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Water Rights, Water Quality & Water Solutions in the West

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2020 WOTUS RULE



ANALYSIS OF THE 2020 WOTUS RULE

&

POLICY IMPLICATIONS FOR EPHEMERAL WASHES IN ARIZONA

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Introduction

The United States has had a tumultuous relationship with one of its most precious resources — water. By the 1970s, aggressive development in the United States necessitated the implementation of regulatory measures to protect the environment. Since then, the debate has focused not on whether the environment should be protected, but how comprehensively that regulatory protection should extend. Nowhere has this debate been more evident than with the federal Clean Water Act (CWA) and the definition of “waters of the United States” (WOTUS).

Since the passage of the CWA in 1972, defining the scope of federal jurisdiction to regulate waters within the borders of the United States has been the subject of constant litigation, legislative scrutiny, and regulatory adjustments. This article examines regulatory and possible resource impacts that may flow from the Trump Administration’s new rule revising federal jurisdiction over waters in the country by redefining the term “waters of the United States.”¹ The most significant change introduced by the new rule is elimination of federal regulation of ephemeral washes and associated water features, which could have a significant impact on water quality and recharge.

After providing legislative and legal background on the CWA and the WOTUS definition, this article considers comments submitted by Arizonans during the rulemaking process. It then examines two projects in Arizona by comparing their CWA regulatory obligations under the prior WOTUS definition issued during the Obama Administration with their obligations under the Trump Administration’s revised definition. The article specifically considers regulatory requirements for state certification, water quality permits, and dredge and fill permits. It also focuses on the regulation of ditches and ephemeral streams, both of which are of importance to Arizona. The numerous environmental requirements imposed outside the CWA are not addressed.

After identifying gaps in regulation created by the new rule, this article lays out the broader implications for the State of Arizona’s authority to regulate in-state waters pursuant to the CWA. It concludes with a discussion of the State’s role in addressing the situation, and factors for the State to consider in addressing the new legal landscape for the waters of Arizona.²

WOTUS in Arizona

Commerce Clause

Regulatory Actions

"Navigable Waters"

Congressional Intent

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History of WOTUS & the Current Regulatory Rule

Sources of Legal Authority

The CWA sets the legal framework for protecting America's waters. Congress's authority to enact the CWA derives from the Commerce Clause of the United States Constitution (Article I, Section 8, Clause 3). The clause states that the US Congress shall have power "to regulate Commerce with foreign Nations, and among the several states, and with the Indian Tribes." This language sets an undefined legal limit on the scope of federal authority to regulate waters as necessary to regulate commerce "among the several States."

Enacted in 1972, the CWA seeks to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters."³ To achieve this goal, the CWA authorizes a number of regulatory actions that apply to management of waters in Arizona.

These regulatory actions include:

- Section 401, 33 U.S.C. § 1341, which requires applicants for a federal permit to conduct an activity that may result in discharge into navigable waters to provide the federal authority with a state certification that any such discharge will comply with effluent limitation standards and other provisions of the CWA.
- Section 402, 33 U.S.C. § 1342, which makes it illegal for any entity to discharge pollutants from a point source into navigable waters unless done so in accordance with a National Pollutant Discharge Elimination System (NPDES) permit.
- Section 404, 33 U.S.C. § 1344, authorizes the US Army Corps of Engineers (Army Corps) to issue permits for the discharge of dredged or fill material into navigable waters.

The scope of federal and state authority to regulate waters is primarily based on these laws. In each case, federal authority depends on whether a discharge is made into "navigable waters." While the contours of the relationship between "navigable waters" and "commerce" are not inherently obvious, a connection in law exists by the use of these terms in both the statute and the Constitution. "Navigable waters" qualifies, though ambiguously, the federal authority pursuant to the Commerce Clause with respect to regulation of waters. Nevertheless, it is also clear that Congress expanded federal jurisdiction beyond the definition of navigable waters in both the CWA and the Constitution by defining them as WOTUS.⁴

Congressional intent to regulate waters beyond the traditional definitions of navigable waters was made clear prior to passage of the CWA through testimony provided during legislative hearings emphasizing the scope of the problem. In its 1971 report, a year before Congress enacted the CWA, the Senate Committee on Public Works found that "the national effort to abate and control water pollution has been inadequate in every vital aspect."⁵ America's waters had turned into a dumping ground for human waste. Major waterways near industrial and urban centers were "unfit for most purposes" and rivers were the "primary sources of pollution of coastal waters and the oceans."⁶ In light of these findings, the CWA passed the following year with bipartisan support and represented a comprehensive program for cleaning up America's waters.

Evolving Definition of Waters of the United States

AGENCY ACTION, JURISPRUDENCE, & CONGRESSIONAL OVERSIGHT

Discerning the scope of federal authority to regulate the nation's waters begins with the original constitutional and statutory authorities. Since its inception, the definition of WOTUS has both contracted and expanded through: multiple rule promulgations by both the US Environmental Protection Agency (EPA) and the Army Corps; court decisions; and acts of Congress. Key legal actions among these events are discussed below.

EPA and Army Corps Initial Definitions of Waters of the United States

EPA issued its first definition of navigable waters in 1973 and established federal jurisdiction over six categories of waters. With this regulation, EPA identified categories of waters that qualified as navigable, and therefore subject to federal jurisdiction, under the CWA.

The initial jurisdictional categories were:

- 1) All navigable waters of the United States
- 2) Tributaries of navigable waters of the United States
- 3) Interstate waters
- 4) Intrastate lakes, rivers, and streams which are utilized by interstate travelers for recreational or other purposes
- 5) Intrastate lakes, rivers, and streams from which fish or shellfish are taken and sold in interstate commerce
- 6) Intrastate lakes, rivers, and streams which are utilized for industrial purposes by industries in interstate commerce⁷

WOTUS in Arizona

Narrow View Overturned

Definition Evolves

1982 Definition

Interstate Waters

Judicial Interpretations

WOTUS Definition

Adjacent Wetlands

SWANCC

In 1974, the Army Corps took a narrow view of the extent of federal authority to regulate waters within these categories by defining “navigable waters” as only waters that were “navigable in fact or readily susceptible of being rendered so.”⁸ However, within a year of the Army Corps publishing the definition, the federal District Court for the District of Columbia struck it down.⁹ That court found the Army Corps’ definition too narrow and thus inconsistent with Congress’ intent under the CWA that “federal jurisdiction over the nation’s waters [be] to the maximum extent permissible under the Commerce Clause of the Constitution.”¹⁰

In response, the Army Corps issued a revised definition that closely followed EPA’s original definition, while also arguably taking a more expansive position. This definition included the same waters as EPA’s definition, but also added wetlands. Army Corps’ revisions even authorized an Army Corps District Engineer to assert jurisdiction over “intermittent rivers, streams, tributaries, and perched wetlands that are not contiguous or adjacent to navigable waters” previously identified.¹¹ Post-1975, EPA and the Army Corps found their definitions diverging and began to disagree on which agency had authority to determine jurisdiction over certain waters. This dispute was largely resolved in 1982, when the Army Corps and EPA issued a harmonized definition of WOTUS.

The 1982 definition included:

- (a) All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of tide;¹²
- (b) All interstate waters, including interstate “wetlands”;
- (c) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, “wetlands,” playa lakes, or natural ponds the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:
 - 1. Which are or could be used by interstate or foreign travelers for recreational or other purposes;
 - 2. From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
 - 3. Which are used or could be used for industrial purposes by industries in interstate commerce;
- (d) All impoundments of waters otherwise defined as waters of the United States under this definition;
- (e) Tributaries of waters identified in paragraphs (1)-(4) [sic] of this definition;
- (f) The territorial seas; and
- (g) “Wetlands” adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a)-(f) of this definition.¹³

Coming 10 years after CWA passage, this harmonized definition represented the farthest reach for federal jurisdiction over WOTUS up to that time. Paragraph (c) gave EPA and the Army Corps authority over wholly isolated intrastate waters. Such waters were entirely detached from traditional understandings of navigability and the following decades would see a number of legal challenges to this definition.

Increasing Legal Challenges and Agency Responses

From the mid-1980s until the publication of a new WOTUS rule in 2015 under the Obama Administration, the definition of waters of the United States began to narrow due to increasing legal challenges and judicial decisions. Three US Supreme Court (Court) decisions were instrumental in defining the scope of WOTUS. These decisions underlie both the issuance of the 2015 Rule and the Trump Administration’s response to that rule. These three pivotal Court decisions — *United States v. Riverside Bayview Homes, Inc.*¹⁴; *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers*¹⁵; and *Rapanos v. United States*¹⁶ — are now summarized.

United States v. Riverside Bayview Homes, Inc.

In 1985, the Court considered the definition of WOTUS for the first time in *U.S. v. Riverside Bayview Homes, Inc.*. This case concerned whether the Army Corps could prohibit a developer from discharging fill material on wetlands adjacent to, and actually abutting, a navigable waterway.¹⁷ Under the Army Corps’ definition of WOTUS, it had jurisdiction over the wetlands at issue because they were adjacent to other jurisdictional waters.¹⁸ The Court deferred to the Army Corps and found reasonable its conclusion that “adjacent wetlands are inseparably bound up with the waters of the United States.”¹⁹ The Court found that Congress’ concern for the protection of water quality and aquatic ecosystems supported the Army Corps’ conclusion.²⁰ Accordingly, the decision in *Riverside Bayview* affirmed federal authority to regulate categories of water beyond strictly navigable waters, in this case wetlands adjacent to navigable waters.²¹

Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers (SWANCC)

A decade after *Riverside Bayview Homes*, the Court issued a decision significantly narrowing Congressional authority to regulate activities under the Commerce Clause (*US v. Lopez*, 514 U.S. 549 (1995)).²² In 2000, Court revisited EPA and Army Corps’ authority under the CWA and issued its opinion in 2001 (*Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers*, 531 U.S. 159 (2001)).

WOTUS in Arizona
Gravel Pit
Isolated Waters
Rapanos
Non-Navigable Wetlands
Split Decision
Plurality
“Significant Nexus”
Tributaries Standard
Kennedy Opinion Prevails
2015 Rule

In *SWANCC*, the Court opined on the Army Corps’ authority over an abandoned sand and gravel pit over which the Army Corps initially determined it had no jurisdiction. The pit subsequently filled with water and became habitat for migratory birds.²³ Addressing its holding in *Riverside Bayview Homes* that “the word ‘navigable’ in the [CWA] was of ‘limited import,’” the Court stated that “the term ‘navigable’ has at least the import of indicating what Congress had in mind as its authority for enacting the CWA: its traditional jurisdiction over waters that were or had been navigable in fact or which could reasonably be so made.”²⁴ Further, the Court explained that its decision in *Riverside Bayview Homes* rested on the “significant nexus” between the wetlands and adjacent navigable waters that informed its reading of the CWA in that case. In later years, the phrase “significant nexus” came to occupy the center of legal controversy over the scope of federal jurisdiction under the CWA.²⁵

The Court ultimately held that the CWA did not grant the Army Corps or EPA jurisdiction over isolated, non-navigable, intrastate waters.²⁶ However, it did not address the regulation to reach this result and left in place the Army Corps’ definition of WOTUS. Thus, *SWANCC* did not close the door on all controversy surrounding the scope of federal jurisdiction under the CWA. More litigation was forthcoming. ***Rapanos v. United States***

In 2006, the Court again considered the EPA and the Army Corps’ scope of CWA jurisdiction in *Rapanos v. U.S.*, 547 U.S. 715 (2006). In *Rapanos*, the Court was asked to determine if non-navigable wetlands that do not abut navigable waters, but rather abut man-made drains or pipes that eventually emptied into navigable waters, fell within the purview of the CWA. [See: Bleichfeld et al, “Wetlands and the Clean Water Act: *Rapanos*, *Carabell*, and the Limits of Federal Jurisdiction” TWR #24; Bricker, “Clean Water Act Wetlands Jurisdiction: The Supreme Court Rules on *Rapanos* & *Carabell*” TWR #29; and Walston, “Supreme Court Decides Wetland Cases *Rapanos* & *Carabell*” TWR #30.]

The *Rapanos* Court was unable to arrive at a majority decision, which resulted in much confusion over what is the guiding legal test. Justice Scalia wrote the plurality opinion for the Court, while Justice Kennedy authored one of the concurring opinions. Subsequently, most courts have relied on Justice Kennedy’s concurring opinion, sometimes in combination with Justice Scalia’s plurality opinion.²⁷

The plurality opinion found that WOTUS “includes only those relatively permanent, standing or continuously flowing bodies of water,” and adjacent “wetlands with a continuous surface connection” to jurisdictional waters.²⁸ It opined that physically isolated waters remain outside the Army Corps’ and EPA’s jurisdiction under the CWA, regardless of the ecological considerations the Court had previously relied upon in *Riverside Bayview Homes* to find jurisdiction over wetlands adjacent to navigable waters.²⁹ Thus, the plurality disagreed with Justice Kennedy’s “significant nexus” test as overly broad.³⁰

In contrast, Justice Kennedy set forth what is known as the “significant nexus” test for determining federal jurisdiction over waters.³¹ The “significant nexus” test provides that WOTUS must “either alone or in combination with similarly situated lands in the region, significantly affect the chemical, physical, and biological integrity of other covered waters more readily understood as ‘navigable.’”³² Justice Kennedy explained that the “significant nexus” test had to be considered in light of the statutory text and the US Constitution: “Consistent with *SWANCC* and *Riverside Bayview* and with the need to give the term ‘navigable’ some meaning, the Army Corps’ jurisdiction over wetlands depends upon the existence of a significant nexus between the wetlands in question and navigable waters in the traditional sense.”³³ Justice Kennedy viewed the Army Corps’ existing standard for tributaries, however, as:

...seem[ing] to leave wide room for regulation of drains, ditches, and streams remote from any navigable-in-fact water and carrying only minor water-volumes towards it — preclude[ing] its adoption as the determinative measure of whether adjacent wetlands are likely to play an important role in the integrity of an aquatic system comprising navigable waters as traditionally understood. Indeed, in many cases wetlands adjacent to tributaries covered by this standard might appear little more related to navigable-in-fact waters than were the isolated ponds held to fall beyond the Act’s scope in *SWANCC*.³⁴

The Army Corps’ theory of jurisdiction in these consolidated cases — adjacency to tributaries, however remote and insubstantial — raised concerns that went beyond the holding of *Riverside Bayview Homes*. Therefore, Kennedy found the Army Corps’ assertion of jurisdiction could not rest on that case.³⁵ In short, Justice Kennedy rejected the Corp’s standard for jurisdiction insofar as it included waters remote from, or carrying only minor water-volumes towards, any navigable-in-fact water.

Since the 2006 decision, all circuit courts that have interpreted *Rapanos* have applied Justice Kennedy’s significant nexus test either alone or in combination with the plurality opinion.³⁶

The 2015 Clean Water Rule

After *Rapanos*, EPA and the Army Corps responded during the Bush Administration by issuing joint guidance interpreting how *Rapanos* would be applied moving forward.³⁷ Yet there continued to be public calls for greater certainty. In response, the Obama Administration issued a new rule (2015 Rule) defining waters of the United States that was intended to clarify the limits of the federal government’s authority under the CWA.³⁸

WOTUS in Arizona

Science Board Findings

Connectivity

Tributary Flow

2015 Rule Challenges

Trump Order

2020 Rule Limitations

Ephemeral Washes Change

Ditch Regulation

The 2015 Rule was based on the agencies’ review of scientific reports from over 1,200 published and peer-reviewed journals and over one million comments that were compiled by EPA’s Science Advisory Board (SAB).

The SAB confirmed, among other findings, that:

- Waters are connected in myriad ways, including physical connections and the hydrologic cycle; however, connections occur on a continuum or gradient from highly connected to highly isolated.
- These variations in the degree of connectivity are a critical consideration to the ecological integrity and sustainability of downstream waters.
- Tributary streams, including perennial, intermittent, and ephemeral streams, are chemically, physically, and biologically connected to downstream waters, and influence the integrity of downstream waters.³⁹

Waters of the United States were defined in the 2015 Rule to include categorically all tributaries regardless of their size or frequency of flow.⁴⁰ The Obama Administration justified this approach by explaining that tributaries flow downstream to other jurisdictional waters and function as part of an integrated system, and therefore they meet the significant nexus test because of their hydrological and ecological connections to and interactions with the downstream jurisdictional waters.⁴¹ Their role in transporting pollution downstream “in and of itself justifies assertion of CWA jurisdiction over all tributaries by rule.”⁴² To many, the 2015 Rule represented an overreach of agency authority — spawning renewed litigation and efforts to revise the rule by the Trump Administration. [See: Moon, *Waters of the United States: Preliminary Injunction*, TWR #138; Glick & Alencio, *Waters of the United States — Not Quite Clear Yet*, TWR #149; Glick, *Waters of the United States Update*, TWR #175; Sensiba & Gerard, *Waters of the United States — Déjà vu All Over Again*, TWR #179].

