



5<sup>th</sup> Management Plans  
**Agricultural Subgroup Meeting**

July 20, 2020

# Agenda

- I. Introduction
- II. Statutory Requirements for Agricultural Conservation Programs
- III. Discussion of Agricultural Conservation Program Proposals
  - A. BMP Program Tiers
  - B. Integrated Farm Program
  - C. Alternative Conservation Programs
- IV. Discuss Options for AMA-specific Customization of Conservation Programs
- V. Closing Remarks



# Statutory Requirements for Agricultural Conservation Programs

# Base Program

A.R.S. § 45-568

*“The director **shall** include in each plan an irrigation water duty or intermediate water duties. These duties shall be calculated... as the quantity of water reasonably required to irrigate crops historically grown in the farm unit and shall be computed by dividing the total irrigation requirement per acre of those crops by an irrigation efficiency of eighty percent...”*



# Historic Cropping Program

A.R.S. § 45-568.02(A)

*“The director **shall** include in the management plan the historic cropping program ... as an alternative conservation program that achieves conservation equivalent to that required by [the Base Program]”*



# Agricultural BMP Program

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].”*



# Cropped Acreage Program

A.R.S. § 45-568.02(F)

*“The director **may** include... additional alternative agriculture conservation programs that the director determines achieve conservation that is at least equivalent to that required under [the Base Program]... including a cropped acreage program in which the maximum annual groundwater allotment is demined based on the crops grown during the calendar year in which the irrigation efficiency is applied.”*



# Alternative Agricultural Conservation Programs

A.R.S. § 45-568.02(F)

*“The director may include in the adoption of, or a modification to, the management plan for the fifth management period additional alternative agricultural conservation programs that the director determines achieve conservation that is at least equivalent to that required under [the Base Program]...”*





# Discussion of Agricultural Conservation Program Proposals

# Modifications to BMP Program

## Concept

- \* Introduce Tiers for BMP Points Targets
  - \* Similar to tiers in Municipal Non-Per Capita Program based on number of connections

## To Be Determined

- \* Method for creating tiers
  - \* Units
    - \* Total Irrigation Acres
    - \* AF/ Irrigation Acres
    - \* Total Actively Irrigated Acres
    - \* AF/Actively Irrigated Acres
    - \* Other?
- \* Setting points targets for each tier



