

# Forging Sustainable Futures: AWP Partnership Framework for Transforming Wastewater into Potable Water in Arizona

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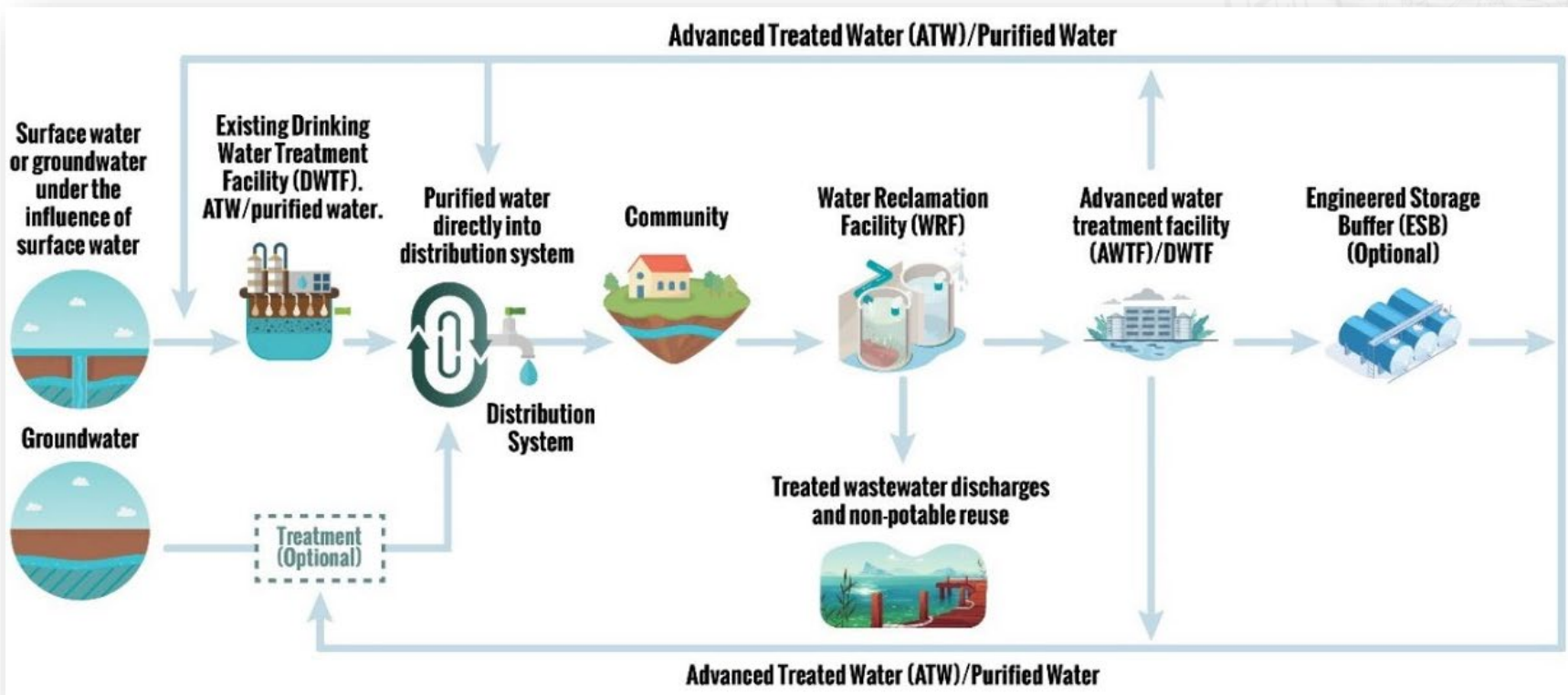
Clean Air, Safe Water,  
Healthy Land for Everyone



- What is Advanced Water Purification?
- Project History
- Technical Advisory Group (TAG)
- Collaboration & Partnerships
- Roadmap
- Survey
- Project Timeline
- Draft Rule
- Next Steps

# What is Advanced Water Purification?

An innovative set of water treatment processes that purifies treated wastewater into safe drinking water without the need for an environmental buffer, such as a river or lake.



