



5th Management Plans Work Group Turf Breakout Meeting

August 17, 2021

Google Form Questionnaire

- 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>



Agenda

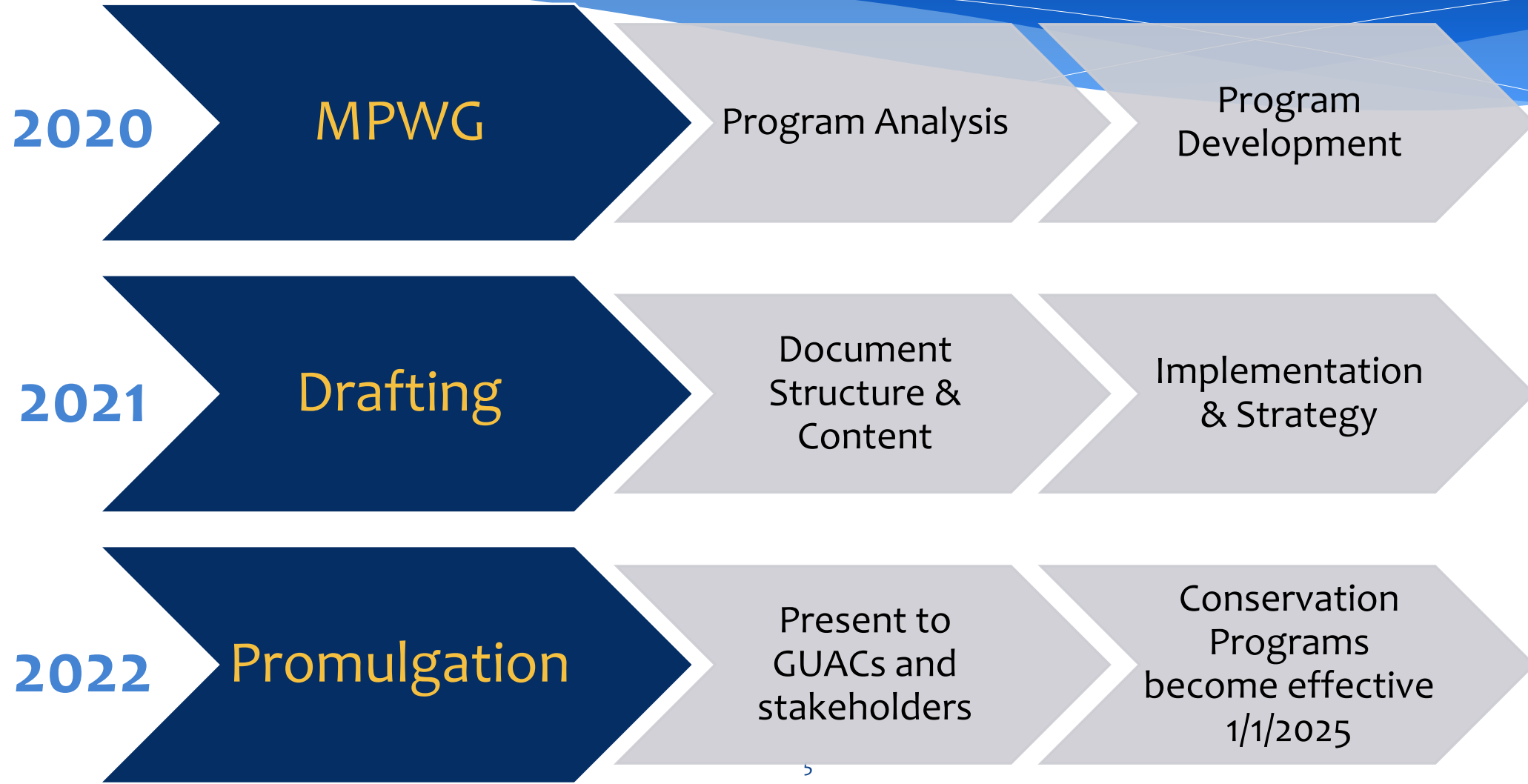
- I. Welcome
- II. Status and Timeline of 5th Management Plans
- III. Recap of Previous Meetings
- IV. Golf Conservation Program Updates
 - i. Updates to 5MP Golf Conservation Program Structure
 - ii. Outdoor Legacy Golf Course Revitalization Grant
- V. Discussion
- VI. Next Steps/Closing

