5th Management Plans Work Group

December 16, 2020
• Additional opportunity to provide input and feedback on items discussed in the meeting
• Questions are optional so you can choose what you’d like to provide input on
• Responses will be posted anonymously on our 5MP Concepts Webpage
• Please respond by 12/30/2020

Link to Google Form Questionnaire: https://forms.gle/khx3PWfyZvj6nLAT6
I. Welcome
II. Timeline for the 5th Management Plans
III. Subgroup Meetings Update and Next Steps
   A. Municipal Subgroup
   B. Industrial Subgroup
      i. Turf Breakout
   C. Agricultural Subgroup
   D. Safe-Yield Technical Subgroup
IV. Drafting the 5th Management Plans
   A. Goals
   B. Chapter Structure
   C. Logistics & Timeline
V. Closing Remarks
Timeline for the 5th Management Plans
Status and Timeline of 4th & 5th Management Plans

4MP

Phoenix AMA Adoption 2020
Pinal AMA Adoption 2020
Santa Cruz AMA Adoption 2020

MPWG 2019-2021
Drafting Plans 2021-2022
Adopting Plans 2022
Plans Effective 2025

5MP
Estimated 5MP Timeline

new.azwater.gov/5MP/plans-concepts

2020
MPWG
Program Analysis
Program Development

2021
Drafting
Document Structure & Content
Implementation & Strategy

2022
Promulgation
Present to GUACs and stakeholders
Conservation Programs become effective 1/1/2025
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
Municipal Subgroup

Update from Past Meetings:

* NPCCP
  * Assessed each BMP & Revised BMP list based on feedback
  * Developed & discussed tier dashboard
  * AMWUA presented a proposal for structuring
  * Discussed components of AMWUA proposal with other ideas/feedback to develop a consensus tiers and points structure proposal

* GPCD
  * Presented initial directions for the 5MP GPCD Program
  * Goals:
    * Increases conservation
    * Sets realistic targets
    * Streamlined/Understandable
    * Adaptable to characteristics of providers

Next Steps for Future Meetings:

* Continue discussing new Planning Category for the NPCCP
* Continue developing GPCD Proposal
* Consider updates to Alternative Conservation Program

Next Meeting:

2/10/2021
Industrial Subgroup

Update from Past Meetings:

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

Next Steps for Future Meetings:

* Suggestions to meet to discuss mining, cooling towers

Next Meetings:

TBD
Turf Breakout

Update from Past Meetings:
* Described need for and goals for developing 5MP Turf Conservation Program for Golf Courses
* Guest presentation from Dr. Paul Brown (University of Arizona Extension Specialist), providing updated ET/water use analysis
* Introduced proposal for Golf Course Allotment Calculation
* Introduced discussion of effluent adjustment, allotment additions, and flexibility accounts
* Introduced potential update to the Non-Golf Turf Conservation Program

Next Steps for Future Meetings:
* Continued discussion of
  * Effluent adjustment, allotment additions, and flexibility accounts
  * Proposal for Golf Course Allotment Calculation
  * Proposal for Non-Golf Turf Allotment Calculations

Next Meeting:
02/24/2021
Agricultural Subgroup

Update from Past Meetings:
* Compared the Base and BMP Conservation Programs
* Discussed new concepts for 5MP Agricultural Conservation Programs including
  * Modifications to the BMP Program
  * Potential alternative conservation program, Integrated Farm Program (IFP)
* Discussion of how multiple agricultural conservation programs (Base, IFP, BMP) could fit together in the 5MP structure
* Presentation from Agricultural Collaborators Group
* Introduced new BMP conservation program analysis
* Introduction of the BMP Advisory Committee

Next Steps for Future Meetings:
* Discuss additional BMP Conservation Program analysis
* Continue discussion of new concepts for 5MP Agricultural Conservation Programs
* Update from BMP Advisory Committee

Next Meetings:
1/27/2021
Executive Order 2020-55 provides for the continuation of the Agricultural Water Conservation Best Management Practices Advisory Committee as an advisory committee to the Director of ADWR

- Continues the Advisory Committee through the adoption of the final groundwater management plans
- Requires an additional irrigation district representative

* Chair: Pinal AMA farmer Scott Riggins
* December 9th Meeting covered the purpose and scope of the Agricultural Water Conservation BMP Advisory Committee, the history of the Agricultural BMP Conservation Program, and next steps for the committee.
* ADWR Public Meetings Calendar for future meetings: [https://new.azwater.gov/meetings](https://new.azwater.gov/meetings)
Safe-Yield Technical Subgroup

**Update from Past Meetings:**

* Discussed each component of the annual safe-yield calculation
* Proposed method to look at safe-yield in the long-term
  * Updated the Overdraft Dashboard to include long-term analysis methods
* Proposed method of communication for safe-yield

**Next Steps for Future Meetings:**

* Continue discussion of long-term analyses
* Continue discussion of communication strategies for safe-yield