# ADEQ Treated Wastewater History

1926

- Reuse of treated wastewater (TW) began at South Rim, Grand Canyon

1932

- Reuse of TW from 23rd Ave. wastewater treatment plant to irrigate Peterson Farms

1972

- First TW rules by ADHS

1973

- TW to cool Palo Verde Nuclear Generating Station

1980

- GW Management Act limited legal use of water from aquifers in high use areas in the state Scottsdale

1989

- *APS v. Long*, AZ Supreme Court case deciding TW is a resource subject to regulation and a commodity that utilities and governments could buy and sell



# Direct Potable Reuse Timeline

## 2001



- Arizona Administrative Code allows use of reclaim water
- Effective February 9, 2001
- Direct Potable Reuse **Prohibited**

## 2018



- AAC – Article 7 Use of Recycled Water
- Effective January 1, 2018
- Prohibition** removed for Direct Potable Reuse

## 2019



- City of Scottsdale Water Campus – First DPR demonstration facility
- DPR permit used on September 9, 2019.
- Purified water allowed for tasting and beverage production.

## 2022 - 2025



- AWP Rulemaking

### Arizona Administrative CODE

[www.azsos.gov](http://www.azsos.gov)



18 A.A.C. 9

Supp. 23-4

#### TITLE 18. ENVIRONMENTAL QUALITY

#### CHAPTER 9. DEPARTMENT OF ENVIRONMENTAL QUALITY - WATER POLLUTION CONTROL

The table of contents on page one contains links to the referenced page numbers in this Chapter. Refer to the notes at the end of a Section to learn about the history of a rule as it was published in the *Arizona Administrative Register*.

This Chapter contains rules that were filed to be codified in the *Arizona Administrative Code* between the dates of October 1, 2023 through December 31, 2023

- H. Prohibited activities.**
1. Irrigating with untreated sewage;
  2. Providing water for human consumption from a reclaimed water source except as allowed in Part E of this Article.
  3. Providing or using reclaimed water for any of the following activities:
    - a. Direct reuse for swimming, wind surfing, water skiing, or other full-immersion water activity with a potential of ingestion; or
    - b. Direct reuse for evaporative cooling or misting.