Status and Timeline of 5th Management Plans



Estimated 5MP Timeline

new.azwater.gov/5MP



Recap from Previous Meetings

October 2019 - Present



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/mybsfjE6Cq7wncCV6>
 - * **Draft regulatory language will be made available**

Next Meeting:



TBD



Summary of 5MP Turf Subgroup Meetings

Meeting Date	Meeting Topic
1. September 9, 2019	First Industrial Subgroup meeting, created Turf Subgroup
2. October 24, 2019	Turf conservation program overview, Goals for 5MP turf conservation program
3. January 23, 2020	Detailed overview of existing golf course conservation program, Potential changes for 5MP turf program
4. June 22, 2020	Guest presentation from U of A, Process for 5MP golf allotment method development, Proposed 5MP golf allotment method
5. August 4, 2020	Proposed 5MP golf allotment method, Effluent incentive, Allotment additions, Non-golf conservation program
6. December 3, 2020	Non-golf conservation program, 5MP non-golf allotment proposal
7. February 24, 2021	Golf conservation program proposal, Guest presentation from golf stakeholders, Allotment additions, Effluent incentive
8. April 28, 2021	Golf conservation program proposal, Presentation from Arizona Alliance for Golf
9. August 17, 2021	Final 5MP golf conservation program

Summary of ADWR and Arizona Alliance for Golf Meetings

Meeting Date	Meeting Topics
1. November 12, 2020	<ul style="list-style-type: none"> • Management plan golf conservation program overview • Clarification of golf conservation program requirements and which facilities are regulated • Concerns expressed by the Arizona Alliance for Golf • Data used for 5MP program development • Counter proposals for allotment method
2. December 14, 2020	
3. January 7, 2021	
4. January 12, 2021	
5. January 26, 2020	
6. February 2, 2021	
7. February 16, 2021	
8. February 19, 2021	
9. February 22, 2021	
10. March 26, 2021	
11. April 15, 2021	
12. April 21, 2021	
13. May 14, 2021	
April 27, 2021	Arizona Alliance for Golf kick-off Meeting

5MP Resources

5TH MANAGEMENT PLANS CONCEPTS

As ADWR and the 5th Management Plans Work Group proceeds in the development of the 5th Management Plans, concepts and stakeholder comments related to 5MP conservation programs will be made available below. Meeting links are provided, to provide additional context for the concept. Any questions or comments on these concepts can be sent to managementplans@azwater.gov.

AGRICULTURAL SUBGROUP >

INDUSTRIAL SUBGROUP >

TURF BREAKOUT GROUP ▾

▼ Concept: Golf Course Conservation

The turf conservation program in the management plans applies to turf facilities who use groundwater and have 10 or more acres of water-intensive landscape. Golf courses are a subset of turf facilities, and the golf course conservation program in the management plans applies to golf courses who use groundwater, have 10 or more acres of water-intensive landscape, and have at least 9 holes.

There are currently 2 proposal packages for Golf Courses. Both proposal packages have 3 parts including an allotment method, effluent adjustment, and allotment additions.

April 28, 2021 Turf Breakout Meeting

ADWR presented updated proposal packages for the golf conservation program. Both conservation program proposals packages include three components, updated allotment calculation methodologies, the effluent adjustment, and updated allotment additions. Calculators for both allotment methods were developed and are available on the 5MP concepts page. [Arizona Alliance for Golf Data, April 2021](#)

5MP Concepts Page includes proposal summaries and applicable meetings, stakeholder comments, additional data:

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

Proposal Allotment Calculators:
<https://new.azwater.gov/5MP/plans-concepts>

APRIL PROPOSED 5MP TURF ALLOTMENT CALCULATOR FOR GOLF COURSES DRAFT

Enter Course Information In White Boxes Below		Proposed Allotment Information	
Total Turfed Acres	<input type="text"/>	Turf Category 1 (AF)	<input type="text"/>
Number of Holes	<input type="text"/>	Turf Category 2 (AF)**	<input type="text"/>
Water Surface Acres	<input type="text"/>	Low Water Use Acres (AF)	<input type="text"/>
Low Water Use Acres	<input type="text"/>	Water Surface Area (AF)**	0.00
Year Course Built	<input type="text"/>	Total Proposed Allotment (AF)*	0.00

