



# Arizona Water Quality Standards

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

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## Purpose

This technical paper is the second in a series of five papers written by the Arizona Department of Environmental Quality (ADEQ) to support stakeholder engagement during the adoption of Arizona's State Surface Water Protection Program (SWPP). This paper is not policy. The SWPP technical papers are intended to be problem-solving artifacts to assist ADEQ in gathering information related to filing a Notice of Proposed Rulemaking for the SWPP program. ADEQ believes that these papers will focus public engagement on the scientific basis for agency decisions and drive productive conversations about SWPP implementation.

At a high level, this paper will address:

- Water quality standards in Arizona;
- The difference between Federal Clean Water Act (CWA) standards and SWPP standards;
- The status of currently approved water quality standards in Arizona;
- Next steps for CWA and SWPP water quality standards.

ADEQ recognizes that at the publication date of this paper, there are potential Federal rulemaking actions and litigation that may impact Arizona's implementation of CWA regulations. The subject of this paper could vary dramatically based on the outcome of those federal proceedings. ADEQ will continue to update stakeholders about any changes in Federal law that impact the adoption of the SWPP.

## Introduction

The Arizona SWPP established by HB2691 (2021) creates a dual-pronged approach for regulating surface water in Arizona. Waters that are considered Waters of the United States (WOTUS) will be regulated under the CWA program that already exists in Arizona. Surface waters that are not WOTUS but qualify to be listed on the Protected Surface Waters List (PSWL) as non-WOTUS protected surface waters will be regulated by an Arizona-specific program established by ADEQ during the SWPP rulemaking.

These two programs will exist in tandem. Protected surface waters cannot be regulated under both programs. During the initial adoption of the SWPP, ADEQ is striving to keep the two programs as similar as possible to provide consistency and clarity to permittees while the legal reach of the Federal CWA is in flux.<sup>1</sup> The similarities between the two programs will ensure the original goal of the SWPP is met, and an ever-changing Federal definition of WOTUS will not result in significant compliance issues in Arizona as waters change between being regulated by the Federal program or the State program.

To direct conversation surrounding the SWPP rulemaking on productive topics, this technical paper gives a general overview of the standards program. Next, it focuses specifically on water quality standards used

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<sup>1</sup> See *Sackett v. Environmental Protection Agency* case and ongoing WOTUS rulemaking at 86 FR 69372.

to develop WQBELs for Arizona Pollutant Discharge Elimination System (AZPDES) permits and how those standards will apply to non-WOTUS protected surface waters.

## Water Quality Standards in Arizona

Section 303(c) of the CWA requires that all states adopt and maintain water quality standards for WOTUS. Adopting water quality standards allows the state to assess the health of Arizona waters and provides a legal basis for controlling pollutants entering a protected surface water. Arizona Revised Statutes (A.R.S.) § 49-222 provides the state-level authorization for ADEQ to adopt those water quality standards.

ADEQ uses the adopted water quality standards as the backbone of Arizona's implementation of the federal NPDES program implemented by ADEQ that's called AZPDES. The AZPDES program provides permits for discharges to WOTUS that limit the additions of pollutants to those surface waters using five general types of provisions:

1. Technology-based effluent limitations;
2. Water-quality-based effluent limitations;
3. Monitoring and reporting requirements;
4. "Boilerplate" conditions;
5. Special conditions, for example, site-specific standards that are applicable.

The SWPP enabling legislation, HB2691 (2021), restricted the permitting provisions that could be applied to discharges to non-WOTUS protected surface waters. This is best summarized in how the legislation redefined the word "permit." A.R.S. §49-201(32) defines the word permit as follows: "[f]or the purposes of regulating non-WOTUS protected surface waters, [a] permit shall not include provisions governing the construction, operation, or modification of a facility except as necessary for the purpose of ensuring that discharge meets water quality-related effluent limitation or to require best management practices<sup>2</sup> for the purpose of ensuring that a discharge does not cause an exceedance of an applicable surface water quality standard."<sup>3</sup>

The restrictions present in the legislation mean the SWPP will regulate discharges to waters primarily based on water quality-based effluent limitations (WQBELs). WQBELs regulate discharges based upon the *actual impact* that a discharge has on receiving waters. The water quality standards established for a particular waterbody serve as the basis for imposing water-quality-based treatment controls in AZPDES permits.

Arizona's water quality standards for the AZPDES program are housed in Title 18, Chapter 11, Article 1 of the Arizona Administrative Code. Related rules for impaired waters can be found in Title 18, Chapter 11, Article 6 but will not be a focus of this technical paper. Rules for non-WOTUS impaired waters will not be modified during the initial SWPP rulemaking.<sup>4</sup>

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<sup>2</sup> Best management practices for the SWPP program will also be addressed in a separate technical paper.

<sup>3</sup> §49-201(32)

<sup>4</sup> §49-232(K) states that "[t]he Director shall apply the rules adopted pursuant to [§49-232(D)] for the identification of impaired waters to non-WOTUS protected surface waters until specifically changed by rule. The director shall

## The Difference between CWA and SWPP Standards

This section provides an overview of water quality standards that will be applicable to the SWPP and the differences between the structure of the SWPP and the CWA. “Water quality standards” are laws or regulations that consist of:

1. The designated use or uses of a waterbody;
2. The water quality criteria that are necessary to protect the use or uses; and
3. An antidegradation policy.

The SWPP established by HB2691(2021) borrows significantly from the Federal CWA structure with a few crucial distinctions. ADEQ *may not* adopt or apply water quality standards for non-WOTUS protected surface waters based on:

1. Antidegradation
2. Antidegradation Criteria
3. Outstanding Arizona Waters

Because antidegradation standards and criteria are prohibited from being used in AZPDES permits for discharges to non-WOTUS protected surface waters, this technical paper does not address them. Additionally, permits and conditions for discharges to non-WOTUS protected surface waters are prohibited from implementing any sections of the CWA directly, including sections 301, 302, 306, 307, 308, 312, 318, and 405. Permits issued for these discharges to non-WOTUS waters are not subject to review by the U.S. Environmental Protection Agency (USEPA). ADEQ is prohibited from adopting or applying rules regarding the following discharges to non-WOTUS protected surface waters:

1. Except as applied to discharges from publicly owned treatment works, requirements specific to new sources or new dischargers under the CWA.
2. Except for discharges from publicly owned treatment works, technology-based effluent limitations, standards, or controls, including new source performance standards, under sections 301(b), 304(b), and 306 of the CWA.
3. Requirements to express all permit limitations, standards, or prohibitions for a metal solely in terms of total recoverable metal.
4. Requirements for review and approval of permits by the USEPA before issuance.

