

# Arizona Primacy of Underground Injection Control (UIC)

June 18, 2018



# The Underground Injection Control Program

EPA regulates injection wells used to place fluids underground for Storage or Disposal

- Construction
- Operation
- Permitting
- Closure

The Safe Drinking Water Act (SDWA) allows States to assume primacy of UIC if certain requirements are met.

- Arizona must satisfy EPA requirements to obtain UIC primacy.



# Overview of UIC Well Classes

UIC Well Class	Description	APP permit required?	Current UIC Permits in Arizona
I	used to inject hazardous and non-hazardous wastes into deep, isolated rock formations.	Y	none
II	used exclusively to inject fluids associated with oil and natural gas production.	Y	none
III	used to inject fluids to dissolve and extract minerals.	Y	2 (one more in process)
IV	shallow wells used to inject hazardous or radioactive wastes into or above a geologic formation that contains a USDW.	Y	none
V	used to inject non-hazardous fluids underground. (drywells, septic systems)	Y/N	10,000s "permit by rule"
VI	used for injection of carbon dioxide (CO <sub>2</sub> ) into underground subsurface rock formations for long-term storage, or geologic sequestration.	Y	none

What are they?

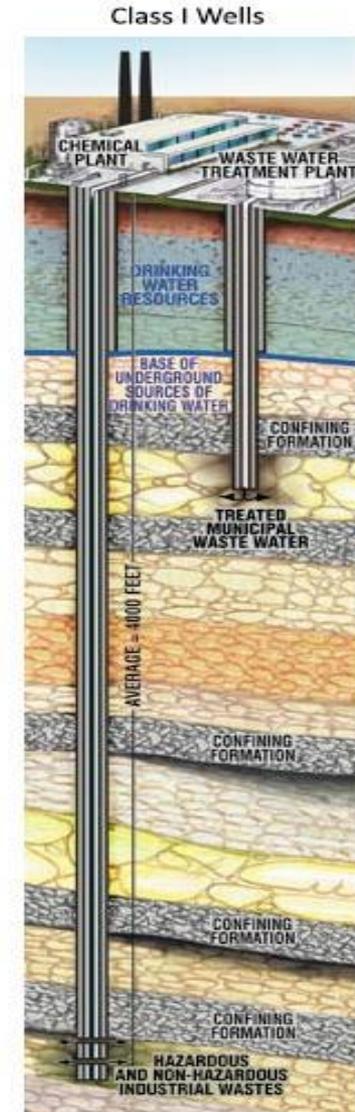
- Wells for deep injection/disposal of brines and other wastes
- Hazardous waste injection prohibited in AZ

What happens with AZ UIC Primacy?

- ADEQ will issue individual UIC permits instead of EPA
- Exempt from APP

None have been permitted in AZ to date

- Primacy allows Arizona to prepare for long term water supply brine disposal needs



Source: EPA

What are they?

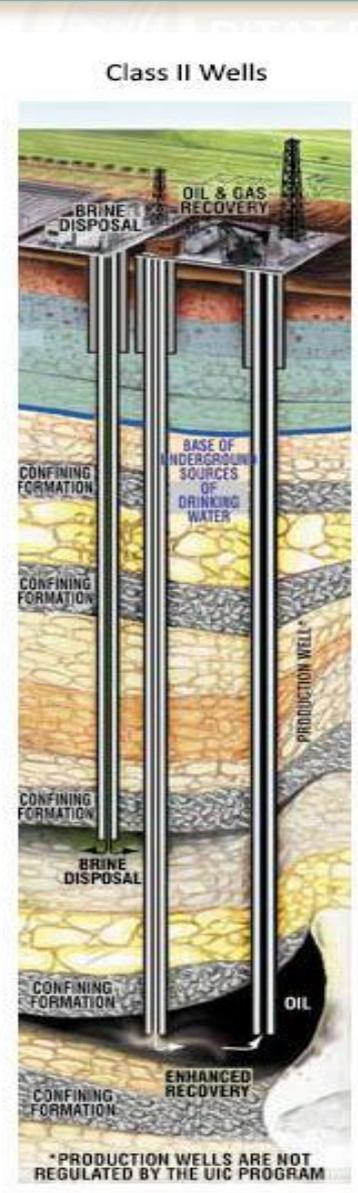
- Wells for injection/disposal of oil and gas field produced brines

What happens with AZ UIC Primacy?