Agency Reversal and the New Revised Rule

The most recent battle over defining WOTUS erupted after the 2015 Rule was issued. It has been challenged in numerous courts across the country and led to several preliminary injunctions or stays. As of December 2018, the Obama Administration’s definition of WOTUS was effective in only 22 states.⁴³ However, the 2015 Rule has been superseded by actions taken during the Trump Administration.

On February 28, 2017, President Trump issued Executive Order 13778, which directed the EPA to review the 2015 Rule and publish for notice and comment a rule that defined “navigable waters,” and, by definition, “waters of the United States” in a “manner consistent with the opinion of Justice Scalia in *Rapanos v. United States*, 547 U.S. 715 (2006).”⁴⁴ A final rule defining WOTUS was published on April 21, 2020.⁴⁵

Key Differences Between the 2015 Rule and the 2020 Rule

Elimination of Ephemeral Washes

The 2015 and 2020 rules have marked differences in how waters of the US are defined, as well as some similarities. The 2015 Rule defined WOTUS broadly in terms of the physical/hydrological connection between waters, whereas the 2020 Rule relies more on the legal limitations in the CWA and Constitution as well as concern for federalism.

The differences present an important change in regulation of waters for Arizona. Since at least the 1982 definition of WOTUS, ephemeral washes were subject to federal jurisdiction. Under the 2020 Rule definition, they no longer will be. Nor will waters associated with ephemeral features, such as wetlands, continue to be subject to federal jurisdiction. As will be seen in the two case study projects presented below, these revisions would bring about a dramatic change in the regulation of Arizona waters.

Even so, regulation of a number of water features remains the same under the 2020 Rule. Jurisdictional waters still include those that are susceptible to use in interstate or foreign commerce (i.e., “traditionally navigable waters” — see footnote 12) and perennial and intermittent tributaries to traditionally navigable waters and adjacent wetlands. Additionally, regulation of ditches would largely remain the same under the new rule as under the 2015 Rule.

Regulation of Ditches

Ditches deserve closer scrutiny because of their importance to irrigation to agriculture production in Arizona, as well as other states in the West.

The 2020 Rule asserts jurisdiction over three classes of ditches:

- 1) Those that would also fall within the category of traditionally navigable waters;
- 2) Those that are constructed in or that relocate a tributary; and,
- 3) Those that are constructed in an adjacent wetland,⁴⁶ so long as they also satisfy the definition of a tributary.⁴⁷

All other ditches are excluded from jurisdiction, similar to the scope of the 2015 Rule.⁴⁸

The 2015 Rule promulgated a definition of “waters of the United States” that expressly included man-made features such as ditches and canals in the definition of tributaries, but excluded ditches with ephemeral flow if those ditches are not a relocated tributary or were not constructed in a tributary. That definition also excluded ditches with intermittent flow, as long as those ditches are not a relocated tributary,

<p>WOTUS in Arizona</p> <p>Flow Interruption</p> <p>Artificial Impoundments Impact</p> <p>Curtailed Jurisdiction</p> <p>Arizona Comments</p> <p>Comments Focus</p> <p>Specific Definitions</p>

are not constructed in a tributary, or do not drain wetlands. Ditches that do not contribute flow, either directly or through another “water of the United States,” were also excluded from the definition of “waters of the United States” under the 2015 Rule.⁴⁹

Impact of Flow Interruption

Another issue of importance to Arizona is the definition of waters with intermittent or perennial flows that connect to a jurisdictional tributary and are interrupted in that connection by a non-jurisdictional ephemeral or artificial feature. The reach upstream of the break was characterized as WOTUS under the 2015 Rule and excluded as WOTUS under the 2019 Proposed Rule. The 2020 Rule again classifies the upstream portions of these systems as WOTUS.⁵⁰

The Salt River Project (SRP) submitted extensive comments on the proposed rule concerning the difficulty posed by removing the WOTUS classification from waters upstream of an ephemeral or artificial break that would otherwise be WOTUS:

To fulfill its purpose as a Federal Reclamation Project, SRP impounds the Salt and Verde rivers and the East Clear Creek, naturally flowing tributaries to traditional navigable waters. Without the impoundments, the Salt and Verde Rivers and East Clear Creek would flow annually as a result of snowpack runoff and precipitation from Arizona’s summer monsoon season. SRP’s impoundments capture and reserve the water for beneficial use of its water shareholders, providing a stable and consistent water supply to the Phoenix metropolitan area. As a result of the artificial impoundments, certain reaches of the Salt River dry up and become artificial ephemeral channels. However, once SRP’s impounded surface water storage capacity is maximized, water is released into the natural river channel, inundating the ephemeral reaches and allowing the Salt River to fulfill its natural purpose as a tributary. The duration of such flow events can vary from one to more than 30 days. For example, during the early 2019 runoff season, nearly 100,000 acre-feet of water was released over a consecutive 32 day period. As such, the entirety of such natural tributaries should be protected under the CWA and treated as a WOTUS, and the impoundment of such tributaries should not alter the downstream jurisdictional status.⁵¹

Under the 2020 rule, ephemeral and other excluded artificial and natural features are not jurisdictional and do not become jurisdictional even if they episodically convey surface water from upstream relatively permanent jurisdictional waters to downstream jurisdictional waters in a typical year.⁵²

Even if many water features would be subject to the same scope of jurisdiction under the 2015 and 2020 rules, ephemeral washes make up more than 80% of all stream features in Arizona. The scope of federal jurisdiction over waters in Arizona is significantly curtailed under the 2020 Rule. The two examples of construction projects discussed below illustrate this point. Arizona policy makers may want to consider what the impact will be on protection of water resources, if any, given this potential reduction in federal jurisdiction.

To assess the significance of regulatory curtailment for Arizona waters, we will examine current state authority to regulate water features under the CWA as well as plans the State may have to expand the regulation now that the 2020 Rule has been finalized. However, first an analysis of stakeholder comments is provided.

Summary of Comments from Arizona Stakeholders to New Rule

Comments⁵³ submitted by Arizona stakeholders during the comment period largely fall into four distinct categories: 1) state governmental agencies or local governments; 2) industry and industry associations; 3) environmental groups; and 4) associations representing indigenous nations. Approximately half of the submitted Arizona-focused comments came from state governmental agencies or local governments, with the majority of the rest from industry (i.e. chambers of commerce, associations, bureaus, and cooperatives), and only a few from tribal governments and coalitions or environmental groups.

The comments focused on: legal and policy considerations; proposed definitions; the issue of federalism; traditional navigable waters; tributaries; both ephemeral and intermittent waters; interstate waters; ditches; lakes and ponds; impoundments; groundwater; and wastewater treatment systems — as well as datasets and resource assessments.

Overall, most governmental agencies, counties, and industry commenters in Arizona are in favor of the changes to the 2015 Rule and expressed support for increased state authority to regulate their own waters. Meanwhile, environmental groups and tribes generally oppose the changes. Many commenters would like to see more specific definitions to terms such as: ephemeral; tributary; ditch; intermittent; traditionally navigable waters; and wetlands — as well as the exclusion of groundwater and wastewater treatment plants from the new rule.

Out of 31 comments from local governments, state agencies, and industries, 29 comments were supportive of the proposed revised rule narrowing federal jurisdiction and of rolling back the more expansive 2015 Rule. In particular, the Coalition of Arizona and New Mexico Counties for Stable

WOTUS in Arizona

Federal v. State Authority

Ephemeral Stream Deregulation

Phoenix Supply Impact

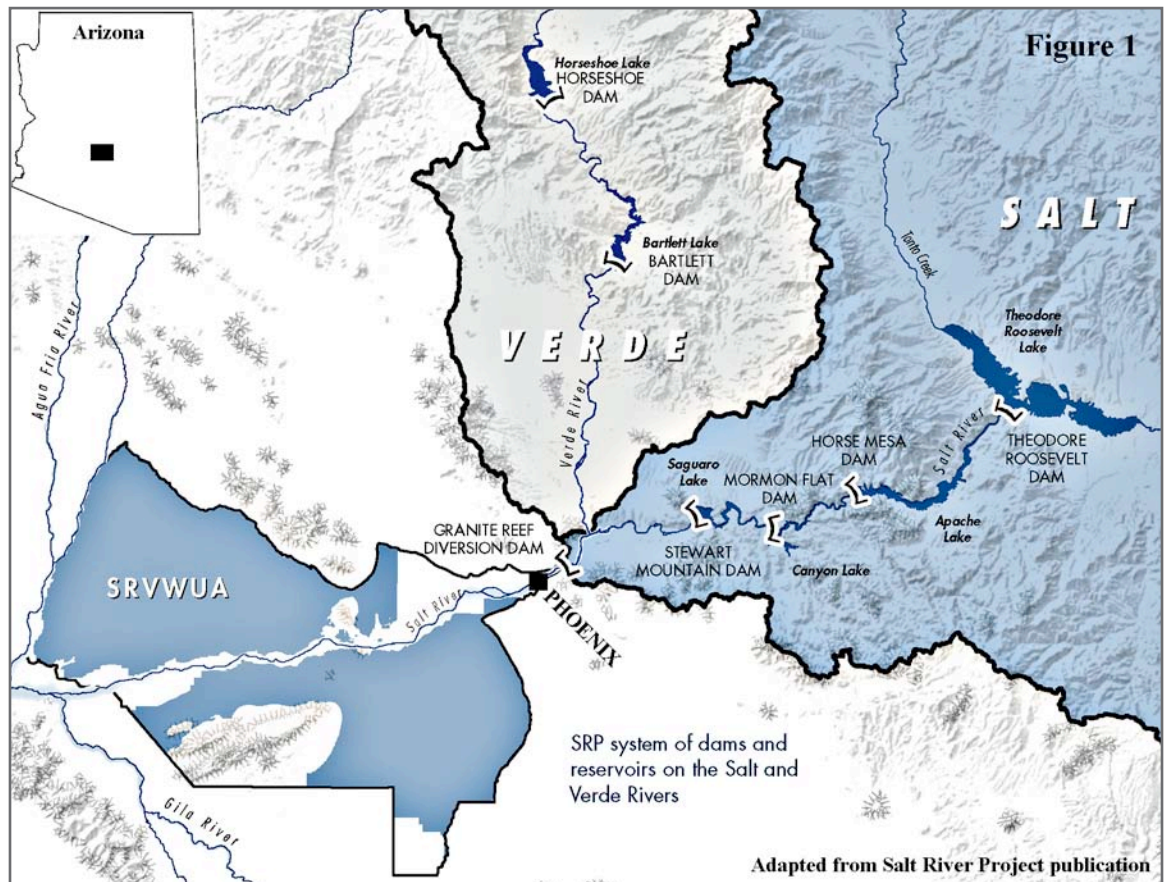
CWA Protection Eliminated

Economic Growth commented that “only waters that are determined through peer-reviewed science to be hydrologically connected” should be under federal jurisdiction, and that the same principle should be applied to determinations of ephemeral and intermittent streams and wetlands.⁵⁴ Pima County, the only government comment submitted in opposition, did not support the change because of concern that decreased regulation would allow pollution of area aquifers.⁵⁵ The Cottonwood Ditch Association, representing approximately 350 shareholders, strongly “supports the basic jurisdictional line drawn around intermittent and more significant waters” and believes that this line reflects a “more accurate application of the Constitution, statutes, and court decisions interpreting the law.”⁵⁶ Likewise, the Arizona Farm Bureau supported the revised definitions that they claim will “end regulatory power grab” and “[protect] the states’ responsibilities over pollution control and planning the use of land and water resources,” while respecting federal-state balance.⁵⁷

On the other hand, environmental group Trout Unlimited and the Intertribal Association of Arizona (ITAA) opposed the rule change. These organizations are concerned that 92% of Arizona streams would be deregulated because they are ephemeral and only flow as a response to monsoon events. Trout Unlimited reasoned that ephemeral streams provide substantial water contributions to perennial, trout-containing tributaries and that removing CWA protection for ephemeral streams would degrade the tributaries as well as the vegetation along the ephemeral stream itself.⁵⁸

The ITAA requested that the agencies “perform a careful evaluation of the impacts of the new rule on the agencies’ trust responsibilities,” as well as the impacts on tribal treaty rights, water rights, and trust resources. They asked that the requested evaluation “include an examination of the cumulative impacts of the rule on tribal jurisdiction, economies, and environmental, cultural, and historic resources.”⁵⁹ The Association also urged agencies to consult with the association’s member tribes, Indian nations, and communities across the country and to retain the 2015 rule in its entirety while conducting the evaluation.

Salt River Project (SRP) partially opposed the proposed revised rule due to concerns about the future federal regulation of the Phoenix water supply.⁶⁰ Specifically, the Salt River is dry below dams in the SRP area during periods of the year when the SRP reservoirs are filling. The 2019 Proposed Rule classified the dry portions of the Salt River below the reservoirs as ephemeral features, thereby eliminating CWA protection for the entire Salt River watershed because none of it would reach a navigable water as an intermittent or perennial stream. The watershed supplies 750,000 acre-feet of annual surface water dedicated for Phoenix metropolitan consumers.



WOTUS in Arizona

AZDEQ Support

Tribal Impacts

Definitions Concerns

Farming & Mining Comments

Ditches Clarification

WOTUS Mapping

Exclusion Impacts Review

Pipeline Project

Comments Raising Legal and Policy Considerations

The Arizona Department of Environmental Quality (AZDEQ) expressed its support for the proposed revised rule claiming that the application of the 2015 Rule has an uncompensated impact on the value of private and State Trust land.⁶² The Arizona Association of Conservation Districts supported the revised rule in order to end “federal overreach” inconsistent with congressional intent and legal precedent.⁶³ Some industry representatives commented that “delegation authority is the key” to position states to “adequately address water quality issues under the federal Clean Water Act,”⁶⁴ and others commented that leaving ephemeral and isolated streams under state control respects congressional intent.⁶⁵ One Supervisor from Apache County was concerned with “increased restrictions imposed on private waters through permitting [may] result in regulatory takings.”⁶⁶

The ITAA, on the other hand, was concerned with the potential environmental degradation resulting from the proposed revised rule as it also “fails to take into account the cumulative impact that the discharge of pollutants and alterations of upstream headwaters, tributaries and wetlands will have on downstream water sources...contrary to the goal of the CWA,” and contended that a diminution of regulation will “have a disproportionately adverse impact on [tribal members and lands].”⁶⁷ The ITAA worried that decreased regulation will result in decreased federal oversight of tribal lands and that the tribes will not be able to implement their own programs because of cost considerations.

Many local governmental agencies preferred increased local control over their artificial water structures and natural features.⁶⁸ Counties pointed out the high cost associated with complying with federal permitting procedures for stormwater systems.⁶⁹

Comments Concerning Regulatory Definitions

Most governments and industrial organizations supported excluding ephemeral streams from CWA jurisdiction. Nevertheless, even comments in support of the new rule expressed concern over definitions and terms used by the agencies, as “the proposed definitions will still require expensive and time consuming efforts to conduct actions that typically end up imposing restrictions that create no significant benefit to the protection of water quality.”⁶⁹ Commenters also requested that the proposed revisions to WOTUS “contain explicit language safeguarding the Ditches, Ditch Right-of-Ways, Ephemeral streams and bodies”⁷⁰ and “connectivity,”⁷¹ and a “clear definition of intermittent.”⁷² Additionally, AZDEQ requested that “the revised rule should clarify that states with CWA delegation should have authority to determine which waters are WOTUS within non-tribal state boundaries.”⁷³

Likewise, the Arizona Farm Bureau (AFB) suggested that the agencies should “clarify key terms relevant to several jurisdictional categories,” and replace current language with a more precise definition of “certain times of a typical year” with a minimum duration of continuous surface flow. The AFB added that “the final rule’s definition of WOTUS must provide clarity and certainty, and must precisely limit the reach of the federal government under CWA.”⁷⁴ The Arizona Mining Association urged the agencies to properly define and narrow the scope of traditional navigable waters consistent with the correct legal definition of “navigable waters of the United States.”⁷⁵

Comments Concerning Ditches

Many commenters⁷⁶ favored excluding man-made ditches from CWA jurisdiction — including those that draw water from a jurisdictional tributary and move it to another jurisdictional tributary. Further clarification between tributaries and ditches using the differentiation of “naturally occurring streams and man-made conveyances” was also requested, as was the inclusion of a “clear exemption for ditches intended to protect public safety.” Commenters also requested clarification on the jurisdictional status of ditches constructed upstream which then empty downstream on the same tributary.

