonoBromoaCetic Acid
1,1,2-Trichloroethane	Butylated hydroxyanisole	MonoChloroAcetic Acid
1,1-Dichloroethane	Captan	Naphthalene
1,1-Dichloroethylene	Carbaryl	N-ButylBenzene
1,1-Dichloropropene	Carbofuran (Furadan)	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)
1,2,3-Trichlorobenzene	Carbon Disulfide	Nitrobenzene
1,2,3-Trichloropropane	Carbon Tetrachloride	Nitroglycerin
1,2,4-Trichlorobenzene	Chloramben	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)
1,2,4-Trimethylbenzene	Chlordane	N-Methyl-2-pyrrolidone
1,2-Dibromo-3-Chloropropane	Chlorobenzene	N-nitrosodiethylamine (NDEA)
1,2-Dichlorobenzene	Chlorodibromoacetic Acid	N-nitrosodimethylamine (NDMA)
1,2-Dichloroethane	Chlorodibromomethane	N-nitroso-di-n-propylamine (NDPA)
1,2-Dichloropropane	Chloroethane	N-Nitrosodiphenylamine
1,3,5-Trimethylbenzene	Chloroform (Trichloromethane)	N-nitrosopyrrolidine (NPYR)
1,3-Butadiene	Chloromethane(Methyl Chloride)	Nonylphenol2
1,3-Dichlorobenzene	cis-1,2-Dichloroethylene	Norethindrone (19- Norethisterone)
1,3-Dichloropropane	Clethodim	N-PropylBenzene
1,3-DichloroPropene	Cumene hydroperoxide	Ortho-Xylene
1,4 DichloroBenzene	Cyanotoxins	o-Toluidine
1,4-Dioxane	Dacthal	Oxamyl
17alpha-estradiol	Dalapon	Oxirane, methyl
1-Butanol	Di-(2-Ethylhexyl)adipate	Oxydemeton-methyl
2,2-Dichloropropane	Di(2-Ethylhexyl)phthalate (AKA Bis (2-ethylhexyl) phthalate, DEHP)	Oxyfluorfen
2,4,5-T	Dibromoacetic Acid	ParaQuat
2,4,5-TP (Silvex)	Dibromochloromethane	p-Chlorotoluene
2,4-D	Dibromomethane	p-Dichlorobenzene (1,4-DCB)
2,4-DB	Dicamba	PentaChloroPhenol
2-Butanone (MEK)	Dichloroacetic Acid	Perfluorobutanesulfonic acid (PFBS)
2-ChloroToluene	Dichlorodifluoromethane	Perfluorodecanoic acid (PFDA)

**Table 4 NOT ALLOWED / NON-DETECT**

2-Methoxyethanol	Dichloromethane	Perfluorododecanoic acid (PFDoA)
2-Propen-1-ol	Dichloroprop	Perfluoroheptanoic acid (PFHpA)
3,5-Dichlorobenzoic acid	Dicrotophos	Perfluorohexanesulfonic acid (PFHxS)
3-Hydroxycarbofuran	Dieldrin	Perfluorohexanoic acid (PFHxA)
4,4'-DDD	Di-isopropyl ether	Perfluorononanoic acid (PFNA)
4,4'-DDE	Dimethipin	Perfluorooctanesulfonic acid (PFOS)
4,4'-DDT	Dinoseb	Perfluorooctanoic acid (PFOA)
4,4'-Methylenedianiline	Diquat	Perfluorotetradecanoic acid (PFTA)
4-Chlorotoluene	Diuron	Perfluorotridecanoic acid (PFTrDA)
4-IsopropylToluene	Endothall	Perfluoroundecanoic acid (PFUnA)
4-Methyl-2-Pentanone (MIBK)	Endrin	Permethrin
4-Nitrophenol (qualitative)	Equilenin	Picloram
Acephate	Equilin	p-Isopropyltoluene
Acetaldehyde	Erythromycin	Profenofos
Acetamide	Estradiol (17-beta estradiol)	ProPoxur
Acetochlor	Estriol	Quinoline
Acetochlor ethanesulfonic acid (ESA)	Estrone	RDX (Hexahydro-1,3,5-trinitro-1,3,5-triazine)
Acetochlor oxanilic acid (OA)	Ethynyl estradiol (17-alpha ethynyl estradiol)	sec-Butylbenzene
Acifluorfen	Ethoprop	Silicone
Acrolein	Ethyl benzene	Simazine
Alachlor	Ethylene Dibromide	Styrene
Alachlor ethanesulfonic acid (ESA)	Ethylene glycol	Tebuconazole
Alachlor oxanilic acid (OA)	Ethylene oxide	Tebufenozide
Aldicarb (Temik)	Ethylene thiourea	Tert-ButylBenzene
Aldicarb sulfone	Fluorotrichloromethane-Freon11	TetraChloroEthene
Aldicarb sulfoxide	Formaldehyde	ThioBenCarb
Aldrin	Gamma-BHC	Thiodicarb
Alpha-Chlordane	Gamma-Chlordane	Thiophanate-methyl
alpha-Hexachlorocyclohexane	Glyphosate	Toluene
Aniline	HCFC-22	Toluene diisocyanate
Aroclor 1016	Heptachlor	Tot DCPA Mono&Diacid Degradate
Aroclor 1221	Heptachlor Epoxide (isomer B)	Total HaloAcetic Acids (HAAS)
Aroclor 1232	Hexachlorobenzene	Total Kjeldahl Nitrogen
Aroclor 1242	Hexachlorobutadiene	Total PCB
Aroclor 1248	Hexachlorocyclopentadiene	Total TRiHaloMethanes

**Table 4 NOT ALLOWED / NON-DETECT**

Aroclor 1254	Hexane	Toxaphene
Aroclor 1260	Hydrazine	Trans-1,2-DichloroEthene
Atrazine	Isopropylbenzene	Trans-1,3-Dichloropropene
Baygon	Lindane	Trans-NonAchlor
Bensulide	M/P-Xylenes	Tribufos
Bentazon	m-Dichlorobenzene (1,3-DCB)	TriChloroAcetic Acid
Benzene	Mestranol	TriChloroEthene
Benzo(a)pyrene	Methamidophos	TriChloroFluoroMethane
Benzyl chloride	Methanol	Triethylamine
Bis(2-Ethylhexyl) Phthalate	Methiocarb	Triphenyltin hydroxide (TPTH)
Bromobenzene	Methomyl	Urethane
Bromochloroacetic Acid	Methoxychlor	Vinclozolin
Bromochloromethane	Methyl Tert-butyl ether (MTBE)	Vinyl Chloride
Bromodichloroacetic Acid	Metolachlor	Xylenes (total)
Bromodichloromethane	Metolachlor ethanesulfonic acid (ESA)	Ziram

