• 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 8/31/2021

Link to Google Form Questionnaire: https://forms.gle/mybsfjE6Cq7wncCV6
I. Welcome
II. Status and Timeline of 5th Management Plans
III. Recap of Previous Meetings
IV. Golf Conservation Program Updates
   i. Updates to 5MP Golf Conservation Program Structure
   ii. Outdoor Legacy Golf Course Revitalization Grant
V. Discussion
VI. Next Steps/Closing
Status and Timeline of 5th Management Plans
Estimated 5MP Timeline

new.azwater.gov/5MP

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
Recap from Previous Meetings

October 2019 - Present
Update from Past Meetings:

* Detailed existing turf conservation programs
* Discussed goals for 5MP turf conservation program
* Proposed allotment calculation methods for golf courses and non-golf turf facilities
* Golf conservation program proposal packages

Today:

* Final Golf Conservation Program

Next Steps:

* Submit final comments via questionnaire
  * [https://forms.gle/mybsfjE6Cq7wncCV6](https://forms.gle/mybsfjE6Cq7wncCV6)
  * Draft regulatory language will be made available
## Summary of 5MP Turf Subgroup Meetings

<table>
<thead>
<tr>
<th>Meeting Date</th>
<th>Meeting Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. September 9, 2019</td>
<td>First Industrial Subgroup meeting, created Turf Subgroup</td>
</tr>
<tr>
<td>2. October 24, 2019</td>
<td>Turf conservation program overview, Goals for 5MP turf conservation program</td>
</tr>
<tr>
<td>3. January 23, 2020</td>
<td>Detailed overview of existing golf course conservation program, Potential changes for 5MP turf program</td>
</tr>
<tr>
<td>5. August 4, 2020</td>
<td>Proposed 5MP golf allotment method, Effluent incentive, Allotment additions, Non-golf conservation program</td>
</tr>
<tr>
<td>6. December 3, 2020</td>
<td>Non-golf conservation program, 5MP non-golf allotment proposal</td>
</tr>
<tr>
<td>7. February 24, 2021</td>
<td>Golf conservation program proposal, Guest presentation from golf stakeholders, Allotment additions, Effluent incentive</td>
</tr>
<tr>
<td>8. April 28, 2021</td>
<td>Golf conservation program proposal, Presentation from Arizona Alliance for Golf</td>
</tr>
<tr>
<td>9. August 17, 2021</td>
<td>Final 5MP golf conservation program</td>
</tr>
</tbody>
</table>
### Summary of ADWR and Arizona Alliance for Golf Meetings

<table>
<thead>
<tr>
<th>Meeting Date</th>
<th>Meeting Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. November 12, 2020</td>
<td>• Management plan golf conservation program overview</td>
</tr>
<tr>
<td></td>
<td>• Clarification of golf conservation program requirements and which facilities are regulated</td>
</tr>
<tr>
<td>2. December 14, 2020</td>
<td>• Concerns expressed by the Arizona Alliance for Golf</td>
</tr>
<tr>
<td>3. January 7, 2021</td>
<td>• Data used for 5MP program development</td>
</tr>
<tr>
<td>4. January 12, 2021</td>
<td>• Counter proposals for allotment method</td>
</tr>
<tr>
<td>5. January 26, 2020</td>
<td></td>
</tr>
<tr>
<td>6. February 2, 2021</td>
<td></td>
</tr>
<tr>
<td>7. February 16, 2021</td>
<td></td>
</tr>
<tr>
<td>8. February 19, 2021</td>
<td></td>
</tr>
<tr>
<td>9. February 22, 2021</td>
<td></td>
</tr>
<tr>
<td>10. March 26, 2021</td>
<td></td>
</tr>
<tr>
<td>11. April 15, 2021</td>
<td></td>
</tr>
<tr>
<td>12. April 21, 2021</td>
<td></td>
</tr>
<tr>
<td>13. May 14, 2021</td>
<td></td>
</tr>
<tr>
<td>April 27, 2021</td>
<td>Arizona Alliance for Golf kick-off Meeting</td>
</tr>
</tbody>
</table>
All meetings are recorded and posted: https://new.azwater.gov/5MP/meetings

5MP Concepts Page includes proposal summaries and applicable meetings, stakeholder comments, additional data: https://new.azwater.gov/5MP/plans-concepts
Proposed Program Updates
## Goals

**Increased conservation**

(“reductions in withdrawals of groundwater”)

- Improved simplicity & transparency
- Improved data & realistic application rates
- Improved administration, communication, & enforcement

**Equity**

- Balanced – lighter impact on those who are already more efficient & not too severe on those who are less efficient
Allotment Design
Allows each course flexibility to manage allotment

Allotment Structure

* Calculation to set a total allotment for a facility
* Total allotment is a water budget
  * Facility can use water within their allotment, as they see fit
  * Allows for management flexibility
  * Flex accounts accommodates year to year variability

Allotment Variables

* Acres of
  * Total Turf
    * Overseeded Turf
    * Non-Overseeded turf
  * Low water Use
  * Water Surface
* Application Rate and Assigned Efficiency
The Management Plans have regulatory authority related to groundwater.