Comments Raising Ancillary Issues

Other subjects addressed by commenters that are less germane to this article include: traditional navigable waters; interstate waters; and wastewater treatment facilities. The Apache County Board of Supervisors supported ongoing Department of the Interior efforts to develop a comprehensive hydrological map that clearly shows which waters are covered under WOTUS.

Case Study Projects

The two projects now reviewed to consider the impact of changes to the definition of WOTUS are: the Sierrita Natural Gas Pipeline; and the Villages at Vigneto. Both projects were located in an area with ephemeral washes and were subject to Army Corps permitting requirements under the 2015 Rule. The ephemeral washes in the project areas would not be subject to permitting under the 2020 Rule.

Sierrita Natural Gas Pipeline

Project Description

The Sierrita Pipeline Project, initially completed in 2014, was designed to transport up to 200,846 dekatherms per day of natural gas approximately 60 miles from a tie-in with El Paso Natural Gas Company’s (EPNG’s) existing South Mainline System near Tucson, Arizona to a meter station at the US-Mexico border where it is to interconnect with a planned Sásabe-Guaymas Pipeline in Mexico.⁷⁷ This additional pipeline will be constructed, owned, and operated by IENova, an affiliate of Sempra Energy. The Sierrita Pipeline is within unincorporated areas of Pima County.

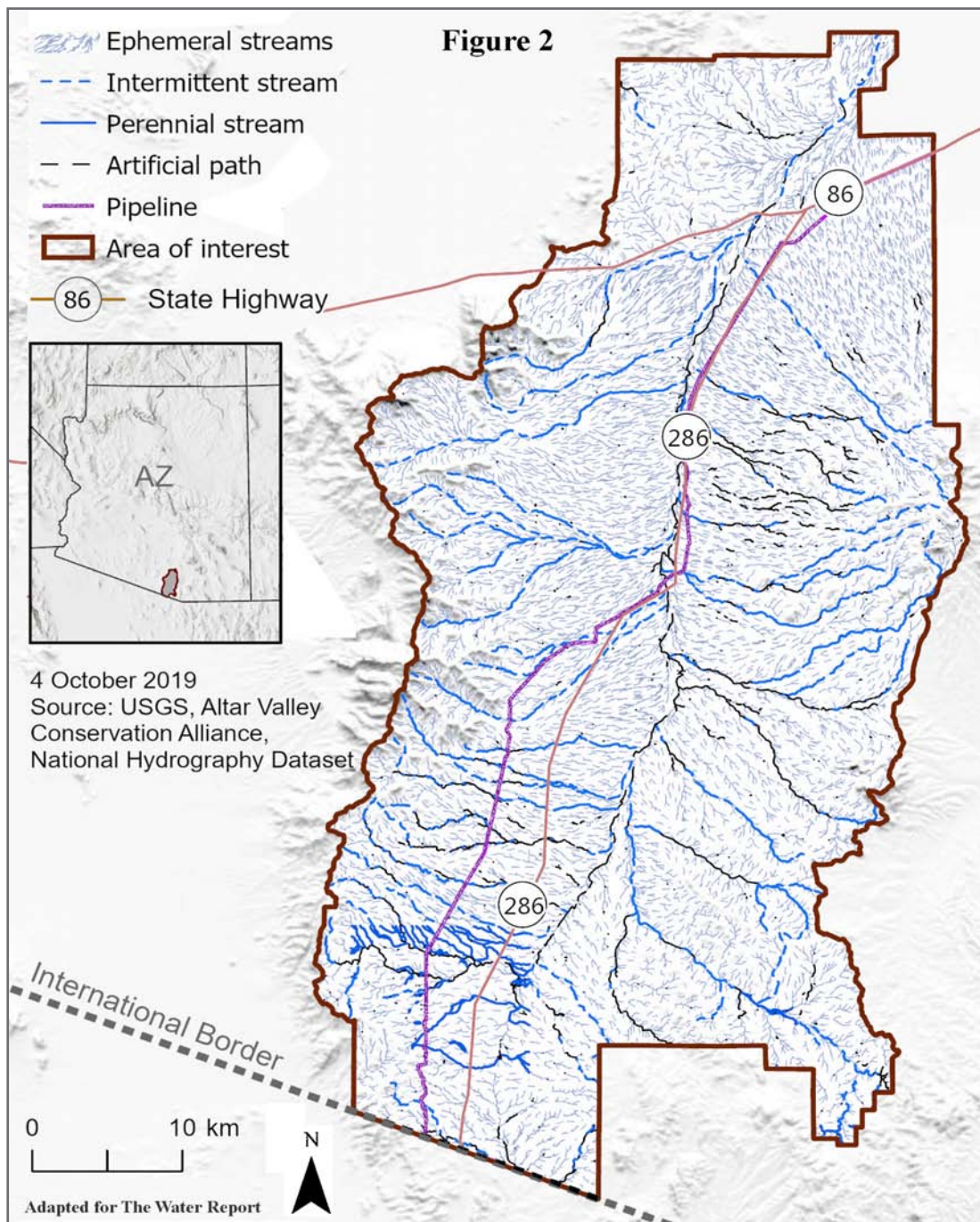
WOTUS in Arizona

Pipeline Area Attributes

This pipeline crosses the Altar Valley (**Figure 2, Area of Interest**). According to the Altar Valley Conservation Alliance (a non-profit organization within the Altar Valley), “the Altar Valley comprises approximately 600,000 acres of Sonoran desert grassland [and] some of the most biologically rich and ecologically threatened biotic communities in the world.”⁷⁸ The Valley is approximately 80 kilometers north to south and 35 kilometers (km) east to west. Elevations range from about 2,300 to 7,600 feet. It has a complex hydrography and primarily drains into the Santa Cruz River. The Valley’s extreme southern area drains into the Gulf of Mexico via the Rio Sonoyta and the Rio De La Concepcion.

According to the US Geological Survey (USGS) National Hydrography Dataset, the Altar Valley contains:

- 10,299 instances of Ephemeral Stream segments for a combined length of 6,171.5 km
- 1,371 instances of Intermittent Stream segments for a combined length of 599.6 km
- 251 instances of Perennial Stream segments for a combined length of 115.1 km
- 2,323 instances of artificial path segments for 398.3 km
- Three instances of Canal/Ditch segments for a combined length of 1.7 km
- Two instances of a connector for a combined length of 0.2 km
- One instance of an underground (water) pipeline with a length of 5.08 km
- 467 intermittent Lakes/Ponds • 99 Perennial Lakes/Ponds • One reservoir • Four swamps/marshes



WOTUS in Arizona

Construction Aspects

Altar Wash Crossing

Data Lacking

Classification Differences

Corps Nationwide Permit Justification

Construction of the pipeline included: construction right-of-way; additional temporary workspace facilities; contractor yards; and improved access roads. Construction disturbed almost 1,000 acres of land. Operation of the pipeline requires about 380 acres, including the pipeline permanent right-of-way and above-ground facility sites.

The Project crosses one perennial waterbody and 206 ephemeral washes as illustrated in **Figure 2**.⁷⁹ None of the waterbodies contain fishery resources and the nearest confluence with a fishery resource (Salt and Gila Rivers) is more than 100 miles away. Therefore, pipeline construction across these ephemeral washes is similar to typical conventional cross-country construction except that the pipe was buried deeper to provide additional cover under the channels, which are highly erodible.

The Central Arizona Project Canal is the only perennial waterbody that is crossed by the pipeline. Of the ephemeral reaches crossed by the pipeline, the Altar Wash is the largest crossing and is considered a major waterbody. An active stream gauge in the Alter Wash indicates that it has the largest active stream flow in the Brawley Wash-Los Robles Wash sub-basin with an annual mean stream flow of 5.35 cubic feet per second (average based on monitoring records from 1966 to 2006, NRCS and University of Arizona, 2008). The Altar Wash flows north to become the Brawley Wash, which then continues to the north/northwest to its confluence with the Santa Cruz River.

It should be noted that the Federal Energy Regulatory Commission (FERC) generated this description of the water resources in the project area even though there is no national dataset that currently portrays the complete set of jurisdictional waters under the CWA. As an example, there are two geospatial datasets important to this area, the National Wetlands Inventory (NWI) maintained by the US Fish & Wildlife Service (USFWS) and the National Hydrography Dataset (NHD) maintained by the USGS (both under the Department of the Interior). While both datasets use the same USGS stream lines, their classifications of those stream lines are very different. The NHD classifies 6,172 of the 6,886 kilometers of stream lines in the Altar Valley as ephemeral while the NWI classifies all of the streams in the Valley as either perennial or intermittent. EPA and the Army Corps have recognized this problem and identified their interest in advancing the development of state-of-the-art geospatial data tools through federal, state, and tribal partnerships to provide an enhanced, publicly-accessible platform for critical CWA information, such as the location of federal jurisdictional waters. Further, the agencies have suggested drawing on the expertise and infrastructure of the standing Federal Geographic Data Committee for convening experts, resolving technical issues, and vetting developments and innovative ideas.⁸⁰

Regulation of the Sierrita Natural Gas Pipeline Project

Sierrita submitted a pre-construction notice (PCN) for the pipeline project on September 30, 2013. In the PCN, Sierrita justified the use of the Army Corps Nationwide Permit (NWP) 12 for this project:

The project is located in an area that does not contain any unique ecological characteristics as there are no wetlands or other special aquatic sites, or perennial or intermittent streams located in the Project area that would be impacted by the Project. Furthermore, no unique upland vegetation communities would be impacted by the Project; vegetated uplands and associated ephemeral drainages in the Project area and vicinity are dominated [by] plant species typical of the Arizona Upland Subdivision of the Sonoran Desertscrub and Semidesert Grassland biotic communities. The loss of WOTUS resulting from the impacts associated with these 199 dry washes is minimal

Army Corps Nationwide & Regional General Permits

The Army Corps Regulatory Program administers and enforces Section 10 of the federal Rivers and Harbors Act of 1899 and Section 404 of the federal Clean Water Act. Under Section 10, a permit is required for work or structures in, over or under navigable waters of the United States. Under CWA Section 404, a permit is required for the discharge of dredged or fill material into waters of the United States.

Under CWA Section 404(e), the Army Corps can issue general permits to authorize discharge activities that have only minimal individual and cumulative adverse environmental effects. General permits can be issued for a period of no more than five years. A Nationwide Permit is a general permit that authorizes activities across the country. The Nationwide Permits authorize approximately 40,000 reported activities per year, as well as approximately 30,000 activities that do not require reporting to Army Corps districts. There are currently 50 Nationwide Permits, and they authorize a wide variety of activities such as: mooring buoys; residential developments; utility lines; road crossings; mining activities; wetland and stream restoration activities; and commercial shellfish aquaculture activities.

Similarly, Army Corps Regional General Permits are issued for specific geographic areas by an individual Corps District. Each Regional General Permit has specific terms and conditions, all of which must be met for project-specific actions to be verified. Concurrent with the Federal Register notice, Corps Districts issue local public notices to solicit comment on proposed regional conditions to restrict the use of the Nationwide Permits to protect local aquatic resources as part of the Regional General Permit rulemaking process.

See: www.usace.army.mil/Missions/Civil-Works/Regulatory-Program-and-Permits/Nationwide-Permits/

WOTUS in Arizona

Authorization Requirements

Regional Conditions

CWA § 401 Water Quality Certification

Certification Conditions

Additional Conditions

considering all dry wash crossings would be restored to pre-construction contours and elevations as required by NWP 12. Minor amounts of fill may be used at some of the dry wash crossings during restoration to achieve bank stabilization to reduce and minimize the potential for erosion.⁸¹

Because the project was anticipated to cause temporary impacts on drainages that were likely to be considered WOTUS, the Army Corps authorized construction of the project on June 30, 2014, under NWP 12, which permits discharge of dredge or fill materials into waters of the United States from utility line activities. For the NWP to be valid, the Sierrita was required to comply with all terms and conditions attached to the Army Corps letter of authorization. The proponent was also required to comply with a USFWS Biological Opinion and the National Historic Preservation Act.

NWPs are general instruments. They are not intended to be closely tailored to conditions at individual project sites, even though stipulations are often added to them. The Sierrita NWP 12 contained 30 fairly extensive General Requirements, the vast majority of which addressed water management issues that were not presented by the pipeline site. It also required the project proponent to comply with stipulations required by the state, Indian tribes, or EPA.

The NWP 12 also requires compliance with ten Regional Conditions, six of which apply to Arizona and the other four only to California. Of the six applicable to Arizona, most apply to water management issues that were not presented by the Sierrita project site. For example, Regional Condition 1 addressed activities in WOTUS that are suitable habitat for federally listed fish species. No such habitat was present in the project location. On the other hand, Regional Condition 3, requiring notification to the Army Corps of compliance with all General and Regional Conditions if a PCN is required to be filed, was applicable in this case, including Arizona Department of Environmental Quality (AZDEQ) water quality certification under section 401 of the Clean Water Act.

The AZDEQ reports that in 2014 when Sierrita’s eligibility for an NWP 12 was verified, AZDEQ did not require the project proponent to notify it for purposes of obtaining a section 401 permit. Consequently, proponents did not notify AZDEQ about the project and the State did not directly regulate the project pursuant to section 401 of the CWA. AZDEQ did, however, append thirty 401 conditions to the Army Corps’ NWP 12 permit which the Army Corps had authority to enforce. Most significantly, the 401 conditions prohibit any discharge into a WOTUS from project activities that exceeded any Water Quality Standard as defined in the Arizona Administrative Code (AAC) R18-11-102. The other requirements were related to: restoration; erosion mitigation; management of wastewater; and project monitoring.

In addition to the conditions for the project imposed by the Army Corps and AZDEQ under the CWA, other federal and state agencies, as well as local governments, imposed additional conditions on the project. These agencies included: the Federal Energy Regulatory Commission; Arizona Department of Transportation; Arizona State Lands Department; Arizona Department of State Parks; the Pima County Departments of Environmental Quality and Transportation; and the Central Arizona Water Conservation District. It is important to note, however, that none of these other conditions addressed directly the resource integrity of the WOTUS, which was governed exclusively by the CWA through the NWP 12.

National Pollutant Discharge Elimination Permit (NPDES)

The NPDES permit program helps address water pollution by regulating point sources that discharge pollutants to waters of the United States. The permit provides two levels of control: technology-based limits and water quality-based limits (if technology-based limits are not sufficient to provide protection of the water body).

Under the CWA, EPA authorizes the NPDES permit program to state, tribal, and territorial governments, enabling them to perform many of the permitting, administrative, and enforcement aspects of the NPDES program. In states authorized to implement CWA programs, EPA retains oversight responsibilities. Currently 46 states and one territory are authorized to implement the NPDES program.

Types of Permits

An NPDES permit is typically a license for a facility to discharge a specified amount of a pollutant into a receiving water under certain conditions. Permits may also authorize facilities to process, incinerate, landfill, or beneficially use sewage sludge. The two basic types of NPDES permits issued are individual and general permits.

An NPDES Individual Permit is a permit specifically tailored to an individual facility. Once a facility submits the appropriate application(s), the permitting authority develops a permit for that particular facility based on the information contained in the permit application (e.g., type of activity, nature of discharge, receiving water quality). The authority issues the permit to the facility for a specific time period (not to exceed five years) with a requirement that the facility reapply prior to the expiration date.

An NPDES General Permit covers a group of dischargers with similar qualities within a given geographical location. General permits may offer a cost-effective option for permitting agencies because of the large number of facilities that can be covered under a single permit.