*[Draft as adopted by CAWCD Board, June 7, 2018]*

## **Consensus Proposal on Water Quality Standards**

CAP Staff and Stakeholders view water quality standards for non-Project Water as part of a multi-faceted approach that includes:

### **1. Monitoring, Modeling and Data Sharing** *[This section to be expanded to include establishment of a refined baseline before projects begin, and comprehensive evaluation of the effects of introduced supplies]*

#### **a. Enhanced Reporting and Data Coordination**

- i.* Ongoing support for CAP's WQ program
- ii.* Enhanced tools to model WQ impacts
- iii.* Annual presentation of WQ information to the Board & stakeholders
- iv.* Facilitation of data sharing among current users

#### **b. Mandatory Monitoring of Non-Project Supply**

- i.* Parties introducing supply pay all costs (*SUA §12.2; Standard Form Wheeling Contract §10.2*)
- ii.* Monitoring requirements tailored to each project based on project-specific factors (e.g., size, concentrations, location, etc.)

### **2. Project Evaluation and Design**

#### **a. Project Evaluation**—*Mandatory technical evaluation of the interaction of introduced supply with existing supply (chemical & physical properties) [This section will be expanded to more explicitly address any operational impacts that a project could have on the CAP system]*

- i.* Applies regardless of water quality
- ii.* May involve modeling, testing, etc
- iii.* Parties introducing supply pay all costs

#### **b. Project Design**

- i.* "Inside the Fence" sampling point
- ii.* May require multiple "turn-in" points to minimize localized effects
- iii.* Introduction of supply may be required to be proportional to CAP flow
  - CAP operations will **not** be adjusted for non-Project WQ

### **3. Numeric Standards**

#### **a. Excluded Constituents**—*Things that cannot be present in non-Project supplies*

- i.* Measured at point of introduction
- ii.* Set at defined non-detect level
- iii.* Applied on an ongoing basis, and fully enforceable
- iv.* Initial proposal from Stakeholder group includes PFOA/PFAA, perchlorate, and cyanide
  - Expanded list to be developed with Stakeholder input

#### **b. Delivery Standards**—*Quality of comingled water delivered at CAP turnouts*



- i. As proposed by Stakeholder Group
  - Expanded list to be developed with Stakeholder input

Priority Constituents	Proposed Standard	units
<b>Arsenic</b>	5	µg/l
<b>Fluoride</b>	0.7	mg/l
<b>Nitrate</b>	1	mg/l
<b>TDS</b>	723	mg/l
<b>TOC</b>	4	mg/l
<b>Turbidity</b>	6	NTU

- ii. Highly protective of existing quality
  - Within historic range and/or twice as stringent as the National Drinking Water standards
  - Applied during evaluation phase of a proposed project, based on a shortage-reduced CAP supply of 1 MAF, and inclusion of all other approved projects
  - Standard is a basis for project denial or modification, but it is not a guarantee of a specific water quality delivered by CAP

**c. Introduction Standards—*Quality of the Non-Project Water supply***

- i. Measured at point of introduction
- ii. Standard based on multiple factors—considered for each constituent
  - Equity; flexibility; certainty; risk; margin of safety; public acceptance; likely sources; mixing capacity; geography; cost; existing standards; operational factors
- iii. Applied on an ongoing basis, and fully enforceable

Priority Constituents	Proposed Standard	units
<b>Arsenic</b>	10	µg/l
<b>Fluoride</b>	4	mg/l
<b>Nitrate</b>	10	mg/l
<b>TDS</b>	1150	mg/l
<b>TOC</b>	6	mg/l
<b>Turbidity</b>	9	NTU

**d. Re-evaluation of Standards**

- i. Every 5 years, starting after the first introduction of non-Project Water
  - Constituents can be added to the Excluded Constituent list more frequently

## 4. Project Approvals

**a. Approval by CAWCD and/or Reclamation**

- i.* Provides opportunity to consider overall merits of a project
  - Note, not all projects are subject to CAWCD approval

**b. NEPA Compliance**

- i.* Required for each project due to federal ownership of CAP system

**c. [AZPDES Permitting?]**

- i.* [General Use Permit?]

**5. Enforcement**

**a. CAP has full contractual enforcement authority**

- i.* Party introducing supply is responsible for compliance (*SUA §12.2*)
- ii.* Required indemnification (*SUA §12.3*)

**b. CAP will have operational control**

- i.* Inspection of facilities and remote shut-off capability

**c. CAP will establish operating procedures for addressing exceedances, missing data, etc.**

- i.* Burden of 'proof' on party introducing supply

# INFORMATION BRIEF

## BOARD OF DIRECTORS



### Agenda Number 7.

**CONTACT:** Darrin Francom  
623-869-2276  
dfrancom@cap-az.com

**MEETING DATE:** Thursday, February 7, 2019

**AGENDA ITEM:** Report on Transmission System Projects - Francom

---

#### **LINKAGE TO STRATEGIC PLAN, POLICY, STATUTE OR GUIDING PRINCIPLE:**

CAWCD Board of Directors 2016 Strategic Plan: Enhance Transmission Reliability

#### **PREVIOUS BOARD ACTION/ACTIVITY:**

February 2013	Board approved participation in PV-Morgan 500kV Transmission Project
May 2013	Board approved ED2 to Saguaro transmission pole replacement contract
February 2015	Board approved Hassayampa Tap 230kV Transmission Project
August 2013	Board approved participation in Valencia to Black Mountain Spreader Yard Transmission Project

