# MEMORANDUM

Date: March 28, 2018

To: The Honorable Chairman and Members
Pima County Board of Supervisors

From: C.H. Huckelberry
County Administrator

Re: **Triennial Review of State Water Quality Standards Update**

As directed by Board resolution 2017-50, staff has begun participating in the Arizona Department of Environmental Quality's (ADEQ) triennial review of water quality standards. The federal Clean Water Act (Act) requires States to review water quality standards at least every three years in a public process, called Triennial Review (TR).

The last such review was completed in 2016. A moratorium on new rule-making limited the last TR to "housekeeping" to meet minimum requirements under the Act. The current TR originated in late 2016. Exchanges previously documented between Hudbay Minerals and staff at Arizona Department of Environmental Quality (attached) indicate at least part of the motivation to initiate a new TR came from Hudbay's request that the State remove the Outstanding Arizona Waters (OAWs) designations that protect Cienega Creek and Davidson Canyon, located downstream of the proposed Rosemont mine, from pollutants that would degrade water quality.

The purpose of the current TR, as defined in a November 2016 memorandum to the Governor's Office, is to "realign Arizona's categories of navigable waters, taking into account U. S. Supreme Court decisions of the past ten years" (attached). Most notably, the 2006 *Rapanos* Supreme Court decision requires case-by-case reviews of whether discharges of dredge or fill to streams have a "significant nexus" to the physical, chemical or biological integrity of Traditionally Navigable Waters.

**Background**

Under the anti-degradation rules promulgated pursuant to the Act, states apply a designation to each "water of the U.S.", *i.e.*, surface water that is subject to the Act, and apply one of three tiers of protection for these waters. Pursuant to this requirement, Arizona designated, by rule, reaches of Cienega Creek in 1999 and 2002 and Davidson Canyon in 2008 as OAWs deserving of the highest tier of water quality protection. Under the Act, the State of Arizona is responsible for maintaining surface water quality standards that protect the designated uses of the waters of the U.S. and, in particular, prohibiting degradation of OAWs, except in very limited circumstances.

ADEQ is entertaining discussion regarding a rule change that would remove OAW anti-degradation protection of Cienega Creek and Davidson Canyon. To do so,ADEQ must conduct a formal rulemaking, including public notice and comment before submitting revised standards to the US Environmental Protection Agency (EPA) for approval.

In July 2017, Governor Ducey asked EPA for a revised Clean Water Act rule to determine which waters in Arizona are to be regulated under the Clean Water Act (attached). In February 2018, a state legislator initiated Senate Bill 1493 for the State of Arizona to assume instead of the U.S. Army Corps of Engineers (Corps) Arizona primacy for Section 404 of the Clean Water Act. Primacy would give Arizona the power to determine which waters are to be regulated under the Act.

**Triennial Review Workgroups Did Not Review ADEQ's Classification of Waters of the US**

ADEQ organized three workgroups in November 2017 to gather input regarding potential changes to its water quality standards. Membership to the workgroups was by ADEQ invitation only.

In their early 2017 presentation to the Governor's office (attached), ADEQ classified 913 waterbodies as either Waters of the US, not Waters of the US, or may be Waters of the US. ADEQ identified 21 streams and 47 lakes from the state's list of regulated streams in Appendix B that they do not consider Waters of the US. We do not know when or if the state will use its classification of Waters of the US in the Triennial Review. We have requested copies of the classifications under the state's public records law so that we can see whether any of the streams are in Pima County.

At a minimum, it seems likely that water bodies that the Corps deems as lacking a significant nexus will not be protected under the surface water quality standards. There are no state rules for this class of water (see attached powerpoint). ADEQ staff indicated that the state is not proposing rules to protect water quality on streams or lakes that are no longer considered as Waters of the US during this TR. No proposals to protect these waters were discussed in the workgroups.

For streams that are not considered Waters of the US, there would be no basis for Outstanding Waters or any other tier of antidegradation protection, no standards for regulating discharge of pollutants to surface waters, and no requirement for addressing past or future impairments of surface water quality. One way to remove the OAW designation from Cienega Creek and Davidson Canyon reaches currently protected is to have these reaches determined to not be Waters of the U.S. Thus, we want to understand what

streams ADEQ considers to be Waters of the US, and which may not be subject to future regulation.

**Triennial Review Workgroups Discussed Hudbay's Proposals for Outstanding Waters**

In the workgroup, Hudbay Minerals and other mining-related representatives argued for diminishing the protections for Outstanding Arizona Waters (OAWs) by modifying or re-interpreting the existing rules. Community Water Coalition and Cienega Watershed Partnership, Sierra Club, as well as the National Park Service participated in the OAW workgroup. Each group expressed substantial concern about diminishing the current anti-degradation standards for OAWs. Pima County suggested ways to clarify existing rules while maintaining current protections.

Hudbay's representative asked that ADEQ delist OAWs found to be impaired by at least one pollutant, while other stakeholders opposed such delisting. Hudbay also wants ADEQ to require stormwater and other additional data collection to ensure that an OAW listing is based upon demonstration of good water quality for all parameters under all conditions of flow, including storm events, . Pima County opposed these two changes. An impaired OAW qualifies for antidegradation protection. The requirement for more data is a higher data quality standard than currently exists, and would place undue burdens on ADEQ and/or new OAW applicants. On March 7, 2018, Hudbay has requested all public records relating to Pima County's participation in the Triennial Review.

Recordings and printed documents for the ADEQ Workgroups are posted here: http://www.azdeq.gov/node/3933

**ADEQ's** Proposed Rule Will Come This Summer

The workgroups likely did not discuss all changes that will be proposed. ADEQ is now independently developing a draft rule. We expect the proposed rule will have the more controversial changes. We will not know the full extent of the rule changes until the proposed rule is issued, perhaps in June 2018.ADEQ may release a partial draft rule this spring. This incomplete draft rule may be followed by an informal comment period. The comment period would provide Pima County and others with an opportunity to influence the process going forward, but it does not require any responses from the state.

Our best guess for the opening of the official 45-day comment period on the proposed rule would be this June. ADEQ must respond to issues raised during the 45-day period. ADEQ hopes to conclude the rule-making process by December 2018.

**Recommendations**

Consistent with Board Resolution 2017-50 and previous Board direction that surface water quality standards be protective of human health and ecosystem functions, it is recommended the Board direct staff to:

1. Request ADEQ hold stakeholder meetings in the Tucson ADEQ office;
2. Continue to participate in the surface water quality rulemaking process;
3. Review and comment on potential impacts of rule changes on water bodies in Pima County;
4. Provide information on existing uses of such water bodies, where appropriate;
5. Oppose efforts to diminish or remove water quality protections for Outstanding Arizona Waters in Pima County.