Adapted from EPA website, see: www.epa.gov/npdes/about-npdes

Villages at Vigneto

WOTUS in Arizona

Planned Community

Water Features

Authorized Fill

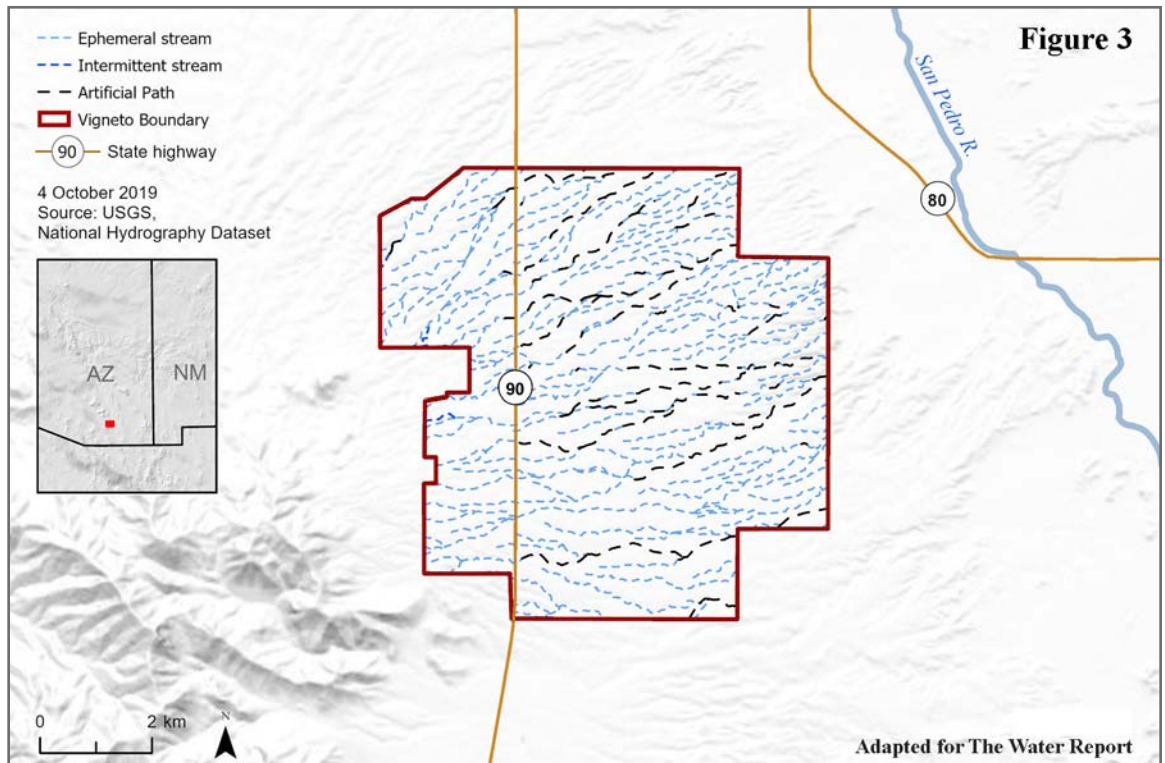
Project Description

Phase 1 of Villages at Vigneto master-planned community is located on 8,212-acres of private land south of US Interstate 10 and east of Arizona State Route 90 in the City of Benson, Cochise County, Arizona. The entire property consists of 15,550 acres that have been annexed into the City of Benson. Phase I of the project involves the development of planning units one through nine on 8,212 acres of the property, which is planned to include residential, employment centers, a town center, shopping centers, schools, and parks. Current regulation of the project covers only Phase I activities.⁸²

The Phase 1 project area contains 475 acres of waters of the United States, all of which are ephemeral streams (see Figure 3). There are no intermittent or perennial water features in the project area. No information presented in the environmental planning documents indicates that the ephemeral features in the project area drain into an intermittent or perennial stream.

Phase I will involve the filling of 51 acres of waters of the United States with clean fill, concrete, rock, gunite, and similar materials, and would be used to create portions of building pads, road and utility wash crossings, bank stabilization/erosion protection, and drainage improvements. Indirect effects of linear road crossings and associated bank revetment may include minor amounts of channel aggradation upstream of the crossing and degradation downstream of the crossings. These potential indirect impacts would be mitigated by the required minimum buffer areas, use of rock energy dissipation or similar engineering design features within the footprint of the 51 acres of authorized fill.

Figure 3: Map depicting the NHD waters within the Vigneto



Once construction is completed in any portion of the project area, stormwater management system structures would be constructed that would include detention/retention basins to minimize suspended particulates and turbidity levels in stormwater runoff from the developed areas. The project would increase the volume flowing through the drainages, which would be managed through the buffering structures identified below. With the inclusion in the project of minimum required buffers, sediment loss from rain events would be minimal.

The project proponents agreed to preserve 1,624 acres of natural open space: 424 acres of unfilled jurisdictional washes; 385 acres of buffer established through preserving the upland area within 25 feet of the ordinary high water mark on both sides of preserved washes (the “primary buffer”); and 815 acres of additional upland open space, which would include pedestrian and equestrian trails (the “secondary buffer”). In addition, Phase I will require habitat improvements at a 144-acre offsite compensatory mitigation area located between Benson and St. David, Cochise County, Arizona, to compensate for the loss of the 51 acres.

Stormwater Management

Open Space

Mitigation Area

WOTUS in Arizona

AZDEQ CWA § 402 Permit

Corps CWA § 404 Permit

AZDEQ Water Quality § 401 Certification

§ 401 Permit Conditions

Federal Regulation Ends

Ephemeral Drainages Excluded

No Water Quality Certification

NPDES Permit Impacts

Other CWA Permits: Sections 402 and Extension of 404 of the CWA

AZDEQ issued a construction general permit under the Arizona Pollution Discharge Elimination System authorized under section 402 of the CWA. The basic terms of that permit require implementation of a Stormwater Pollution Prevention Plan, which is designed to limit the discharge of sediment from disturbed construction sites to WOTUS. Minimization measures imposed by the permit include best management practices implemented by the project developer that use temporary and permanent controls for erosion and sediment, and rock energy dissipaters in the wash associated with culverts.

The Army Corps issued a standard section 404 permit for the project on June 21, 2006. The completion date of the project was extended from 2026 to 2038 by the Army Corps by letter dated October 17, 2018. Under it, the permittee was required to comply with the 401 certification issued by the State and with the habitat mitigation plan prepared by the permittee’s consultant. Some of the principal features of the habitat mitigation plan are described above in the project description.

AZDEQ 401 Certification

AZDEQ issued a letter of 401 certification on July 22, 2005, to the predecessor company proposing to construct the project Tres Alamos Ranch. The certification was renewed on October 24, 2017. Section 401(a) of the CWA states that such a certification is required for any activity requiring a federal permit which may result in any discharge into the navigable waters. Through the letter, the State certified the project proponent’s obligation to comply with all applicable water quality standards such as a stormwater permit, and reclaimed water and dewatering permits for discharges into WOTUS.

The certification was based on a commitment by the project proponent to comply with State Water Quality Standards for Surface Waters.⁸³ Designated uses for the subject waterbodies included aquatic and wildlife ephemeral habitat, and partial body contact. The conditions imposed in the 401 certification were in addition to the conditions imposed by the Army Corps in a CWA 404 Nationwide Permit issued in June 2007. The conditions were enforceable by the Army Corps, with a civil penalty of up to \$25,000 per day for violations. Criminal penalties could also have been imposed for any knowing violation of the CWA. Examples of conditions imposed in the 401 permit include:

- Bar on violating surface water quality standards;
- Bar on discharge of wastewater to a WOTUS;
- Bar on runoff and seepage activities violating surface water quality standards for any WOTUS;
- Permit certified activities to be performed during periods of no flow in any watercourse or WOTUS;
- Mitigation of erosion and sedimentation including monitoring the transport of sediment or other pollutants into any downstream WOTUS; and
- Conditions on the use of irrigation wastewater, and fertilizers and pesticides.

2020 Rule: Policy Considerations and Implications for Arizona

The preceding discussion addresses regulation under the prior CWA jurisdictional framework for the two example projects. The most salient point to be drawn from the descriptions is that the overwhelming number of water features in the areas of both projects are ephemeral washes that were previously regulated under a number of sections in accordance with the CWA. Under the 2020 Rule, these washes will no longer be defined as WOTUS. As such, *the federal government will not* be authorized to regulate these kinds of ephemeral features going forward. In particular, the Army Corps and EPA will lack the authority to issue dredge and fill permits under section 404 of the CWA for projects affecting ephemeral drainages. State authority to act under sections 401 and 402 may also be reduced by the exclusion of ephemeral drainages from WOTUS.

Under section 401, state certifications are required only for projects when an applicant is applying for a federal permit to “conduct any activity...which may result in any discharge into the navigable waters.” Under the Trump Administration’s rule, applicants will no longer be required to apply for dredge and fill permits for projects in ephemeral drainages, which are the only federal permits for discharges into navigable waters. Therefore, without a required federal permit, state authority to issue section 401 certifications for projects in wholly ephemeral drainages, such as the Sierrita Pipeline and Villages at Vigneto, will be eliminated.

State authority under section 402 of the CWA to maintain water quality standards through the issuance of National Pollutant Discharge Elimination System (NPDES) permits will also be diminished under the new rule. NPDES permits are administered under state law⁸⁴ and authorize discharges “into navigable waters” from any point source so long as the discharges comply with applicable water quality criteria and standards.⁸⁵

WOTUS in Arizona

Connectivity Unconsidered

Non-WOTUS State Waters

State Program Tune-Up Needed

Determining Rule Effect

Environmental Values

Groundwater Recharge

Plants/Wildlife

Case Studies Findings

Flood Flows

Even though CWA section 402 does not require a discharge to be made directly into a “navigable water” for it to be subject to the CWA,⁸⁶ both the Sierrita Pipeline and Villages at Vigneto may not be subject to NPDES permits. As discussed in the descriptions of the projects, the ephemeral reaches in the respective project areas were short and did not drain into an intermittent or perennial watercourse, except perhaps during floods. Absent this connectivity, and given that it is generally possible for pollutants to naturally wash downstream, there is a question as to whether these kinds of projects would be subject to CWA section 402 permit requirements under the 2020 Rule. Further guidance will be required from the Trump Administration before a final determination can be made about the interplay between the new WOTUS definition and the applicability of other sections of the CWA to projects in Arizona and other states.

Arizona Governor Ducey’s Administration is aware of these potential changes to regulation of water features in Arizona. In a letter dated June 16, 2017, from Governor Ducey to the EPA, the Governor asserted that the “State recognizes and welcomes the need to protect non-WOTUS state surface waters.” However, in a letter dated April 15, 2019, commenting on the Trump Administration’s rule, the Governor also revealed that:

[T]he State does not currently have a robust state-level program designed specifically to protect and restore surface water quality. Time and resources will be needed to work with stakeholders to determine the appropriate state response to reduced CWA jurisdiction, and to draft, pass, and implement any necessary changes or additions to state statutes and rules.

Additionally, the State is currently evaluating its legal authorities as a first step in determining what, if any, regulation of ephemeral drainages it may want to impose.

This, then, arrives at this article’s key question: What will be the effect on surface water resources in Arizona given the new rule’s elimination of ephemeral drainages from federal jurisdiction?

This question cannot be answered without knowing: whether Arizona will decide to enact authority to regulate ephemeral drainages; the scope of that possible enactment; and if there will be sufficient funding designated for such regulatory activities.

There are different ways to regard the environmental values presented by ephemeral drainages for the State to consider in making these determinations.⁸⁷ According to EPA, ephemeral and intermittent streams and tributaries provide a wide range of functions that are critical to the health and stability of arid and semi-arid watersheds and ecosystems in the American Southwest, including Arizona. Most importantly, they provide hydrologic connectivity within a basin — linking ephemeral, intermittent, and perennial stream segments — and thereby facilitate the movement of water, sediment, nutrients, debris, fish, wildlife, and plant propagules throughout a watershed. They provide wildlife habitat and connectivity to perennial reaches by providing a relatively more vegetated and moist environment than do the surrounding uplands. The processes that occur during ephemeral and intermittent stream flow also include dissipation of energy as part of natural fluvial adjustment, and the movement of sediment and debris.

Ephemeral and intermittent streams are responsible for a large portion of basin groundwater recharge in arid and semi-arid regions through channel infiltration and transmission losses. These stream systems contribute to the biogeochemical functions of the watershed by storing, cycling, transforming, and transporting elements and compounds. Ephemeral and intermittent streams support a wide diversity of plant species and serve as seed banks for these species. Because vegetation is more dense than in surrounding uplands, ephemeral and intermittent streams provide habitat, migration pathways, stop-over places, breeding locations, nesting sites, food, cover, water, and resting areas for mammals, birds, invertebrates, fish, reptiles and amphibians. In arid and semi-arid regions, the variability of the hydrological regime is a key determinant of both plant community structure in time and space and the types of plants and wildlife that can be supported.

It is also worthwhile to consider the environmental profile of the two examples of actual ephemeral drainages presented in this paper. The Sierrita pipeline crosses 206 ephemeral washes and one perennial waterbody, the Central Arizona Project (CAP) Canal.⁸⁸ No intermittent waterbodies are crossed. The most significant ephemeral waterbody crossed by the pipeline, the Altar Wash, is considered a major waterbody.

For the Villages at Vigneto project area, the ephemeral washes consist of smaller drainages converging into larger washes that convey water for a very short period of time after storm events. The ephemeral flows usually last no more than a few hours after a major storm event. The primary flood control function of these ephemeral systems is to convey flood flows through the landscape. They do not support aquatic organisms.⁸⁹ There is no indication in the available information that the washes connect to channels that carry greater volumes of water.

**WOTUS in
Arizona****Regulatory
Response****Stormwater
Runoff****State Plan?****Ephemeral
Features
Protection****Resource Needs**

The State of Arizona may want to evaluate carefully the information presented here regarding the two project sites in deciding its regulatory response to the potential elimination of federal regulation of ephemeral drainages. On the one hand, the ephemeral drainages in the two projects described above are likely connected to important recharge and stormwater management opportunities, in addition to the broader hydrological benefits provided by the Altar Wash in the pipeline project. Ensuring that potential recharge functions are not harmed requires careful analysis of the exact role that ephemeral drainages play in enhancing recharge. The more important these drainages are for the quantity and quality of groundwater recharge, the more they merit protection under State law.

The role of ephemeral drainages in helping to channel stormwater runoff should also be carefully considered. From 1955-2000, Arizona suffered hundreds of millions of dollars in flood damage.⁹⁰ State decision makers may want to carefully consider how important natural features such as ephemeral drainages are for mitigating flood impacts and then respond accordingly with a policy position for managing them.

In addition to looking at the aggregate benefits provided by ephemeral drainages, decision makers may want to consider the particular benefits the drainages provide at specific sites. Other than the Altar Wash, the drainages for the Sierrita Pipeline and Villages at Vigneto do not connect to other streams. The risk of pollution flowing down the features into other waters is negligible. The State may want to balance the less significant values presented for washes like those in the two subject projects with the broader benefits of ephemeral features generally in devising a State plan for protecting domestic waters.

Conclusion

The purpose of this article is to focus the attention of policy makers and the public on potential consequences of eliminating federal jurisdiction over certain water features for earth-disturbing projects. Now that the 2020 Rule is final, it will be for the public in each state to determine how much regulatory protection to afford ephemeral features and their associated waters, and at what level to fund such efforts. This article makes clear that the new rule leaves the door wide-open for the states to become more deeply involved in regulating surface waters within their boundaries.

As described here, the definition of WOTUS has swung back and forth between more and less comprehensive federal jurisdiction. The response of stakeholders has been to litigate the issue, arguing over definitions and application as described in the statute and regulations. In the meantime, our country has lacked a stable regulatory regime for properly managing our surface waters. With this new rule in place, a focus on resource needs rather than legal definitions may be a more effective path for achieving the clean water and healthy landscapes desired by all.