#### **ISSUE SUMMARY/DESCRIPTION:**

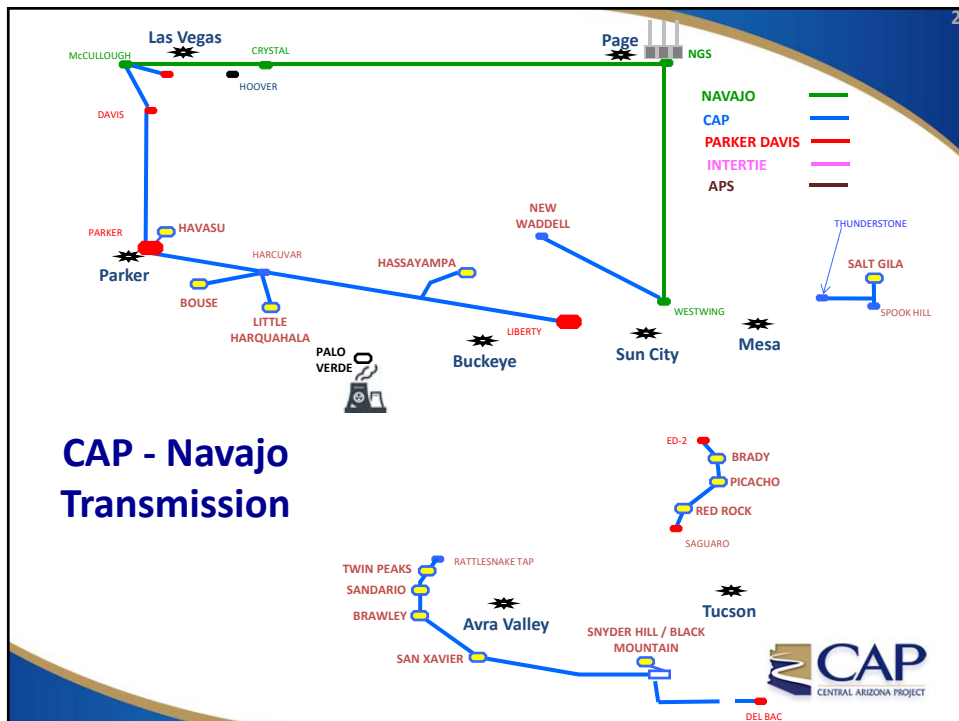
The CAWCD Board has previously authorized four major transmission projects that are now completed or nearing completion. These projects have addressed system reliability, added flexibility in electrical transmission paths, provided access to the Palo Verde trading hub, and positioned CAP well for the post-NGS environment. The attached presentation gives an overview of the transmission system utilized by CAP and highlights the four projects.

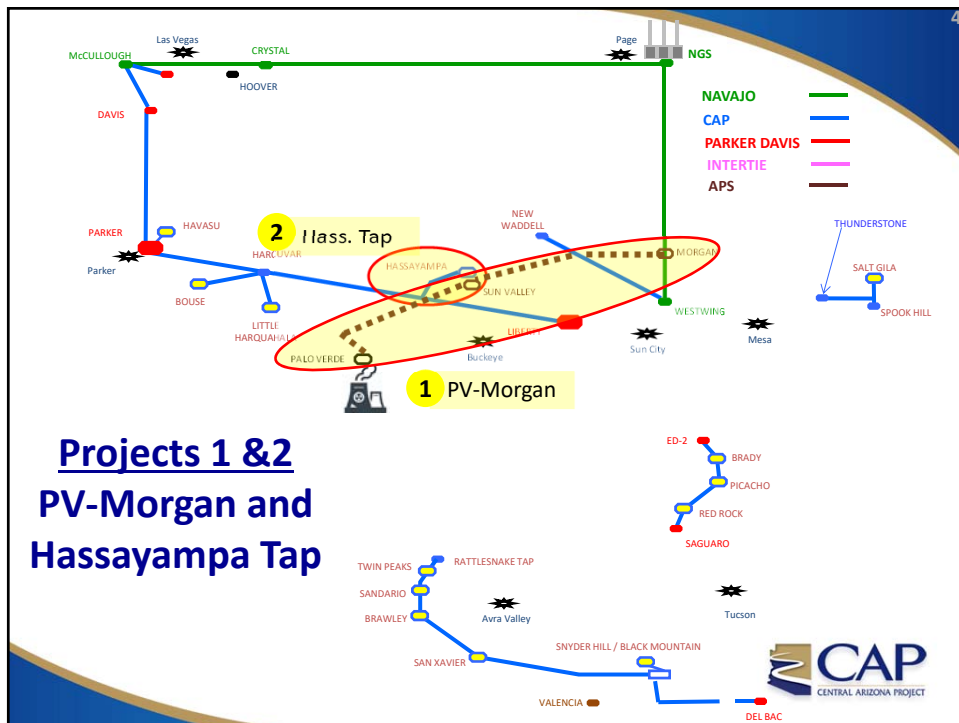
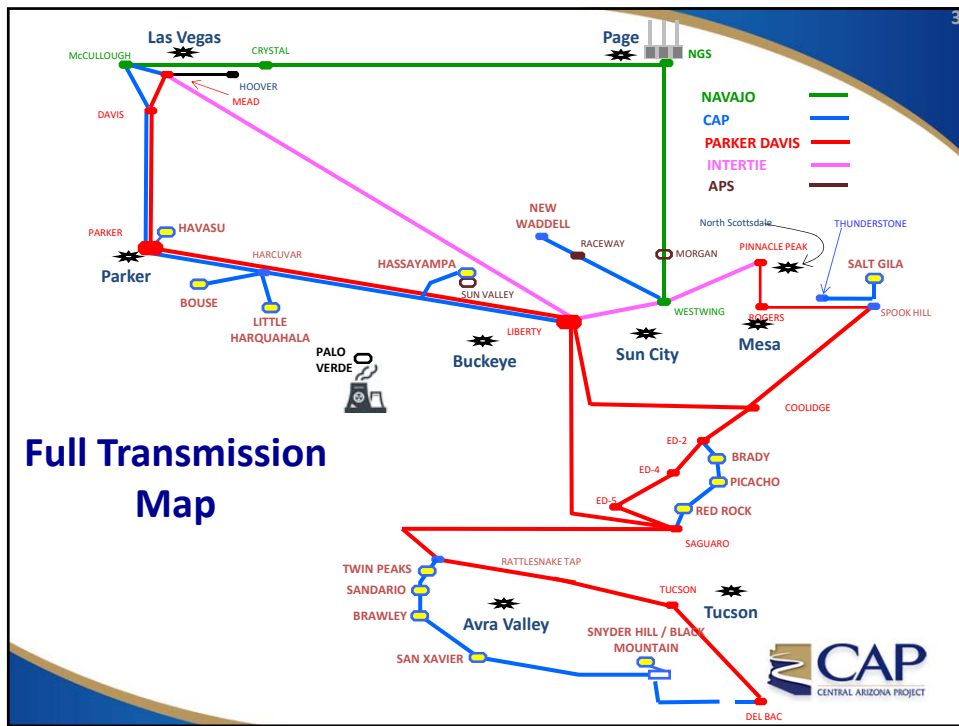
#### **ATTACHMENTS:**

