I. Welcome

II. Key Issues for 5th Management Plans
   A. Statutory Framework
   B. Conservation

III. Subgroup Meetings Update and Next Steps
   A. Agricultural Subgroup
   B. Municipal Subgroup
   C. Industrial Subgroup
      i. Turf Breakout
   D. Safe-yield Technical Subgroup

IV. 5MP Timeline

V. Closing Remarks
Key Issues for the Fifth Management Plans
Statutory Requirements
Management Goals
(A.R.S. § 45-562)

Safe-yield:
“A groundwater management goal which attempts to achieve and thereafter maintain a long-term balance between the annual amount of groundwater withdrawn in an active management area and the annual amount of natural and artificial recharge in the active management area.”
(A.R.S. § 45-561(12))

Prescott, Phoenix, and Tucson AMAs:
Safe-yield by the year 2025

Pinal AMA:
To allow development of non-irrigation uses and to preserve existing agricultural economies in the AMA for as long as feasible, consistent with the necessity to preserve future water supplies for non-irrigation uses.

Santa Cruz AMA:
To maintain a safe-yield condition in the AMA and to prevent local water tables from experiencing long term declines
A.R.S. § 45-563 (A)

“The director shall develop a management plan for each initial active management area for each of five management periods... and shall adopt the plans only after public hearings... The plans shall include a continuing mandatory conservation program... designed to achieve reductions in withdrawals of groundwater.”
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<th>Statutory Requirements - Summary</th>
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<th>A.R.S. § 45-564 et seq.</th>
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<td>Historical Natural Recharge</td>
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<td>May Establish Cropped Acreage Program</td>
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<td>Recommendations to AWBA/for well locations</td>
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Conservation
Key Issues

* Continued Progress toward Management Goals
* Definitions and Strategies
* Timeline and Transition into Drier Future
Progress toward Management Goals

Prescott AMA
Annual Overdraft – Inflows & Outflows
Conservation in the Context of the Management Plans

A.R.S. § 45-563 (A)

“The director shall develop a management plan for each initial active management area for each of five management periods... and shall adopt the plans only after public hearings... The plans shall include a continuing mandatory conservation program... designed to achieve reductions in withdrawals of groundwater.”
Water Management Strategies

“*It was obvious that if we didn’t use the new supply to help achieve a balance, we’d be in an awful mess in forty or fifty years.*”

-Wes Steiner

Supply Side

Meeting demand with new resources

* Colorado River water delivered through the CAP
* Effluent
* Recharge/Recovery

Demand Side

Managing demand to postpone/avoid the need to develop additional resources or to bring use in line with available resources

* “reductions in withdrawals of groundwater”
Demand Management in the Context of the Management Plans

* Long-term reductions v. Short-term curtailment
  * Looking for strategy around using water wisely, not for short-term restriction/reduction

* Benefits
  * Progress toward the goals/long-term supply resiliency
  * Balancing supply/demand to allow for growth within resource availability
  * Reducing demand → Long-term reduction in costs
Demand Management Measures

Conservation

Reducing total use

“...reductions in withdrawals of groundwater.”

Efficiency

Minimizing waste

Efficiency can coincide with conservation, but must be designed to reduce total use to also be conservation.
Conservation Programs

* Existing components

* How might we consider using demand management as a principle for designing conservation programs going forward?
  * Focus on long-term
  * Focus on elimination of waste
  * Focus on “reductions in withdrawals of groundwater” on the AMA scale
  * Moving beyond simple “efficiency”
**BMP Programs**

**Agricultural**
A.R.S. § 45-568.02(G)

“The director shall include... a best management practices program... in lieu of complying with an irrigation water duty and a maximum annual groundwater allotment. The program shall be designed to achieve conservation that is at least equivalent to that required under [the Base Program].”