CHH/mp

Attachment

c: Carmine DeBonis Jr., Deputy County Administrator for Public Works
Suzanne Shields, Director Regional Flood Control District
Linda Mayro, Director Sustainability and Conservation
Julia Fonseca, Environmental Planning Manager Sustainability and Conservation

# ADEQ Arizona Department of Environmental Quality Memorandum

Date: November 16, 2016
To: Hunter Moore, Natural Resource Policy Advisor
From: Bret Parke, Deputy Director, ADEQ
Subject: Request for Exception from the Rulemaking Moratorium
Title 18, Chapter 11 – Water Quality Standards – Article 1. Water Quality Standards for Surface Waters

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Arizona's Water Quality Standards must be updated to ensure that Arizona retains primacy and sole enforcement authority for Clean Water Act violations in Arizona. State standards must be updated to be consistent with and not more stringent than those established by the federal government, and to provide clear guidance to permittees and the general public regarding the extent of those authorities.

This memo requests that you please approve an exception to the rulemaking moratorium to develop with interested stakeholders a notice of proposed rulemaking for Arizona Administrative Code Title 18, Chapter 11 – Water Quality Standards – Article 1. Water Quality Standards for Surface Waters. This request complies with paragraph 2 of Executive Order 2016-03 to:

- To avoid violating a court order or federal law that would result in sanctions by a court or the federal government against an agency for failure to conduct the rulemaking action.
- To comply with a state statutory requirement (A.R.S. 49-221).

The Arizona Department of Environmental Quality (ADEQ) sets water quality standards for navigable waters, implementing one of the major requirements of the Clean Water Act. The proposed rule-making would develop standards and language that conform with federal law and reduce confusion to permittees and the general public.

Section 303(c) of the Clean Water Act requires all states to review their water quality standards, at least once every three years, and revise where appropriate (known as the "triennial review"). EPA reviews, and must approve, any revised water quality standards, and has authority to impose water quality standards if it finds a state's to be insufficient. (33 U.S.C. § 1313(c)); 40 C.F.R. §131.22.

In August 2015, ADEQ completed an update which included only minor corrections and clarifications of previous revisions. At this time, ADEQ would like to begin the research for a broader review of the standards with the next triennial review in the fall of 2016, along with a robust stakeholder outreach effort that will conclude with the completion of the review by August 2018. The triennial review will include:

- Updating standards to conform to EPA's 2015 updates;
- Realigning Arizona's categories of navigable waters, taking into account U.S. Supreme Court decisions of the past ten years.
- Conforming to new EPA's 2015 variance procedure, allowing some permittees additional time to comply with water quality standards.
- Clarifying how Arizona categorizes tributaries to navigable waters ("the tributary rule").

The water quality standards impact various surface water programs, such as the Arizona Pollutant Discharge Elimination System (AZPDES) permitting program and the impaired waters listing. Beginning the triennial review now will allow ADEQ to prepare the necessary studies to withstand EPA's scrutiny and gather information and supporting documentation on stakeholders' views, especially as to realigning how Arizona categorizes waters of the U.S.

This request is consistent with Arizona Revised Statute §41-1038 (C) because the rules are necessary to avoid potential sanctions by the US Environmental Protection Agency.

HUDBAY

January 10, 2017

Mr. Trevor Baggiore, P.E.
Water Quality Division Director
Arizona Department of Environmental Quality
1110 W. Washington
Phoenix, AZ 85007

Re: Triennial Review Rulemaking

Dear Mr. Baggiore:

Hudbay has learned that the Arizona Department of Environmental Quality (the Department) has commenced a rulemaking process to review the surface water standards for waters in Arizona (commonly called the Triennial Review process).

In this rulemaking process, Hudbay requests that the Department undertake a review of both the rulemaking and listing process, as well as the historical water quality data underlying those rulemakings, that resulted in the listing of each of the Arizona Surface Waters classified as Outstanding Arizona Waters over the years. Hudbay encourages the Department to include in its review an evaluation of stormwater runoff contributions to intermittent and perennial waters.

Thank you for your consideration, and if you need to reach me I am available via email at Kathy.Arnold@hudbay.com or at (520) 495-3502

Regards,

Katherine Ann Arnold, PE
Director, Environment

*Doc. No. 002/17-15.5.6.1*

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hudbayminerals.com

STATE OF ARIZONA
OFFICE OF THE GOVERNOR

DOUGLAS A. DUCEY
GOVERNOR

EXECUTIVE OFFICE

June 16, 2017

Scott Pruitt, Administrator
Environmental Protection Agency
USEPA Headquarters
William Jefferson Clinton Building
1200 Pennsylvania Avenue, N. W.
Mail Code: 1101A
Washington, DC 20460

Re: State of Arizona Input on Proposed Revision to the Definition of "Waters of the United States" Final Rule, 80 Fed. Rg. 37,052

Dear Administrator Pruitt,

This letter is in response to your May 2017 request for input on the forthcoming proposal to revise the definition of waters of the United States (WOTUS) Final Rule, 80 Fed. Rg. 37,054 (June 29, 2015) and how states might respond to reduced federal jurisdiction under the Clean Water Act (CWA). I want to thank you for soliciting input before rule changes are drafted by US EPA.

In formulating our comments, we solicited input from our customers and stakeholders and several key principles emerged: protectiveness and consistency with the initial Congressional intent; a need for clarity; and a need for flexibility to allow implementation across the nation's wide range of ecological and hydrologic realities. Recommended elements of the rule to attain these key principles are described below.

**Protectiveness and Consistency with Congressional Intent**

It is Arizona's view that the original intent of Congress was not to use the Clean Water Act as a blanket regulation to cover all waters. Federal jurisdiction may extend beyond navigable waters to particular non-navigable water bodies and wetlands, but only in cases where water features affect navigable waters and are identifiable based on clear, objective characteristics.

1700 WEST WASHINGTON STREET, PHOENIX, ARIZONA 85007
602-542-4331 • www.azgovernor.gov

**Clarity**

The Executive Order on reviewing the WOTUS rule directs both EPA and the Department of the Army to consider interpreting the term "navigable waters" in a manner consistent with Justice Scalia's opinion in Rapanos v. United States, 547 U.S. 715 (2006). Two of the main tenets of this opinion are that WOTUS must be "relatively permanent waters", and that wetlands must have a "continuous surface connection" to a relatively permanent water to be considered a WOTUS.

Arizona believes that relatively permanent waters in Arizona include perennial and seasonal waters. Seasonal waters include any waters that flow at any time during the year as a result of factors other than storm flow. Seasonal waters that flow only as a result of storm events would not be included. Similarly, wetlands would only be considered a WOTUS if they have a continuous connection to a WOTUS, and the connection is at least seasonal.