**Next Meeting:**

3/10/2021
### Proposed Method of Communication – Safe-Yield Metrics

| Safe-Yield Metric                  | Definition                                                                 | 1988–2016 | Prescott | Phoenix | Pinal** | Tucson | Santa Cruz |
|-----------------------------------|---------------------------------------------------------------------------|-----------|----------|---------|---------|---------|----------|-----------|
| **Annual**                        | Proportion of years in overdraft                                         |           | ✓        | ✓       | ✓       | ✓       | ✓        |
| **Long Term Status**              | Overdraft status of the most recent year of long-term analysis           |           | ✓        | ✓       | ✓       | ✓       | ✓        |
| **Long Term Direction**           | Direction of overdraft in the most recent 3 years of the long-term analysis |           | ✓        | ✓       | ✓       | ✓       | ✓        |
| **Single Year Overdraft**         | Amount of overdraft in the most recent year of the long-term analysis    | 12,154    | 151,136  | 166,077 | -721    | 9,488   |
| **% Overdraft (by Total Demand)** | Single year overdraft, using the most recent year of the long-term analysis, as a percent of total water demand | 35.8%     | 6.5%     | 15.3%   | -0.2%   | 17.1%   |
| **% Overdraft (by Groundwater Demand)** | Single year overdraft, using the most recent year of the long-term analysis, as a percent of groundwater demand | 77.3%     | 16.2%    | 26.1%   | -0.4%   | 56.3%   |
| **Outlook**                       | Narrative about potential future issues that may impact the achievement or maintenance of safe-yield | ✓ Absence of imported water supplies ✓ Shortage of Colorado River Water ✓ Uncertainty resurface water supplies ✓ Difficulty achieving goal with existing tools | ✓ Cuts to Agricultural Pool ✓ Shortage of Colorado River Water | ✓ Shortage of Colorado River Water | ✓ Sensitivity to Drought ✓ Shallow Basins ✓ Adjudications ✓ TCI Agreement |
| **Long-Term Status**              | What does this all mean?                                                 | Not at Safe-Yield, unlikely to achieve with current practices | Not at Safe-Yield, unlikely to achieve with current practices | Safe-Yield is not the goal | Currently at or around Safe-Yield, unlikely to maintain in Colorado River shortage conditions | Not at Safe Yield, status is significantly impacted by drought conditions |

**Safe yield is not the goal for the Pinal AMA**
Drafting the 5th Management Plans
Goals for designing 5MP drafts

* Simplicity
  * Shorter – simplified chapters, less repetition
  * More accessible
  * Providing online interactive data & tools

* Statutory Requirements
  * Conservation programs designed to reduce withdrawals of groundwater
  * Other required information & programs

* Providing references to additional information
  * Groundwater Models
<table>
<thead>
<tr>
<th>Chapter</th>
<th>4MP Structure</th>
<th>5MP Structure</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction</td>
<td>Executive Summary</td>
</tr>
<tr>
<td>2</td>
<td>Hydrology</td>
<td>Hydrology (Quantity &amp; Quality)</td>
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<tr>
<td>3</td>
<td>Water Demands &amp; Supply</td>
<td>Supply and Demand (AMA-wide, by Sector, including analysis of goals)</td>
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<td>4</td>
<td>Agricultural</td>
<td>Recharge &amp; Recovery</td>
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<td>5</td>
<td>Municipal</td>
<td>Agricultural</td>
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<tr>
<td>6</td>
<td>Industrial</td>
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<tr>
<td>7</td>
<td>Water Quality</td>
<td>Industrial</td>
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<tr>
<td>8</td>
<td>Underground Water Storage, Savings, and Replenishment</td>
<td>Implementation &amp; Support</td>
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<tr>
<td>9</td>
<td>Water Management Assistance</td>
<td>Strategy &amp; Look Forward</td>
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<tr>
<td>10</td>
<td>Implementation</td>
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<tr>
<td>11</td>
<td>TAMA/PrAMA: Projections PhxAMA/PAMA/SCAMA: Water Management Strategy</td>
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<tr>
<td>12</td>
<td>TAMA/PrAMA: Water Management Strategy</td>
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Central location for all 5MP concepts, proposals, tools
Online Resources

* AMA Supply & Demand Data (Dashboards & Datasets)
* Projections
* Low Water-Use Plant List
* Supplement I
* Annual Reporting
### Logistics and Timeline

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<thead>
<tr>
<th>Year</th>
<th>Month</th>
<th>Topic</th>
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<tbody>
<tr>
<td>2020</td>
<td>December</td>
<td>Planning and prep. Requests to Hydrology, Recharge, AMAs &amp; GUACs, Compliance, AWBA, and ADEQ</td>
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<td>2021</td>
<td>January</td>
<td>Supply/Demand/Safe-Yield (Publish draft Report?)</td>
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<td>February</td>
<td>Municipal</td>
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<td>June</td>
<td>Agricultural</td>
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<td>July</td>
<td>Possible MPWG update, outreach, GUACs</td>
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<td>August</td>
<td>Implementation/Compliance</td>
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<td></td>
<td>September</td>
<td>Introduction and Strategy/Needs/Closing</td>
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<td>October</td>
<td>Internal Review</td>
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<td>November</td>
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<td>December</td>
<td>Present to GUACs</td>
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**Focus**

* All 5 Management Plans will be drafted simultaneously
* A lot of overlap between chapters
* Subgroup check-ins as respective chapters are developed
* AMA Customization
Closing
MPWG Subgroups

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

Work Group

Subgroup

Breakout

MPWG
12/16/2020

Ag
1/27/2021

Muni
2/10/2021

Industrial
TBD

Safe-Yield Technical
3/10/2021

Turf
2/24/2021
Questions?

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

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

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