# Modifications to BMP Program: Potential BMP Tiers

## Potential Agricultural BMP Tiers by AF/Acre

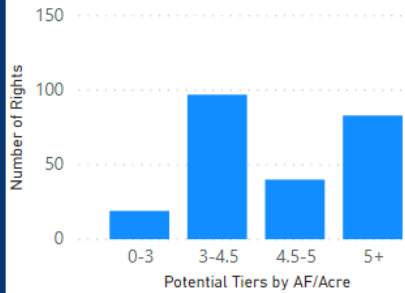
AMA

Phoenix

Pinal

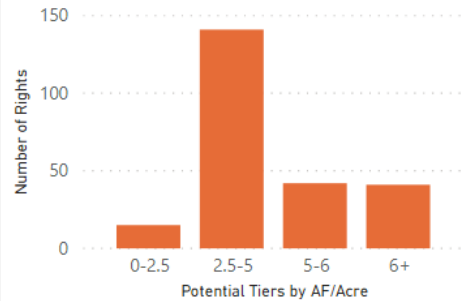
### CROP CONSUMPTIVE USE

AF/Irrigation Acre



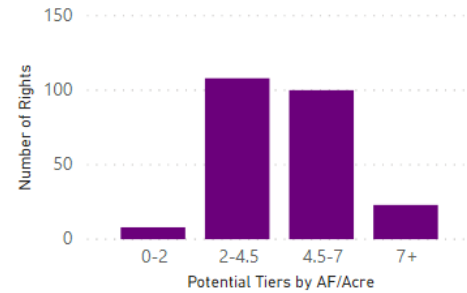
### ALTERNATIVE CROP CONSUMPTIVE USE

AF/Irrigation Acre



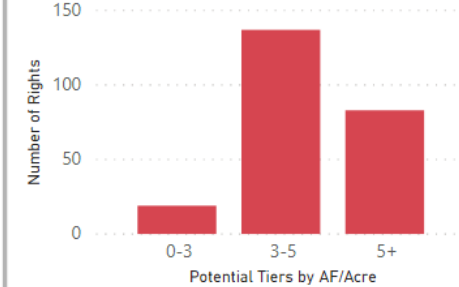
### NORMAL DISTRIBUTION

AF/Irrigation Acre

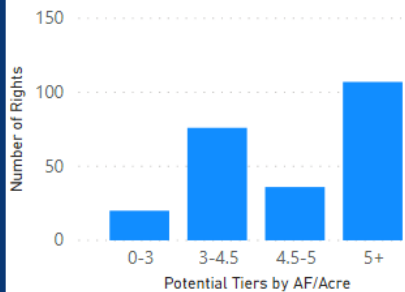


### THREE TIERS

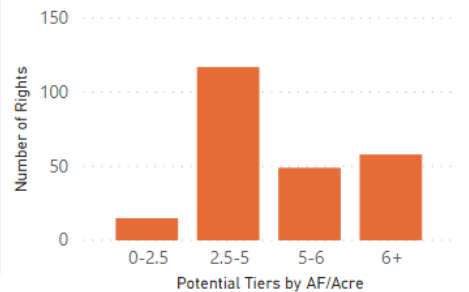
AF/Irrigation Acre



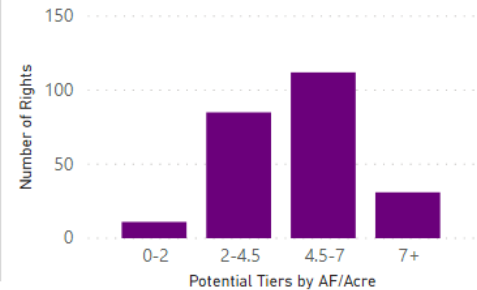
AF/Actively Irrigated Acre



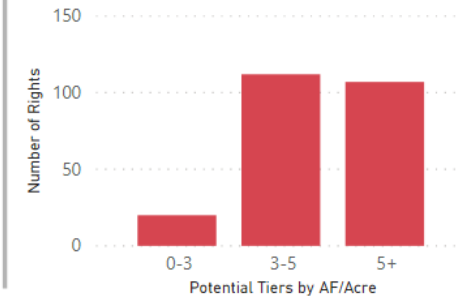
AF/Actively Irrigated Acre



AF/Actively Irrigated Acre



AF/Actively Irrigated Acre



# Modifications to BMP Program

## Concept

- \* Introduce Tiers for BMP Points Targets
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## To Be Determined

- \* Method for creating tiers
  - \* Units
    - \* AF/acre
    - \* Total acreage
    - \* Other?
- \* **Setting points targets for each tier**



# Potential Alternative Conservation Program: Integrated Farm Program

## Concept

- \* Allow multiple IGFRs under the same owner/operator to combine reporting/allotments, with a “cut to the aquifer” percentage reduction of the total combined allotment.
- \* Similar to provision allowing contiguous turf facilities to combine allotments