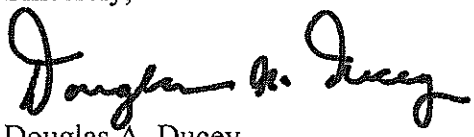
**Flexibility and State Regulation**

The revised rule should also clearly identify that states have authority to determine waters regulated under the CWA within non-tribal state boundaries. Determinations of cross-state, tribal, and international waters should continue to be made by the Department of the Army with input from affected states or tribes.

In regard to a reduced scope of federal regulation under the CWA, Arizona recognizes and welcomes the need to protect non-WOTUS state surface waters. Changes to the federal rule will require us to evaluate how to protect waters that no longer fall under the CWA. For example, man-made lakes that are not connected to a WOTUS that are used for recreation and could pose human health risks.

The State of Arizona appreciates EPA's emphasis on cooperative federalism, and looks forward to continued discussions with EPA and the Department of the Army as they evaluate rule amendments. Ongoing cooperation between states and federal agencies will ensure that the final rule provides needed clarity to allow for focused, defensible and protective implementation of CWA programs.

Sincerely,



Douglas A. Ducey
Governor
State of Arizona

cc: Douglas E. Lamont, P.E.
Senior Official Performing the Duties of the Assistant Secretary of the Army (Civil Works)

# Water Quality Standards-Triennial Review Exemption Request

February 7, 2017

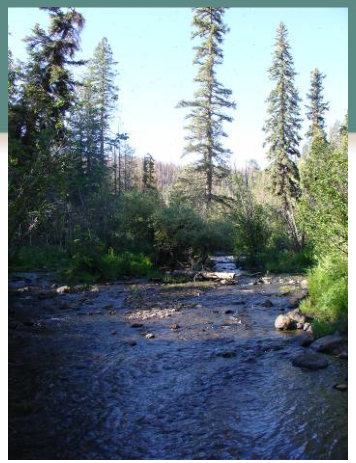
ADEQ
Arizona Department of Environmental Quality

# Why do we need a Triennial Review (TR)?

- Receive input on and review Surface Water Quality Standards required by CWA, every 3 years
- Clean-up of problem areas in Appendix B
- Appropriate application of CWA programs

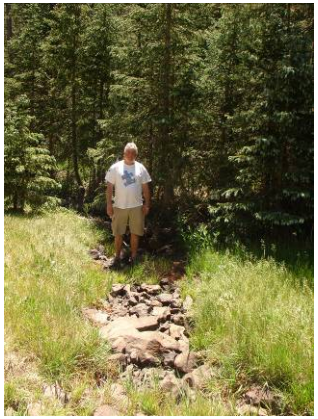
# Why do we need a Triennial Review (TR)?

- Overview of non-Appendix B changes
  - Review/adopt EPA's 2015 water quality criteria updates
  - Narrative nutrient standards for lakes
  - Update rule language to reflect EPA changes to how variances are treated
  - Clarification of antidegradation rule language
  - Review of Outstanding Arizona Waters (OAWs)

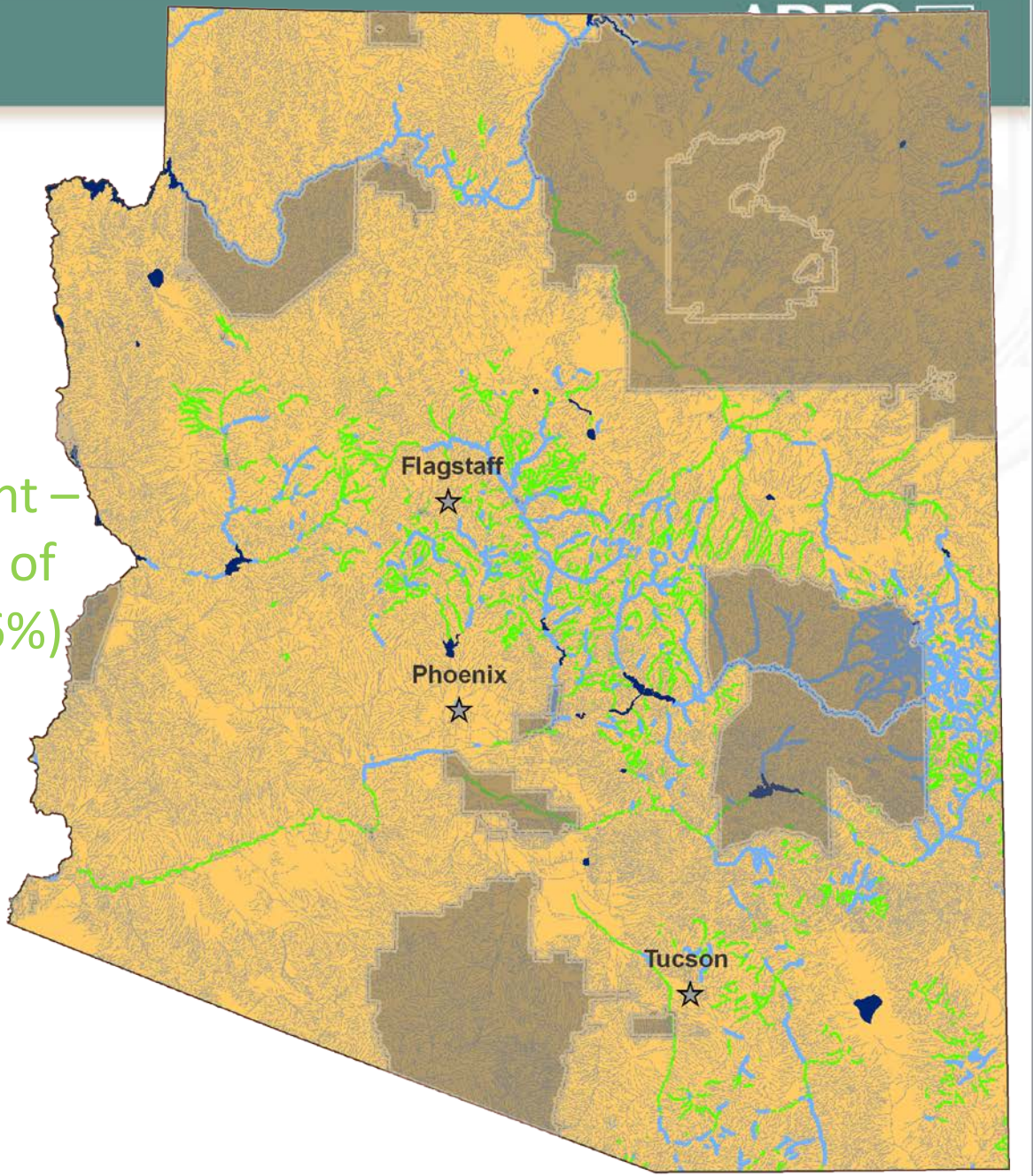


Perennial – Flows all year (4%)