## Designated Uses

Arizona’s water quality standards under the CWA and SWPP designate specific uses for waters and then establish standards to protect those uses. ADEQ maintains a list of WOTUS and their corresponding, federally approved designated uses in A.A.C. Title 18, Chapter 11, Article 1, Appendix B.

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amend rule to update the impaired waters identification rules within one year after adopting surface water quality standards for non-WOTUS protected surface waters pursuant to section 49-221, subsection A, paragraph 2.”

The designated uses of a surface water are the most fundamental articulation of its role in Arizona's aquatic or human environment. These adopted uses express goals for the water, such as supporting aquatic life and human activities. Designated uses are assigned to waterbodies through rulemaking, which includes a public process and an opportunity for stakeholders to comment. To change or remove an existing designated use for a specific WOTUS, the CWA requires a Use Attainability Analysis (UAA).<sup>5</sup> The findings in the UAA are submitted to EPA as part of the rulemaking.

The concept of protected surface water having designated uses is central to establishing appropriate water quality standards. Arizona's "menu" of designated uses listed at R18-11-104(B) provides for the protection and propagation of fish, shellfish, and wildlife and for recreation in and on the water.

The currently specified ADEQ-specified designated uses for WOTUS are:

- Domestic water source (DWS),
- Fish consumption (FC),
- Full body contact recreation (FBC),
- Partial body contact recreation (PBC),
- Aquatic and wildlife (cold water) (A&Wc) (acute and chronic),
- Aquatic and wildlife (warm water) (A&Ww) (acute and chronic),
- Aquatic and wildlife (effluent-dependent water) (A&Wedw) (acute and chronic),
- Aquatic and wildlife (ephemeral water) (A&We) (acute only),
- Agricultural irrigation (AgI), and
- Agricultural livestock watering (AgL).

ADEQ's four subcategories of aquatic and wildlife designated uses are meant to protect fish, shellfish, and wildlife (A&Wc, A&Ww, A&Wedw, and A&We). Every surface water in Arizona, with the exception of certain canals, has one of these four designated uses to protect the aquatic life and wildlife. Both the A&Wedw and A&We are assigned based on the flow characteristics of the water itself. The A&Wc and A&Ww are assigned based on the relative elevation of the water. Intermittent and Perennial WOTUS protected surface waters located above 5000 ft. are assigned the A&Wc use and those below are assigned the A&Ww use.

ADEQ protects water quality for "recreation in and on the water" with the full-body contact recreation (FBC), partial body contact recreation (PBC), and fish consumption (FC) designated uses. These designated uses are intended to maintain and protect water quality for swimming, water-skiing, boating, wading, fishing, and other recreational uses. The FBC designated use is intended to protect public health when people engage in recreational activities that may involve full immersion in the water and potential ingestion of the water such as swimming. The PBC designated use is intended to protect public health when people engage in water-based recreational activities where full immersion and ingestion of the water are unlikely such as wading or boating. The FC designated use is intended to protect human health when fish or other aquatic organisms are taken from a surface water for human consumption.

ADEQ has considered the use and value of surface waters for public water supply by establishing the domestic water source (DWS) designated use. The DWS designated use applies to a surface water that is

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<sup>5</sup> [https://www.epa.gov/wqs-tech/use-attainability-analysis-uaa#:~:text=A%20use%20attainability%20analysis%20\(UAA,fishable%2Fswimmable%22%20uses\)](https://www.epa.gov/wqs-tech/use-attainability-analysis-uaa#:~:text=A%20use%20attainability%20analysis%20(UAA,fishable%2Fswimmable%22%20uses))

used as a raw water source for drinking water supply. The water quality criteria for the DWS designated use were developed assuming that treatment is necessary to yield drinking water suitable for human consumption. The DWS designated use applies to a surface water that has a water intake located along it which uses the surface water as a raw water source.

Finally, ADEQ recognizes the use and value of surface waters for agricultural purposes by establishing the agricultural irrigation (AgI) and agricultural livestock watering (AgL) designated uses. These uses are intended to maintain and protect surface water quality so water can be used for crop irrigation or to water cattle and other livestock.

ADEQ has not made meaningful modifications to the designated uses assigned to waterways during the last two triennial reviews. Designated uses for unlisted waters are largely established through the tributary rule at R18-11-105. The agency is currently developing a process to streamline use attainability analyses to better adapt assigned designated uses to the conditions of listed surface waters.

During the initial adoption of the SWPP, ADEQ is endeavoring to keep as many of the aspects of the new SWPP as similar as possible to the traditional AZPDES program that has already been deployed in Arizona. As a result, the SWPP will maintain nine of the ten designated uses that Arizona has developed for the CWA program. Notably, SWPP does not apply to ephemeral waterways, therefore, ADEQ will not adopt an aquatic and wildlife (ephemeral) use for the SWPP. Arizona's non-WOTUS protected surface waters list will use the following designated uses:

- Domestic water source AZ (DWSAZ),
- Fish consumption AZ (FCAZ),
- Full body contact recreation AZ (FBCAZ),
- Partial body contact recreation AZ (PBCAZ),
- Aquatic and wildlife (cold water) AZ (A&WcAZ) (acute and chronic),
- Aquatic and wildlife (warm water) AZ (A&WwAZ) (acute and chronic),
- Aquatic and wildlife (effluent-dependent water) AZ (A&WedwAZ) (acute and chronic),
- Agricultural irrigation AZ (AgIAZ), and
- Agricultural livestock watering AZ (AgLAZ).

Future rulemakings for non-WOTUS protected surface waters may add or revise these designated uses.

## Water Quality Criteria

The term “criteria” is used when referencing water quality standards in a few different ways. The term is a reference to a specific part of a state water quality standard – that is, a water quality standard is composed of designated uses and the water quality criteria necessary to protect those uses.<sup>6</sup> When Arizona adopts specific criteria they become the applicable regulatory requirements for protected waters.

