

Ag-to-Urban
Informal Stakeholder Process
Technical Working Group
January 30, 2025



Meeting Logistics

- Please note that this meeting is being broadcast via webinar and is being recorded.
- The meeting recording and materials will be posted to the ADWR Ag-to-Urban webpage <https://www.azwater.gov/how-doi/find-info-on/ag-to-urban>
- This is an open discussion: those who wish to participate are encouraged to sit at the table and speak freely.
- *Technical issues? Please call the ADWR Help Desk at 602-771-8444 or email tickets@azwater.gov.*



Meeting Agenda

- I. Data in the Dashboard and Assumptions
- II. The Role of Replenishment
- III. Dashboard Assumptions & Discussion
- IV. Next Steps



Data in the Dashboard and Assumptions



Data in the Dashboard and Assumptions

From the GWPC AWS Committee:

Address challenges revealed by Assured Water Supply modeling projections, while continuing to:

- Strengthen the integrity of the Assured Water Supply program
- Protect consumers and aquifers
- Ensure future growth is not reliant on mined groundwater.

For the Technical Working Group:

Suggested dashboard improvements and revised assumptions should be based on compelling data. We hope for the best but plan for hard realities.



The Role of Replenishment



The Role of Replenishment

- New 50% replenishment option added to the dashboard.
- ADWR is not considering changing how replenishment obligations are calculated to ensure consistency with the management goal.
- Replenishment options represent a range of expected replenishment rates across each AMA.



Dashboard Assumptions



Development Patterns & Population

Growth

Agricultural Water Use & Agricultural

Attrition

Industrial Growth & Incidental

Recharge

Assumptions



Development Patterns and Population Growth

Population Growth



Derived from the State Demographer's 2022-2060 State and County Population Projections.

The Dashboard uses the medium series which the State Demographer deems to be the most likely scenario.

Population Projection Data available at <https://oeo.az.gov/population/projections>

Housing Acreage Conversion



Incorporates projection of acreage conversion over time using rates of housing development.

- Phoenix: starts at 35k housing units per year at 3.9 units per acre
- Pinal: starts at 6.9k housing units per year at 3.1 units per acre
- Increases housing units/year according to rates of projected population growth

Agricultural Water Use and Agricultural Attrition

Agricultural Water Use

Used total eligible acres and current water usage associated with those acres; assumes current rates of groundwater use on ag acres that have not retired.

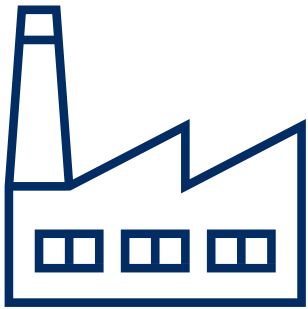


Agricultural Attrition

Assumes current rates of decline of agricultural water use correlate to acreage declines.

- Phoenix: -1.3% annually
- Pinal: -2% annually (matches 2019 model)

Industrial Growth & Incidental Recharge



Industrial Growth

Assumes some of the natural attrition of ag is related to conversion to industrial water uses.

Uses Type 1 conversions and utilization to estimate associated water use.



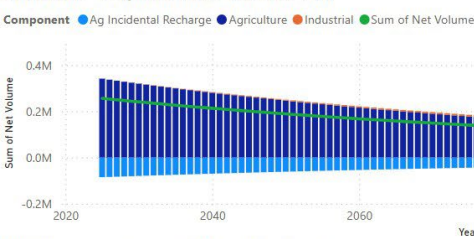
Incidental Recharge

Municipal: 4% of Total Use

Agricultural: 25% of Total Use

Industrial Water Use: None

Status Quo - Projected Water Use Over Time



Ag to Urban Analysis: Phoenix AMA

Assumptions

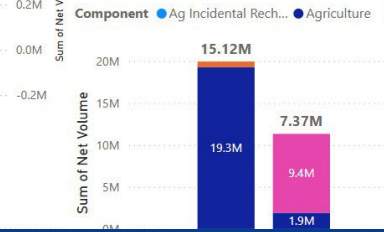
Program Rate (AF/Ac)