1. Transmission Project Report (2-7-2019)

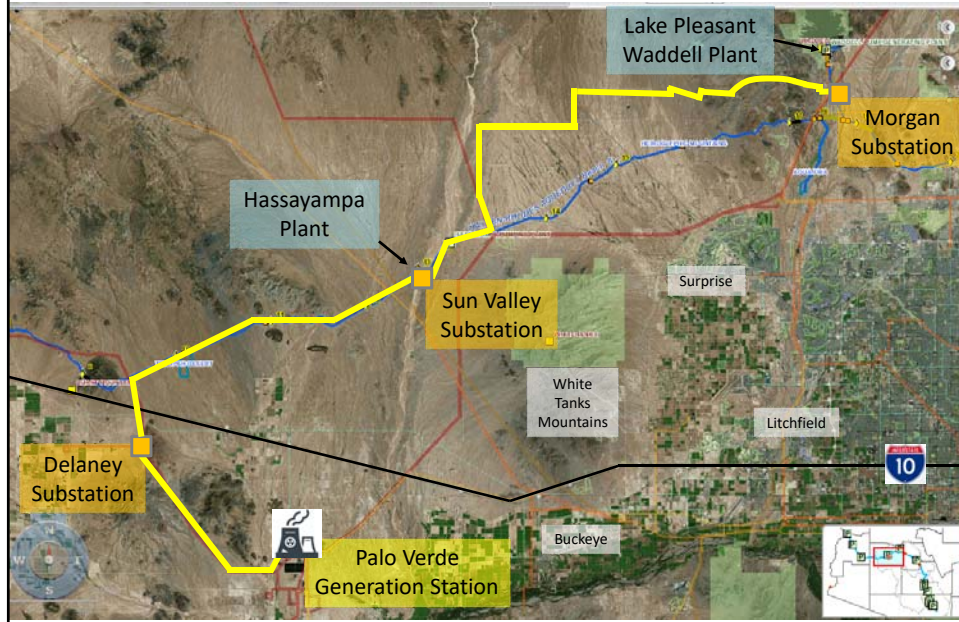
# Transmission System Projects

Darrin Francom  
Director, Operations,  
Power and Engineering





## Palo Verde - Morgan 500 kV Project



## Palo Verde - Morgan 500 kV Project

### Project Facts

- 500kV Transmission Line: Palo Verde to Morgan
- Board Approved Contract: February 2013
  - APS Project
  - CAP10% Owner of Transmission Capacity
  - Capacity at Sun Valley Substation

### Importance to CAP

- Conveys NGS Energy Directly to CAP Loads
  - Avoids Transmission Cost
- Access to Market at PV Hub
  - Direct Link: Palo Verde and Navajo Southern Transmission System at Morgan Substation





## Palo Verde - Morgan 500 kV Project

### Schedule

- Board Approved Contract: February 2013
- Construction Started: Fall of 2013
- Scheduled Completion Date: Summer 2018
- Actual Completion Date: May 2018

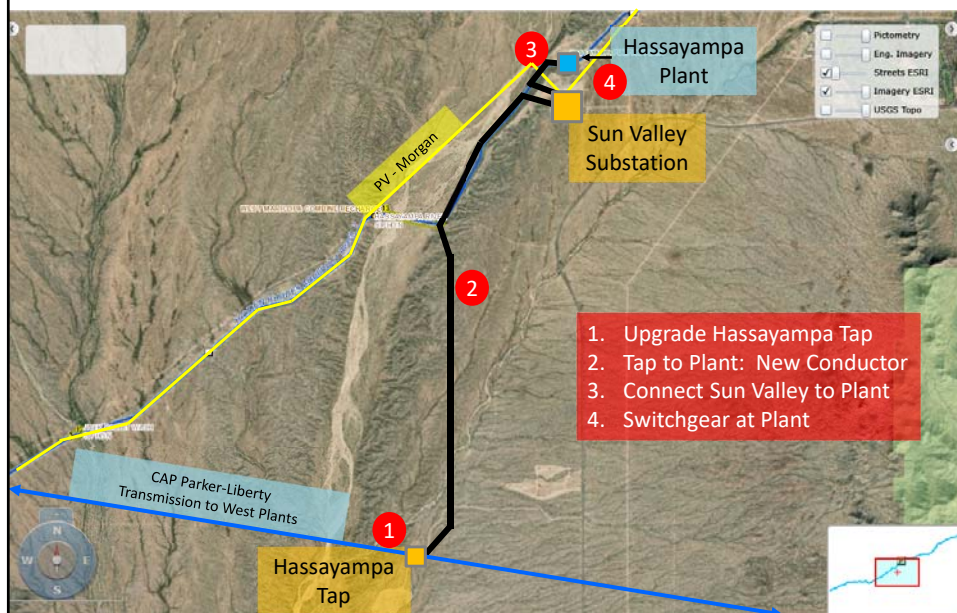
### Cost

- Board Approved: \$40.5 million
- Total Spent: \$28.6 million\*

\* Billed to date



## Project 2 - Hassayampa Tap 230 kV Project



## Hassayampa Tap 230 kV Project

### Project Facts

- Connects Hassayampa to PV-Morgan
- Connects Western Plants to PV-Morgan
- Board Approved Contract: February 2015
  - Project Manager: WAPA

### Importance to CAP

- Reliability - Western Pumping Plants
  - Additional Grid Interconnection at Sun Valley
  - Secondary Feed to Hassayampa
- Conveys NGS Energy Directly to CAP Loads
  - Avoids Transmission Cost
- Access to Market at PV Hub
  - Direct Link: Palo Verde and Navajo Southern Transmission System



## Hassayampa Tap 230 kV Project

### Schedule

- Board Approved Contract: February 2015
- Construction Started: June 2017
- Scheduled Completion Date: January 2019
- Actual Completion Date: January 2019