Criteria to protect designated uses in Arizona are expressed in three ways:

1. Chemical-specific concentrations;
2. Toxicity levels; or

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<sup>6</sup> 40 C.F.R. § 131.3(b)

3. Narrative statements representing a quality of water that supports a particular use of a surface water.

## Chemical-Specific and Toxicity Criteria

The most direct way ADEQ protects a listed designated use is by adopting numeric surface water standards that establish specific limits on the concentrations of pollutants that will preserve that use. ADEQ adopts criteria for pollutants when they are listed by the EPA as either a toxic pollutant or a priority pollutant. When EPA lists a pollutant, they also publish an analytical test methodology that ADEQ can use to set numeric criteria that are appropriate for Arizona.<sup>7</sup> These individual pollutant parameters are listed in A.A.C. Title 18, Chapter 11, Article 1, Appendix A, and R18-11-109. In adopting numeric water quality standards, ADEQ considers:

- The effect of unique local water quality characteristics on the toxicity of pollutants;
- The varying sensitivities of local affected aquatic populations to these pollutants; and
- The extent to which the stream's natural flow is perennial, intermittent, effluent-dependent, or ephemeral.

## Narrative Criteria

Narrative criteria are general statements designed to protect the aesthetics and health of a waterway. Arizona's existing narrative criteria prevent permitted discharges of pollutants that result in any conditions listed in A.A.C. R18-11-108. Additionally, ADEQ has further defined the criteria when these conditions are violated in A.A.C. R18-11-108.01 and R18-11-108.02. ADEQ does have narrative nutrient criteria for lakes and reservoirs adopted at R18-11-108.03, but the EPA has not approved that rule.

Water quality criteria, numeric criteria, and narrative criteria are all based on a significant body of scientific work.<sup>8</sup> Generally, standards are developed using a workgroup process or informal public meetings and are eventually proposed for public comment.

## Economic, Social and Environmental Cost-Benefit Analysis

The SWPP requires an economic, social and environmental (ESE) cost-benefit analysis to adopt water quality standards at a certain level for a class of waters. This is not a requirement under the CWA, which only requires an economic analysis if a modification from an EPA recommended standard is proposed. Because an ESE cost-benefit analysis is not required under the CWA, but is under the new SWPP, ADEQ is working to construct a formalized process to apply this analysis to water quality standards. ADEQ has not

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<sup>7</sup> View the [EPA website](#) for more information on the recommended water quality criteria.

<sup>8</sup> For further discussion on this subject, ADEQ recommends interested parties visit the [EPA website](#). Additionally, Appendices C through G of this paper discuss the process ADEQ goes through to set these criteria for individual pollutants. Interested stakeholders may reach out to ADEQ for more explanation regarding setting individual standards.

completed a cost/benefit analysis for adopting narrative water quality standards for non-WOTUS protected surface waters at this time, so this technical paper does not establish a clear path for those standards. However, there are no wadeable, perennial streams on the Initial PSWL, therefore the agency is unlikely to adopt regulations similar to R18-11-108.01 or R18-11-108.02. Additionally, to ensure that CWA and SWPP waters are regulated coherently, it is unlikely that ADEQ will adopt narrative nutrient criteria for lakes and reservoirs similar to the guidelines in R18-11-108.03. R18-11-108.03 has not been approved by the EPA and is currently not used for AZPDES permitting. ADEQ will not apply an unapproved WQS to non-WOTUS protected surface waters.

ADEQ has hired McClure Consulting Inc. to build a model the ESE cost-benefit analysis at a broader level. The model is still in its early stages but is complete for some of our standards. ADEQ intends to publish an additional technical paper reviewing this model, with examples of application. This paper will be published in late Spring or early Summer 2022. Once rulemaking is complete, ADEQ will need to incorporate the ESE cost-benefit analysis into the application of water quality standards for non-WOTUS protected waters.

As mentioned previously, ADEQ will locate the water quality standards for the SWPP program in a separate article from the Federally approved standards in A.A.C. Title 18, Chapter 11, Article 1. The SWPP standards will be adopted in Title 18, Chapter 11, Article 2.

## Arizona Water Quality Standards Current State

ADEQ revises WOTUS water quality standards under a timetable established by the CWA. The CWA requires the agency to review A.A.C. Title 18, Chapter 11, Article 1, once every three years.<sup>9</sup> This process is called the triennial review. EPA is required to review any modifications ADEQ makes to WOTUS water quality standards and approves the standards that meet the requirements of the CWA.<sup>10</sup> ADEQ makes modifications to Arizona's WOTUS water quality standards through the State's rulemaking process, however, those changes don't take effect until EPA approval is received.

The EPA must approve or disapprove ADEQ's standards within a set amount of time established in the CWA and implementing regulations<sup>11</sup>. If EPA approves ADEQ's submitted standards, the EPA must notify ADEQ within 60 days of receiving the submittal of Arizona's standards, rules, and supporting documentation. If EPA disapproves of Arizona's surface water quality standards, it must do so within 90 days of receiving the complete submittal of the surface water quality standards rules.

If the Regional Administrator disapproves a water quality standard, EPA must notify ADEQ, specifying:

1. Why the state standards are not in compliance with the CWA, and
2. The revisions ADEQ must make to its standards to assure compliance with the CWA before EPA could fully approve the standards<sup>12</sup>. Under § 303(c)(4) of the CWA, EPA must federally promulgate

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<sup>9</sup> 40 C.F.R. § 131.3(c)(1).

<sup>10</sup> Id. at § 131.3(c)(3).

<sup>11</sup> See CWA § 303(c)(3) and 40 C.F.R. §131.21(a)

<sup>12</sup> See 40 C.F.R. § 131.21

water quality standards no later than 90 days after the date of notice of the disapproval described above if ADEQ does not adopt the necessary revisions as specified by EPA within that time.

A state-adopted standard for WOTUS waters that EPA disapproves remains in effect until either:

1. ADEQ adopts the necessary revisions through the rulemaking process, or
2. EPA promulgates a federal water quality standard to supersede the disapproved water quality standard.

ADEQ completed its statutory obligation and submitted the regulatory modifications made during the 2019 triennial review to the EPA on November 19, 2019. During the review process, EPA signaled to ADEQ that a non-trivial number of individual pollutant parameters developed by ADEQ and listed in A.A.C. Title 18, Chapter 11, Article 1, Appendix A, Table 1 for certain designated uses would be disapproved as they did not meet the requirements of the CWA.

ADEQ submitted a request to formally withdraw portions of the 2019 Triennial Review on December 21, 2021. Specifically, ADEQ withdrew modifications of the individual pollutant parameters established in Appendix A, Table 1 for the domestic water source, fish consumption, full-body contact, and partial body contact designated uses from review. The EPA signaled that the Federal government could not approve these standards for individual pollutants due to incorrect assumptions ADEQ made during their development. ADEQ is committed to resolving those issues before submitting the next triennial review package to the EPA.