0.5	1.5
1	2

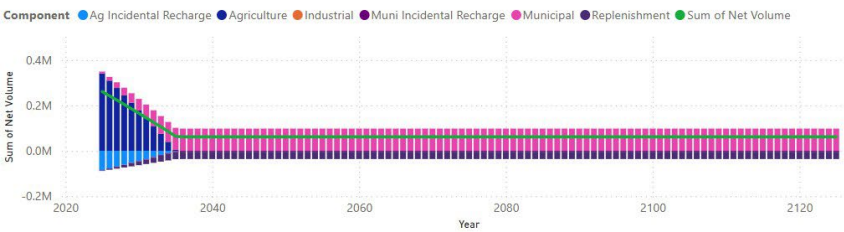
Replenishment Rate

0	0.67	CAGR 2015
0.33	1	

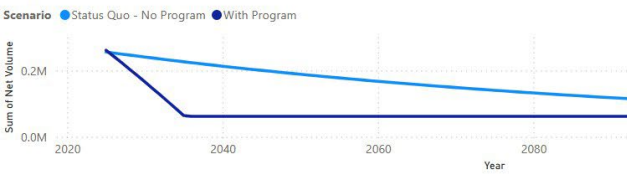
Total Water Use (100 Year Projection)



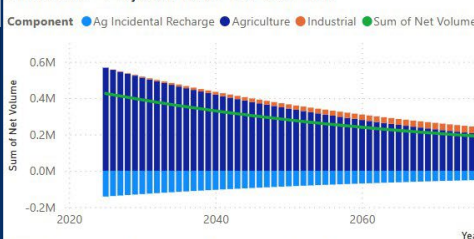
With Program - Projected Water Use Over Time



Projected Net Water Use Over Time



Status Quo - Projected Water Use Over Time



Ag to Urban Analysis: Pinal AMA

Assumptions

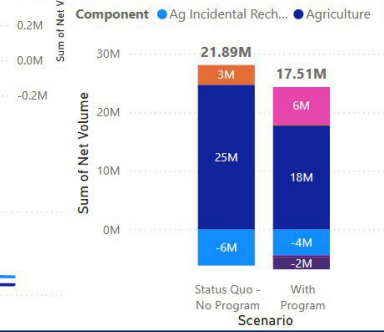
Program Rate (AF/Ac)

0.50	1.50
1.00	

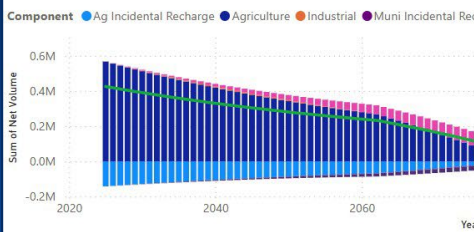
Replenishment Rate

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0.33	1	

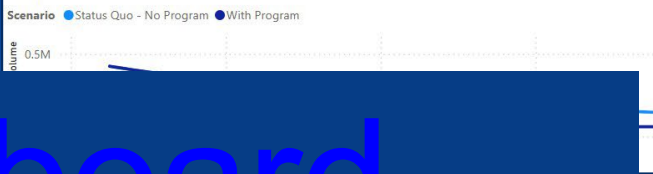
Total Water Use (100-Year Projection)



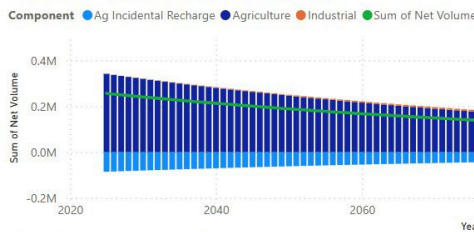
With Program - Projected Water Use Over Time



Projected Net Water Use Over Time



Status Quo - Projected Water Use Over Time



Ag to Urban Analysis: Phoenix AMA

Assumptions

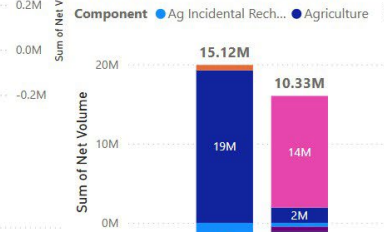
Program Rate (AF/Ac)