AMA DRAFT

Last Updated

Enter Course Information In White Boxes Below		Proposed Allotment Information	
Total Turfed Acres	<input type="text"/>	Course Category	<input type="text"/>
Number of Holes	<input type="text"/>	Turf Category 1 (AF)	<input type="text"/>
Water Surface Acres	<input type="text"/>	Turf Category 2 (AF)	<input type="text"/>
Low Water Use Acres	<input type="text"/>	Turf Category 3 (AF) ⁵	<input type="text"/>
Year Course Built	<input type="text"/>	Low Water Use Acres (AF)	<input type="text"/>
AMA	<input type="text" value="Choose AMA"/>	Water Surface Area (AF)**	<input type="text"/>
		Total Proposed Allotment (AF)*	0.00

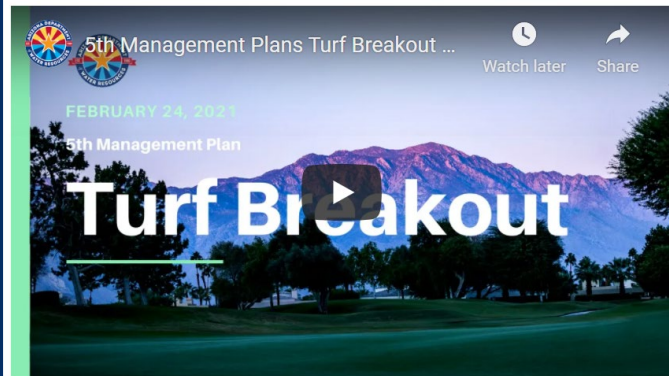
All meetings are recorded and posted:
<https://new.azwater.gov/5MP/meetings>

5th Management Plans Turf Breakout Meeting

Wednesday, February 24, 2021 - 10:00am to 11:30am

[Turf Breakout Meeting Agenda \(2/24/2021\)](#)

[Turf Breakout Meeting Presentation \(2/24/2021\)](#)



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



Management Plans Requirements

Applicability

- * 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

- * 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

20 AF in excess
of allotment

Groundwater
40 AF

Groundwater
100 AF

Groundwater
50 AF

Colorado
River Water
50 AF

Colorado
River Water
110 AF

Colorado
River Water
110 AF

Effluent
50 AF
($50 * 0.6 = 30$ AF)

Colorado River
Water
50 AF

Final Allotment Method

Phoenix AMA

PART 1: Allotment Method

Turf Category	Rate	Limit
Overseeded Turf	77.5% efficiency @ 6.035 AF/Ac	Up to 70 acres*
Non-Overseeded Turf	77.5% efficiency @ 4.36 AF/Ac	70 to 90 acres*
Additional Turf	NONE	NONE
LWU	0.74AF/Ac	Up to 1Ac/Hole

PART 1: Results

Aggregate Change from 4MP	
Courses Currently Using Groundwater	All Courses
- 3.1%	- 1.3 %
- 2,248	- 1,207 AF

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.



5MP TURF CONSERVATION PROGRAM FOR GOLF COURSES

DRAFT

Category	AMA	Rate	Limit
Turf Category 1	Prescott	5.43 AF/Ac	70 acres*
	Phoenix	6.035 AF/Ac	
	Pinal		
	Tucson		
	Santa Cruz		
Turf Category 2	Prescott	3.76 AF/Ac	70 to 90 acres*
	Phoenix	4.36 AF/Ac	
	Pinal		
	Tucson		
	Santa Cruz		
Turf Category 3	Prescott	Not Applicable	Not Applicable
	Phoenix		
	Pinal		
	Tucson		
	Santa Cruz		
Water Surface Acres	Prescott	5.5 AF/Ac	If built after 1984, 0.14 Acres/Hole
	Phoenix	6.2 AF/Ac	If built after 1989, 0.14 Acres/Hole
	Pinal		If built after 1985, 0.14 Acres/Hole
	Tucson	5.8 AF/Ac	If built after 1991, 0.14 Acres/Hole
	Santa Cruz		
Low Water Use Acres	All	0.74 AF/Ac	1 Acre/Hole