As part of the EPA's concurrence with ADEQ's partial withdrawal of the 2019 TR, EPA took additional action to approve some changes to WQS in the 2019 TR that ADEQ did not withdraw. EPA approved the revisions to the definitions, antidegradation, mixing zones, and variance standards adopted in 2019 on January 24, 2022.<sup>13</sup> The EPA also approved portions of ADEQ's submittal that made minor formatting revisions and other corrections that were non-substantive.

The EPA has not acted on the changes to the 2019 TR individual pollutant parameters in Appendix A, Table 1 for the aquatic and wildlife cold, aquatic and wildlife warm, aquatic and wildlife ephemeral, aquatic and wildlife effluent-dependent water, agricultural irrigation, and agricultural livestock watering designated uses. The EPA has signaled to ADEQ that they expect these modifications to be approved in 2022. EPA has communicated to ADEQ that they are waiting on United States Fish and Wildlife Service to complete an evaluation as to whether ADEQ's new standards are protective enough of endangered species.<sup>14</sup>

The above facts have left Arizona with a patchwork of effective standards to apply to WOTUS, as illustrated below. Specifically:

- For the domestic water source, fish consumption, full-body contact, and partial body contact designated uses, the individual pollutant parameters from Arizona's 2016 Triennial Review will apply until modified and approved by the EPA in an upcoming Arizona action.
- For all aquatic and wildlife uses and agricultural irrigation use, the individual pollutant parameters from Arizona's 2016 are currently effective until EPA approves the modifications made by the 2019 TR.

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<sup>13</sup> See Appendix G of this paper.

<sup>14</sup> This is referred to as a Section 7 evaluation.

- Narrative standards and changes made to the definitions, antidegradation, mixing zone, and variance portions of Arizona's water quality standards in the 2019 TR are currently effective.

Effective Version of Recently Changed Standards For WOTUS		
Standard	Current Effective Version of Standards 4/1/2022	The version of Standards Expected to be Effective when SWPP is Adopted
<b>Individual Parameters for Domestic Water Source Use</b>	2016	2016
<b>Individual Parameters for Fish Consumption</b>	2016	2016
<b>Individual Parameters for Full-Body Contact</b>	2016	2016
<b>Individual Parameters for Partial Body Contact</b>	2016	2016
<b>Individual Parameters for Aquatic and Wildlife Uses</b>	2016	2019*
<b>Individual Parameters for Agricultural Irrigation Use</b>	2016	2019*
<b>Individual Parameters for Agricultural Livestock Use</b>	2016	2019*
<b>R18-11-101. Definitions</b>	2019	2019
<b>R18-11-107. Antidegradation</b>	2019	2019
<b>R18-11-114. Mixing Zones</b>	2019	2019
<b>R18-11-122. Variances</b>	2019	2019

\*Dependent on USFWS review and EPA approval.

## Next Steps for CWA and SWPP Water Quality Standards

Actionable surface water quality standards are the building blocks for Arizona's Surface Water programs. As ADEQ adopts the SWPP, the agency will also seek to rectify some of the issues with the federal program and align water quality standards to the best of the agency's ability. To meet these goals, ADEQ will need

to modify A.A.C. Title 18, Chapter 11, Article 1, Appendices A and B, in addition to adopting the new SWPP standards in A.A.C. Title 18, Chapter 11, Article 2. ADEQ's initial draft plan for the SWPP rulemaking is to:

1. Harmonize designated uses between the State program and the Federal program.
2. Use existing Federal numeric standards if not prohibited, specifically numeric parameters for individual pollutants, to protect non-WOTUS waters.
3. Remove non-WOTUS waters from Article 1, Appendix B, and list waters that meet the requirements of §49-221 as non-WOTUS protected surface waters on the PSWL in Article 2, Appendix B.

After the initial adoption of water quality standards for SWPP, ADEQ will continue to review the best available science and most recent guidance for establishing water quality standards. When new pollutants are listed by the EPA as toxic or priority pollutants, ADEQ will review the analytical test methodology, apply the ESE process, and determine if updated standards for the CWA program are appropriate for state protected waters on the PSWL.

## Conclusion

By adopting similar provisions to our CWA program for the SWPP, ADEQ believes that the agency can help limit confusion amongst permittees, continue to provide consistent permit limits, and build a program that protects Arizona's surface waters based on the *actual impact* of the pollution to that water. The goal of the SWPP has always been to provide consistency and clarity for surface water regulation in Arizona.

Adopting water quality standards is one of the most data-driven functions ADEQ performs. Generating standards that are protective for each use of a surface water and the corresponding pollutants is a project that takes years to complete. The initial adoption of the SWPP will use the generations of work that have been done to ensure the program is protective of Arizona waters based on the actual impact pollutants have on the uses of those waters. Developing standards for protecting non-WOTUS surface waters will evolve alongside the WOTUS definition itself.

## Appendix A - Letter from EPA RE: ADEQ's 2019 TR



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION IX  
75 Hawthorne Street  
San Francisco, CA 94105-3901

By Email Only

Trevor Baggiore  
Director, Water Quality Division  
Arizona Department of Environmental Quality  
1110 W. Washington St.  
Phoenix, Arizona 85007

Subject: Arizona 2019 Triennial Review Revised Water Quality Standards - Definitions, Antidegradation Criteria, Mixing Zones and Variances.

Dear Director Baggiore:

I am pleased to approve the subject water quality standards consistent with the requirements of section 303(c) of the Clean Water Act (CWA) and 40 C.F.R. Part 131. Summarized below are the specific approved standards, which take effect immediately for CWA purposes. Incorporated as part of this letter is EPA's detailed analysis of the standards and rationale for approval.

EPA approves the revisions to the definitions, antidegradation, mixing zones, and variance regulations adopted in Arizona's 2019 Triennial Review. The submittal also included formatting revisions and other corrections that are non-substantive and are not new or revised WQS and are therefore not subject to EPA review and approval. EPA will review and act on additional new and revised water quality standards adopted in the 2019 Triennial Review in separate actions.

I look forward to our continued partnership to protect Arizona's water quality and advance human health and wildlife protection. Please call me if you would like to discuss further, or your staff may contact Rochelle Cameron at (415) 972-3323 with specific questions concerning this approval.