Intermittent – Flows part of the year (6%)



Ephemeral – Only flows when it rains (90%)



# Appendix B Review - Purpose

- Define which waterbodies are Waters of the United States (WOUS)
- Remove or add waterbodies based on WOUS criteria
- Define which waters should be protected on a Waters of the State list?
- Identify & avoid problem areas for AZPDES / TMDL programs

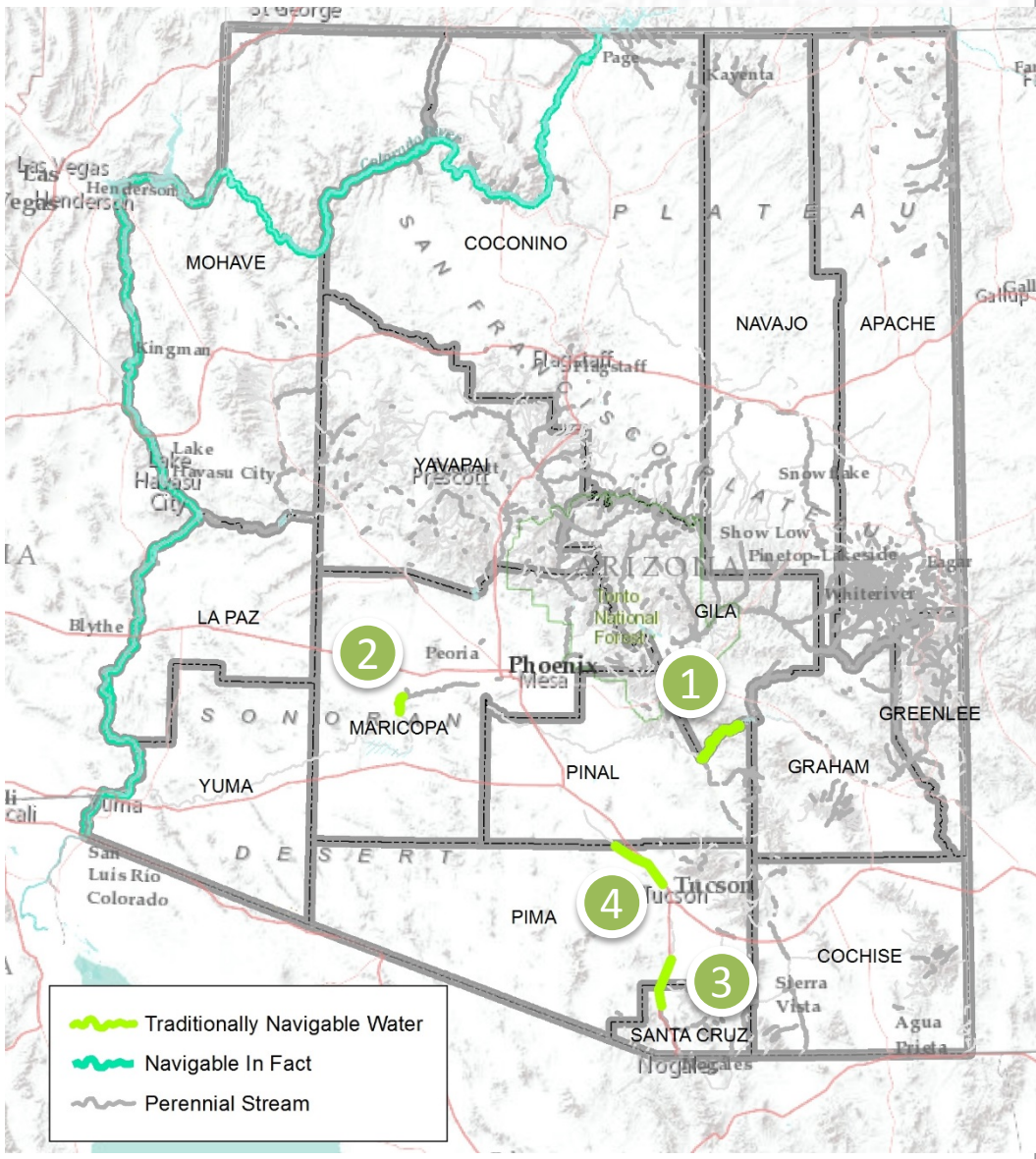
# WOUS Criteria

- 2008 USEPA/USACOE post-Rapanos guidance memo on AJDs
- Essentially Three categories:
  - Automatically jurisdictional (Yes WOUS)
    - Traditional navigable waters (TNWs)
    - Wetlands adjacent to TNWs
    - Tributaries of TNWs that have relatively permanent flow (RPW)
    - Wetlands abutting RPW tributaries
    - Impoundments of Jurisdictional waters
    - Interstate Waters, Territorial Seas
  - Jurisdictional if Significant nexus with a TNW (Maybe WOUS)
    - Non-RPW tributaries
    - Wetlands adjacent to non-RPW tributaries
    - Wetlands adjacent but do not directly abut RPW tributary
  - Not Jurisdictional (Not WOUS)
    - Swales or erosional features (gullies, small washes with low volume, infrequent, short duration flow)
    - Ditches (including roadside ditches) excavated wholly in and draining only uplands and to not carry RPW

# WOUS = Yes - Traditionally Navigable Waters

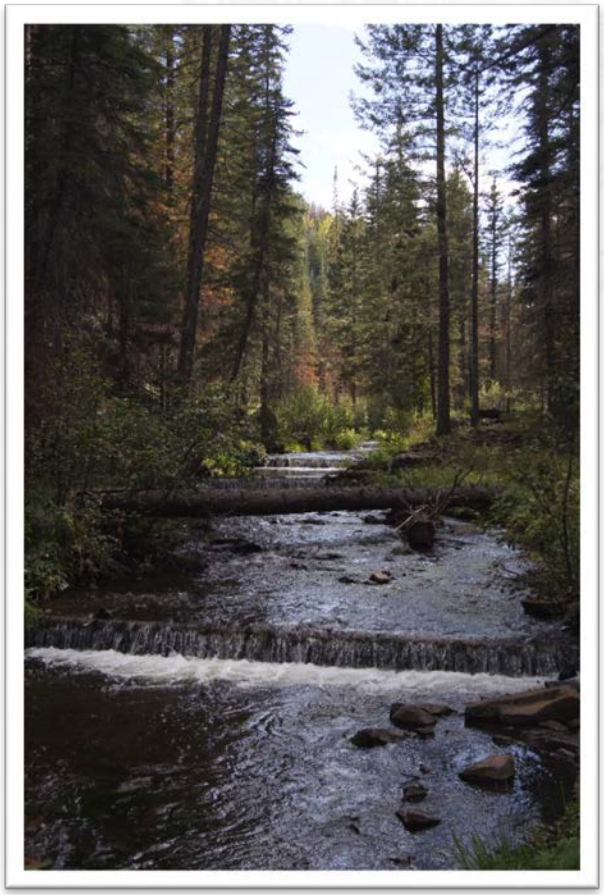
1. Gila River (Coolidge Dam to Winkelman)
2. Lower Gila River (Powers Butte to Gillespie Dam)
3. Santa Cruz River (Tubac gage station to Continental Gage station)
4. Santa Cruz River (Roger Rd WWTP to Pima/Pinal County line

