Arizona Water Management

Clint Chandler
Deputy Director
Arizona Department of Water Resources
June 18, 2020
Arizona’s Water Success

If there's one thing Arizona is the best in the nation at – it's water.

GOVERNOR DOUG DUCEY
THE STATE OF THE STATE ADDRESS (1.11.16)
Arizona’s Water Resource Challenges

**Driving Forces**
- Arizona has had a drought declaration in place since 1996
- Population & economic growth will increase demand for water

**Short-term Challenges**
- Risks to Colorado River Supply
  - Shortage on the Colorado River System is likely at some point
  - Recurring Lower Basin Annual Deficit

**Medium-term Challenges**
- Water resources in rural areas of the state are more stressed
  - Primary water source is groundwater
  - Lack of groundwater regulation
  - Lack of groundwater data
  - Rural areas lack the resources to address their issues

**Long-term Challenges**
- Growing statewide imbalance between existing water supplies and demand projected in the next 25 years and 50 years

As of 6/9/2020
DRAFT Transient Annualized ΔS Rates, ADWR Models

**San Simon**
- ΔS 1940-2015 ≈ 76,000 AF/yr
- ΔS 2015 ≈ 182,000 AF/yr
- (updated, unpublished)

**Pinal AMA (includes IB S)**
- ΔS 1923-1983 = 356,000 AF/yr
- ΔS 1923-2014 = 178,000 AF/yr, with CAP
- ΔS 2014/15 ≈ 0 AF/yr
- CAP use since mid-1980’s offsetting imbalance

**Tucson AMA**
- ΔS 1940-1985 = 120,000 AF/yr
- ΔS 1940-2010 = 100,000 AF/yr, with CAP
- ΔS 2014 ≈ +60,000 AF/yr
- Recent CAP Artificial Recharge
- Offsetting imbalance

**Santa Cruz**
- (dynamic, subject to flood recharge)
- ΔS 1997-2017 ≈ 0 AF/yr
- Sin≈25,000
- Sout≈25,000

**Willcox**
- ΔS 1948-1983 = 35,000 AF/yr
- ΔS 1948-2015 ≈ 76,000 AF/yr -
Rural Arizona Groundwater Challenges

La Paz County
Water levels at numerous wells throughout the Ranegras Plain Basin have been identified as having a downward trend. Between 2015-2019, the average water level change at an index well was \(-1.9\) feet.

Mohave County
Water levels at numerous wells throughout the Hualapai Basin have been identified as having a downward trend. Between 2015-2019, the average water level change at an index well was \(-5.4\) feet.

Cochise County
Water levels at numerous wells throughout the Wilcox Basin have been identified as having a downward trend. Between 2015-2019, the average water level change at an index well was \(-15.9\) feet.
Governor’s Water Augmentation, Innovation & Conservation Council

Created by Executive Order on January 31, day of DCP signing

- Dissolves the Governor’s Water Augmentation Council (GWAC) and replaces with the Governor’s Water Augmentation, Innovation and Conservation Council (GWAICC)
- Investigates long-term augmentation to benefit Arizona, and strategies for conservation and innovation in pursuit of more sustainable water supplies
- Meets quarterly and has formed working groups. Inaugural meeting, March 8, 2019
Governor’s Water Augmentation, Innovation & Conservation Council

Created by Executive Order on January 31, day of DCP signing

- Chaired by Director of ADWR
- Includes previous members of the GWAC, plus Speaker of the House, President of the Senate and House and Senate Minority Leaders, or their legislative designees, plus others as appointed by the Governor
- Shall consider a communication plan for Arizona to accurately convey Arizona’s water resiliency and efforts to maintain resiliency going forward
Non-AMA Groundwater Committee

• Working to achieve a baseline understanding of Arizona groundwater outside the AMAs.

• Working to identify and discuss potential options, including Best Management Practices, to address groundwater challenges in those areas.

Post 2025 AMA Committee

• Focused on identifying water management challenges facing the AMAs and generating strategic solutions for 2025 and beyond.
Desalination Committee

• Working to evaluate and overcome barriers to desalination projects.

Long-term Water Augmentation Committee

• Long-Term Water Augmentation Opportunities for Arizona report was released August 2019.

• It identifies potential opportunities to augment the State’s water supplies.

• It will continue to consider and potentially develop additional options for augmentation.
Groundwater Management
Active Management Areas

Active Management Areas (AMAs)
- Phoenix
- Pinal
- Prescott
- Santa Cruz
- Tucson

Irrigation Non-Expansion Areas (INAs)
- Joseph City INA
- Harquahala INA
- Douglas INA
Regulatory Structure

- Registration of all wells
- Adequate Water Supply
- Community Water Systems Documentation
  +
  - Expansion of irrigated acres is prohibited
  - Monitoring and Reporting
  +
  - Assured Water Supply
  - Management Goals, Plans, & Conservation Programs
  - Withdrawal Fees
Estimated 4MP Adoption Timeline

Conservation Program Requirements go into effect at least 2 years after a plan is adopted. ADWR shifts the actual effective date past the 2-year mark to line up with Reporting Years.
The stakeholder group is chaired by Pinal County Supervisor Stephen Miller.