Sincerely,  
**TOMAS**  
**TORRES**  
Tomás Torres  
Director, Water Division

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Enclosures

cc: Erin Jordan, ADEQ Surface Water Quality Improvement Value Stream Manager

## **Enclosure**

### **EPA Review of Arizona 2019 Triennial Review**

EPA Partial Action: Definitions, Antidegradation, Mixing zones, and Variance regulations

#### **Background**

Section 303 of the Clean Water Act (CWA or “Act”), 33 U.S.C. §1313, requires states to establish water quality standards (WQS) and to submit any new or revised standards to EPA for review and approval or disapproval. See also 40 C.F.R. Part 131. Arizona’s adoption of new or revised WQS involved the following actions: A Notice of Proposed Rulemaking on February 1, 2019, a public hearing on March 28, 2019, a public comment period from February 1, 2019 to March 28, 2019 and a Notice of Final Rulemaking (NFRM) on July 9, 2019. The NFRM was approved by the Governor’s Regulatory Review Council on September 4, 2019. The Arizona Secretary of State published the state adopted amendments October 4, 2019 in the Arizona Administrative Register. The Attorney General for Arizona certified that the revisions were duly adopted pursuant to Arizona law on November 13, 2019. Arizona transmitted the revisions to EPA by letter dated November 19, 2019 and provided a complete package on November 24, 2019. ADEQ continued to submit supplemental technical information through September 30, 2020. EPA finds the public participation procedures followed by the State in development and adoption of the revisions to the statewide water quality standards (WQS) are consistent with the procedural requirement set forth in 40 C.F.R. §131.20(b).

Arizona withdrew the numeric human health criteria established in its 2019 submittal from EPA action pursuant to CWA 303(c) by letter dated December 21, 2021. Arizona cited that its numeric human health criteria were based on incorrect assumptions and committed to revising these criteria in its next triennial review.

As discussed more fully below, where EPA has determined that Arizona’s rule revisions are new or revised WQS, EPA has reviewed and acted on these adopted WQS pursuant to Section 303(c) of the CWA.<sup>1</sup>

#### **Synopsis of Action**

Clean Water Act Section 303(c) directs states to adopt WQS for waters that are subject to the CWA. EPA’s implementing regulations at 40 C.F.R. Part 131 require that WQS specify appropriate designated uses of the waters and water quality criteria that protect those uses. EPA reviews the WQS to determine if they are consistent with the factors listed at 40 C.F.R. § 131.5 and contain the minimum requirements listed at 40 C.F.R. § 131.6.

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<sup>1</sup> EPA has provided FAQs on “What is a New or Revised Water Quality Standard Under CWA 303(c)(3)?” at <https://www.epa.gov/sites/production/files/2014-11/documents/cwa303faq.pdf>. The link provides detailed information of such analysis.

Relevant to this action, Arizona submitted changes to WQS at Arizona Administrative Code Title 18, Chapter 11:<sup>2</sup> 101. Definitions, 107.01. Antidegradation Criteria, 114. Mixing Zones, 122. Variances. This document explains EPA's basis for approval of changes to these portions of Arizona's 2019 Triennial Review. EPA also acknowledges non-substantive changes in R18-11-115 Site-Specific Standards and Appendix A Numeric Water Quality Standards. These non-substantive revisions are included to ensure public transparency but do not constitute new or revised WQS subject to EPA action under CWA 303(c).

### **EPA Review of New and Revised WQS**

#### **I. R18-11-101: Definitions**

Arizona added a definition for “variance” as follows:

“Variance” means a time-limited designated use and criterion for a specific pollutant(s) or water quality parameter(s) that reflect the highest attainable condition during the term of the variance.

EPA finds this revision to be consistent with 40 C.F.R. Part 131 and approves pursuant to Section 303(c) of the Act.

#### **II. R18-11-107.01: Antidegradation Criteria**

##### **Tier 3 Antidegradation Protection and Antidegradation Review**

In subsection (C)(4), Arizona revised requirements relating to Tier 3 antidegradation protection. The adopted revisions are as follows (underlined text is newly added and strike-out text is removed):

4. A discharge regulated under a § 404 permit that may affect existing water quality of an OAW requires ~~an individual § 401 water quality certification a determination by the Director~~ to ensure that existing water quality is maintained and protected and any water quality impacts are temporary. Temporary water quality impacts are those impacts that occur for a period of six months or less ~~and are not regularly occurring. The form of such a determination shall be as follows:~~
  - a. For Corps-issued § 404 permits, an individual § 401 water quality certification.
  - b. For Director-issued § 404 permits, a § 404 permit action, wherein the Director shall conduct a water quality evaluation as a part of the state's requirements for issuing § 404 permits and in accordance with this section.

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<sup>2</sup> Arizona also submitted changes to 109. Numeric Water Quality Standards, 115. Site-Specific Standards, Appendix A. Numeric Water Quality Standards, Appendix B. Surface Waters and Designated Uses, and Appendix C. Site-Specific Standards. EPA is still reviewing water quality standards related to aquatic life protection and Designated Uses. On December 21, 2021, Arizona withdrew its numeric human health criteria from EPA action.

In subsection (D), Arizona updated requirements relating to antidegradation reviews of § 404 permits. The modifications clarify how the form of the antidegradation review differs between a Corps-issued § 404 permit and a Director-issued § 404 permit. The revisions are as follows:

D. Antidegradation review of a § 404 permit: shall be conducted as follows:

1. For a Corps-issued § 404 permit. The Director shall conduct the antidegradation review of any discharge authorized under a nationwide or regional § 404 permit as part of the § 401 water quality certification prior to issuance of the nationwide or regional permit. The Director shall conduct the antidegradation review of an individual § 404 permit if the discharge may degrade existing water quality in an OAW or a water listed on the 303(d) List of impaired waters. For regulated discharges that may degrade water quality in an OAW or a water that is on the 303(d) List of impaired waters, the Director shall conduct the antidegradation review as part of the § 401 water quality certification process.
2. For a Director-issued § 404 permit. The Director shall conduct the antidegradation review of any discharge authorized under a general § 404 permit as a part of its determination whether to issue a general permit in accordance with state requirements for issuing a § 404 general permit and with this section. The Director shall conduct the antidegradation review of an individual § 404 permit as part of the § 404 permit action in accordance with state requirements for issuing a § 404 permit and in accordance with this section.

This provision clarifies determinations of temporary water quality impacts and creates parallel tracks for Corps-issued and Director-issued § 404 permits. EPA notes that Arizona does not have authority to issue permits under CWA § 404 and therefore the clauses related to Director-issued § 404 permits are not applicable. These provisions will only apply if and when Arizona is approved to issue § 404 permits pursuant to CWA § 404(g). These amendments are consistent with CWA Section 404(b)(1) Guidelines for Specification of Disposal Sites for Dredged or Fill Material. EPA finds these amendments to be consistent with 40 C.F.R. Part 131 and approves this provision pursuant to Section 303(c) of the Act.