* Colorado River – navigable in-fact"



# WOUS = Yes – Relatively Permanent Water

- Relatively Permanent waters (RPW) that flow directly or indirectly into TNWs



# WOUS = Yes – Impoundments of Jurisdictional Waters

# WOUS = No

- Streams:
  - Swale or gully with no Bed, Bank, and Ordinary High Water Mark indicators
  - Agricultural drainage ditches in uplands
  - Streams that end in a terminal basin (eg. Willcox Playa)

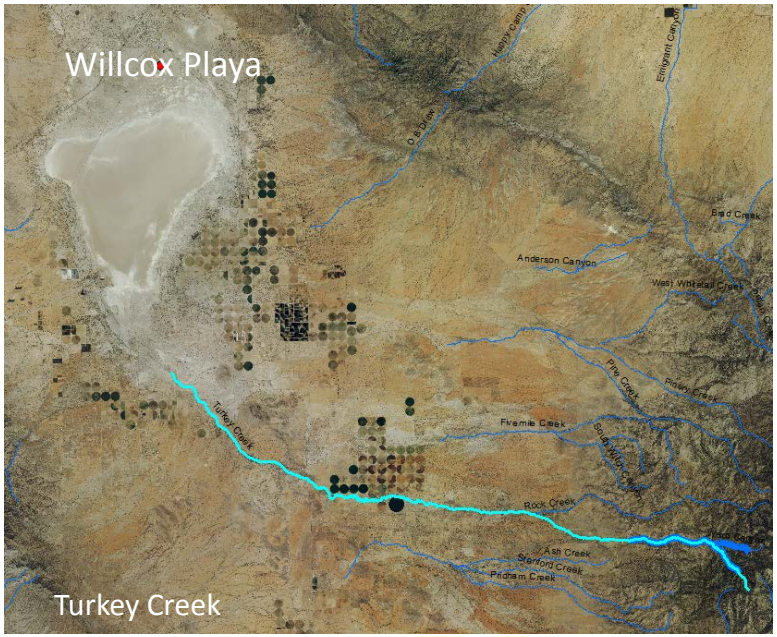



**Photo 55.** Swale is not jurisdictional under the CWA.

**Photo 60.** These erosional features are small channels eroded into the soil surface by runoff.

# WOUS = No

- Lakes:
  - Terminal lake; Has inlets but no outlet or connection to neighboring streams
  - Isolated lake; no inlets or outlets
  - Constructed Urban lake, no discharge to a WOUS, not adjacent to a WOUS

# WOUS = Maybe

- These waters require a “significant nexus” analysis to determine if they are a WOUS
  - Non-Relatively Permanent Waters (non-RPW) that flow directly or indirectly to TNWs
  - Wetlands adjacent to tributaries that are non-RPW that flow directly or indirectly to TNWs
  - Wetlands adjacent to but do not directly abut a RPW that flows directly or indirectly into TNWs

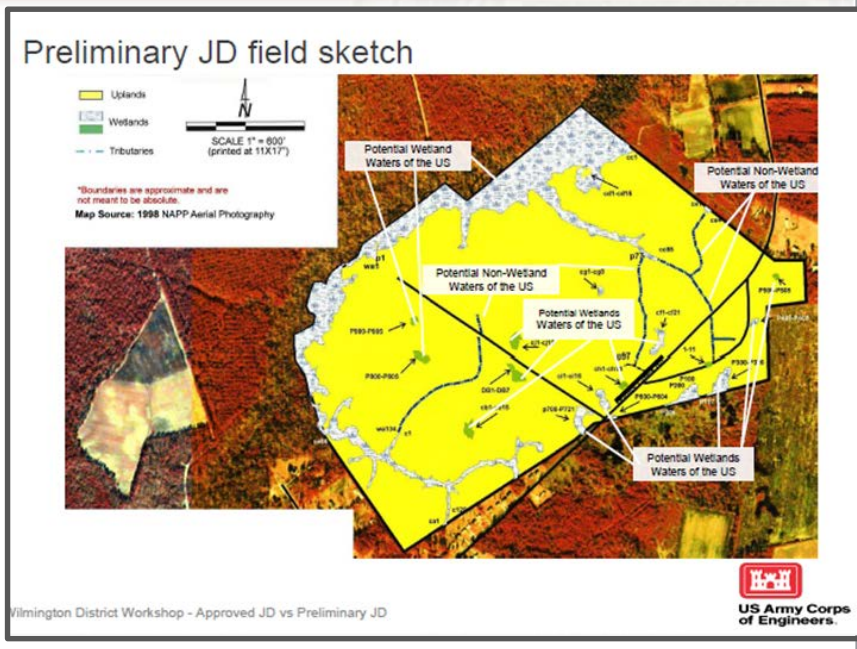
# WOUS = Maybe

- Significant Nexus evaluation may include:
  - Hydrologic characteristics
    - Flow characteristics
    - Bed and Banks, and Ordinary High Water Mark (BBOHWM) indicators present
  - Biological characteristics
    - Riparian corridor,
    - Wetland fringe,
    - Habitat for threatened and endangered species,
    - Fish spawning area,
    - Other environmental sensitive species,
    - Aquatic/wildlife diversity