Turf Category 1: Overseeded acres
Turf Category 2: Non-overseeded acres
Turf Category 3: Acres in excess of 5 Acres/Hole or 90 Acres/18 Holes
Low Water Use Acres: Land that is watered by a permanent irrigation system and planted primarily from ADWR's LWU plant list


Final Allotment Method – Part 1

5MP TURF ALLOTMENT CALCULATOR FOR GOLF COURSES DRAFT

Enter Course Information in White Boxes Below **Proposed Allotment Information**

Total Turfed Acres	<input type="text"/>	Course Category	<input type="text"/>
Number of Holes	<input type="text"/>	Turf Category 1 (AF)	<input type="text"/>
Water Surface Acres	<input type="text"/>	Turf Category 2 (AF)	<input type="text"/>
Low Water Use Acres	<input type="text"/>	Turf Category 3 (AF) [§]	<input type="text"/>
Year Course Built	<input type="text"/>	Low Water Use Acres (AF)	<input type="text"/>
AMA	<input type="button" value="Choose AMA"/>	Water Surface Area (AF)**	<input type="text"/>
		Total Proposed Allotment (AF)*	0.00

*Total Proposed Allotment does not account for any allotment additions or adjustments.
 **If water surface acres were added after a certain year, depending on the AMA, the course may not be eligible for full water surface area allotment (see Proposal Description for more information).



<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

AMA	4MP	Proposed 5MP	5MP
Prescott	0.6	0.7	0.6
Phoenix	0.6	0.7	0.6
Pinal	0.7	0.7	0.7
Tucson	0.7	0.7	0.7
Santa Cruz	0.7	0.7	0.7

- 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

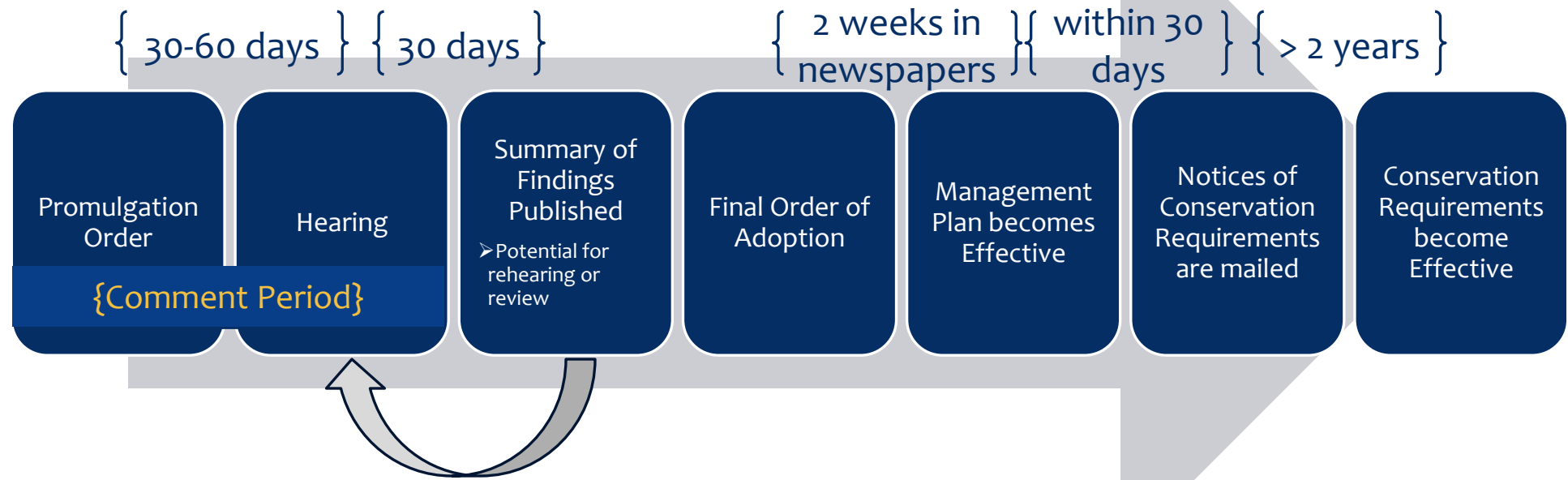
- * Revegetation
 - * updated application rate of 0.74 AF/Acre
 - * Limited to three years
- * Newly Turfed Area
 - * Single year, 1 AF/ac and no more than 5 AF/hole (PrAMA: 0.8 AF/ac and no more than 4 AF/hole)
 - * Only applies if total turfed area does not increase