**Municipal**
A.R.S. § 45-568.01(D)

“The director shall design the non-per capita conservation program to achieve water use efficiency in the service areas of municipal providers regulated under the program equivalent to the water use efficiency assumed [under the GPCD Program]”
Management Goals

* Demand Management measures and strategies can create further progress toward the goals.
* All sectors contribute to overdraft and can contribute toward progress toward the goals.
* 5MP Goal: Finding conservation and efficiency in all sectors that is both practical and makes incremental progress toward reducing withdrawals of groundwater
5MP Timeline

* 5MP needs to contain flexibility and make progress to take us into the future
* Statutes do not yet define what comes after the 5MP
  * We anticipate there will be some continued water management structure, but the details of that and the timing are yet to be defined.
  * The 5MP Conservation Requirements will remain in place until subsequent requirements become effective.
Subgroup Meetings Update & Next Steps
A.R.S. § 45-563 (A)

“The director shall develop a management plan for each initial active management area for each of five management periods... and shall adopt the plans only after public hearings... The plans shall include a continuing mandatory conservation program... designed to achieve reductions in withdrawals of groundwater.”

ADWR-led stakeholder forum for the development of the 5th Management Plans

Goals:
* Assess existing conservation programs
* Update existing management strategies
* Develop new management strategies
Update from Past Meetings:

* Discussed each BMP under the Non-Per Capita Conservation Program (NPCCP)

Next Steps for Future Meetings:

* Restructure and Clarify BMP Categories
* Evaluate the tiers and points structure for the NPCCP
* Revamp Conservation Efforts Report to streamline data reporting & sharing
* Discuss GPCD and Alternative programs

Next Meeting:

6/4: BMP Categories & Points Structure
Agricultural Subgroup

Update from Past Meetings:

* Compared the Base and BMP Conservation Programs
* Discussed new concepts for 5MP Agricultural Conservation

Next Steps for Future Meetings:

* Continue discussion of water use data and conservation in the Base and BMP Programs
* Further discuss and develop 5MP Programs

Next Meetings:

- 5/18: Data
- 7/20: 5MP Conservation Programs
Industrial Subgroup

Update from Past Meetings:

* Industrial Subgroup met once in September 2019
  * Recommended sub-sector level breakout groups

Next Steps for Future Meetings:

* TBD – may meet or form additional subgroups as the need arises

Next Meetings:

TBD
Update from Past Meetings:

* Detailed existing conservation programs
* Discussed goals for 5MP Conservation Program
  * Simplicity
  * Data-driven

Next Steps for Future Meetings:

* Continue to discuss strategies for simplification of the turf program moving forward while continuing to reduce withdrawals of groundwater
* Discuss how to include realistic over-seeding practices in golf course requirements
* Evaluate conservation requirements for other turf-related facilities (parks, schools, HOAs, etc.)

Next Meeting:

6/22: 5MP Conservation Program
Update from Past Meetings:

* Discussed each component of the annual safe-yield calculation
* Consensus on calculating Ag Incidental Recharge as a percent of total demand
* Introduced some methods for the long-term analysis of management goals & communication concepts

Next Steps for Future Meetings:

* Establish rates of Ag Incidental Recharge for each AMA
* Continue discussion of long-term analyses
* Consider additional communication strategies

Next Meeting:

7/7: Strategies for Long-Term Analysis
5MP Timeline
A.R.S. § 45-563 (A)

“The director shall develop a management plan for each initial active management area for each of five management periods... and shall adopt the plans only after public hearings... The plans shall include a continuing mandatory conservation program... designed to achieve reductions in withdrawals of groundwater.”

ADWR-led stakeholder forum for the development of the 5th Management Plans

Goals:

* Assess existing conservation programs
* Update existing management strategies
* Develop new management strategies
Estimated 5MP Timeline

2020

MPWG

Program Analysis

Program Development

Drafting

Document Structure & Content

Implementation & Strategy

Promulgation

Present to GUACs and stakeholders

Conservation Programs become effective 1/1/2025
MPWG Subgroups

{ All meeting info is available at new.azwater.gov/5MP }

Work Group

MPWG

- Ag: 5/18/2020
- Muni: 6/4/2020
- Industrial: TBD
- Safe-Yield Technical: 7/7/2020

Subgroup

Breakout

Turf: 6/22/2020
Questions?

managementplans@azwater.gov

Management Plans Work Group:
new.azwater.gov/5MP

Full Text of Management Plans:
new.azwater.gov/ama/management-plans

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