- ADEQ will issue individual UIC permits instead of EPA
- Exempt from APP
- Not Exempt from OGCC requirements

None have been permitted in AZ to date

- Sets a simpler permit path if an oil and gas field is ever developed in jurisdictional AZ



Source: EPA

What are they?

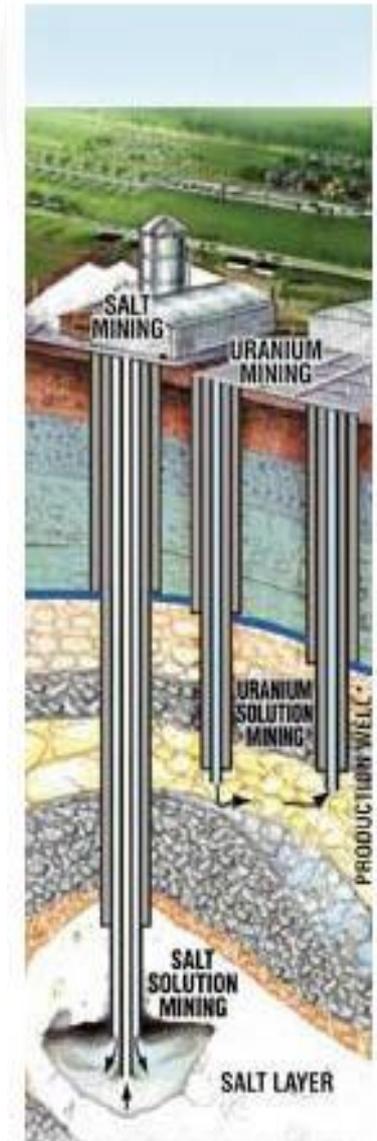
- Wells for in-situ mining of salt, copper, uranium and other ores

What happens with AZ UIC Primacy?

- ADEQ will issue individual UIC permits instead of EPA
- Exempt from APP

How many do we have?

- Several permits have been issued for salt and copper mining
- Transition of UIC permits from EPA to ADEQ necessary.



What are they?

- Wells for shallow injection/disposal of hazardous and radioactive wastes
- New wells are banned nationwide

What happens with AZ UIC Primacy?

- They will still be banned in AZ
- Exempt from APP

None have been permitted in AZ to date

- This ban must be continued to obtain UIC primacy



Source: EPA

**Underground Injection Control Class IV wells are banned!**

What are they?

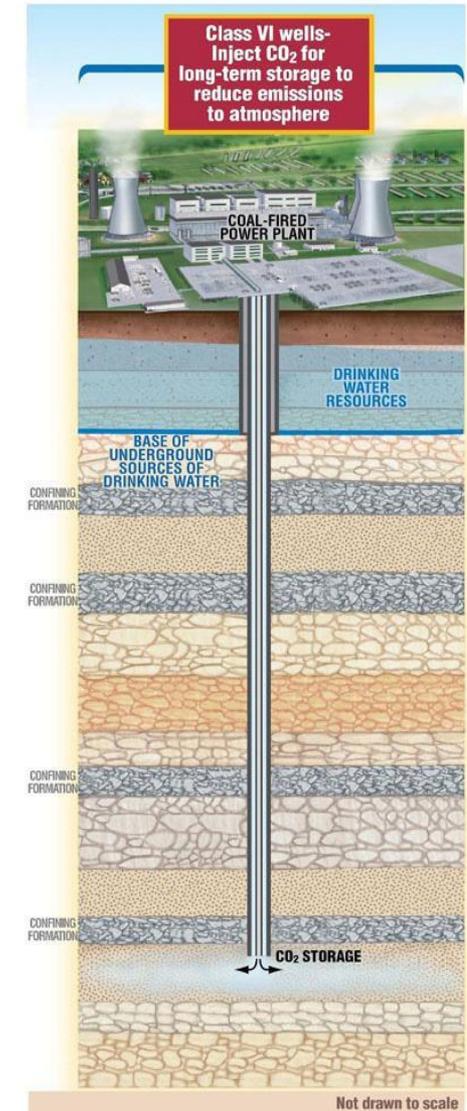
- Wells for injection/disposal of CO2 “sequestration”

What happens with AZ UIC Primacy?