## To Be Determined

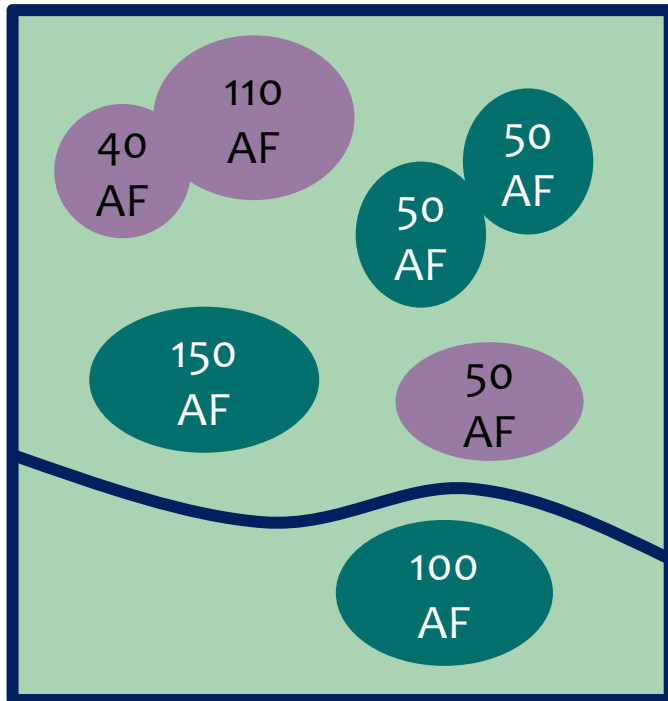
- \* Geographic limitations
  - \* Contiguous
  - \* Irrigation District
  - \* Sub-Basin
- \* “Cut to the Aquifer” Percentage
- \* Process for joining/leaving
- \* Management of flex credits



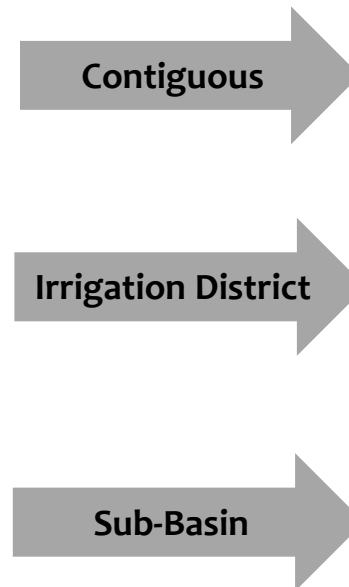
# Potential Alternative Conservation Program: Integrated Farm Program

## Base Program Allotments

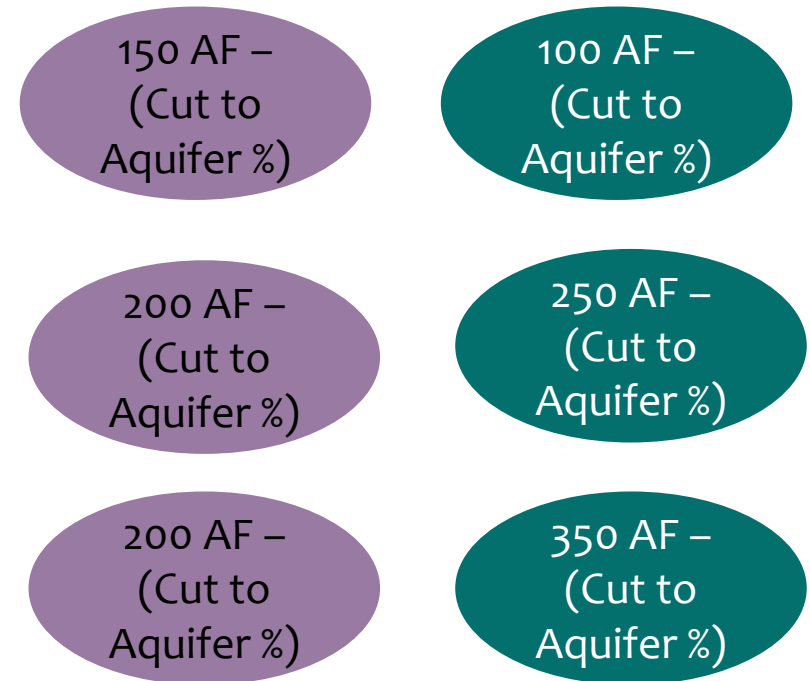
- Legend**
- Farmer A
  - Farmer B
  - Irrigation District
  - Sub-Basin