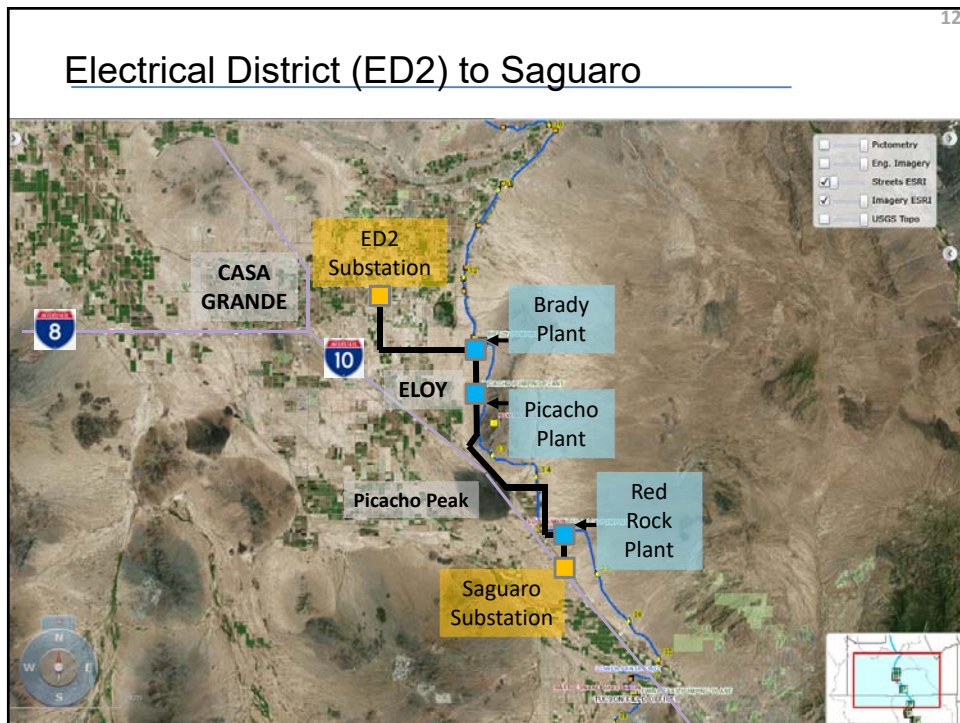
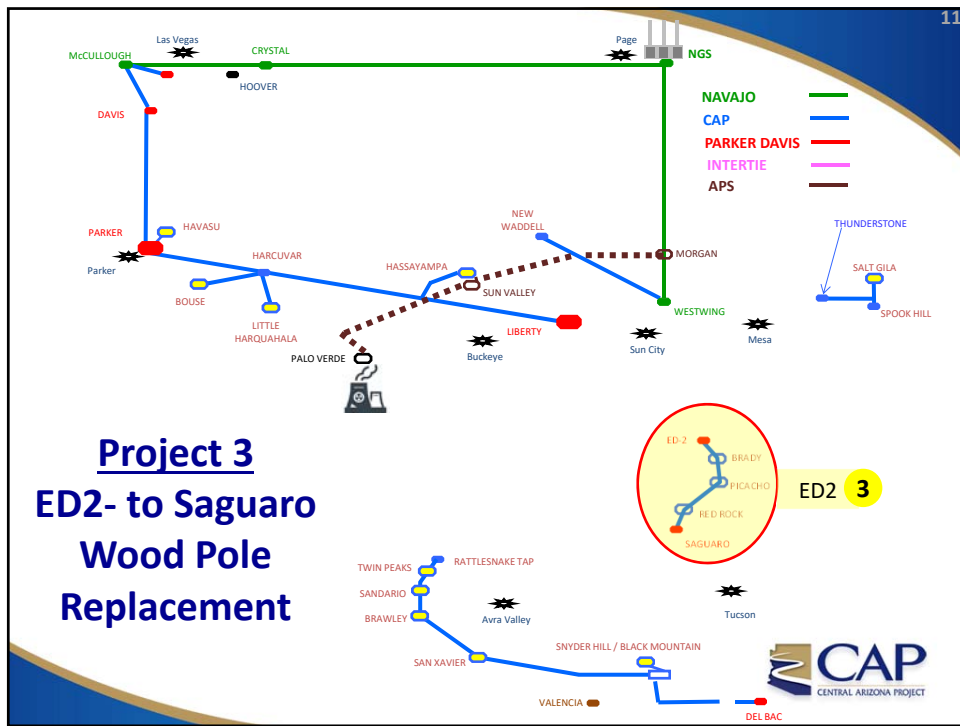
### Cost

- Board Approved: \$14.1 million
- Total Spent: \$13.7 million\*

\* Billed to date







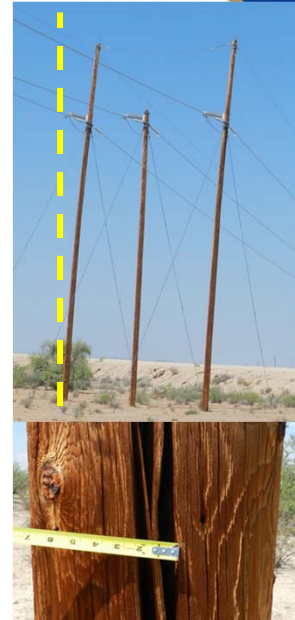
## Electrical District (ED2) to Saguaro

### Project Facts

- Replaces Old Wood Transmission Poles
  - Constructed in 1984
- 35.6 Miles of Conductor
- 400 Wood Poles to 252 Steel Poles
- Board Approved Contract: May 2013
  - Project Manager: WAPA

### Importance to CAP

- Reliability - Replacing Aging Infrastructure
  - Minimize service outages
- Addresses Costly Failure Mode
  - Number of Blow Down Events