- ADEQ will issue individual permits instead of EPA
- Exempt from APP

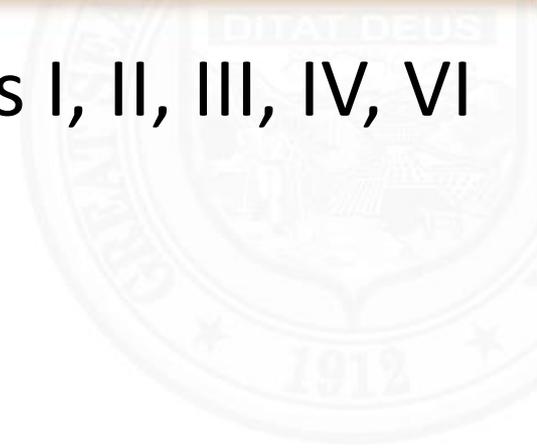
None have been permitted in AZ to date

- Sets a simpler permit path for the future if carbon sequestration becomes important

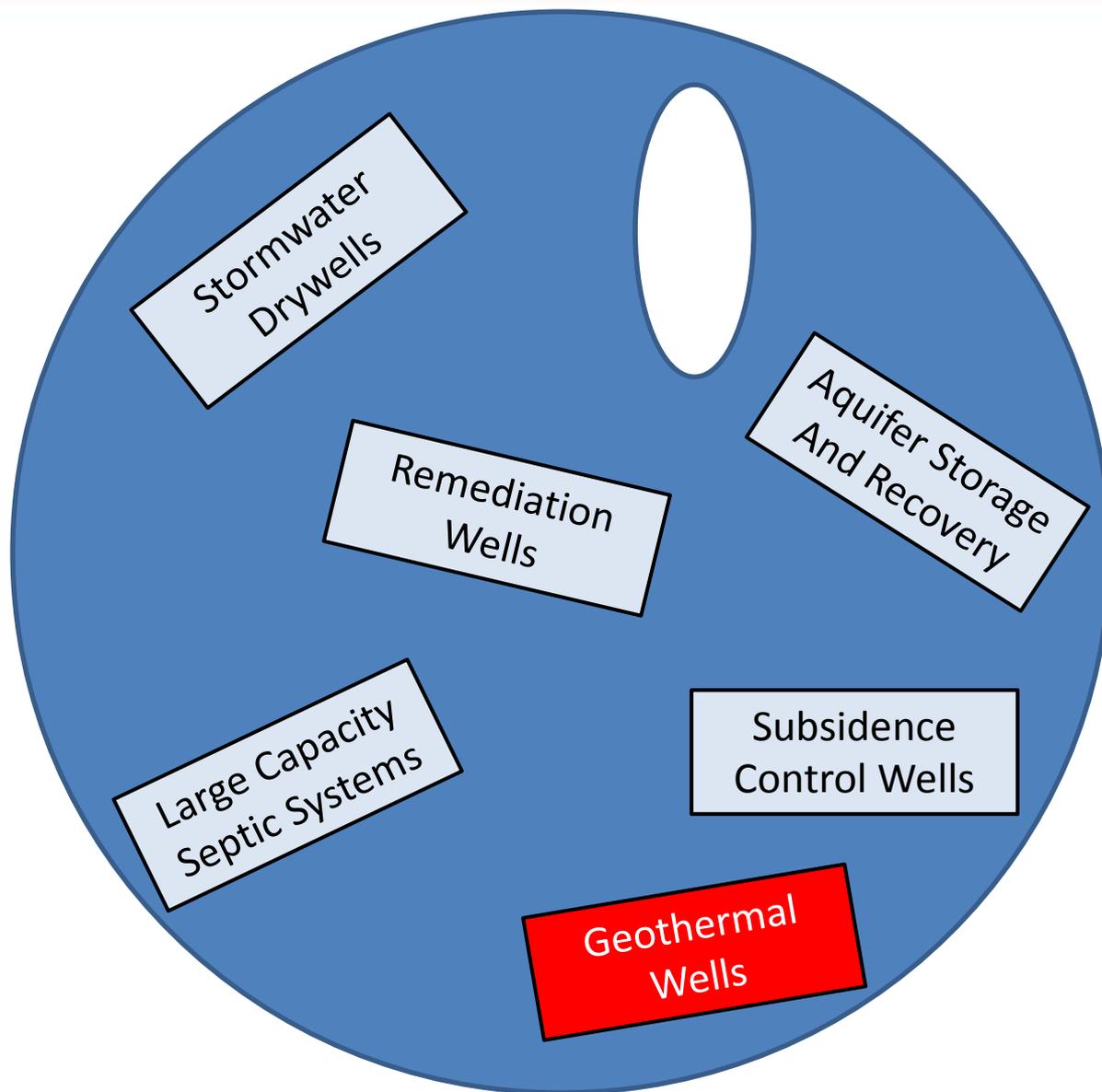


Classes I, II, III, IV, VI

Everything Else =  
Class V Injection  
Wells



# UIC Class V Wells



“Permit by  
Rule”

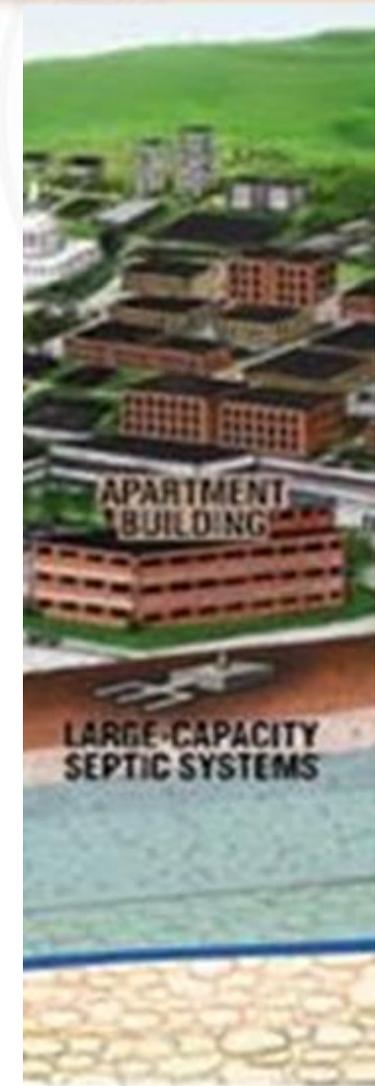