## What have we done so far?

Project Set-up:  
**June, 2022**

Initial  
Stakeholder &  
Tribal  
Communications:  
**July, 2022**

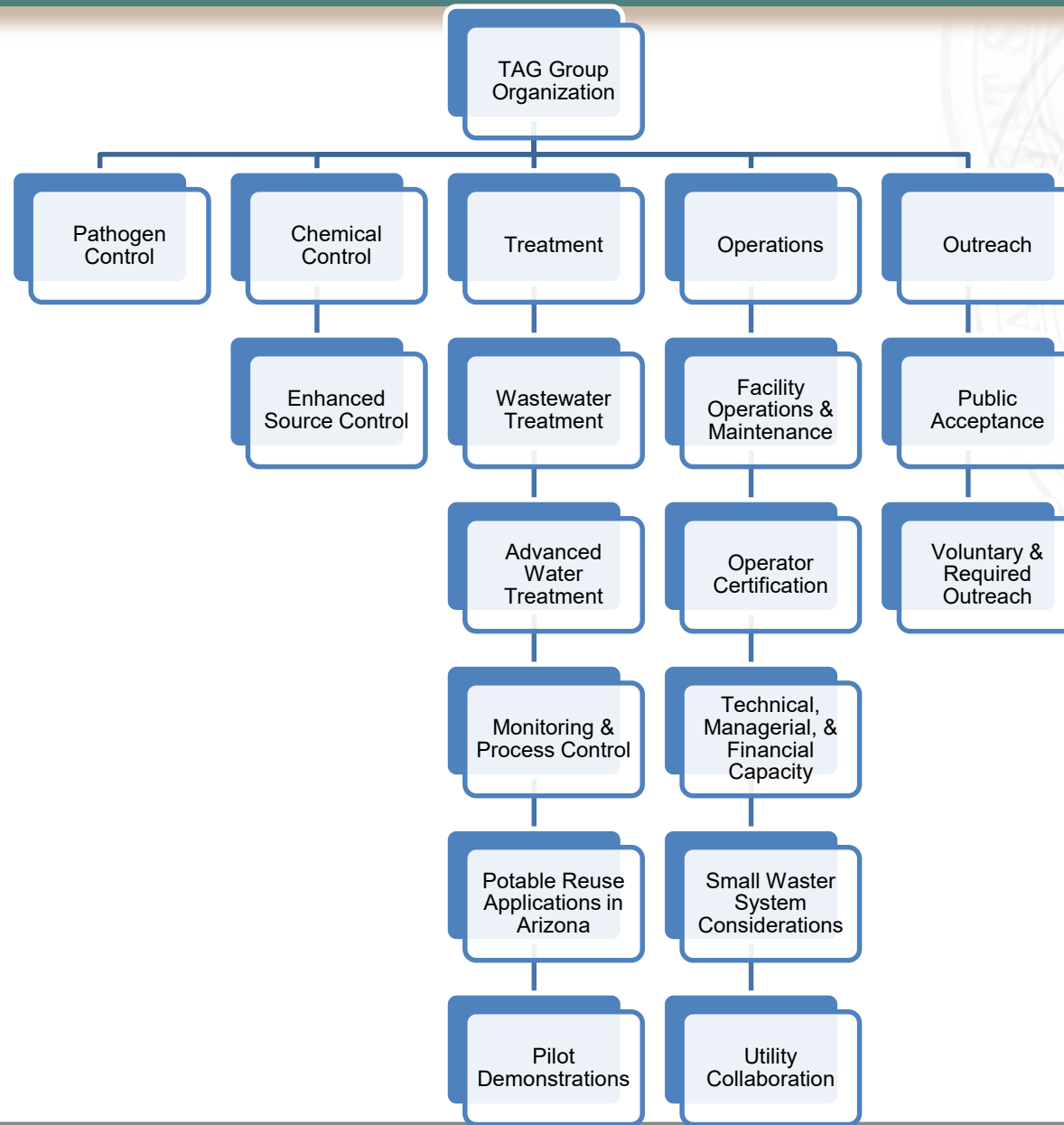
Technical Advisory  
Group  
Recommendations  
: **September 2022**  
**-May, 2023**