## Electrical District (ED2) to Saguaro

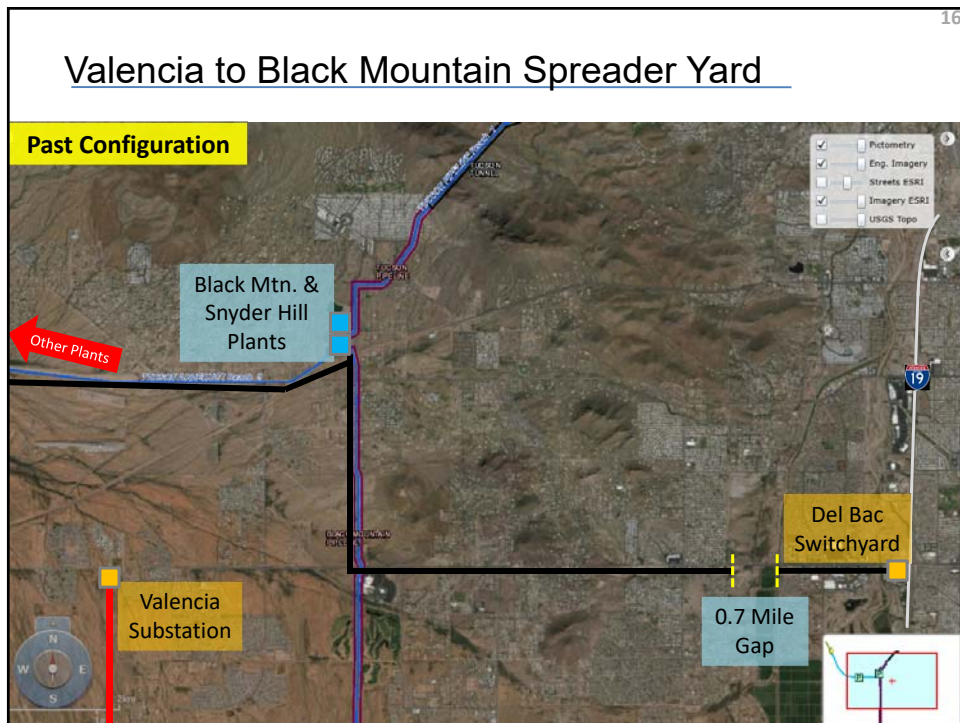
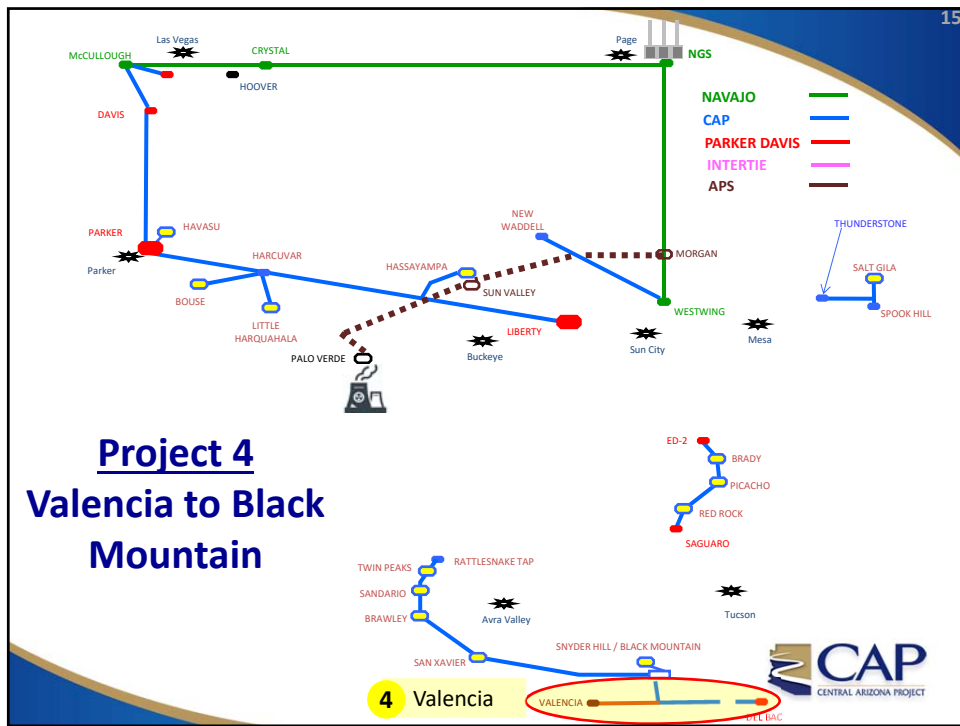
### Schedule

- Board Approved Contract: May 2013
- Construction Started: November 2016
- Scheduled Completion Date: February 2019
- Actual Completion Date: May 2018

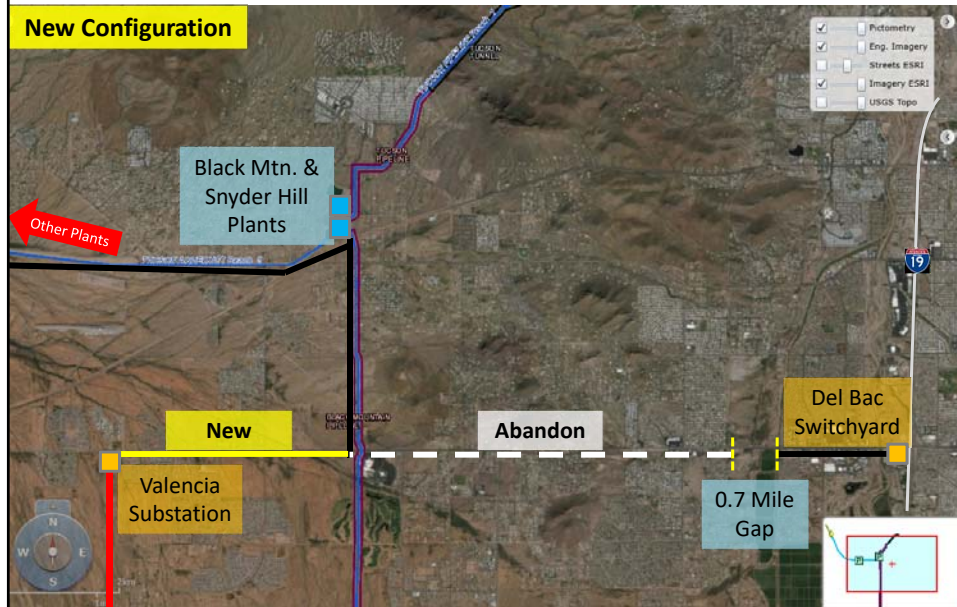
### Cost

- Board Approved: \$11.8 million
- Total Spent: \$10.4 million





## Valencia to Black Mountain Spreader Yard



## Valencia to Black Mountain Spreader Yard

### Project Facts

- 115 kV Transmission Line – 2.7 miles
  - Connects Spreader Yard to Valencia
- Board Approved Contract: August 2016
  - Project Manager: Arizona Electric Power Cooperative (AEP)
    - AEP Fronts All Costs, CAP Pays at Completion



### Importance to CAP

- Reliability – Tucson B Plants Were Radially Fed
  - Project Provides Redundant Paths (Loop)
- Addresses the 0.7 Mile Gap (Never Constructed by the Bureau of Reclamation)
- Eliminates Need for Del Bac Substation





## Valencia to Black Mountain Spreader Yard

### Schedule

- Board Approved Contract: August 2016
- Construction Started: October 2018
- Scheduled Completion Date: February 2019
- Projected Completion Date: May 2019

### Cost

- Board Approved: \$1.8 million
- Estimated Cost: \$1.8 million



YOUR WATER. YOUR FUTURE.