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<https://extension.arizona.edu/nrulpc>
<https://law.arizona.edu/natural-resource-use-management-clinic>
<https://wrrc.arizona.edu/>

Footnotes

- 1) 84 Fed. Reg. 4154 (2019)
- 2) These waters are defined broadly by the Arizona Revised Statutes, § 45-141, which provides the following definition for surface waters in the State: “The waters of all sources, flowing in streams, canyons, ravines or other natural channels, or in definite underground channels, whether perennial or intermittent, flood, waste or surplus water, and of lakes, ponds and springs on the surface, belong to the public and are subject to appropriation and beneficial use... .”
- 3) 33 U.S.C. § 1251
- 4) 33 U.S.C. § 1361(7)
- 5) S. Rep. 92-414
- 6) *Id.*
- 7) National Pollutant Discharge Elimination System, 38 Fed. Reg. 13528, 13,529 (1973)
- 8) Permits for Activities in Navigable Waters or Ocean Waters, 39 Fed. Reg. 12,115, 12,119 (April 3, 1974)
- 9) *See Nat. Res. Def. Council, Inc. v. Callaway*, 392 F. Supp. 685 (D.D.C. 1975)
- 10) *Id.*
- 11) Permits for Activities in Navigable Waters or Ocean Waters, 40 Fed. Reg. 31,320, 31,324 (July 25, 1975)
- 12) Considered “traditionally navigable waters”
- 13) Compare Final Rule, Consolidated Permit Regulations, 45 Fed. Reg. 33,290, 33,424 (EPA’s definition) and Interim Final Rule for Regulatory Programs of the Corps of Engineers, 47 Fed. Reg. 31,794, 31,810 (the Corps’ definition)
- 14) 474 U.S. 121 (1985)
- 15) 531 U.S. 159 (2001)
- 16) 547 U.S. 715 (2006)
- 17) *U.S. v. Riverside Bayview Homes*, 474 U.S. 121, 135 (1985)
- 18) *Id.* at 121
- 19) *Id.* at 133-34
- 20) *Id.* at 133
- 21) *Id.* at 133
- 22) The Supreme first signaled in recent times that it was going to scrutinize assertions of federal power under the Commerce Clause to regulate activities wholly within states in *United States v. Lopez*, 514 U.S. 549 (1995). The Court rejected the notion that carrying handguns in a school yard was a commercial activity or even related to any sort of economic enterprise. 514 U.S. at 567
- 23) *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers*, 531 U.S. 159, 164-66 (2001) (the Corps “initially concluded that it had no jurisdiction over the site because it contained no ‘wetlands,’ or areas which support ‘vegetation typically adapted for life in saturated soil conditions.’”)
- 24) *Id.* at 172
- 25) *Id.* at 167 (“It was the significant nexus between the wetlands and ‘navigable waters’ that informed our reading of the CWA in *Riverside Bayview Homes*.”)
- 26) *Id.* at 167, 68 (“In order to rule for respondents here, we would have to hold that the jurisdiction of the Corps extends to ponds that are not adjacent to open water. But we conclude that the text of the statute will not allow this.”)
- 27) *See* Congressional Research Service, *Evolution of the Meaning of the “Waters of the United States” in the Clean Water Act*, at 21-22 (Mar. 2019), available at <https://fas.org/sgp/crs/misc/R44585.pdf>. Most federal courts have followed Justice Kennedy’s opinion pursuant to the *Marks* doctrine, which states that when the Supreme Court issues a fragmented opinion with no majority holding, the holding of the court becomes the opinion that concurred on the narrowest grounds. *See Marks v. United States*, 430 U.S. 188, 97 S. Ct. 990 (1977). *See e.g. Northern California River Watch v. City of Healdsburg*, 496 F.3d 993 (9th Cir. 2007) (upholding Justice Kennedy’s “significant nexus” test as the official *Rapanos* opinion); *United States v. Chevron Pipe Line Co.*, 437 F. Supp. 2d 605 (N.D. Tex. 2006) (upholding Justice Scalia’s *Rapanos* “continuous surface water connection” test in the plurality opinion as the official *Rapanos* holding); *United States v. Bailey*, 571 F.3d 791 (8th Cir. 2009) (holding that courts are free to rely on either Justice Kennedy’s or Justice Scalia’s *Rapanos* holding)
- 28) *Id.* at 739, 742
- 29) *Id.* at 740-42
- 30) *Id.* at 738 fn. 9, 753
- 31) As explained above at fn. 33, the term “significant nexus” was first employed by the Court in *SWANCC*, to characterize the relationship between the wetlands and adjacent navigable waters at issue in *Riverside Bayview Homes*.
- 32) *Id.* at 780
- 33) *Id.*
- 34) *Id.* at 781-82.
- 35) *Id.* at 780.
- 36) *Stephen P. Mulligan, supra* note 4 at 22, 23.
- 37) Clean Water Act Jurisdiction Following the U.S. Supreme Court’s Decision in *Rapanos v. United States & Carabell v. United States*, EPA (Dec. 2, 2008), www.epa.gov/sites/production/files/2016-02/documents/cwa_jurisdiction_following_rapanos120208.pdf
- 38) 80 F.R. 37,053 (June 29, 2015)
- 39) 80 F.R. at 37,059
- 40) 80 Fed. Reg. 37,104 (June 29,2015)
- 41) 80 F.R. at 37,079
- 42) *Id.* at 37,076
- 43) Definition of “Waters of the United States”—Recodification of Preexisting Rule, 83 FR 32227-01 (July 12, 2018)
- 44) Executive Order No. 13778, Fed. Reg. 12,497 (Feb. 28, 2017)
- 45) 85 Fed. Reg. 22,250
- 46) An adjacent wetland is a wetland that:
 - Abuts, meaning to touch at least at one point or side of a tributary or other jurisdictional water;
 - Is inundated by flooding from a jurisdictional water in a typical year;
 - Is separated from a jurisdictional water by a natural feature; or,
 - Is separated from a jurisdictional water by an artificial feature so long as that structure allows for a direct hydrologic surface connection between the wetland and the jurisdictional water.
- 40 C.F.R. 120.2(3)(i)

Footnotes continued

- 47) 40 C.F.R. 120.2(3)(xii)
- 48) 80 FR 37053, 37105
- 49) *Id.*
- 50) 85 F.R. 22290 and 120 C.F.R. 120.2(3)(xii)
- 51) Comment of the SRP submitted April 11, 2019, on the Proposed Rule
- 52) Prepublication of final rule, p. 103
- 53) Original comments can be found via the EPA's website for Step Two of the Navigable Waters Protection Rule, www.epa.gov/nwpr/navigable-waters-protection-rule-step-two-revise, at the Administrative Docket ID No. EPA-HQ-OW-2017-0480 at www.regulations.gov/docketBrowser?rpp=25&so=DESC&sb=commentDueDate&po=0&dct=PS&D=EPA-HQ-OW-2018-0149
- 54) Comment submitted by Howard Hutchison, Executive Director, Coalition of Arizona/New Mexico Counties for Stable Economic Growth, April 14, 2017, Document ID EPA-HQ-OW-2018-0149-4434
- 55) Comment submitted by C.H. Huckelberry, County Administrator, Pima County Governmental Center, April 15, 2019, Document ID EPA-HQ-OW-2018-0149-4856
- 56) Comment submitted by Andy Groseta, President, Cottonwood Ditch Association, Inc., Document ID EPA-HQ-OW-2018-0149-5371
- 57) Comment submitted by Stefanie Smallhouse, President, Arizona Farm Bureau Federation, Document ID EPA-HQ-OW-2018-0149-4756
- 58) Comment submitted by Steve Reiter, Chairman, Arizona Council of Trout Unlimited, April 9, 2019, Document ID EPA-HQ-OW-2018-0149-3292
- 59) Comment submitted by Shan Lewis, President, Inter Tribal Association of Arizona (ITAA) and vice Chairman, Fort Mojave Indian Tribe, Document ID EPA-HQ-OW-2018-0149-4919
- 60) Comment submitted by Kara M. Montalvo, Director, Environmental Compliance & Permitting, Salt River Project (SRP), Document ID EPA-HQ-OW-2018-0149-5245
- 61) Comment submitted by Lisa A. Atkins, Commissioner, Arizona State Land Department, et al., Arizona Department of Environmental Quality, Document ID EPA-HQ-OW-2018-0149-4714
- 62) Comment submitted by Frank Krentz, President, Arizona Association of Conservation Districts, Document ID EPA-HQ-OW-2018-0149-5002
- 63) Comment submitted by Robert S. Lynch on behalf of the Irrigation & Electrical Districts of Arizona, Document ID EPA-HQ-OW-2018-0149-4925
- 64) *E.g.*, Arizona Farm Bureau Federation comment, *supra*
- 65) Comment submitted by Travis K. Simshauser, Supervisor, District 3, Apache County, Arizona, April 12, 2019, Document ID EPA-HQ-OW-2018-0149-5109 (“Simshauser April 12 comment”)
- 66) ITAA comment, *supra*
- 67) *E.g.*, Comment submitted by Lee Jack, District 1 Supervisor, Navajo County, Arizona, Document ID EPA-HQ-OW-2018-0149-4380
- 68) Comment submitted by Eastern Arizona Counties Organization, Document ID EPA-HQ-OW-2018-0149-4551
- 68) Coalition of Arizona/ New Mexico Counties for Stable Economic Growth, *supra*
- 70) Simshauser April 12 comment, *supra*
- 71) Comment submitted by Travis K. Simshauser, April 11, 2019, Document ID EPA-HQ-OW-2018-0149-4725
- 72) Arizona Farm Bureau Federation comment, *supra*
- 73) AZDEQ comment, *supra*
- 74) Arizona Farm Bureau Federation comment, *supra*
- 75) Comment submitted by Steve Trussell, Executive Director, Arizona Mining Association, Document ID EPA-HQ-OW-2018-0149-4811
- 76) These comments are available at the Administrative Docket, and include: Navajo County District 1, Eastern Arizona Counties Organization (Apache, Cochise, Gila, Graham, Greenlee, & Navajo Counties), Attorneys General of AZ, TX, UT, Apache County Board of Supervisors District 3, AZDEQ, Cottonwood Ditch Association, Arizona Farm Bureau Federation, and the Arizona Association of Conservation Districts.
- 77) Information about the Sierrita project is drawn from the Environmental Impact Statement (EIS) prepared by the Federal Energy Regulatory Commission (FERC) for the project.
- 78) Altar Valley Conservation Alliance website: <https://altarvalleyconservation.org/>
- 79) Within the Altar Valley where the pipeline is located, there are ephemeral areas with a combined length of 6,171.5 km; intermittent streams with a combined length of 599.6 km; and, perennial streams with a combined length of 115.1 km. Source: Robert Davis, Certified Mapping Scientist (GIS/LIS) ASPRS
- 80) 84 Fed. 4198-99
- 81) Letter from SWCA Environmental Consultants to Ms. Sallie Diebolt, Chief Arizona Regulatory Branch, Army Corps, September 30, 2013, p. 16
- 82) The project descriptive narrative in this paper is derived from an Army Corps Public Notice issued in the fall of 2017 about the reevaluation of the project permit.
- 83) Arizona Administrative Code Title 18, Chapter 11, § 108, Narrative Water Quality Standards, and Appendix B
- 84) Currently forty-six states and one territory have NPDES programs. Source: EPA, www.epa.gov/npdes/about-npdes. The law in Arizona is in the Arizona Administrative Register, Title 18, Chapter 11, Article 1, Water Quality Standards for Surface Waters.
- 85) 42 U.S.C. § 1342(b)
- 86) The plurality opinion in *Rapanos* noted that the CWA “does not forbid the ‘the addition of any pollutant directly to navigable waters from any point source,’ but rather the ‘addition of any pollutant to navigable waters.’” 547 U.S. 715, 743 (judgment of the Court by Scalia)(emphasis in the original). “Thus, from the time of the CWA’s enactment, lower courts have held that the discharge into intermittent channels of any pollutant that naturally washes downstream likely violates [the CWA] even if the pollutants discharged from a point source do not emit ‘directly into’ covered waters, but pass ‘through conveyances’ in between.” *Id.* (emphasis in the original).
- 87) The following comments on the ephemeral values is drawn from “*The Ecological and Hydrological Significance of Ephemeral and Intermittent Streams in the Arid and Semi-arid American Southwest*”, EPA, November 2008.
- 88) Sierrita Pipeline Project: Final Environmental Impact Statement, Federal Energy Regulatory Commission, 4-38; March 2014
- 89) Department of the Army, *Environmental Assessment and Statement of Findings for Re-Evaluation of Previously Issued Department of the Army Standard Individual Permit SPL-2003-00826*, (July 26, 2019), p. 69
- 90) “*Flood Damage in the United States, 1926-2000: A Reanalysis of National Weather Service Estimates*,” Roger A. Pielke, Jr., Mary W. Downton, J. Zoe Barnard Miller (June 2002), p. 80

Groundwater & the CWA

Point Source

NPDES Permit

“Functional Equivalent”

Fact Specific Determinations

GROUNDWATER UNDER THE CLEAN WATER ACT

County of Maui v. Hawai'i Wildlife Fund

IT'S GROUNDHOG DAY (AGAIN)

by Kathy Robb, CEO, Blue Access LLC (New York, NY)

Introduction

The federal Clean Water Act (CWA or Act) requires a permit for “any addition” of any pollutant to navigable waters from “any point source.” 33 U.S.C. 1362(12)(A). While there is agreement that the Act does not require a National Pollution Discharge Elimination System (NPDES) permit for a discharge of a pollutant to groundwater, courts have long divided on whether the CWA requires a permit for a discharge of a pollutant from a point source that travels through groundwater to navigable waters (defined as “waters of the United States”). On April 23, 2020, the US Supreme Court in *County of Maui v. Hawai'i Wildlife Fund*, 590 US ___ (2020), held that it does — “sometimes.”

In a six-to-three decision, Justice Breyer wrote: “We conclude that the statutory provisions at issue require a permit if the addition of the pollutants through groundwater is the functional equivalent of a direct discharge from the point source into navigable waters.” *Maui, Slip Op.* at 1. The opinion included a seven-point, non-exclusive list of factors to be applied by the lower courts to define what this new “functional equivalent” standard means, case by case.

Both sides have claimed victory. The result raises this question: Are we doomed to continue to develop water policy in the United States through years of protracted litigation?

Background

Whether the CWA requires a permit for releases from a point source to groundwater that eventually makes its way to navigable waters has been litigated for decades, with differing results.

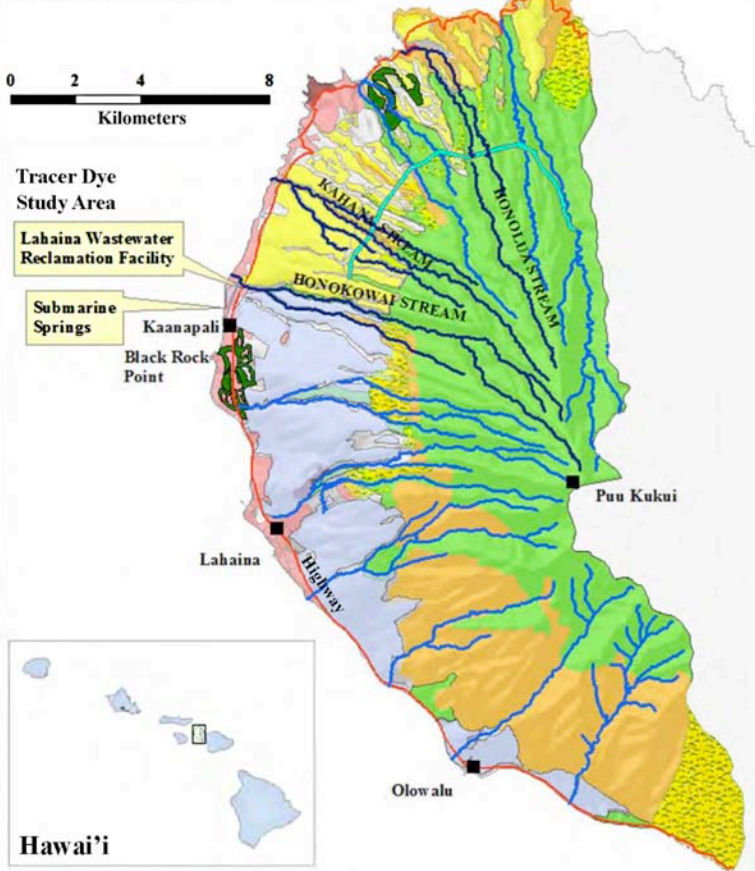
The federal circuit courts split on the issue. Lower courts confronting the status of discharges to groundwater where the groundwater serves as a conduit to surface water have fallen generally into three different outcomes: 1) the CWA does not cover those discharges because the point source did not discharge directly to surface waters; 2) those discharges are covered by the CWA only when there was a direct

hydrological connection between the surface water and the groundwater; or 3) those discharges are covered if the pollutant in the eventual discharge to surface water could be traced back to the discharge from the original point source. All these determinations require intensive fact-specific litigation, which often plays out over a period of years.