Bill Garfield of Arizona Water Company and Jake Lenderking of Global Water serve as co-vice chairs.

Six meetings have been held:

- December 9, 2019
- January 6, 2020
- February 3, 2020
- February 10, 2020
- March 2, 2020
- June 1, 2020

In support of this effort, the Department will continue providing technical support and input when requested.

When evaluating proposals from the task force, the State’s assessment will uphold Governor Ducey’s commitment to consumer protection and water sustainability objectives of the Assured Water Supply Program.
Arizona’s Water Future

The Drought Contingency Plan is the most significant water legislation passed in nearly 40 years.

It was a collaborative action that ensures that we continue to protect the river system while providing a reliable source of water to the 40 million people who rely on it.

Arizona Department of Water Resources
• Dec 2007 – Completion of the 2007 Guidelines
• Fall 2012 – Completion of the Colorado River Basin Study
• Fall 2014 – Execution of the Pilot Drought Response MOU
• Summer 2015 – Bureau of Reclamation Commissioner Estevan Lopez assembles Lower Basin Principals (state reps)
• Spring 2016 – LBDCP framework is completed and work begins at the intrastate level to develop implementation plans
• Winter 2017 – “DCP Plus” fails to gain traction in Arizona
• Spring 2018 – ADWR and CAWCD declare a “fresh conversation”
• Winter/Spring 2019 – Arizona Legislature and U.S. Congress pass DCP legislation
• 2020 – DCP Implementation
Drought Contingency Plan Recap

Lower Basin Drought Contingency Plan

• ADWR & CAWCD jointly hosted 9 public Steering Committee meetings to discuss & recommend how to adopt and implement the LBDCP in a way that is acceptable to Arizona water users

• January 31, 2019 – Arizona Legislature passed & Gov. Ducey signed SB 1227
  - The legislation authorized ADWR Director to sign the Interstate DCP Agreements on behalf of Arizona

Colorado River Drought Contingency Plan


• April 8, 2019 – Bill passed after announced by Sen. McSally & Rep. Grijalva

• April 16, 2019 – Signed by President Trump

• May 20, 2019 – Signed & finalized by Lower Basin States, Reclamation & Interior
Motivation for DCP

- Ongoing drought, structural deficit and decline of major Colorado River Reservoirs (Lake Powell and Lake Mead) – risk of shortage is growing
- Concerns about “crash” in lake levels – i.e., “point of no return” if no action taken soon
- Basin States’ ability to determine outcomes vs. having them imposed by the United States
- Value proposition of leaving more water vs. taking full supplies
• Having a schedule and deadlines
• Think “out of the box” and be willing to change course or start over despite time pressures
• Seek collaboration and partnerships
• Inclusion of concepts and proposals from all parties
• Arizona is stronger together
• Recognizing the need for a “fresh conversation”
• Open and transparent dialogue, including work groups
  ▪ Recorded sessions
  ▪ Posted materials
• Involvement of all interested parties including Tribes that are necessary to achieve to be successful
• Inclusion of both AZ executive branch and AZ legislative branch participants directly in the conversation

- The review is a retrospective, fact-based analysis of the operational performance of the rules.
- The review is not renegotiation of new rules
- The Basin States will participate in the 7.D review process
- Other stakeholders including Tribes and NGOs will participate in the process
- Negotiations for post-2026 rules will follow the completion of the 7.D review, likely starting in 2021
The success of the Arizona DCP Process forms a template for how Arizona can prepare for the reconsultation process.

As co-chairs of the DCP Steering Committee, ADWR & CAP have met with the DCP Steering Committee Delegates to gain their input on how Arizona should proceed to prepare for the next negotiation process.

ADWR and CAP intend to jointly reconvene the DCP Steering Committee Delegates to outline a new process aimed to prepare Arizona for the development of new Colorado River operating rules.

We continue to be stronger together.
Establish a process for continued engagement within Arizona throughout the Reconsultation process

Provide a venue for developing and sharing stakeholder perspectives and values to guide Arizona’s perspectives in the Reconsultation process

Identify risks and benefits to inform Arizona’s input to the Reconsultation process

Continue the transparency that was established during the successful DCP Steering Committee effort
ADWR & CAP will host a virtual meeting of the Arizona Reconsultation Committee on June 25, from 10:00 am to 12:00 pm to discuss the following items:

- Update on Colorado River conditions
- Status of the implementation of the Drought Contingency Plan
- Process to prepare Arizona for the reconsultation of the 2007 Guidelines
As Arizona transitions to a drier future, we must continue to promote a culture of conservation - one that enables the unbeatable quality of life and boundless opportunity we enjoy.

GOVERNOR DOUG DUCEY
SIGNS ARIZONA DCP LEGISLATION (1.31.19)
Clint Chandler
Deputy Director

Phone: 602.771.8659
Email: cchandler@azwater.gov

Website: www.azwater.gov
Twitter: @azwater