### **III. R18-11-114: Mixing Zones**

Arizona revised its mixing zones rule as follows (underlined text is newly added and strike-out text is removed):

- A. The Director may establish a mixing zone for a point source discharge to a surface water as a condition of an individual AZPDES permit on a pollutant-by-pollutant basis. A mixing zone is prohibited in an ephemeral water or where there is no water for dilution, or as prohibited pursuant to subsection (H) of this section.
- B. The owner or operator of a point source seeking the establishment of a mixing zone shall submit a request to the Director for a mixing zone as part of an application for an AZPDES permit. The request shall include:
  1. An identification of the pollutant for which the mixing zone is requested;
  2. A proposed outfall design;

3. A definition of the boundary of the proposed mixing zone. For purposes of this subsection, the boundary of a mixing zone means the location is where the concentration of wastewater across a transect of the surface water differs by less than five percent complete mixing occurs; and
  4. A complete and detailed description of the existing physical, biological, and chemical conditions of the receiving water and the predicted impact of the proposed mixing zone on those conditions. The description shall also address the factors listed in subsection (D) of this section that the Director must consider when deciding to grant or deny a request and shall address the mixing zone requirements in subsection (H) of this section.
- C. ~~The Director shall review the request for a mixing zone to determine whether the written request is complete. If the request is incomplete, the Director shall provide the applicant with a list of the additional information required.~~
- D.C. The Director shall consider the following factors when deciding whether to grant or deny a request for a mixing zone:
1. The assimilative capacity of the receiving water;
  2. The likelihood of adverse human health effects;
  3. The location of drinking water plant intakes and public swimming areas;
  4. The predicted exposure of biota and the likelihood that resident biota will be adversely affected;
  5. Bioaccumulation;
  6. Whether there will be acute toxicity in the mixing zone, and, if so, the size of the zone of initial dilution;
  7. The known or predicted safe exposure levels for the pollutant for which the mixing zone is requested;
  8. The size of the mixing zone;
  9. The location of the mixing zone relative to biologically sensitive areas in the surface water;
  10. The concentration gradient of the pollutant within the mixing zone;
  11. Sediment deposition;
  12. The potential for attracting aquatic life to the mixing zone; and
  13. The cumulative impacts of other mixing zones and other discharges to the surface water.

- E.D. Director determination.
1. The Director shall deny a request to establish a mixing zone if a water quality standard will be violated outside the boundaries of the proposed mixing zone. ~~The Director shall notify the owner or operator of the denial in writing and shall state the reason for the denial.~~
  2. If the Director approves the request to establish a mixing zone, the Director shall establish the mixing zone as a condition of an AZPDES permit. The Director shall include any mixing zone condition in the AZPDES permit that is necessary to protect human health and the designated uses of the surface water.

F.E. Any person who is adversely affected by the Director's decision to grant or deny a request for a mixing zone may appeal the decision under A.R.S. § 49-321 et seq. and A.R.S. § 41-1092 et seq.

G.F. The Director shall reevaluate a mixing zone upon issuance, reissuance, or modification of the AZPDES permit for the point source or a modification of the outfall structure.

H.G. Mixing zone requirements.

1. ~~The length of a mixing zone shall not exceed 500 meters in a stream. A mixing zone shall be as small as practicable in that it shall not extend beyond the point in the waterbody at which complete mixing occurs under the critical flow conditions of the discharge and of the receiving water.~~
2. The total horizontal area allocated to all mixing zones on a lake shall not exceed 10 percent of the surface area of the lake.
3. Adjacent mixing zones in a lake shall not overlap or be located closer together than the greatest horizontal dimension of the largest mixing zone.
4. ~~A mixing zone shall provide for a zone of passage of not less than 50 percent of the cross-sectional area of a river or stream.~~

5.4. The design of any discharge outfall shall maximize initial dilution of the wastewater in a surface water.

6.5. The size of the zone of initial dilution in a mixing zone shall prevent lethality to organisms passing through the zone of initial dilution. ~~The mixing zone shall prevent acute toxicity and lethality to organisms passing through the mixing zone.~~

EPA finds these amendments to be consistent with 40 C.F.R. Part 131 and approves this provision pursuant to Section 303(c) of the Act.

#### **IV. R18-11-122: Variances**

Arizona deleted its previous variance rules language in its entirety and added a completely revised variance rule to align with EPA's 2015 Revision to 40 C.F.R. Part 131. Among other updates, EPA's 2015 Rulemaking provides a comprehensive regulatory structure for and explicitly authorizes variances. Arizona's revisions include defining variances as a water quality standard, enabling variances to be discharger-specific or water body or waterbody segment-specific, revising time limitations and requirements for periodic review, and adding required documentation to approve a variance. EPA finds the revisions to be consistent with 40 C.F.R. Part 131 and approves these provisions pursuant to Section 303(c) of the Act. The approved WQS follows:

- A. Upon request, the Director may establish, by rule, a discharger-specific or water segment(s)-specific variance from a water quality standard if requirements pursuant to this section are met.

B. A person who requests a variance must demonstrate all of the following information:

1. Identification of the specific pollutant and water quality standard for which a variance is sought.
2. Identification of the receiving surface water segment or segments to which the variance would apply.
3. A detailed discussion of the need for the variance, including the reasons why compliance with the water quality standard cannot be achieved over the term of the proposed variance, and any other useful information or analysis to evaluate attainability.
4. A detailed discussion of the discharge control technologies that are available for achieving compliance with the water quality standard for which a variance is sought.
5. Documentation that more advanced treatment technology than applicable technology-based effluent limitations is necessary to achieve compliance with the water quality standard for which a variance is sought.
6. A detailed description of proposed interim discharge limitations and pollutant control activities that represent the highest level of treatment achievable by a point source discharger or dischargers during the term of the variance.
7. Documentation that the proposed term is only as long as necessary to achieve the highest attainable condition. 8. Documentation that is appropriate to the type of use to which the variance would apply as follows:
  - a. For a water quality standard variance to a use specified in Clean Water Act § 101(a)(2), documentation must include demonstration of at least one of the following factors that preclude attainment of the use during the term of the variance:
    - i. Naturally occurring pollutant concentrations prevent attainment of the use;
    - ii. Natural, ephemeral, intermittent or low flow conditions or water levels prevent the attainment of the use, unless these conditions may be compensated for by the discharge of sufficient volume of effluent discharges without violating state water conservation requirements to enable uses to be met;
    - iii. That human-caused conditions or sources of pollution prevent the attainment of the water quality standard for which the variance is sought and either (1) it is not possible to remedy the conditions or sources of pollution or (2) remedying the human-caused conditions would cause more environmental damage to correct than to leave in place;
    - iv. Dams, diversions or other types of hydrologic modifications preclude the attainment of the use, and it is not feasible to restore the water body to its original condition or to operate such modification in a way that would result in the attainment of the use;
    - v. Physical conditions related to the natural features of the water body, such as the lack of a proper substrate, cover, flow, depth, pools, riffles, and the like, unrelated to water quality, preclude attainment of aquatic life protection uses;
    - vi. That installation and operation of each of the available discharge technologies more advanced than those required to comply with technology-based effluent limitations to achieve compliance with the water quality standard would result in substantial and widespread economic and social impact; or