# Conclusion and Questions

# Colorado River Water Supply Report

## System Contents: 24.75 MAF

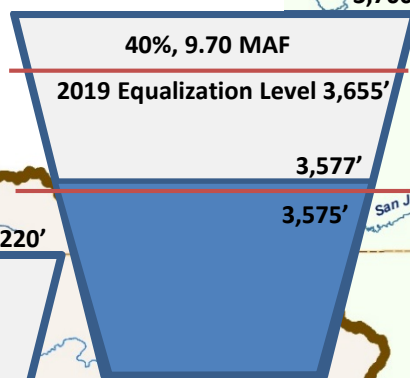
1/28/19

### Reservoir Capacities (MAF)

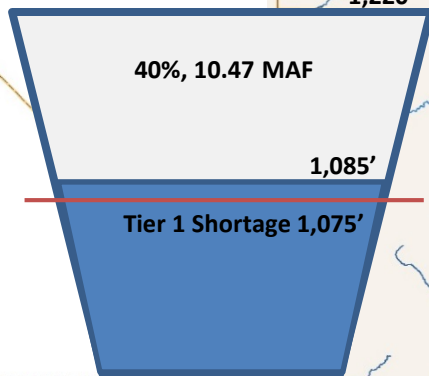
Reservoir	Current	Change	Maximum
Lake Mead	10.47	+ 0.57	25.90
Lake Powell	9.70	- 0.84	24.30
Flaming Gorge Reservoir	3.20	- 0.12	3.75
Navajo Reservoir	0.87	- 0.02	1.70
Blue Mesa Reservoir	0.25	0.00	0.83
Fontenelle Reservoir	0.15	- 0.07	0.34
Morrow Point Reservoir	0.11	0.00	0.12