1	2
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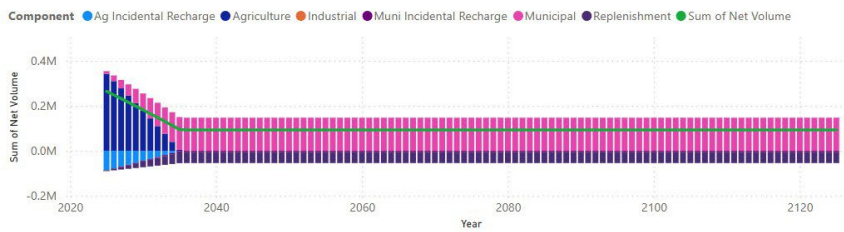
Replenishment Rate

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0.33	1	

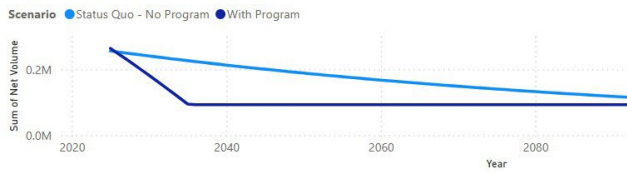
Total Water Use (100 Year Projection)



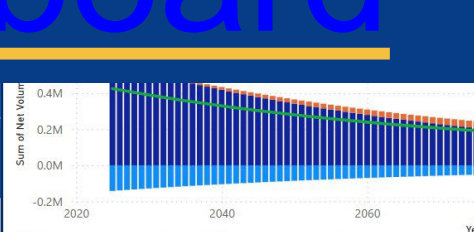
With Program - Projected Water Use Over Time



Projected Net Water Use Over Time



Status Quo - Projected Water Use Over Time



Ag to Urban Analysis: Pinal AMA

Assumptions

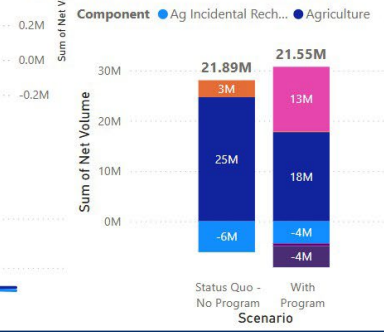
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1.00	

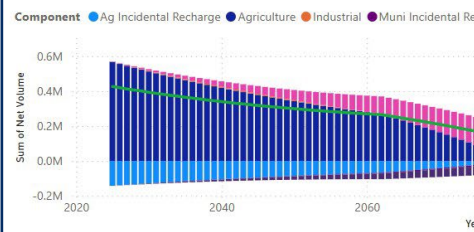
Replenishment Rate

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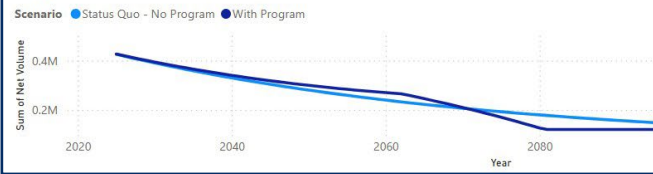
Total Water Use (100-Year Projection)



With Program - Projected Water Use Over Time



Projected Net Water Use Over Time



Dashboard

Next Steps



Joining the Technical Working Group



Technical experts willing to participate in a data-heavy technical working group can join the technical working group email list at <https://adwr.info/Ag>.

All information regarding these meetings will also be available on ADWR's Public Meetings calendar and the Ag-to-Urban webpage.

Next Meeting

Next Informal Stakeholder Meeting

Date and Time:

~~Thursday, February 6, 10:00 AM~~

Wednesday, February 5, 10:00 AM



Details posted at <https://www.azwater.gov/how-doi/find-info-on/ag-to-urban>

To join the email list, please email Ag2Urban@azwater.gov

Contact Information

Ag-to-Urban email

ag2urban@azwater.gov

Ag-to-Urban webpage:

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