Proposed  
Program  
Roadmap:  
**November,**  
**2023**

# Technical Advisory Group (TAG)



# Technical Advisory Group (TAG) Topics

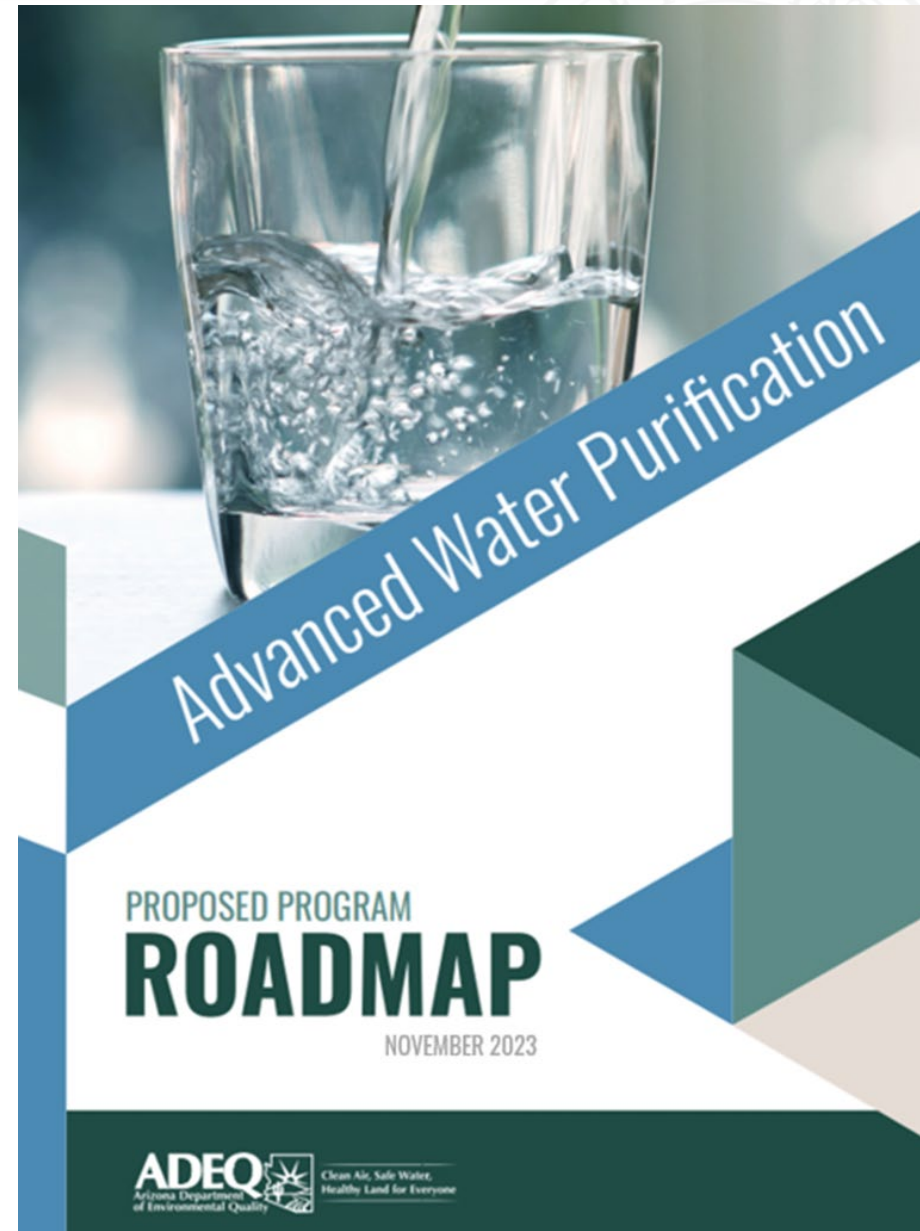




# Advanced Water Purification (AWP) Roadmap

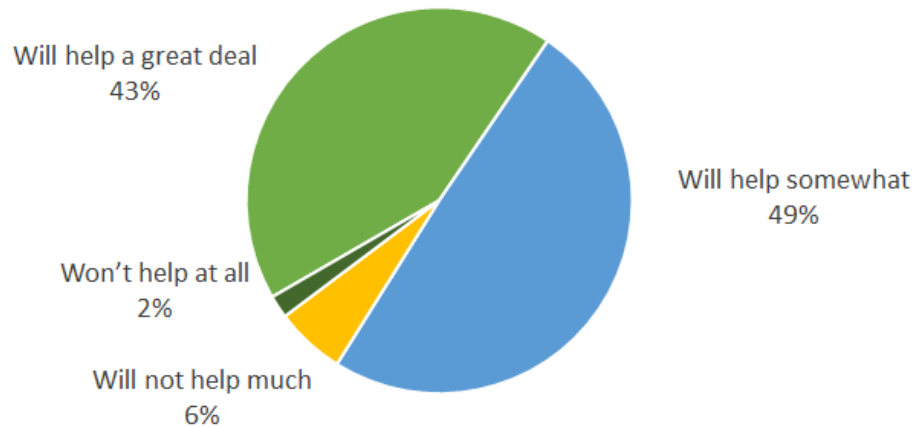
## Roadmap Chapters & Content:

- Risk Management
- Source Assessment and Control
- Treatment
- Monitoring
- Operations and Maintenance
- Outreach Plan
- Permit Process
- Fees