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



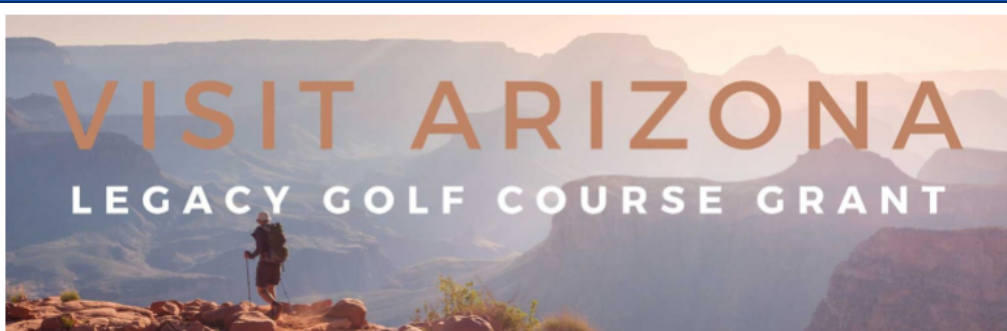
Administrative Review & Variance

- * 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/>



Visit Arizona Legacy Golf Course Revitalization Grant

OVERVIEW

Nature of the Visit Arizona Legacy Golf Course Revitalization Grant: As the Arizona travel, tourism, and hospitality industries recover from the pandemic, the Legacy Golf Course Revitalization Program will provide assistance to older golf courses to modernize and become more sustainable. Golf driven tourism was tied to 2.4 million visitors and brought an estimated \$2.2 billion to the Arizona economy in 2019, supporting 24,100 jobs. The effects of COVID were not uniform across the industry, priority will be given to courses that improve water conservation and sustainability.

Funding Source: American Rescue Plan (ARP) Funds, U.S. Department of the Treasury's Coronavirus State and Local Fiscal Recovery Funds, CFDA/Assistance Listing 21.027

- Funding provided by ARP is meant to aid the tourism, travel and hospitality industries in responding to the negative economic impacts of the pandemic.

Funding Total: Visit Arizona Legacy Golf Course Revitalization Grant Program - \$8 million

Funding Use:

- Funds may be used to "respond to the public health emergency or its negative economic impacts, including... aid to impacted industries such as tourism, travel and hospitality." (31 CFR Part 35, pp. 7)
- For the purpose of the Visit Arizona Initiative, funding will be considered only to entities within the tourism, travel & hospitality industry within Arizona, that meet the stated eligibility requirements and demonstrated need as outlined in the program guidelines.

Eligible Uses:

- "Eligible uses that respond to the negative economic impacts of the public health emergency must be designed to address an economic harm resulting from or exacerbated by the public health emergency." (31 CFR Part 35, pp. 30)
- Grant responses must be related and reasonably proportionally to the extent and type of harm experienced. (31 CFR Part 35, pp. 31)

What's Needed to Apply:

- Obtain or confirm your entity's valid [DUNS Number](#)
- Provide proof of [SAM.Gov Account](#). If your entity is not registered in SAM.Gov, please do so as soon as possible. Proof of SAM.Gov Account registration initiation (Email Confirmation) will be required for application. We understand the SAM.Gov Account registration process will take time. SAM.Gov Account registration needs to be complete by the first reporting period.

- * 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/>
- * Webinar detailing all Visit Arizona Initiative Grants:
 - * Presentation: https://tourism.az.gov/wp-content/uploads/2021/08/VAI-Presentation_Final.pdf
 - * Recorded Video: <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/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