### Geographic Limitation



## Integrated Farm Program Allotments



# Potential Alternative Conservation Program: Integrated Farm Program

Program Aspects	Base Program	BMP Program	Integrated Farm Program
Reporting	Each IGFR	Possible Combined Reporting	Combined Reporting
Allotment	Total allotment by IGFR	No Allotment	Combined Allotments
Cut to Aquifer	None	None	TBD
Flex Credits	\$250 Administrative Transfer Cost	Frozen	\$0 Administrative Transfer Cost, Accumulation TBD
Process	Default	Application to join, Restrictions on opting out	Application to join, Restrictions on opting out



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- \* Geographic limitations
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# Alternative Agricultural Conservation Programs

A.R.S. § 45-568.02(F)

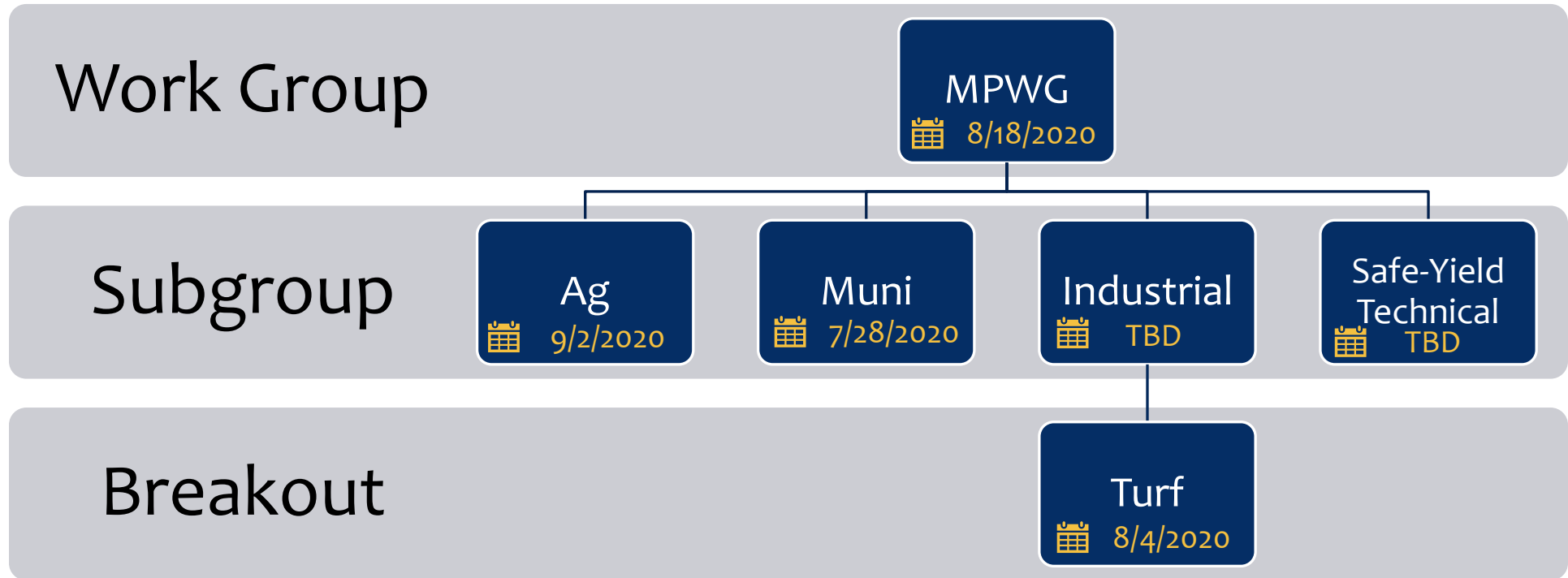
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# Options for AMA-specific Customization of Conservation Programs

# Closing Remarks

# MPWG Subgroups



# Questions?

[managementplans@azwater.gov](mailto:managementplans@azwater.gov)

Management Plans Work Group:  
[new.azwater.gov/5MP](http://new.azwater.gov/5MP)

Full Text of Management Plans:  
[new.azwater.gov/ama/management-plans](http://new.azwater.gov/ama/management-plans)