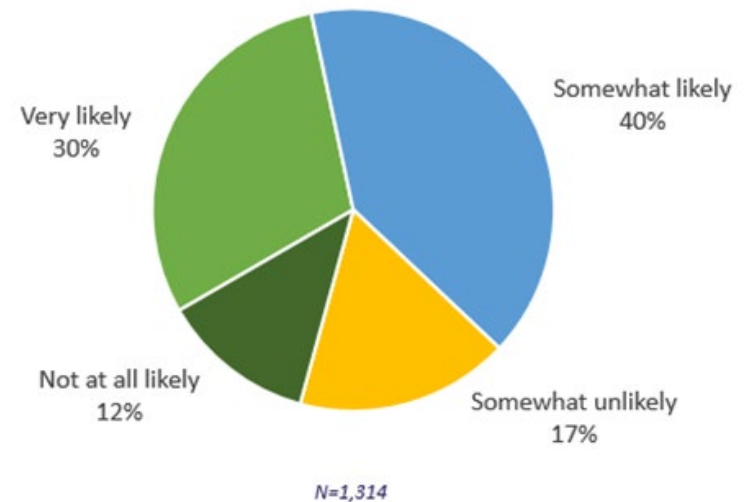


## We surveyed a 1,314 people and general results support implementing DPR.

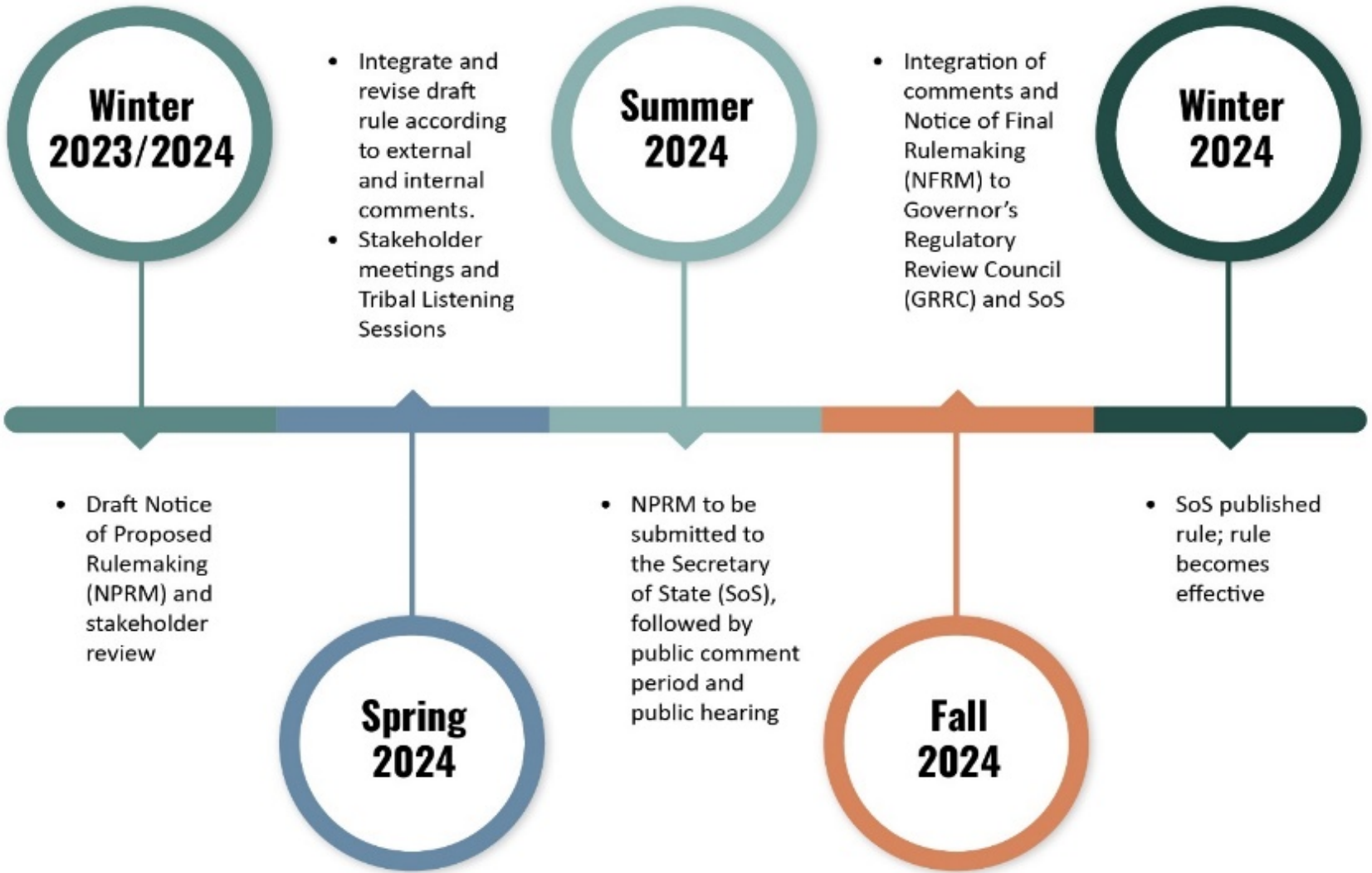
To what extent do you believe that this type of water will address the water situation in Arizona?