In *County of Maui*, the County for years injected three to five million gallons of recycled, treated wastewater daily into four injection wells located a half-mile inland from the Pacific Ocean — without an NPDES permit. The injection wells, installed in the 1980s, are long pipes that carry effluent about 200 feet underground into a shallow groundwater aquifer. The wastewater makes its way through groundwater to the Pacific Ocean, a “water of the United States” under the Act. A tracer dye study showed that injected dye was visible in the ocean 84 days after it was injected into the wells. All parties in the case agreed that the wells are a defined “point source” and the groundwater is not. The two sides disagreed about whether the discharges are harming a nearby coral reef.

Hawai'i Wildlife Fund argued that the County's effluent injections are discharges from a point source (the wells) through groundwater to navigable water without an NPDES permit, causing damage to water reefs and violating the CWA. The County of Maui argued that the discharge from the wells, a point source, to groundwater that subsequently makes its way to the ocean, is not a discharge from a point source regulated under the Act, and therefore no NPDES permit is required.

Western Maui



Groundwater & the CWA

4th Circuit

Rapanos

“Fairly Traceable” Rejected

Seven Factors

Time & Distance

Guidance Lacking

Dissent: Uncertainty

“From” Meaning

The Ninth Circuit held that the indirect discharge through groundwater to the Pacific is subject to regulation under the CWA and requires an NPDES permit. *Hawai’i Wildlife Fund et al v. County of Maui*, 886 F.3d 737 (9th Cir. 2018). They found that there was a “fairly traceable” connection established through the tracer dye studies, showing “the functional equivalent of a discharge into navigable waters” by the County. *Id.* at 748. In reaching this decision, the Ninth Circuit considered “for its persuasive value” language from the late Justice Scalia’s plurality opinion in *United States v. Rapanos*, 547 U.S. 715, 126 S.Ct. 2208, 165 L.Ed2d (2006), that the CWA does not prohibit the “‘addition of any pollutant directly into navigable waters from any point source’ but rather the ‘addition of any pollutant to navigable waters.’” *Rapanos* at 723 (emphasis in original); 886 F.3d at 748. Thus, the Ninth Circuit rejected the County’s argument that a point source must discharge directly into navigable waters to trigger permitting requirements under the CWA — holding instead that it is enough for the discharge to come from a point source (here, the wells.) The Ninth Circuit “assumed without deciding” that the groundwater here was not a point source or navigable water under the CWA. (The district court had determined that the groundwater was both). 886 F.3d 746, fn.2. [For a fuller discussion of the lower court decisions, circuit splits, legislative history and background on indirect discharges and the CWA, see “*Groundwater & the Clean Water Act: Murky Waters — Are Indirect Discharges to Groundwater Regulated Under the Clean Water Act? Hawai’i Wildlife Fund, et al v. County of Maui*” Kathy Robb, *TWR* #170 (4/15/18), and its update, *Water Briefs, TWR* #186.]

Supreme Court Ruling

The US Supreme Court (Court) found the Ninth Circuit “fairly traceable” test too broad, noting that it could result in EPA requiring a permit in unexpected circumstances, such as “the 100-year migration of pollutants through 250 miles of groundwater to a river.” *Maui, Slip Op.* at 6. In describing the new “functional equivalent” test (although the Ninth Circuit also used those words describing the “fairly traceable” test — see above), the Court identified a non-exclusive list of seven factors, emphasizing two of them:

“But there here are too many potentially relevant factors applicable to factually different cases for this Court now to use more specific language. Consider, for example, just some of the factors that may prove relevant (depending upon the circumstances of a particular case): (1) transit time, (2) distance traveled, (3) the nature of the material through which the pollutant travels, (4) the extent to which the pollutant is diluted or chemically changed as it travels, (5) the amount of pollutant entering the navigable waters relative to the amount of the pollutant that leaves the point source, (6) the manner by or area in which the pollutant enters the navigable waters, (7) the degree to which the pollution (at that point) has maintained its specific identity. Time and distance will be the most important factors in most cases, but not necessarily every case.” *Maui, Slip Op.* at 16.

The Court, however, gives little guidance on how the factors are weighted, or how they should be scaled. What distance is too far between a pipe (point source) discharge of a pollutant into groundwater and the entry point of that pollutant into navigable waters? In *County of Maui*, the distance was about half a mile. The Court suggests that a few feet would be considered close enough, but that 50 miles might be too far, depending on the circumstances: “If the pipe ends 50 miles from navigable waters and the pipe emits pollutants that travel with groundwater, mix with much other material, and end up in navigable waters only many years later, the permitting requirements likely do not apply.” *Maui, Slip Op.* at 16. The same lack of definition applies to the time factor, the second factor emphasized by the Court. In *Maui*, it took 84 days for the dye to become visible in the Pacific Ocean.

Where does this leave us at, say, discharges from 40 miles, or that take a year to reach navigable waters? And are tracer dye tests and preemptive applications for NPDES permits now going to become the new normal to defend against potential enforcement or citizens suits? Justice Alito, in his dissent, highlighted the uncertainty created in the majority opinion: “If the Court is going to devise its own legal rules, instead of interpreting those enacted by Congress, it might at least adopt rules that can be applied with a modicum of consistency. Here, however, the Court makes up a rule that provides no clear guidance and invites arbitrary and inconsistent application.” *Maui, Alito Dissent* at 1.

The opinion, like the oral argument in the case, also focused more on prepositions rather than defined statutory terms under the CWA. “Point source,” “pollutant,” and “waters of the United States” got little discussion, as the Court focused on “from” — whether the discharge to the Pacific was “from” the point source, and “to” navigable waters, when it went through groundwater. At oral argument, the justices noted that both sides had strong arguments about the meaning of “from.” *November 6 Transcript* at 17 (*Nov. 6 Tr.* at 17). The justices grappled with identifying a “limiting factor” that would help them interpret “from” in the statute.

Groundwater & the CWA

Point Source

Regulatory Certainty

“From” Analogy

“Massive Loophole”

CWA Genesis

CWA Goals

Jurisdictional Issues Remain

Counsel for the County Elbert Lin urged the Court to require a permit only when pollutants are conveyed directly from a point source to navigable waters. The County argued that the releases from Maui’s underground injection wells are already regulated under several existing federal and state programs, including the CWA’s non-point source program. “The question is where the line falls between the CWA’s federal point source program and its state law non-point source program. And the answer is in the text. The text defines a point source as a discernable, confined and discrete conveyance, and it thereby makes clear that the trigger point for point source permitting is not where a pollutant comes from but how it reaches navigable waters.” *Nov. 6 Tr.* at 3.

When asked by the justices to provide “limiting factors” to determine the meaning of “from,” Lin pointed to statutory context as the means to determine interpretation, and emphasized the separate point source and non-point source regulatory framework of the CWA. *Nov. 6 Tr.* at 18-19. He argued that requiring a permit for groundwater delivery from a point source would eliminate any “meaningful role for the non-point source program.” He also pointed to a need for regulatory certainty in advance about who must apply for a permit — which, he noted, the “after-the-fact” application of tracer dye studies cannot provide — and the steep penalties (up to \$55,000 a day per source) that could apply under the CWA for failure to obtain a permit, not only for corporate entities and municipalities but also for “ordinary lay people.”

At oral argument, US Deputy Solicitor General Malcolm Stewart offered an analogy to illustrate the government’s position on the meaning of “from”:

“And, for example, if at my home I pour whiskey from a bottle into a flask and then I bring the flask to a party at a different location and I pour whiskey into the punch bowl there, nobody would say that I had added whiskey to the punch from the bottle. It would be true that the punch — that the whiskey originated in the bottle, its route was fairly traceable from the bottle to the punch bowl, and it wound up in the punch bowl, but you wouldn’t say it was added to the punch from the bottle.”

Nov. 6 Tr. at 22.

In the opinion, Justice Breyer considers several examples of everyday meanings of “from” — describing immigrants from Finland, travelers from Europe who came from Baltimore and perhaps from the train station, and meat drippings for gravy that came from the meat and from the pan — and concludes that a discharge could come from many places, just like a person or gravy.

While the Ninth Circuit’s “fairly traceable” test was viewed by the Court as too broad, the County’s position that discharges from a point source that travels through groundwater to navigable waters never require a permit was viewed as too narrow. In oral argument, it became clear that the Court was struggling with how a reading of the Clean Water Act precluding any permitting for discharges through groundwater to navigable water (as advocated by the County and EPA), could create a “massive loophole” allowing discharges that violate the fundamental purpose of the Act.

The regulatory bundle commonly referred to as the Clean Water Act is made up of a statute first passed in 1972 and last amended in 1987, with antecedents as far back as the Rivers and Harbors Act of 1899. It is well to remember that prior to the CWA, US rivers were literally on fire. The Cuyahoga River had fires every decade between 1868 and 1972. Iconic photos from 1952 published on the cover of Life magazine at the time of a 1969 fire on the Cuyahoga River horrified the nation, galvanizing political support for passage of the Act three years later. Congress overrode a presidential veto to the initially-named “*Federal Water Pollution Control Act Amendments of 1972*” by 52 to 12 in the Senate and 247 to 23 in the House, with members of both parties casting votes on each side, in a bipartisan atmosphere at which we now can only marvel.

Congress set audacious goals in the CWA in 1972: “To restore and maintain the chemical, physical, and biological integrity of the nation’s waters,” to make waters fishable and swimmable by 1983, and to eliminate the discharge of pollutants by 1985. *See* (33 U.S.C. 1251). Unsurprisingly, these target dates were not met. But by 1998, the United States had doubled the waters clean enough for fishing and swimming; more than doubled the number of people served by modern sewage treatment plants; and drastically reduced wetlands losses. In 1972, less than a third of the nation’s waters met the CWA’s goals; by 2016, it was estimated that over 65 percent did.

Tensions inherent in the CWA from the beginning remain over 47 years later. Three jurisdictional aspects of the Act are still the subject of hotly contested litigation and debate: 1) what are “navigable waters” (which defines the jurisdictional waters under the Act); 2) what does the “cooperative federalism” that is a hallmark of the Act mean for jurisdiction between the federal government and the states; and 3) what is the regulatory scope of the Act for groundwater?

While out of sight, groundwater is certainly no longer out of mind. More than 28 trillion gallons of water a year is pumped from underground in the US. About 78% is used for irrigation; 14% used for

<p>Groundwater & the CWA</p>	<p>public supply systems; and 4% is applied to rural domestic/livestock uses. The recent increase in litigation involving groundwater mirrors a 2017 Gallup poll report that Americans are more concerned about water pollution than they have been since 2001.</p>
<p>CWA Purpose</p>	<p>The opinion of the Court reflects the concern about adhering to the purpose of the Act: “[W]e conclude that, in light of the statute’s language, structure, and purposes, the interpretations offered by the parties, the Government, and the dissents are too extreme.” <i>Maui, Slip Op.</i> at 15.</p>
<p>States’ Burden</p>	<p style="text-align: center;">The States’ Role</p> <p>Among the 30 amicus briefs filed in the case, 20 state attorneys general and two governors joined in a brief supporting the County’s position, asserting that the Ninth Circuit’s decision drastically expands CWA jurisdiction and would place a huge additional burden on states, most of which administer the NPDES permitting program. The states argue in the brief that the decision “infringes upon the sovereign prerogative of the States to manage their water resources — especially those such as groundwater that are often wholly <i>intrastate</i>.” (emphasis in original) <i>Brief of Amici Curiae State of West Virginia, 17 Other States, and the Governors of Kentucky and Mississippi in Support of Petitioner County of Maui</i>, Case No. 18-260, at 2.</p>
<p>State Autonomy</p>	<p>The Court’s opinion held that “perhaps most important, the structure of the [Clean Water Act] indicates that, as to groundwater pollution and nonpoint source pollution, Congress intended to leave substantial responsibility and autonomy to the States. <i>See, e.g.</i>, §101(b), 86 Stat. 816 (stating Congress’ purpose in this regard).” <i>Maui, Slip Op.</i> at 6.</p>
<p>State Impacts Vary</p>	<p>The impact of this decision is likely to vary by state. Every state has authority to regulate discharges to groundwater, and some have integrated permitting programs that regulate discharges to both surface water and groundwater. Therefore, in many states, even if a discharge like Maui’s had not triggered CWA treatment and permitting requirements, state authorities would have required modern levels of wastewater treatment prior to any discharge, including a discharge to groundwater. Going forward, if EPA fails to adopt rules, states that implement the NPDES program may define new requirements and issue general permits that address how the “functional equivalent” factors will be applied.</p>
<p>Deference to Agencies</p>	<p style="text-align: center;">Chevron Deference and County of Maui</p> <p>While some commentators have made much of the fact that the Court determined not to give “<i>Chevron</i> deference” to the US Environmental Protection Agency’s (EPA’s) position in <i>County of Maui</i>, the Court notes in its opinion that “[n]either the Solicitor General nor any party has asked us to give what the Court has referred to as <i>Chevron</i> deference to EPA’s interpretation of the statute. <i>See Chevron U.S.A. Inc. v. Natural Resources Defense Council, Inc.</i>, 467 U.S. 837, 844 (1984).” <i>Maui, Slip Op.</i> at 12.</p>
<p>Two-Part Test</p>	<p>The <i>Chevron</i> doctrine is a two-part test applied to determine when and whether a court gives deference to an agency’s interpretation of the construction of a statute. <i>Chevron U.S.A. v. NRDC</i>, 467 U.S. 837 (1984). If the intent of Congress is clear, the court and the agency must give effect to the unambiguous intent of Congress. If the court determines that Congress has not directly addressed the precise issue at hand, and the statute is silent or ambiguous on the issue, the question for the court is whether the agency’s answer is a permissible construction of the statute. Before the Ninth Circuit, the government had urged the court to defer to EPA’s prior articulation of the scope of the CWA, “direct hydrological connection”, as applied to groundwater.</p>
<p>EPA Reversal</p>	<p>EPA reversed its position mid-case in <i>County of Maui</i>, arguing in the lower courts that those groundwater discharges may require a permit if there is a “direct hydrological connection” between the point source and navigable waters — and then arguing before the Supreme Court that all releases to groundwater are excluded from the CWA permitting program, even where pollutants are conveyed to jurisdictional waters (navigable water, or “waters of the United States”). 84 Fed. Reg. at 16,814. EPA and the US Department of Justice had supported the environmental groups in the district court and the Ninth Circuit, arguing that discharges from a point source to navigable water through groundwater sometimes require an NPDES permit. EPA then asked for comments on this position in February 2018. EPA subsequently published an “<i>Interpretive Statement</i>” in April 2019 after the Court granted certiorari in the <i>Maui</i> case, stating that discharges from point sources to groundwater are excluded from the NPDES permitting program, and sided with the County’s position in briefs and oral argument.</p>
<p>EPA Statement</p>	<p>US Deputy Solicitor General Malcolm Stewart urged the Court to adopt the position of the April 23, 2019, “<i>Interpretive Statement on Application of the Clean Water Act National Pollution Discharge Elimination System Program to Releases of Pollutants From a Point Source to Groundwater</i>.” 84. Fed. Reg 16,810, which states that the CWA does not require permits for pollutants released to groundwater and subsequently making their way to navigable waters.</p>

Groundwater & the CWA

Deference Unwarranted

“Functional Equivalent” Affects

Rulemaking?

Increased Requirements?

Legal Implications

The lack of reliance on *Chevron* deference reflects a Justice Department trend not to argue that an agency’s reading of a particular statute is permissible due to agency expertise and therefore entitled to *Chevron* deference, but rather that the reading is the best one and should win the day. Of course, the relative merits and foibles of *Chevron* deference have always depended very much on whose ox is gored by the agency position in a particular case. Nonetheless, in *Maui*, the Court expressly declined to defer to the agency’s interpretation, calling it “neither persuasive nor reasonable.” *Maui, Slip Op.* at 12. Interestingly, the “functional equivalent” test in *Maui* actually gives EPA broader permitting jurisdiction under the Clean Water Act than it argued for.