# USACOE Jurisdictional Determinations (JD)

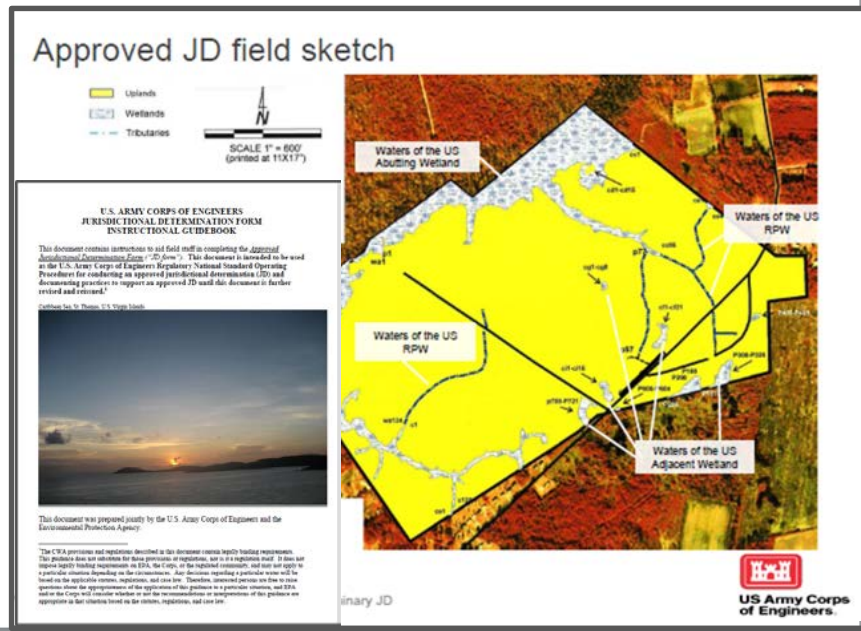
ADEQ Arizona Department of Environmental Quality

- Jurisdictional Determinations (JD)
  - documents stating presence/absence of a WOUS on a parcel of land
  - subject to regulatory jurisdiction under Section 404 of the Clean Water Act (33 U.S.C. 1344) or
  - Section 9 or 10 of the Rivers and Harbors Act of 1899
  - Conducted by the USACOE with notification to USEPA
- Approved JD
- Preliminary JD




## APPROVED/PRELIMINARY JD'S

| | AJDs | PJDs |
|---|---|---|
| JD Request Form? | Y | Y |
| Wet/Up Data Forms? | Y | Y |
| JD (Rapanos) Forms? | Y | N |
| Appealable? | Y | N |
| Used for Permits? | Y | Y |
| Expiration? | Y (5 years) | N |
| Distinguish non JD Waters? | Y | N |
| Sign Survey? | Y | N |
| Processing Time? | Depends on level of complexity | Typically Faster |



# ADEQ Evaluation Process for Waters in Appendix B

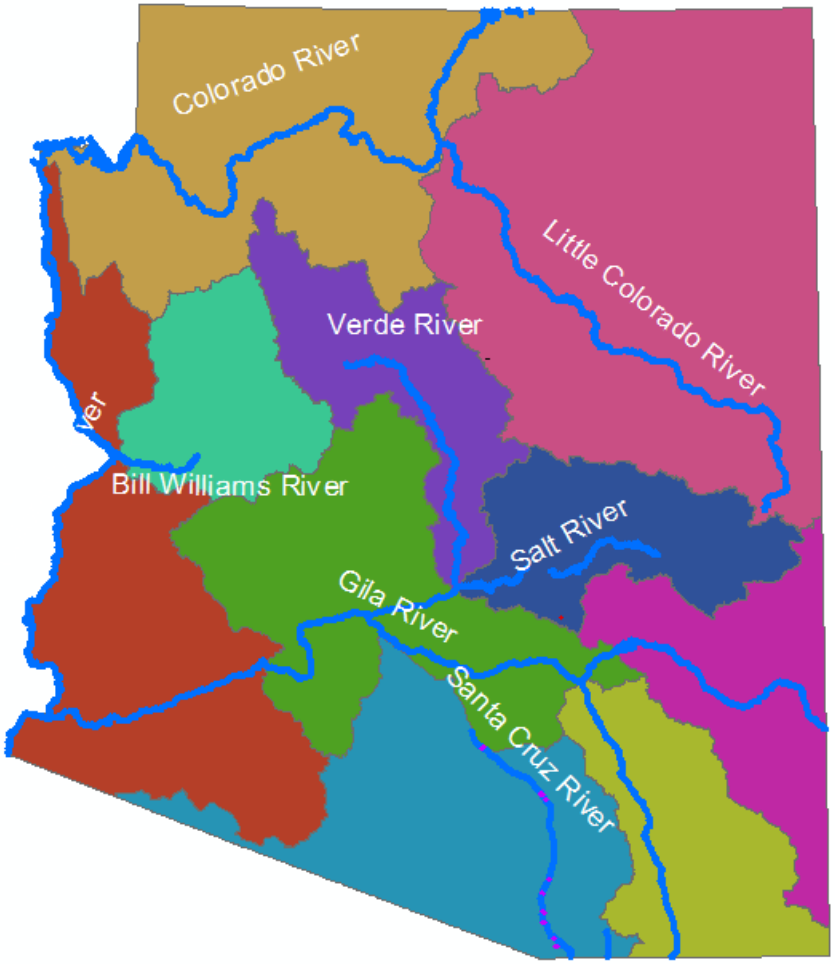
- ADEQ review of 913 waterbodies in Appendix B (Arizona Administrative Code Title 18, Chapter 11, Article 1)
- Used aerial photography and geographic information system (GIS) layers
- Based on Army Corp of Engineers (ACOE) and EPA JD criteria
- ADEQ additional clarifying guidance
- Evaluated waterbodies into the following categories:
  - Yes
  - Maybe
  - No
- Re-evaluation of "Maybe" category; field visits where needed until all Maybe's resolved
- Disclaimer – ADEQ evaluations have been made remotely via desktop GIS screening analysis. May be changed with ground truthing field visits or new data.

# WOUS = Yes – Relatively Permanent Water

- Relatively Permanent waters (RPW) that flow directly or indirectly into TNWs
  - Perennial in entirety (Flow regime layer)
  - RPW, Perennial Segments in reach (Flow regime layer)
  - RPW, >90days flow present (Intermittent flow data)
  - Constructed (man-made or man-altered) channel with relatively permanent flow, or discharges to a RPW tributary
  - Documentation of WOUS status by USACOE
  - Spring that is perennial and direct tributary to RPW (eg. Fossil Springs)
  - Lake that is within a RPW stream or is tributary to a RPW stream

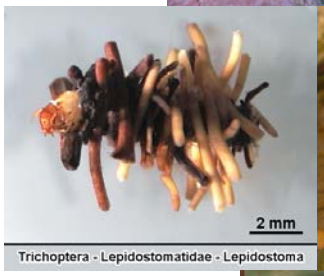
# Non-RPWs - Arizona clarifying criteria

- A waterbody is considered WOUS if:
  - Stream with Bed, Bank, and Ordinary High Water Mark (BBOHWM) indicators present at the mouth and in 50% of channel length and Flows to one of Arizona's "Large River RPWs" or TNWs, or
  - Non-RPW Lake that is located within a tributary with BBOHWM indicators, that flows to a downstream "Large River RPW" or TNW
  - Constructed channel that connects natural channels with BBOHWM and flows to a "Large River RPW" or TNW