NEVADA

### Lake Powell



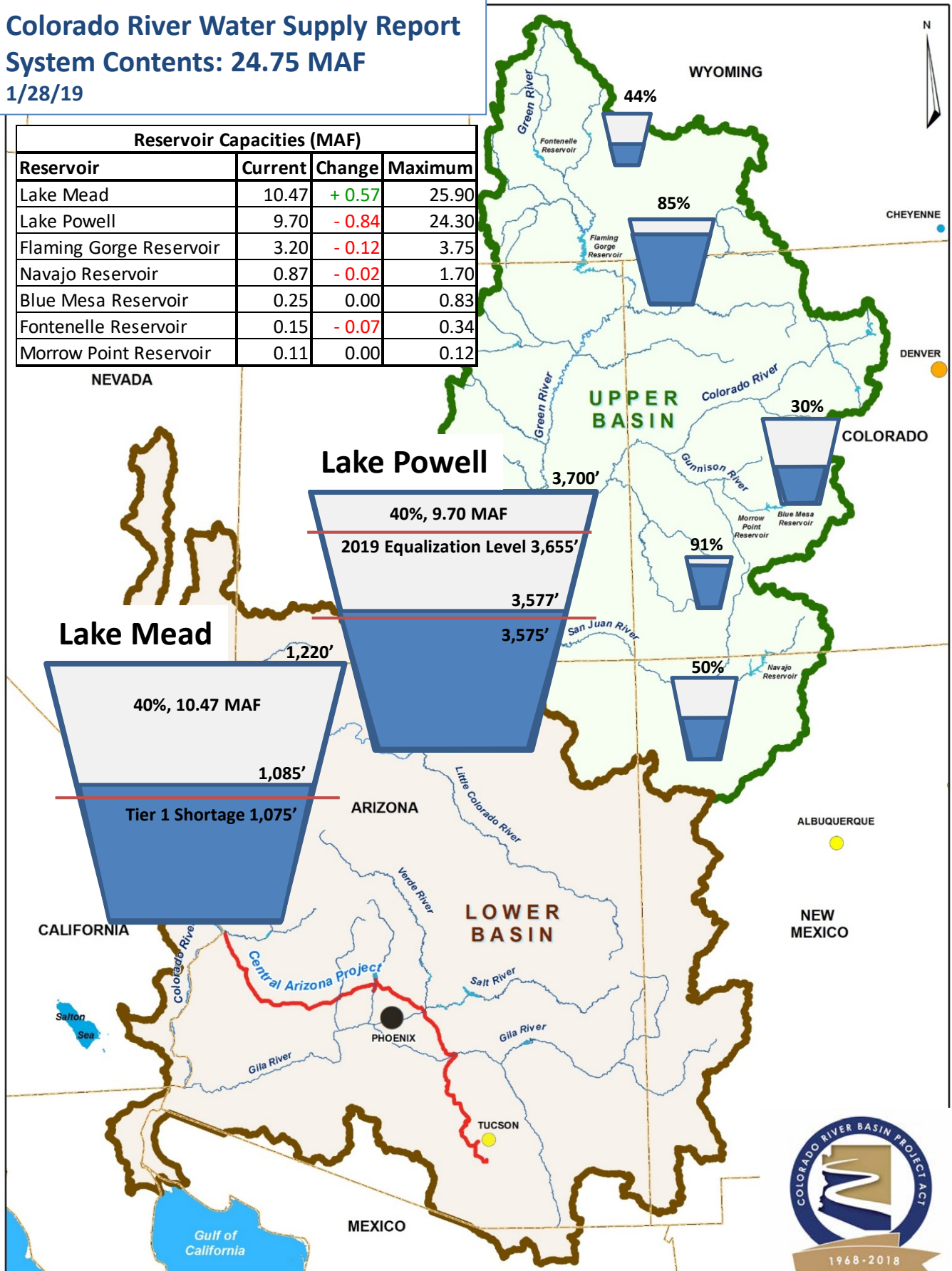
### Lake Mead



ARIZONA

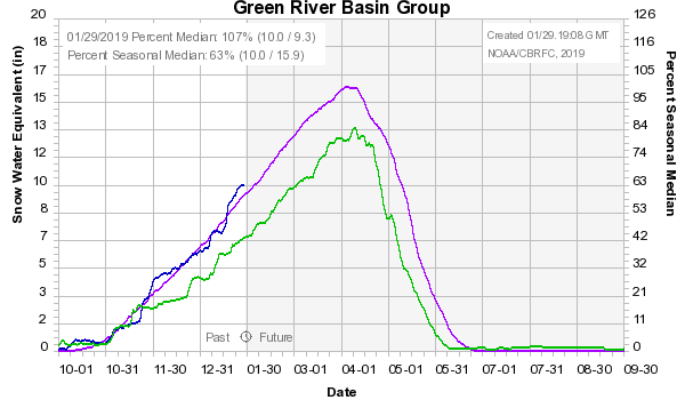
### LOWER BASIN

MEXICO



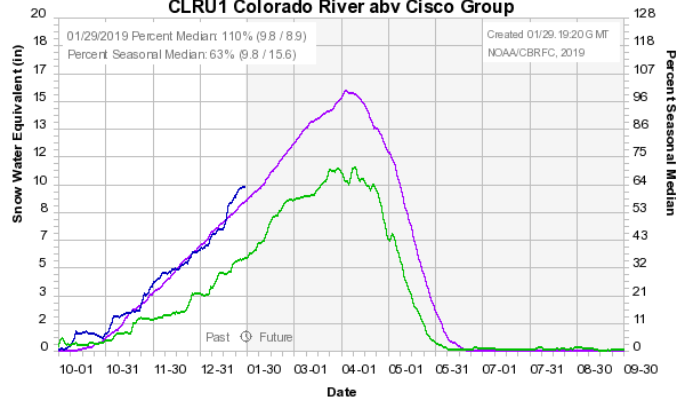
CENTRAL ARIZONA PROJECT

Colorado Basin River Forecast Center  
Green River Basin Group



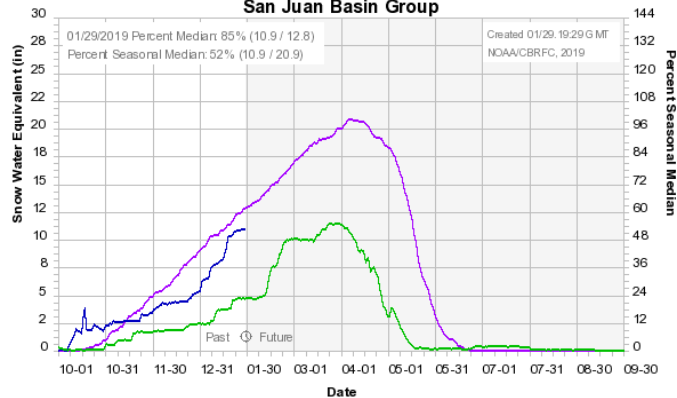
Median 1981-2010 — 2019 — 2018

Colorado Basin River Forecast Center  
CLRU1 Colorado River abv Cisco Group



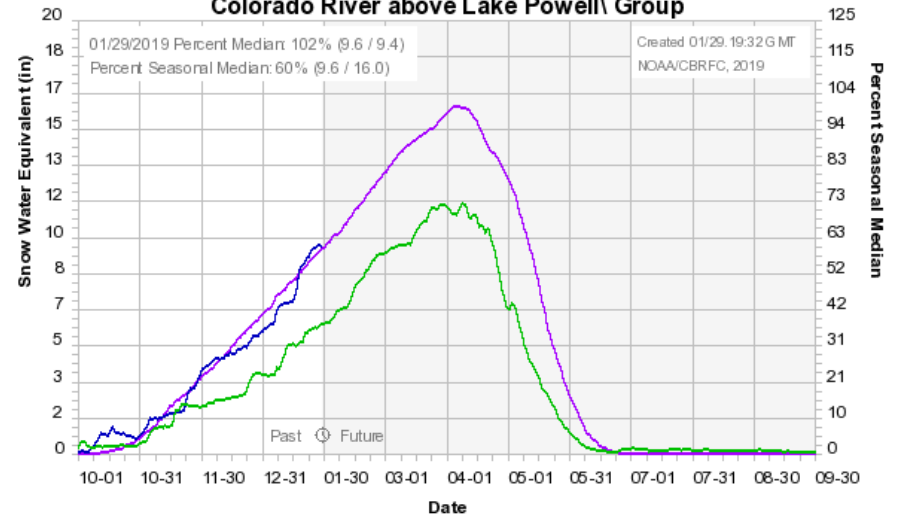
Median 1981-2010 — 2019 — 2018

Colorado Basin River Forecast Center  
San Juan Basin Group



Median 1981-2010 — 2019 — 2018

Colorado Basin River Forecast Center  
Colorado River above Lake Powell Group



Median 1981-2010 — 2019 — 2018

As of 1/29/2019, snow accumulation in the Green River Basin (contributes 33%) to date (blue line) is at 107% of the 30-year median (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 110% of the 30-year median.

Snow accumulation in the San Juan River Basin (contributes 13%) to date is at 85% of the 30-year median.

For the overall Colorado River Basin above Lake Powell, the snow accumulation to date is at 102% of the 30-year median.

The snow accumulation in each of the major tributaries and overall Colorado River Basin above Lake Powell are all showing greater amounts than last year's accumulation at this time. The Apr-Jul inflow to Lake Powell is projected to be 64% of the 30-year average.

# Update on AZ LBDP Implementation Process

February 5, 2019  
CAWCD Board Meeting



## Proposed Agreements and Status

#	Agreement Name	Status	Requires CAWCD Approval	Parties
1	Arizona Implementation	Draft concept	Y	ADWR, CAWCD, others TBD
2	CAP Ag Mitigation	Draft terms	Y	CAWCD, CAP Ag Distr.
3	CAP NIA Mitigation	Draft terms	Y	CAWCD, CAP NIA customers
4	CAWCD – SRP Exchange	Draft Agreement	Y	CAWCD, SRP
5	Arizona ICS Framework & New AZ Exhibits	Draft Agreement & draft Exhibits	Y	ADWR, BOR, CAWCD (Exhibits - interstate approval)
6	CRIT System Conservation	Draft concept	Y	ADWR, BOR, CAWCD, CRIT, others
7 *	US – CAWCD LBDP Obligations	Final form of Agreement	Approved by CAWCD Board on 1/31/19	US, CAWCD
8 **	CAWCD – ADWR Exchange of Letters	Final Letters	Executed by CAWCD and ADWR on 1/30/19	ADWR, CAWCD

\* Orange means approved by CAWCD Board, awaiting execution by the U.S. and CAWCD

\*\* Green means fully executed and final

2



## Proposed Agreements and Status

#	Agreement Name	Status	Requires CAWCD Approval	Parties
9	GSF – GSF Agreement	Concept	N	EPCOR, CAP Ag Distr.
10	USF – GSF Agreements	Draft agreements	N	Some M&I users, CAP AG Distr.
11	AWBA Recovery Agreements	Concept	N	AWBA, Recovery partners (TBD)
12	US – GRIC “Pre-firming”	Draft concept	N	US, GRIC
13	AWBA – GRIC “Pre-Firming”	Draft concept	N	AWBA, GRIC
14	Interstate ICS Borrowing Capacity	Concept	N	ADWR, SNWA, MWD
15	Interstate Aggregate ICS Capacity	Concept	N	ADWR, SNWA, CRCN, MWD
16 *	GRIC-CAGRD Water Supply Acquisition Agreements	Final Agreements	Executed by CAWCD, GRIC and GRWS on 1/31/19	GRIC, GRWS, and CAWCD and the United States

\* Yellow means fully executed by CAWCD, GRIC and GRWS, awaiting execution by the U.S.



**Central Arizona Water Conservation District  
Nominating Committee Report  
February 7, 2019**

The Nominating Committee submits the following nominations to the Board:

For the office of President:	Lisa Atkins
For the office of Vice President:	Terry Goddard
For the office of Secretary:	Sharon Megdal
For the Executive Committee Members:	Alexandra Arboleda Jim Hartdegen Mark Taylor