- vii. Actions necessary to facilitate lake, wetland, or stream restoration through dam removal or other significant reconfiguration activities preclude attainment of the designated use and criterion while the actions are being implemented.
- b. For a water quality standard variance to a use other than those uses specified in Clean Water Act § 101(a)(2), documentation must justify how consideration and value of the water subject to the use appropriately supports the variance and term. A demonstration consistent with (B)(8)(a) of this section may be used to satisfy this requirement.
9. For a waterbody segment(s)-specific variance, the following information is required before the Director may issue a variance, in addition to all other required documentation pursuant to this section:
- Identification and documentation of any cost-effective and reasonable best management practices for nonpoint source controls related to the pollutant(s) or water quality parameter(s) and water body or waterbody segment(s) specified in the variance that could be implemented to make progress towards attaining the underlying designated use and criterion; and
  - If any variance pursuant to (B)(9)(a) of this section previously applied to the water body or waterbody segment(s), documentation must also demonstrate whether and to what extent best management practices for nonpoint source controls were implemented to address the pollutant(s) or water quality parameter(s) subject to the water quality variance and the water quality progress achieved.
10. For a discharger-specific variance, the following information is required before the Director may issue a variance, in addition to all other required documentation pursuant to this section:
- Identification of the permittee subject to the variance;
  - For an existing point source discharge, a detailed description of the existing discharge control technologies that are used to achieve compliance with applicable water quality standards. For a new point source discharge, a detailed description of the proposed discharge control technologies that will be used to achieve compliance with applicable water quality standards; and
  - Documentation that the existing or proposed discharge control technologies will comply with applicable technology-based effluent limitations.
- C. The Director shall consider the following factors when deciding whether to grant or deny a variance request:
1. Bioaccumulation,
  2. The predicted exposure of biota and the likelihood that resident biota will be adversely affected,
  3. The known or predicted safe exposure levels for the pollutant for which the variance is requested, and 4. The likelihood of adverse human health effects.
- D. The variance shall represent the highest attainable condition of the water body or water body segment applicable throughout the term of the variance.
- E. A variance shall not result in any lowering of the currently attained ambient water quality, unless the variance is necessary for restoration activities, consistent with (B)(8)(a)(vii) of this section. The Director must specify the highest attainable condition of the water body or waterbody segment as a quantifiable expression of one of the following:

1. The highest attainable interim criterion,
  2. The interim effluent condition that reflects the greatest pollutant reduction achievable; or
  3. If no additional feasible pollutant control technology can be identified, the interim criterion or interim effluent condition that reflects the greatest pollutant reduction achievable with the pollutant control technologies installed at the time of the issuance of the variance, and the adoption and implementation of a Pollutant Minimization Program.
- F. A variance shall not modify the underlying designated use and criterion. A variance is only a time limited exception to the underlying standard. For discharge-specific variances, other point source dischargers to the surface water that are not granted a variance shall still meet all applicable water quality standards.
- G. Point source discharges shall meet all other applicable water quality standards for which a variance is not granted.
- H. The Director may not grant a variance for a point source discharge to an OAW listed in R18-11-112(G).
- I. Each variance established by the Director is subject to review and approval by the Regional Administrator.
- J. The term of the water quality variance may only be as long as necessary to achieve the highest attainable condition and must be consistent with the supporting documentation in subsection (E) of this section. The variance term runs from the approval of the variance by the Regional Administrator.
- K. The Director shall reevaluate, in its triennial review, whether each variance continues to represent the highest attainable condition. Comment on the variance shall be considered regarding whether the variance continues to represent the highest attainable condition. If the Director determines that the requirements of the variance do not represent the highest attainable condition, then the Director shall modify or repeal the variance in its triennial review rulemaking.
- L. If the variance is modified by rulemaking, the requirements of the variance shall represent the highest attainable condition at the time of initial adoption of the variance, or the highest attainable condition identified during the current reevaluation, whichever is more stringent.
- M. Upon expiration of a variance, point source dischargers shall comply with the water quality standard.
- N. The following are discharger-specific variances adopted by the Director: 1.[Reserved]
- O. The following are water body and waterbody segment-specific variances adopted by the Director: 1. [Reserved]

#### **EPA Acknowledgement of Non-Substantive Changes**

EPA acknowledges the following non-substantive changes to previously approved WQS to ensure public transparency as to which provisions are applicable for purposes of the CWA in accordance with 40 C.F.R § 131.21(c). The non-substantive changes do not revise previously approved WQS and EPA's acknowledgement of the non-substantive changes does not constitute an action under CWA Section 303 (c).

## **I. R18-11-115: Site-Specific Standards**

In subsection (B)(5), Arizona deleted the “natural adaptive” language in its site-specific standards rule that was disapproved by EPA in its action on Arizona’s 2016 Triennial Review. EPA finds this to be a non-substantive change that adds clarity but is not a WQS action under Section 303(c) of the Act.

## **II. Appendix C: Site-Specific Standards**

Arizona removed site-specific standards for copper for Bright Angel Wash and Transect Canyon. These site-specific standards were adopted in the 2016 Arizona Triennial Review but were disapproved by EPA. These standards were removed to be consistent with EPA’s 2016 decision. EPA finds this to be a non-substantive change that adds clarity but is not a WQS action under Section 303(c) of the Act.

### **Endangered Species Act**

Section 7(a)(2) of the Endangered Species Act (ESA) states that each federal agency shall ensure that any action authorized, funded, or carried out by such agency is not likely to jeopardize the continued existence of any endangered or threatened (listed) species or result in the destruction or adverse modification of critical habitat. ESA consultation requirements do not apply to actions where EPA lacks discretion to protect species, or where an EPA action has no effect on listed species or critical habitat.