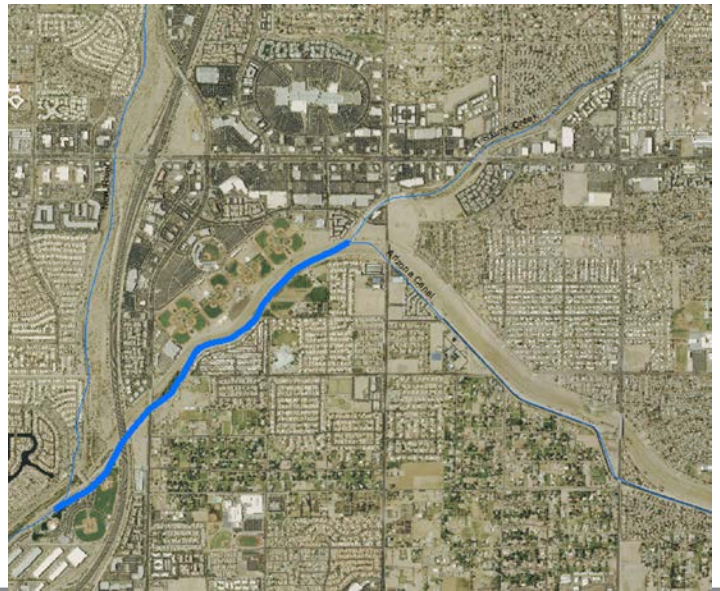
# Non-RPW - Important considerations

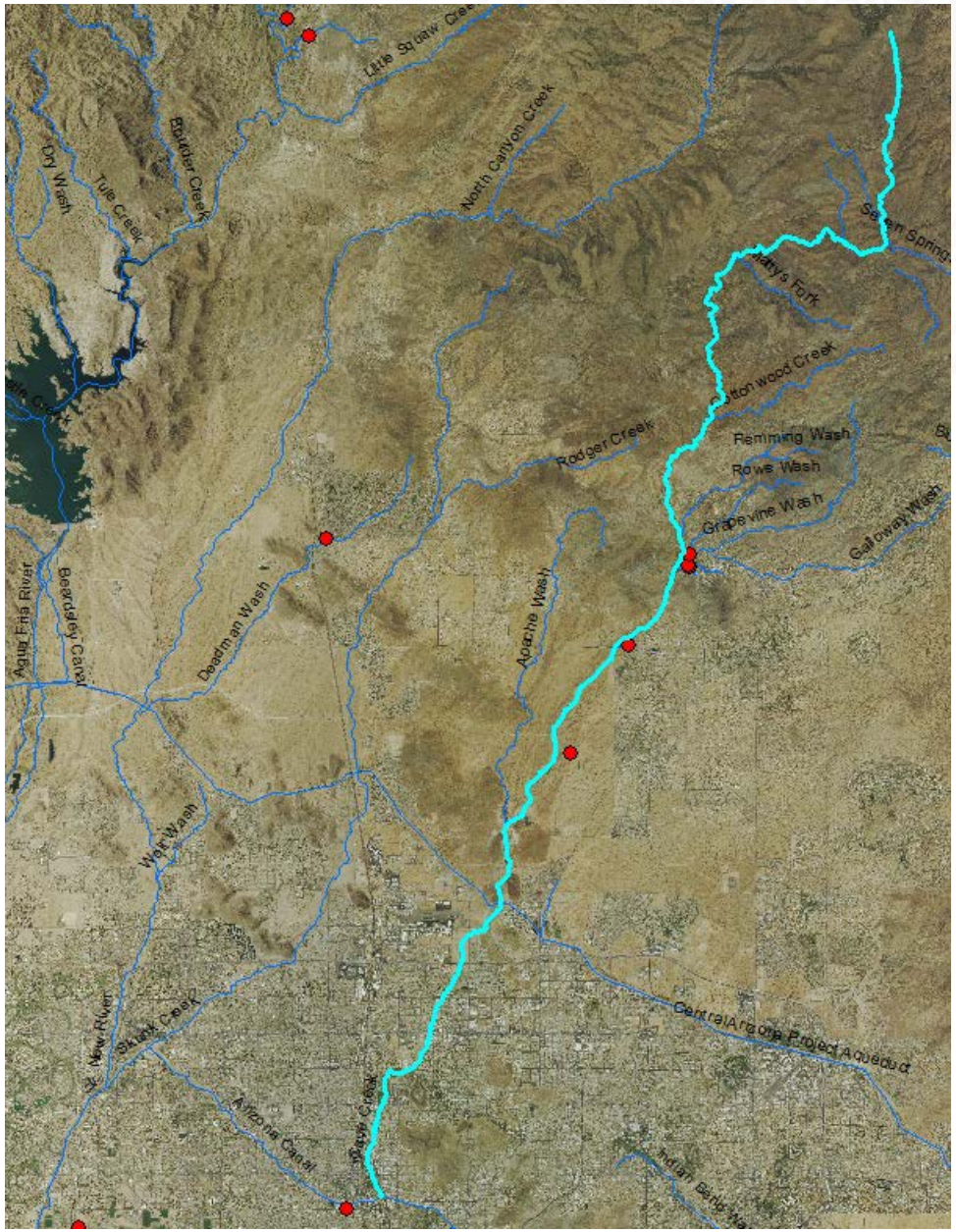
- Ability to carry floodwaters, sediment and pollutants downstream
- Maintenance of water quality
- Provision of aquatic habitat that supports biota
- Capacity to transfer nutrients to support downstream foodwebs
- Habitat services such as spawning areas for recreationally, commercially important species in downstream waters