Facilities that use any amount of groundwater in a given year are subject to the conservation requirements in the plans.

Compliance is calculated using the “Stacking” methodology, under which total water use is regulated for those using groundwater.

Compliance is calculated by “stacking” the groundwater on top of other uses.
Stacking Examples

Turf-Related Facility Conservation Allotment = 100 AF

- No groundwater use in excess of allotment
- Groundwater 20 AF in excess of allotment

- Groundwater 100 AF
- Groundwater 50 AF
- Colorado River Water 110 AF
- Colorado River Water 50 AF
- Effluent 50 AF
  \(50 \times 0.6 = 30\) AF
- Colorado River Water 50 AF

20 AF in excess of allotment
Final Allotment Method
Phoenix AMA

PART 1: Allotment Method

<table>
<thead>
<tr>
<th>Turf Category</th>
<th>Rate</th>
<th>Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overseeded Turf</td>
<td>77.5% efficiency @ 6.035 AF/Ac</td>
<td>Up to 70 acres*</td>
</tr>
<tr>
<td>Non-Overseeded Turf</td>
<td>77.5% efficiency @ 4.36 AF/Ac</td>
<td>70 to 90 acres*</td>
</tr>
<tr>
<td>Additional Turf</td>
<td>NONE</td>
<td>NONE</td>
</tr>
<tr>
<td>LWU</td>
<td>0.74AF/Ac</td>
<td>Up to 1Ac/Hole</td>
</tr>
</tbody>
</table>

PART 1: Results

<table>
<thead>
<tr>
<th>Aggregate Change from 4MP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Courses Currently Using Groundwater</td>
</tr>
<tr>
<td>- 3.1%</td>
</tr>
<tr>
<td>- 2,248</td>
</tr>
</tbody>
</table>

PART 2: Effluent Adjustment
* NO CHANGE from current adjustment

PART 3: Allotment Additions
* No change from February proposal
  • Update to low water use application rate
  • Newly turfed areas cannot increase previous total turfed acres

*Acreages shown are for an 18-hole course and would be adjusted for courses with a different number of holes.
# Final Allotment Method – Part 1

## SMP TURF CONSERVATION PROGRAM FOR GOLF COURSES

<table>
<thead>
<tr>
<th>Category</th>
<th>AMA</th>
<th>Rate</th>
<th>Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turf Category 1</td>
<td>Prescott</td>
<td>5.43 AF/Ac</td>
<td>70 acres*</td>
</tr>
<tr>
<td></td>
<td>Phoenix</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pinal</td>
<td>6.035 AF/Ac</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tucson</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Santa Cruz</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Turf Category 2</td>
<td>Prescott</td>
<td>3.76 AF/Ac</td>
<td>70 to 90 acres*</td>
</tr>
<tr>
<td></td>
<td>Phoenix</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pinal</td>
<td>4.36 AF/Ac</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tucson</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Santa Cruz</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Turf Category 3</td>
<td>Prescott</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
</tr>
<tr>
<td></td>
<td>Phoenix</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pinal</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tucson</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Santa Cruz</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water Surface Acres</td>
<td>Prescott</td>
<td>5.5 AF/Ac</td>
<td>if built after 1984, 0.14 Acres/Hole</td>
</tr>
<tr>
<td></td>
<td>Phoenix</td>
<td>6.2 AF/Ac</td>
<td>if built after 1989, 0.14 Acres/Hole</td>
</tr>
<tr>
<td></td>
<td>Pinal</td>
<td>5.8 AF/Ac</td>
<td>if built after 1991, 0.14 Acres/Hole</td>
</tr>
<tr>
<td></td>
<td>Tucson</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Santa Cruz</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low Water Use Acres</td>
<td>All</td>
<td>0.74 AF/Ac</td>
<td>1 Acre/Hole</td>
</tr>
</tbody>
</table>

*Enter Course Information in White Boxes Below*

**Proposed Allotment Information**

- **Total Turf Acres**
- **Number of Holes**
- **Turf Category 1 (AF)**
- **Turf Category 2 (AF)**
- **Turf Category 3 (AF)**
- **Low Water Use Acres**
- **Low Water Use Acres (AF)**
- **Year Course Built**
- **AMA**
- **Water Surface Area (AF)**

**Calculate Total Proposed Allotment (AF)**

**https://new.azwater.gov/5MP/plans-concepts**

*Acreages shown are for an 18-hole course and would be adjusted for courses with a different number of holes.*
## Effluent Adjustment – Part 2