#### **Definitions**

EPA’s discretion to act on a state submission concerning definitions is limited to determining whether the submission is consistent with 40 C.F.R. Part 131. EPA has no discretion to revise an otherwise approvable definition to benefit listed species. EPA has concluded that it lacks sufficient discretionary federal involvement or control to protect listed species when it approves or disapproves definitions adopted by states as part of their water quality standards. Therefore, ESA consultation requirements do not apply to EPA’s actions to approve Arizona’s new and revised definitions.

#### **Antidegradation**

EPA has determined that approval of Arizona’s two revised antidegradation regulations will have no effect on listed species. Arizona’s revised regulations create new procedural requirements related to CWA Section 404 Permits for the discharge of dredged or fill materials that will prevent degradation existing water quality. Preventing degradation will maintain the existing quality of these waters and therefore approval of these regulations will have no effect on threatened or endangered species.

#### **Variances**

EPA’s discretion to act on a state variance regulation is limited to determining whether the regulation is consistent with 40 C.F.R. Part 131. Each variance adopted under the regulations is a separate action that will require EPA approval and ESA compliance. EPA has no discretion to revise an otherwise approvable variance regulation to benefit listed species. EPA has concluded

that it lacks sufficient discretionary federal involvement or control to protect listed species when it approves or disapproves variance regulations adopted by states as part of their water quality standards. Therefore, EPA consultation requirements do not apply to EPA's action to approve Arizona's new variance regulation.

### **Mixing Zones**

EPA's discretion to act on a state mixing zone regulation is limited to determining whether the regulation is consistent with 40 C.F.R. Part 131. EPA has no discretion to revise an otherwise approvable mixing zone regulation to benefit listed species. EPA has concluded that it lacks sufficient discretionary federal involvement or control to protect listed species when it approves or disapproves mixing zone regulations adopted by states as part of their water quality standards. Therefore, EPA consultation requirements do not apply to EPA's action to approve Arizona's mixing zone rule amendments.

### **Consultation with Indian Tribes**

EPA upholds its trust responsibility to federally recognized tribal governments consistent with the “*2011 EPA Policy on Consultation and Coordination with Indian Tribes*” (<https://www.epa.gov/tribal/epa-policy-consultation-and-coordination-indian-tribes>). Meaningful communication and coordination with appropriate tribal leadership on a government-to-government basis prior to EPA taking actions or making decisions that may affect tribal interests is a fundamental principal of this Policy. On August 20, 2019 EPA sent written invitations to consult to 24 tribes whose interests may be affected by this action. Four tribes requested Consultation: White Mountain Apache Tribe, Hopi Tribe, Ak-Chin Indian Community, and Colorado River Indian Tribes.

### **White Mountain Apache Tribe (WMAT)**

A Consultation teleconference between EPA Region 9 Water Division Director and WMAT Chairperson Gwendena Lee-Gatewood was held on (January 29, 2020). WMAT also submitted written comments to EPA by letter (February 6, 2020) expressing concern that Arizona standards may be less protective than downstream tribal standards. The Tribe also identified inaccuracies in Arizona's submission on location coordinates of tribal boundaries. EPA determined Arizona's WQS in this action are protective of the downstream WMAT WQS beneficial uses as required by 40 C.F.R. §131.10 (b). EPA provided the tribe's comments regarding tribal boundaries to Arizona DEQ.

### **Hopi Tribe**

The Hopi Tribe submitted written comments to EPA by letter (July 21, 2020). The tribe indicated no objections to the proposed changes in water quality standards. The tribe stressed its concerns about general water quality effects from development near traditional cultural properties off reservation. EPA acknowledged the tribe's concerns and notes that its action under CWA 303(c) does not approve or disapprove future development.

### **Ak-Chin Indian Community**

The Ak-Chin Indian Community submitted written comments to EPA by letter (January 9, 2020). The primary concern identified by the tribe relates to the impact of the ambiguity of the

definition and jurisdictional application of “Waters of the United States” for Arizona Water Quality Standards. The Navigable Waters Protection Rule was vacated by the courts on August 31, 2021. On November 18, 2021, the U.S. Environmental Protection Agency and the Department of the Army signed a proposed rule to revise the definition of WOTUS. EPA has shared the tribe’s comments to inform this rulemaking.

The tribe also mentioned the possibility that its future tribal water quality standards may be more stringent than upstream Arizona standards. 40 C.F.R. §131.10 (b) requires that WQS must be protective of downstream WQS and is included in EPA’s review. The tribe’s letter concluded that they “do not believe formal tribal consultation on the narrative or numeric value of Arizona’s proposed standards is necessary” but requested that EPA clarify in our decision how the standards will apply, considering the changes to the definition of navigable waters. EPA clarifies that the approved WQS in this decision document will apply to Waters of the United States.

### **Colorado River Indian Tribes (CRIT)**

The Colorado River Indian Tribes (CRIT) submitted written comments (January 10, 2020) to facilitate scoping its concerns to be discussed during consultation. EPA attempted to arrange consultation by phone and email (September 2020 voicemail T. Yin to W. Nabahe; 9/14/21 T. Yin email to CRIT (D. Gutherie, R. Loudbear and A. Flora); 11/1/21 T. Yin email to CRIT (D. Gutherie, A. Flores, A. Flora, J. Rivera, T. Harper, R. Loudbear). After receiving no responses to repeated outreach EPA closed this Consultation.

EPA considered the four main areas of concern raised in the tribe’s letter:

1. Arizona’s revised WQS are less protective without adequate justification. Arizona withdrew its revised numeric human health criteria from EPA action on December 21, 2021.
2. Arizona’s revised e-coli criteria is less protective of recreation use. Arizona withdrew this criterion from EPA action on December 21, 2021.
3. Arizona’s revised Mixing Zones removes numeric standards. Arizona’s revised mixing zone policy describes how Arizona will evaluate and establish mixing zones to ensure protection of water quality. Through requirements that mixing zones be no larger than necessary, Arizona will ensure that the previous numeric maximum does not become the default mixing zone size. It also clarifies that, while the WQS authorize the permitting authority to grant dilution in permits, the WQS preference the minimization of granted dilution. Further, by requiring that mixing zones not exceed the point where complete mixing occurs would clarify that mixing zones may only be applied in zones where physical mixing is occurring and is predictable.
4. Enforcement penalties for non-permitted dischargers are inadequate: EPA notes that enforcement policies are not subject to EPA’s review under CWA Section 303(c). EPA has shared this comment with EPA Region 9’s Enforcement and Compliance Assurance Division.