Conclusion

POTENTIAL IMPACTS OF MAUI

The undefined, fact-driven factors of the “functional equivalent” test in *Maui* may be narrower, and not any more vague, than the standard the Court points out that EPA previously had sought for decades — requiring permits for “some (but not to all) discharges through groundwater” — and that did not result in an “unmanageable expansion” of the program. But the functional equivalent test seems much like Justice Kennedy’s 2006 “significant nexus” test, which Justice Kennedy held in 2006 should define jurisdiction waters under the Clean Water Act. District courts despaired of applying that test, and it triggered uncertainty, epic litigation, and several rulemakings (some still under challenge).

The Court suggests, in addition to district court rulings on a case-by-case basis, that EPA might put flesh on the bones of the functional equivalent factors through a rulemaking, akin to efforts to define “Waters of the United States,” or guidance, or general permits. In fact, the latest final Rule, “The Navigable Waters Protection Rule” was published two days before the *Maui* opinion on April 21, 2020, and excludes groundwater from the definition of “Waters of the United States” under the Clean Water Act (*see* previous article, this *TWR*). That Rule becomes effective on June 22, 2020 and replaces the rule published on October 22, 2019. 85 Fed. Reg. 22,250 (2020). It remains to be seen whether EPA would pursue yet another rulemaking, given the difficulty in defining the Court’s functional equivalent factors and the district court litigation that would be sure to follow across the country.

The *Maui* decision sets up the possibility for increased federal permit requirements for those discharging wastewater that moves through groundwater and ultimately reaches navigable waters. Superfund site cleanups, municipalities, golf courses, recreation areas, agriculture, businesses that contain stormwater onsite in unlined ponds, cesspools, septic systems, underground storage tanks, surface impoundments, landfills, and pipelines — all potentially may fall under the CWA if groundwater carries a discharge from a point source to navigable waters.

EPA’s *Interpretive Statement* excluded from permitting pollution sources such as leaks from coal ash ponds, which are large impoundments of power plant waste that often sit adjacent to federally regulated waterways. The *Maui* decision “functional equivalent” factors have potential legal implications for any sort of surface impoundment, including coal ash ponds.

FOR ADDITIONAL INFORMATION:

KATHY ROBB, Blue Access LLC, 917/ 428-3742 or kathy@blueaccess.org

ORAL ARGUMENT TRANSCRIPT AT:

www.supremecourt.gov/oral_arguments/argument_transcripts/2019/18-260_m6hn.pdf

County of Maui, SLIP OPINION AT: https://www.supremecourt.gov/opinions/19pdf/18-260_i4dk.pdf

Kathy Robb is the CEO of Blue Access LLC (New York, NY), a sustainable investment organization working with underserved communities at the intersection of water and finance. Prior to joining Blue Access in February, 2020, Kathy was in private practice focusing on environmental litigation before federal district and appellate courts across the country and in the US Supreme Court, and advising on environmental risk issues in complex transactions from the bid process through closing. She has represented water districts, developers, investors, lenders, energy companies, industrial and paper companies, and chemical manufacturers on water-related disputes, endangered species issues, environmental impact reviews, river sites with contaminated sediments, solid and hazardous waste issues, and sites with contaminated groundwater. Her work in private practice includes litigation on the Colorado, Rio Grande, Guadalupe, San Antonio, Fox, and Kalamazoo Rivers, among others, on issues under NEPA, the Clean Water Act, the ESA, the Migratory Bird Treaty Act, the Grand Canyon Protection Act, CERCLA, RCRA, and other federal and state statutes and common law claims, and representations on many of the large water-driven Superfund sites across the United States. Kathy is the current president of the Leadership Council for the Environmental Law Institute in Washington, DC and a former board member of ELI, and a co-founder of the National Water Law Forum, among other board service. She was elected as a member of the American College of Environmental Lawyers in 2016.

WATER BRIEFS

CWA § 401

US

EPA ISSUES FINAL RULE

On June 1, the US Environmental Protection Agency (EPA) announced a final rule narrowing the ability of states and Indian tribes to formally object to federally permitted projects based on state or tribal water quality standards. Under Section 401 of the federal Clean Water Act (CWA § 401), states and authorized tribes can review certain proposed projects requiring federal permits to determine whether those projects will comply with state or tribal water quality standards. EPA's new rule will make it more difficult for states and authorized tribes to deny or condition their CWA § 401 "certifications."

The new rule limits what types of pollution discharges a state or authorized tribe can review for CWA § 401 certification purposes. It also: limits the amount of information that can be requested from an applicant; dramatically shortens the amount of review time states and tribes have to act on an application; and limits the conditions that states and tribes can put into 401 certifications to protect their waters from pollution.

According to EPA's press release, the new rule "clarifies the scope of Section 401, including clarifying that 401 certification is triggered based on the potential for a project to result in a discharge from a point source into a water of the United States. When states look at issues other than the impact on water quality, they go beyond the scope of the Clean Water Act."

EPA Administrator Andrew Wheeler stated: "Today, we are following through on President Trump's Executive Order to curb abuses of the Clean Water Act that have held our nation's energy infrastructure projects hostage, and to put in place clear guidelines that finally give these projects a path forward."

According to Washington State Department of Ecology Director Laura Watson: "This action is a blatant attempt to rewrite the 1972 Clean Water Act by diminishing the role of the states in protecting water quality. It makes a mockery of the federal-state partnership that has protected our nation's waters for nearly 50 years. ... This massive

federal overreach under Section 401 is unprecedented. It is also illegal and indefensible — and it will not stand."

Litigation is anticipated.

Next month's edition of *The Water Report* will include a detailed analysis of these issues.

For info: CWA § 401 website: www.epa.gov/cwa-401.

ESA FLOWS

CO

RESERVOIRS COORDINATION

Sufficient water runoff from melting mountain snowpack in Colorado River headwaters this year means that most headwater reservoirs will more than meet their storage needs. As a result, participants in the Coordinated Reservoir Operations (CROS) program have ramped-up water releases into the Colorado River to benefit four rare fishes protected under the federal Endangered Species Act (ESA). The Colorado River, where it traverses Colorado's Grand Valley, is critical to the survival of these four endangered fishes: bonytail; Colorado pikeminnow; humpback chub; and razorback sucker.

For the fifth time in the last six years, coordinated voluntary reservoir operations occurred as the Colorado River neared its natural spring runoff peak. In years with sufficient snowpack, surplus inflow is bypassed simultaneously from multiple reservoirs to boost river flow without impacting reservoir yields or future water uses. These water releases improve river conditions for the four rare Colorado River fishes. For instance, increased Colorado River flows help remove fine sediment from gravel beds in the river channel ("cobble bars"), which serve as spawning habitat for native fishes.

Beginning May 29, reservoirs increased water releases over several days. They maintained flow at a constant rate for three-to-five days, and then wound down.

Approximate release and flow amounts include:

- Green Mountain Reservoir (operated by the Bureau of Reclamation) will increase releases from approximately 350 cubic feet per second (cfs) to

around 1450 cfs.

- Williams Fork Reservoir (operated by Denver Water) currently releases around 200 cfs; this will likely increase to approximately 500 cfs over the coming week.
- Moffatt Tunnel collection system (operated by Denver Water) will bypass approximately 100 cfs of available flow, beginning May 30.
- Wolford Mountain Reservoir (operated by the Colorado River Water Conservancy District) will increase outflows from 400 to 500 cfs for approximately 3 days, starting May 30.
- Northern Colorado Water Conservancy District does not anticipate pumping water from Windy Gap Reservoir to Granby Reservoir this month, allowing for Windy Gap Reservoir inflows to continue down the Colorado River.
- Willow Creek Reservoir (operated the Bureau of Reclamation and Northern Colorado Water Conservancy District) will continue to bypass 75 cfs of reservoir inflow to support CROS and meet downstream senior water rights.

The CROS program is a partnership between owners and operators of upper Colorado River water storage systems, including: US Bureau of Reclamation, Denver Water, Colorado River Water Conservation District, and Northern Colorado Water Conservancy District (Northern Water). CROS was established in 1995 as part of the Upper Colorado River Endangered Fish Recovery Program, a public-private partnership supported by the US Fish and Wildlife Service (USFWS).

Science indicates that these collaborative conservation efforts are working. Recent scientific analyses of the humpback chub and razorback sucker suggest that these fishes could be reclassified from endangered to threatened under the ESA. Reclassification would be a major conservation milestone for local, state, federal, tribal, public and private partners across the Colorado River basin.

For info: Sara Leonard, State of Colorado: 720/ 670-0089 or sara.leonard@state.co.us

WATER BRIEFS

CONSERVATION

AZ

COLORADO RIVER / LAKE MEAD

As part of an overall \$38 million effort to bolster Lake Mead surface levels by fallowing irrigable farmland on the Colorado River Indian Reservation in western Arizona, the National Audubon Society has reached an agreement with the Arizona Department of Water Resources (ADWR) to help fund the Colorado River Indian Tribes' (CRIT) on-going efforts to conserve 150,000 acre-feet of water in Lake Mead over the next three years. The three-year deal is expected to reduce water demand and add approximately two vertical feet to Lake Mead's surface levels.

According to the agreement signed on May 21, Audubon (supported by their corporate partner Intel Corporation) will contribute to an Arizona Fund created in 2019 to incentivize the CRIT for creating up to 150,000 acre-feet of system conservation water in Lake Mead — helping to avoid precipitous declines in the Lake. The CRIT offered to forego irrigation water deliveries and fallow approximately 10,000 acres of farmland in exchange for the funding.

The fallowing/funding effort is a part of Arizona's agreement among dozens of water users, agencies, tribes and conservation groups statewide in January 2019 to address instability in the Colorado River system through the Drought Contingency Plan (DCP). After nearly 20 years of drought in the Colorado Basin, the DCP is designed to promote conservation, reduce demand, and stabilize water levels in Lake Mead through projects such as the CRIT's system conservation project.

Signed May 21, Audubon's funding contribution agreement with ADWR comes almost exactly one year after the May 20, 2019 signing of the DCP on the Observation Deck of Hoover Dam by the seven Colorado River States and the federal Department of the Interior. [See Snyder & Kowalski, *TWR* #178; Editors' Article, *TWR* #182]

The specific terms of the CRIT conservation effort were set out in an agreement by ADWR with the US Bureau of Reclamation, operator of the Colorado River system, and the CAWCD, which delivers about 1.6 million acre-feet of Arizona's 2.8 million acre-foot annual allocation to

users mainly in central and south-central Arizona.

To fund the CRIT creation of system conservation water in Lake Mead, the State of Arizona appropriated \$30 million in budget year 2019/2020. By a separate agreement, the Environmental Defense Fund (EDF) agreed to deposit \$2 million into the Fund by January 31, 2020 and use its best efforts to raise an additional \$6 million into the Fund no later than July 15, 2021.

The Audubon contribution is a part of the EDF agreement. Intel's leadership support of Audubon made this vital project possible, and also opens up opportunities to leverage additional philanthropic support later this year.

For info: Shauna Evans, ADWR, smevans@azwater.gov; or Joey Kahn, Audubon, Joey.kahn@audubon.org.

PFAS RULES

NJ

STATE SETS MCLS

On June 1, the New Jersey Department of Environmental Protection (NJDEP) officially published its adoption of stringent, health-based drinking water standards for **perfluorooctanoic acid** (PFOA) and **perfluorooctane sulfonic acid** (PFOS). These "forever" chemicals are extremely persistent in the environment and have been linked to various health problems in people. [See McKnight, *TWR* #195]

Last year, New Jersey became the first state to issue a statewide directive ordering companies to address contamination caused by the use and discharge of these chemicals. The companies named in the directive are DuPont, Chemours, 3M, and Solvay Polymers.

NJDEP formally established **maximum contaminant levels** (MCLS) of 14 parts per trillion for PFOA and 13 parts per trillion for PFOS. The rules also add these chemicals to the State's list of hazardous substances and sets these levels as formal groundwater quality standards for the purposes of site remediation activities and regulated discharges to groundwater.

PFOA and PFOS belong to a large class of synthetic chemicals known as **per- and polyfluoroalkyl** substances (PFAS). In 2018, New Jersey became

the first state to adopt an MCL for any PFAS, setting an MCL of 13 parts per trillion for **perfluorononanoic acid** (PFNA). The federal government has not established MCLs for any PFAS. To date, New Hampshire and Vermont are the only other states to advance formal drinking water standards for PFAS.

All public water systems in New Jersey must begin monitoring for PFOA and PFOS within the first quarter of 2021. If a system's finished drinking water exceeds the MCL, it will be required to take necessary protective measures such as adding treatment systems or taking wells out of service. All results of testing will be made public through federally required Consumer Confidence Reports that water systems send to customers and post to their websites.

The rules also include a provision that allows public water systems to submit monitoring data for PFOA and PFOS prior to the start of required monitoring. To date, more than 1,000 water systems have submitted PFOA and PFOS monitoring data. In addition, beginning December 1, 2021, private well owners will be required to test for PFOA, PFOS and PFNA under the requirements of the state's Private Well Testing Act, which mandates testing during real estate transactions for private residences and periodic testing for rental properties. Sites undergoing remediation in New Jersey are now also required to determine whether these contaminants have been discharged at the site and have impacted ground water. If so, remediation activities must meet the standards established in the Rule.

After the discovery of PFOA in tap water and supply wells of a public water system near DuPont's Chambers Works plant in Salem County, New Jersey became the first state to conduct statewide studies of PFAS in drinking water. As a result, NJDEP set a PFOA guidance level of 40 parts per trillion for water systems to follow. Research on environmental occurrence and human health risk assessment has been ongoing since then.

For info: Lawrence Hajna, NJDEP, 609/ 292-2994; Adopted Rule at: www.nj.gov/dep/rules/; NJDEP Drinking Water Watch website: www9.state.nj.us/DEP_WaterWatch_public/.

WATER BRIEFS

WATER SUPPLY OR

“WEST PROJECT” COMPLETED

On May 5, the Columbia Improvement District (CID) officially completed and tested the first of three regional Columbia River water supply projects. The project is known regionally and statewide as the “West Project” and its completion officially establishes the cornerstone for implementing a water supply sustainability effort over 30 years in the making. The West Project is one of three regional Columbia River water supply projects envisioned by the Northeast Oregon Water Association (NOWA) to deliver both new, mitigated Columbia River water supplies, and existing, certificated Columbia River water supplies. These projects will serve the region’s irrigated agricultural region and take pressures off over-appropriated groundwater aquifers. These projects are the first step in a multi-year effort to stabilize and recover aquifers critical to the region’s long-term economic and environmental stability.

The West Project pump test in May yielded approximately 195,000 gallons per minute or approximately 435 cubic-feet-per-second. While the project’s total pumping demand may not be measurable in the Columbia River (.2%), it is enough water to begin to fix legacy groundwater problems that have plagued the region and its irrigated agriculture land base since the first groundwater declines in 1958.

The total cost of the West Project was roughly \$34 million, of which \$4 million came from an \$11 million state funding package secured by NOWA with the rest of the package supported by private debt service and equity contributions from the region.

CID will operate the west project and own the project in partnership with the Port of Morrow who, in support of the entire region and both counties, worked with CID to ensure that, through a partnership, CID was able to access the Port’s strong bond rating and receive the lowest debt service rate possible to reach as many landowners as possible. In addition to assisting the West Project directly, the Port of Morrow at no charge to the project owners, in 2016, agreed to oversee the entire \$11 million grant award with the State of

Oregon to ensure that the projects in Umatilla County and Morrow County had adequate oversight and financial management.

For info: J.R. Cook, NOWA Director, 541/ 969-8026 or jrcook@northeastoregonwater.org; NOWA website: www.northeastoregonwater.org/columbia-river-supply-project

**SNIFFING FOR MUSSELS CA
INVASIVE SPECIES V. DOG DETECTIVES**

The US Bureau of Reclamation (Reclamation) will begin using mussel-sniffing dogs to inspect boats on the weekends this summer to help protect California’s New Melones Lake from invasive-aquatic species, such as quagga or zebra mussels. Staff will also provide training to boat owners on conducting boat inspections to reduce the invasion of aquatic species that are negatively impacting many recreational areas.