No changes from 4MP

<table>
<thead>
<tr>
<th>AMA</th>
<th>4MP</th>
<th>Proposed 5MP</th>
<th>5MP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prescott</td>
<td>0.6</td>
<td>0.7</td>
<td>0.6</td>
</tr>
<tr>
<td>Phoenix</td>
<td>0.6</td>
<td>0.7</td>
<td>0.6</td>
</tr>
<tr>
<td>Pinal</td>
<td>0.7</td>
<td>0.7</td>
<td>0.7</td>
</tr>
<tr>
<td>Tucson</td>
<td>0.7</td>
<td>0.7</td>
<td>0.7</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>0.7</td>
<td>0.7</td>
<td>0.7</td>
</tr>
</tbody>
</table>

- One AF of effluent use would be counted as 0.6 or 0.7 AF of water use for the purpose of compliance
Allotment Additions- Part 3

Updated in 5MP

* Revegetation
  * updated application rate of 0.74 AF/Acre
  * Limited to three years

* Newly Turfed Area
  * Single year, 1 AF/ac and no more than 5 AF/hole (PrAMA: 0.8 AF/ac and no more than 4 AF/hole)
  * Only applies if total turfed area does not increase

Unchanged from 4MP

* Filling or Refilling Bodies of Water
  * Single year

* Addition for Leaching
  * Remains in effect as long as TDS remains high
Management Plan Promulgation

- **Promulgation Order**: 30-60 days
- **Hearing**: 30 days
- **Summary of Findings Published**: Potential for rehearing or review
- **Final Order of Adoption**: 2 weeks in newspapers within 30 days
- **Management Plan becomes Effective**: > 2 years
- **Notices of Conservation Requirements are mailed**
- **Conservation Requirements become Effective**

{Comment Period}
* Application for a conservation requirement that differs from that established by the Management Plan conservation program

* Can result in an adjustment to conservation requirement that lasts:
  * Administrative Review: the length of the management plan
  * Administrative Variance: Up to 5 years

* Process:
  * Application within 90 days of notice of conservation requirement
  * Consideration of extraordinary circumstances which makes unreasonable to comply with conservation requirement
Visit Arizona Initiative:
Legacy Golf Course Revitalization Grant
Legacy Golf Course Revitalization Grant

Source: Arizona Office of Tourism Website [https://tourism.az.gov/grants/](https://tourism.az.gov/grants/)

- Funding source: Federal American Rescue Plan
- Non-competitive, offered on a rolling basis
- $15,000 per acre up to $105,000
- Guidelines, application, and check-list are available at:
  - [https://tourism.az.gov/visit-arizona-legacy-golf-course-revitalization-grant/](https://tourism.az.gov/visit-arizona-legacy-golf-course-revitalization-grant/)
- Webinar detailing all Visit Arizona Initiative Grants:
  - Recorded Video: [https://www.youtube.com/watch?v=G2LL8QZCVcA](https://www.youtube.com/watch?v=G2LL8QZCVcA)
Legacy Golf Course Revitalization Grant

Source: Arizona Office of Tourism Website
https://tourism.az.gov/grants/

* **Grant Criteria:**
  - 18-hole golf course
  - Over 90 acres
  - Built prior to 1986
  - Golf course infrastructure modernization projects that helps the course reduce its dependence on water resources
  - Include a project scope of work and budget that assesses the connection between the negative economic harm and the COVID-19 public health emergency, the nature and extent of that harm, and how the use of this funding would address such harm.” (31 CFR Part 35, pg. 11)
Discussion
Closing Comments
Estimated 5MP Timeline

new.azwater.gov/5MP

2020: Development

- Work Group, Subgroups, & Stakeholder Outreach
- Data Analysis
- Develop Concepts to Increase Conservation
  - Update Existing Programs
  - Design New Programs

2021: Drafting

- Build out Concepts developed in previous phase
  - Regulatory Language
  - Feedback from GUACs/AMAs re: Customization & Implementation
- Draft Narrative & Background
- Develop Data Tools

2022: Adoption

- Publication of initial drafts
- Presentation to GUACs for recommendations
- Promulgation processes
  - Hearing & Public Comment
  - Findings & Adoption
  - Noticing of Conservation Requirements
5MP Turf Breakout - Progress

Update from Past Meetings:
* Detailed existing turf conservation programs
* Discussed goals for 5MP turf conservation program
* Proposed allotment calculation methods for golf courses and non-golf turf facilities
* Golf conservation program proposal packages

Today:
* Final Golf Conservation Program

Next Steps:
* Submit final comments via questionnaire
  * [https://forms.gle/mybsfj6Cq7wncCV6](https://forms.gle/mybsfjE6Cq7wncCV6)
  * Draft regulatory language will be made available

Next Meeting:
* TBD
Questions?

managementplans@azwater.gov

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

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