# Non-RPW example

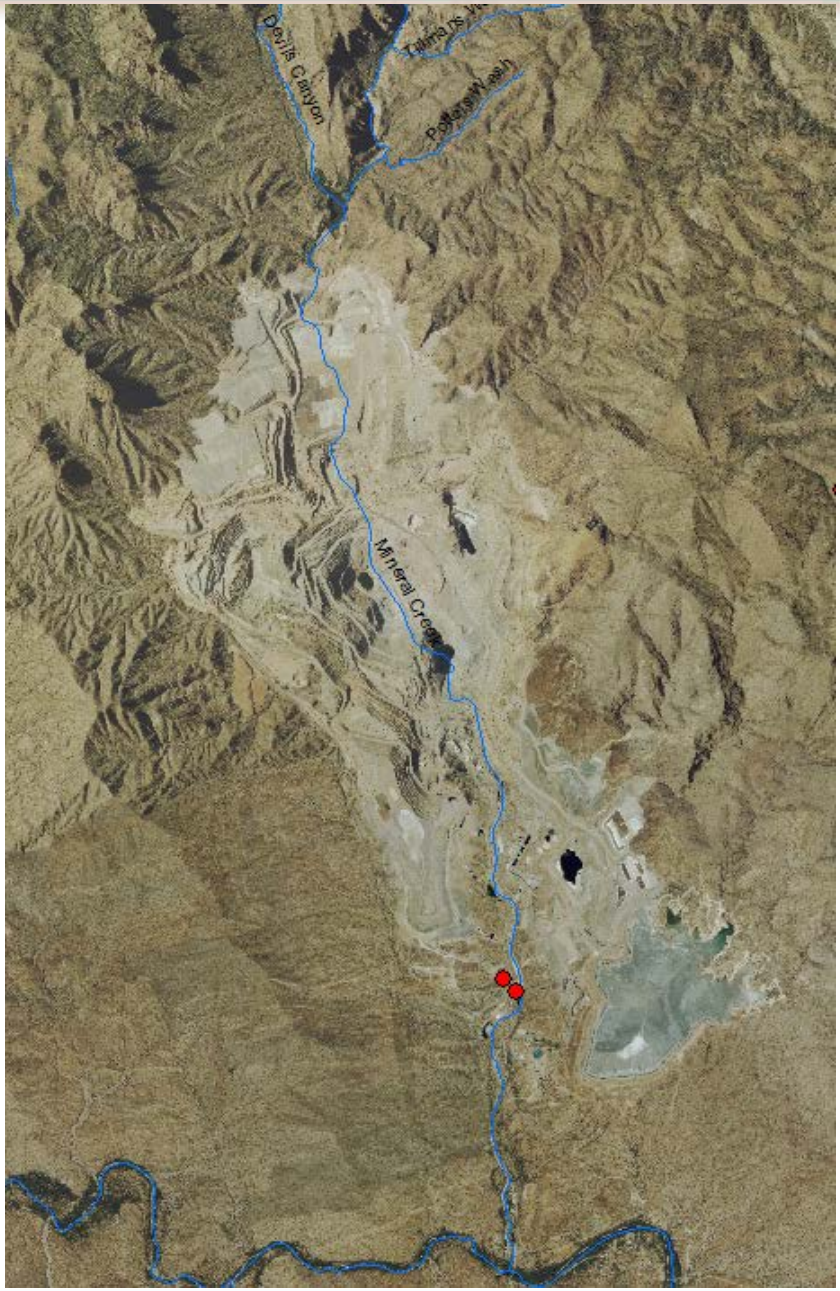
- Cave Creek (Phoenix Metro Area)
  - Flows indirectly to Gila River, an Arizona Large River RPW
  - Bed, Bank, and OHWM indicators present at mouth and >50% of channel length
  - Is a WOUS





# Non-RPW Mining example

- Mineral Creek
  - Flow directly to Gila River, an Arizona Large River RPW
  - Bed, Bank, and OHWM indicators present at mouth and >50% of channel length Is a WOUS



# Summary of Results, to date:

| Waterbody | Yes | Maybe | No | Total |
|---|---|---|---|---|
| Lakes | 136 | 74 | 47 | 257 |
| Streams | 299 | 336 | 21 | 656 |
| **Total** | **435** | **410** | **68** | **913** |

# Agua Caliente Lake – Not WOUS

- DO exceedances, well water source
- Not meeting permit conditions
- Expensive to install new technologies
- Removal from Appendix B would provide permit relief

# Problem areas for ADEQ

- AZPDES permits where receiving waterbody is:
  - Lakes:
    - Not WOUS (n=7)
    - Maybe WOUS (n=2)
  - Streams:
    - Not WOUS (n=0)
    - Maybe WOUS (n=54)

| | | |
|---|---|---|
| SC | Agua Caliente Lake | Isolated lake |
| LC | Dry Lake (EDW) | Terminal lake |
| SP | Lake Cochise (EDW) | Trib to terminal lake |
| LC | Ned Lake (EDW) | Isolated lake |
| MG | Papago Park South Pond | Isolated urban lake |
| LC | Pintail Lake (EDW) | Isolated lake |
| LC | Telephone Lake (EDW) | Isolated lake |

# Problem areas for ADEQ

- "Impaired" waterbodies where TMDL studies must be done:
  - Lakes (n=31):
    - Not WOUS (n=6)
    - Maybe WOUS (n=2)
  - Streams (n=54)
    - Not WOUS (n=0)
    - Maybe WOUS (n=13)

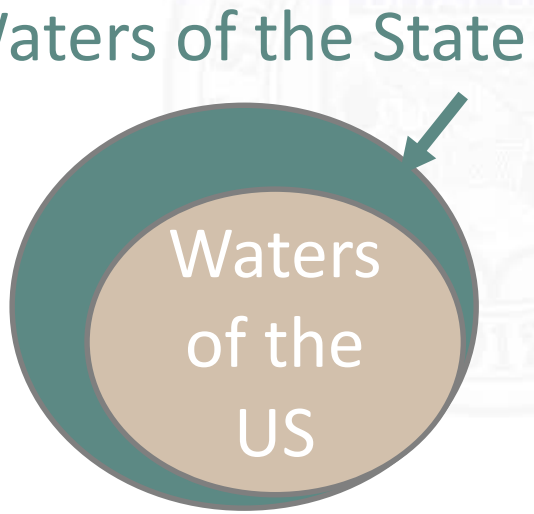
| Water shed | Surface Waters | Rationale |
|---|---|---|
| MG | Alvord Park Lake | Isolated urban lake |
| MG | Cortez Park Lake | Isolated urban lake |
| LC | Long Lake, Lower | Terminal lake |
| LC | Pintail Lake (EDW) | Isolated lake |
| VR | Stoneman Lake | Terminal lake |
| LC | Telephone Lake (EDW) | Isolated lake |

# Appendix B Updates needed in Triennial Review

- Proposed deletions
  - 47 lakes
  - 21 streams
- Proposed additions, after evaluation:
  - 28 perennial stream segments (USGS study)
  - Lakes (Colorado River adjacent lakes)
  - 303d listed tributaries, if not covered by Tributary rule

# Waters of the State

- ADEQ mission: To protect and enhance public health and the environment in Arizona
- Designated uses we care about:
  - Full body contact
  - Domestic water source
  - Fish consumption
  - Aquatic life
- Currently no statute or rule that addresses maintenance and restoration waters of the State
- Aim to develop Waters of the State program to protect designated uses in waterbodies not covered by WOUS



Freestone Park Lake, Gilbert

# Potential Waters of the State

- 83 Lakes ( 50 AGFD fishing lakes )
- Waterbodies that are domestic water sources
- Tributary streams to terminal basins
- Terminal and isolated lakes that support aquatic life