- ADEQ administers as EPA did previously. Nothing new.

No  
exemption  
needed from  
APP

- Best fit for situation

Can still  
issue  
individual  
UIC permit

- None needed currently.



Source: EPA

# “Permit by Rule” general principles

#1

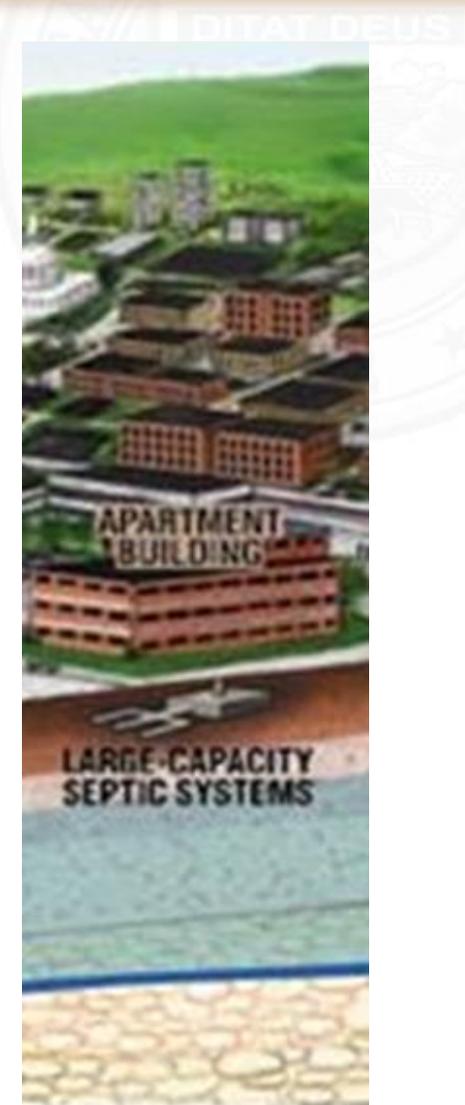
- Submit information to ADEQ in the future, if we don't already have it.

#2

- Operate wells so as to not endanger aquifers.