How likely would you be to drink DPR water?



# Advanced Water Purification (AWP) Project Timeline

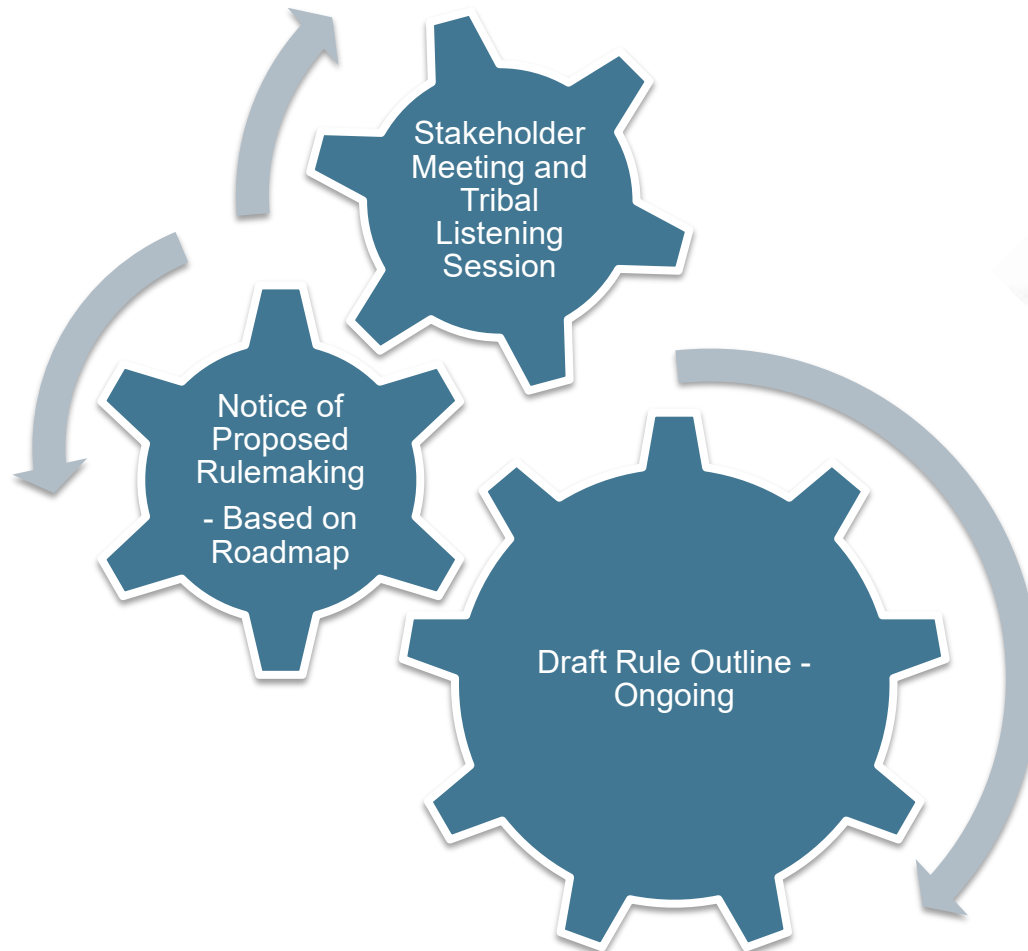


## Cities considering the pursuance of AWP:

- ❖ City of Phoenix
- ❖ City of Scottsdale
- ❖ City of Cottonwood

Others - Flagstaff, Clarkdale, Goodyear, Casa Grade

# Next Steps





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Healthy Land for Everyone**

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