#3

- Close well properly

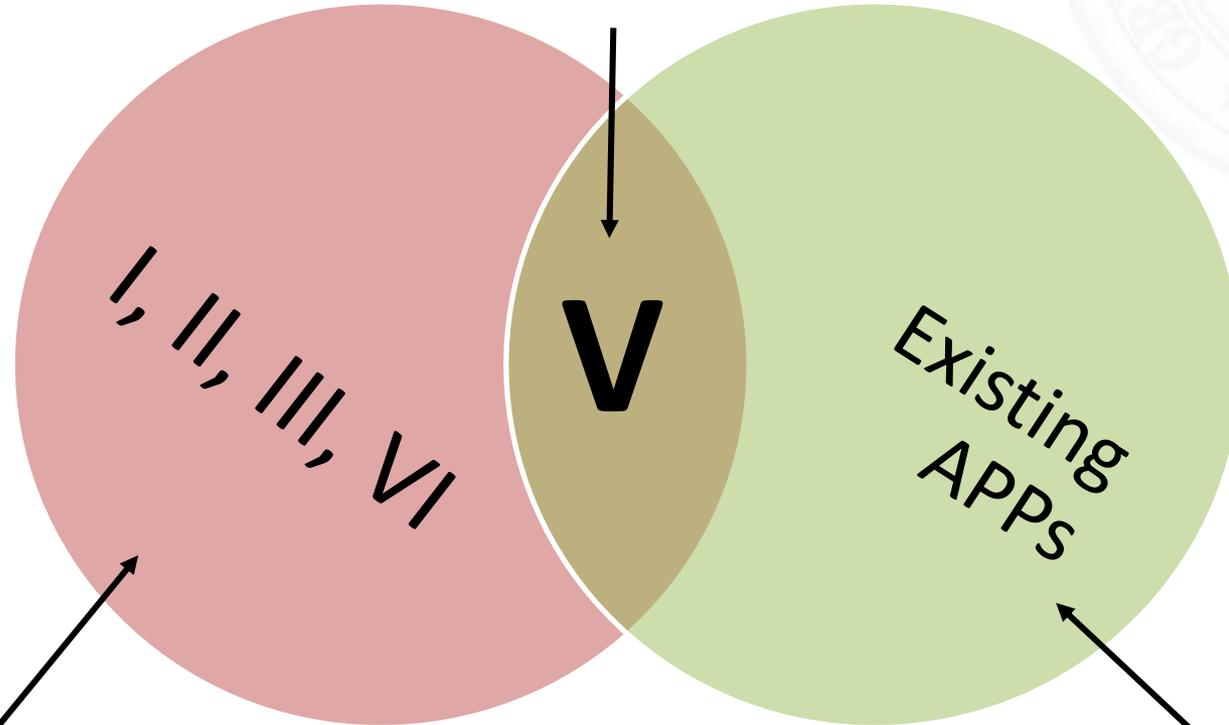


Source: EPA

# Summary

Regulated as before  
Permit by rule and/or

APP

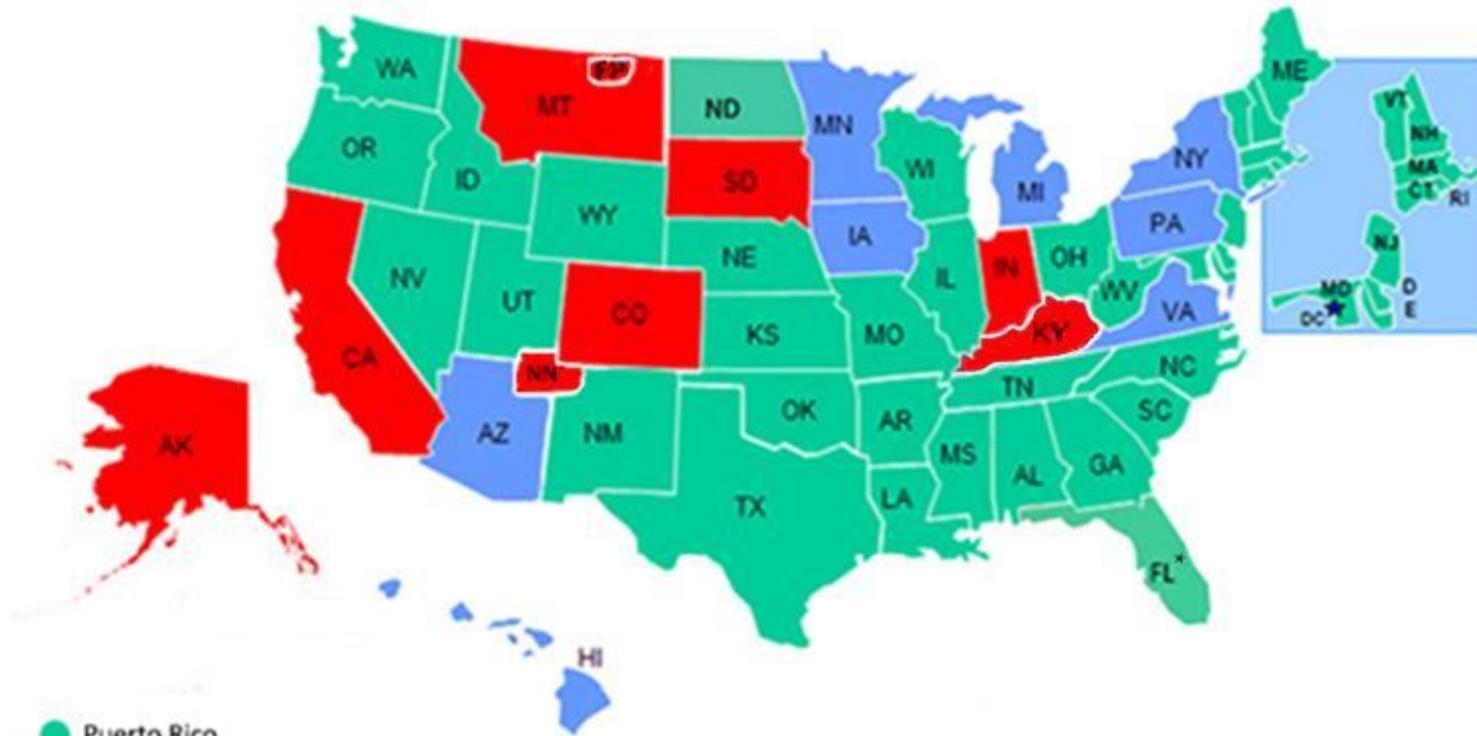


Get individual permit  
from ADEQ not EPA.  
No APP needed.

Life goes on as  
normal

# Status of UIC Primacy by State

DITAT DEUS



- Puerto Rico
- Virgin Islands
- American Samoa
- Indian Tribes, excluding Class II for Navajo Nation (NN) and Ft. Peck (FP)
- Commonwealth of Northern Mariana Islands
- Guam

- Primacy/well class II only
- Primacy/well classes I-V
- EPA implements well class I-V
- \* EPA retains direct implementation authority for class II wells in Florida

# Why pursue UIC Primacy now?

EPA is encouraging  
states to seek  
primacy

Gives Arizona  
control over what  
is being injected

Remove  
duplicative  
regulation

Improve the  
quality of the  
program

Reduce cost and  
cycle time for  
permits

Provides  
environmentally  
responsible growth





Arizona is  
Required to  
Adopt a UIC  
Program

Pursuant to A.R.S 49-203(A)(5)

- The director shall: Adopt, by rule, the permit program for underground injection control described in the safe drinking water act.

## Authority to implement relevant portions of 40 CFR 144 through 146:

Permitting Requirements

Prohibition  
of Class IV  
wells

Inventory  
and Plan for  
regulating  
Class V wells

Compliance  
and  
Enforcement  
Authorities

Sharing  
information  
with EPA

Public  
Notice and  
Hearing

Technical  
Standards

Monitoring  
and  
reporting



Provides the statutory framework necessary to create and implement regulation required for Arizona to obtain primacy from EPA.

- Provides Funding
- Creates Permitting Authority
- Adds Penalties for Violations
- Allows Private Right to Action
- Eliminates Duplicative Regulation

Exempts certain types of UIC Well Classes from Aquifer Protection Permit program once primacy is obtained

- UIC Class I,II,III,IV,VI exempt from APP
- UIC Class V wells not exempt from APP

# Projected Timeline



## Initial Stakeholder Meetings

- June & July 2018

## Send High Level Program and Rule Components

- September 2018

## Stakeholder Meetings on Preliminary Draft Rule

- March – April 2019

## Formal Rule Process (Public Hearing, GRRC)

- April 2019 – January 2020

Submit to EPA – April 2020



# Pros and Cons to AZ UIC Primacy

**Pros**

**Cons**