New Melones managers will not allow vessels to launch if they have been in a mussel-infested lake within the last 30 days or if it fails the vessel inspection.

Scientists and engineers call quagga and zebra mussels “biofoulers,” because they displace native species and coat and clog everything in their path. [See Bucich & Paulsen, *TWR* #126] They also clog boat motors and may clog New Melones Lake Reservoir’s pipes.

Boaters are encouraged to follow these simple guidelines when entering or leaving any water way to expedite the inspection process:

- Inspect all exposed surfaces; small mussels feel like sandpaper.
- Wash the hull of each watercraft thoroughly.
- Remove all plant and animal material.
- Drain all water and dry all areas (including the lower outboard unit).
- Clean and dry all live-wells and dispose of any unused bait in the trash.
- Empty and dry any buckets and compartments.

Reclamation encourages boaters to review California’s Division of Boating and Waterways Clean, Drain and Dry Boat Cleaning Procedures before transporting boats this summer.

For info: Mary Lee Knecht, Reclamation, 916-978-5100 or mknecht@usbr.gov; website: www.wildlife.ca.gov/Conservation/Invasives/Quagga-Mussels

FLOOD RESILIENCY OK

LEGISLATURE MANDATES PLAN

Oklahoma Senate Bill 1269 directs the Oklahoma Water Resources Board (OWRB) to develop a Statewide Flood Resiliency Plan. It was signed into law by Governor J. Kevin Stitt on May 18. In addition to the creation of a statewide flood mitigation plan, the law creates the State Flood Resiliency Revolving Fund to fund both the development of the Plan as well as future flood hazard mitigation projects. The law was requested by the OWRB as the agency responsible for long range water resources planning and management.

The Flood Plan will examine flood risks, and potential flood mitigation projects beyond the local level, along an entire runoff area within a larger watershed. The Plan will examine the need for additional flood risk information — such as flood maps — and will ultimately feature a State inventory of specific flood control infrastructure projects that will include cost-benefit analyses. Flood risk needs and assessments within watersheds could also be coordinated between communities in those watersheds.

OWRB and other hazard mitigation and infrastructure agencies — including: the Oklahoma Floodplain Managers Association; Oklahoma Emergency Management; Federal Emergency Management Agency; Oklahoma Conservation Commission; Oklahoma Department of Commerce; Oklahoma Department of Transportation; US Army Corps of Engineers; and the Natural Resources Conservation Service — have already begun initial collaboration for the plan.

In the fall of 2019, a Legislative interim study reviewed all aspects of the federal, state, and local preparation and response to the Arkansas River basin floods during the spring of 2019. Among other issues, the interim study highlighted the need to establish a coordinated plan to begin addressing Oklahoma’s hazard mitigation and infrastructure needs.

In 2019, much of Oklahoma, and especially the Arkansas River basin, experienced record flooding. Oklahoma has already experienced flooding in some areas during 2020.

For info: Cole Perryman, OWRB, cole.perryman@owrb.ok.gov

WATER BRIEFS

WOTUS CHALLENGE NM
NMED STATEMENT

On May 19, New Mexico Environment Department (NMED) Cabinet Secretary James Kenney issued the following statement after the state joined other states in asking a federal court to prevent the Waters of the US (WOTUS) rule from taking effect:

“We will not allow a rule to take effect this summer that will devastate New Mexico’s scarce and limited water resources,” Secretary Kenney said. “When it comes to protecting our surface waters, I am ready to take this fight to the courts and seek a preliminary injunction with other states. New Mexico is arguably the state with the most to lose, and my Department will do whatever it takes to prevail in protecting our most precious resource.”

The new WOTUS rule was finalized in April and is scheduled to go into effect on June 22, 2020. On May 1, 2020, New Mexico Attorney General Hector Balderas officially joined 16 other states, the City of New York and the District of Columbia in suing the federal government over the rule. On May 19, the multi-state coalition asked the court to issue a preliminary injunction to prevent the rule from going into effect nationwide while litigation on the rule’s merits continues.

According to NMED, if the new rule takes effect in New Mexico, at least 89 percent of the state’s rivers and streams and approximately 40 percent of the state’s wetlands would lose federal protection from pollution. This federal rollback of environmental protections for streams and wetlands and the resulting reductions in water quality will be devastating to wildlife and humans who are dependent on these waters for drinking water as well as cultural, recreational, and economic purposes.

For info: Maddy Hayden, NMED, 505/231.8800 or maddy.hayden@state.nm.us

CLEANUP CA
SUPERFUND SETTLEMENT

EPA has reached a \$6,521,025 settlement with 145 parties to clean up contaminated groundwater at the Omega Chemical Corporation Superfund Site in Whittier, California.

The settlement has been concluded with parties that each sent one to three tons of waste to the Omega Chemical Corporation site. This Superfund site was formerly the location of a recycling

company and is marked by extensive soil and groundwater contamination. The settlement is expected to provide funding for cleanup of approximately four miles of contaminated groundwater that extends beyond the property line and reaches the cities of Whittier, Santa Fe Springs and Norwalk, California.

EPA has incurred more than \$42 million in costs since 1999 for site cleanup. EPA has recovered more than \$27 million from potentially responsible parties through settlement agreements.

The Omega Chemical Corporation was a refrigerant and solvent recycling facility that operated between 1976 and 1991. It handled drums and bulk loads of industrial waste solvents and chemicals that were processed to form commercial products. Subsurface soil and groundwater at and around the site have high concentrations of trichloroethylene (TCE), perchloroethylene (PCE), Freons, and other contaminants. Consumption of TCE and PCE for extended periods can cause damage to the nervous system, liver and lungs and increase cancer risk.

The Omega location became a Superfund site in 1999, when it was added to the Superfund National Priorities List. Since that time EPA has overseen the removal of more than 2,700 drums as well as more than 12,500 pounds of contaminants from the soil and groundwater. This effort has included treatment of more than 30 million gallons of contaminated groundwater since 2009. Since 2010 a soil vapor extraction system has operated to address potentially harmful vapor intrusion from the Omega Site.

The settlement, announced May 21, is subject to a 30-day comment period before becoming final.

For info: Soledad Calvino, EPA, 415/972-3512 or calvino.maria@epa.gov
EPA Superfund site: www.epa.gov/superfund/omegachemical

AQUIFER RECHARGE US
CORPS INVOLVEMENT & OPPORTUNITIES

In April, the US Army Corps’ Institute for Water Resources released “*Managed Aquifer Recharge and the U.S. Army Corps of Engineers: Water Security through Resilience*” — a report on Army Corps participation and opportunities in aquifer recharge projects throughout the United States.

The Report finds that storing water underground (managed aquifer recharge (MAR)) can augment surface storage

and increase resilience of Army Corps projects. Currently, the Army Corps and its partners are using, have considered or are considering using MAR, or conjunctive management of ground- and surface water, in at least 17 states in six of the seven Corps divisions in the continental US. Federal authorities for using MAR in Army Corps projects are modest but increasing.

The Army Corps is using or considering MAR to help fulfill its primary missions of flood risk management and aquatic ecosystem restoration, and for secondary purposes such as drought resilience, water supply, and reducing saltwater intrusion. For secondary mission areas, the Corps’ role in MAR is typically to support its partners’ efforts. The Report finds that MAR can be smoothly integrated into the Army Corps’ planning process, including stakeholder engagement, reallocation studies, and forecast-informed reservoir operations.

The Report concludes that additional management flexibility provided by MAR may help address allocation conflicts triggered by new water demands or changing conditions. It finds that opportunities exist in both eastern (riparian law) and western (prior appropriation law) states.

The Report recommends that the Army Corps improve education and training of its staff, and create opportunities for intra- and inter-agency exchanges of knowledge and experience, on uses, roles, and science and engineering behind MAR. This will improve the ability of Corps staff to identify where MAR may be a management measure worthy of consideration.

The Institute for Water Resources (IWR) is an Army Corps Field Operating Activity with centers located in Alexandria, VA; Davis, CA; New Orleans, LA; Lakewood, CO; and Pittsburgh, PA. IWR was created in 1969 to analyze and anticipate changing water resources management conditions and develop methods and analytical tools to address economic, social, institutional, and environmental needs in water resources. Since its inception, IWR has been a leader in the development of strategies and tools for planning and executing Army Corps water resources and water management programs.

For info: Report available from: www.iwr.usace.army.mil

June 15 WEB Sustainable Financial Management Planning for Water Utilities Webinar, Noon - 1:00 pm EDT. Presented by Water Infrastructure & Resiliency Finance Center. For info: https://rossstrategic.zoom.us/webinar/register/WN_jX8a9wigQJONUym2R44qA	June 18 WEB Colorado River Basin Climate and Hydrology: State of the Science Webinar, Presented by Western Water Assessment: 11:00 am - Noon MDT. Register at: https://cuboulder.zoom.us/webinar/register/WN_CCP6TZimQ0SWHNzrK62-7w . For info: https://wwa.colorado.edu/events/webinars/	June 29-30 CA “REMOTE PLATFORM” EVENT Fifth Annual California Water Boards Water Data Science Symposium, Sacramento. CalEPA Headquarters. For info: www.waterboards.ca.gov/resources/data_databases	July 20-24 WEB EWRI International Low Impact Development Conference, Environmental & Water Resources Institute Event. RE: Low Impact Development (LID), Green Infrastructure (GI), Sustainable Urban Drainage Systems (SUDS) and Water Sensitive Urban Designs (WSUD). For info: www.lidconference.org/virtual
June 15-16 CO Green Infrastructure Course, Denver. EUCI Conference Center. Concepts, Planning & Implementation. For info: www.euci.com/events/	June 18-19 MI RESCHEDULED: 10/8&9/20 PFAS Litigation in the Midwest Seminar, Detroit. Southfield Town Center. For info: LawSeminarsInternational.com or www.lawseminars.com	July 1 WEB Superfund Webinar, 10:30 - Noon PDT. For info: Environmental Law Education Center, https://elecenter.com/	July 22 WEB PFAS: Messaging, Managing Risk, and Testing for Unregulated Compounds Webinar, Presented by American Water Works Association. For info: www.awwa.org/Events-Education/Events-Calendar
June 16 WEB Stormwater Planning & Your Permit: How’s That Going to Happen? - Webinar, Noon - 1:00 pm PDT. Presented by Tetra Tech Stormwater Series. For info: Dan Gariépy, 360/789-7776 or dan.gariépy@tetratech.com	June 22-23 WA VIRTUAL EVENT VIA ZOOM Tribal Consultations Seminar, Seattle. 901 Fifth Avenue Building. RE: Conducting Projects Effecting Tribal Lands. For info: www.LawSeminars.com	July 13-16 TX WEB-BASED VIRTUAL EVENT Texas Water 2020: Exhibition & Conference, Fort Worth. Fort Worth Convention Center; Texas American Water Works Association Annual Conference. For info: www.txwater.org or www.awwa.org/Events-Education/Events-Calendar	July 22-24 WY & ZOOM ZOOM WEBINAR Western States Water Council 2020 (193rd) Meeting, Cody. Holiday Inn / Buffalo Bill Village Resort. Presented by the Western States Water Council. For info: http://www.westernstateswater.org/upcoming-meetings/
June 16 WEB Effective Utility Management (EUM) Roadmap Webinar: Taking the Next Step Toward Sustainability, Presented by EPA; 1:00 pm - 3:00 pm EDT. For info: https://rossstrategic.zoom.us/webinar/register/WN_D8JptFC6SdOqjFd95uxzg	June 22-23 ND RESCHEDULED: 11/12&13/20 Bakken Oil & Gas Shale Water Management 2020: Cost-Effective Water Strategies for North Dakota Exhibition & Conference, Williston. TBD. For info: www.bakken.shale-water-management.com/?join=VR	July 14 ID Water Law for Utilities - Idaho Rural Water Assoc. Class, Twin Falls. Twin Falls County Clerk: Annex Conference Room, 630 Addison Avenue W, Ste. 103; 8:30 am - 4:30 pm. Presented by Idaho Rural Water Association and Schroeder Law Offices. For info: www.idahoruralwater.com/Training/Training/TabId/5524/PgrID/17727/PageID/3/Default.aspx	July 23-24 OR & WEB 3rd Annual Agriculture Law Seminar, Bend. McMenamin’s Old St. Francis School. Available Via Live Webcast. For info: The Seminar Group, 800/574-4852, info@theseminargroup.net or www.theseminargroup.net
June 16 WEB Water Quality Webinar, 10:30 - Noon PDT. For info: Environmental Law Education Center, https://elecenter.com/	June 23 WEB Enforcement & Compliance History Online (ECHO) Webinar, ECHO (https://echo.epa.gov). Environmental Compliance & Enforcement Questions; 1:30 - 2:30 pm EDT. For info: https://echo.epa.gov/help/training#upcoming	July 15 ID Water Law for Utilities - Idaho Rural Water Assoc. Class, Pocatello. Police Station EOC Training Room, 5205 S. 5th Street, 8:30 am - 4:30 pm. Presented by Idaho Rural Water Association and Schroeder Law Offices. For info: www.idahoruralwater.com/Training/Training/TabId/5524/PgrID/17727/PageID/3/Default.aspx	July 23-25 UT “VIRTUAL SETTING” 66th Annual Rocky Mountain Mineral Law Institute, Salt Lake City. The Grand America Hotel. For info: www.rmmlf.org/conferences
June 17 WEB Utility Risk and Resilience Assessments: “American Water Infrastructure Act — Lessons Learned from the Trenches”, Presented by American Water Works Association. For info: www.awwa.org/Events-Education/Events-Calendar	June 24 WEB Current and Emerging Technologies for PFAS Treatment and Lessons Learned Webinar, Presented by American Water Works Association. For info: www.awwa.org/Events-Education/Events-Calendar	July 16-17 Virtual Meeting Groundwater Sustainability Plans (GSPs) in California - Virtual Update, ZOOM. For info: LawSeminarsInternational.com or www.lawseminars.com	July 29 CA & ZOOM CEQA and the NEPA Re-Write Seminar, San Diego. Latham & Watkins Conference Center. For info: LawSeminarsInternational.com or www.lawseminars.com
June 17 WEB WOTUS and Maui – Parallel Developments Impact the Clean Water Act and Source Water Protection Webinar, Presented by American Water Works Association. For info: www.awwa.org/Events-Education/Events-Calendar	June 25-26 Via ZOOM VIRTUAL EVENT VIA ZOOM Water Law in Washington: 29th Annual Conference on Critical Developments, Seattle. ZOOM. For info: LawSeminarsInternational.com or www.lawseminars.com	July 16-17 Virtual Meeting Groundwater Sustainability Plans (GSPs) in California - Virtual Update, ZOOM. For info: LawSeminarsInternational.com or www.lawseminars.com	July 29-30 WEB Association of California Water Agencies (ACWA) 2020 Summer Virtual Conference: “Resilience Rising”, For info: www.acwa.com/events/2020-summer-virtual-conf/
June 18 WA RESCHEDULED: 9/17/20 Celebrate Waters Event, Seattle. Ivars Salmon House. Presented by the Center for Environmental Law & Policy. For info: www.celp.org	June 28-July 2 ND CANCELLED Western Governors’ Association 2020 Annual Meeting, Medora. TBA. For info: https://westgov.org/	July 17 ID Water Law for Utilities - Idaho Rural Water Assoc. Class, Fruitland. Fruitland Treatment Plant, 1200 NW 6th Avenue; 8:30 am - 4:30 pm. Presented by Idaho Rural Water Association and Schroeder Law Offices. For info: www.idahoruralwater.com/Training/Training/TabId/5524/PgrID/17727/PageID/3/Default.aspx	July 30-31 WEB NGWA Workshop on Groundwater in the Northwest, National Groundwater Association Presentation: Area Practitioners Share Experiences & Lessons Learned. For info: www.ngwa.org/events-and-education/ngwa-s-event-calendar

Note: Events are being rescheduled, canceled, or adapted online due to coronavirus. Check with event organizers.



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CALENDAR

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August 4-5 WEB

Texas Commission on Environmental Quality Public Drinking Water Conference, Current & Upcoming Regulations in Texas, New Technologies, & More. Free TCEQ Event. For info: www.tceq.texas.gov/drinkingwater/conference.html

August 5-6 NH

Fate of PFAS: From Groundwater to Tap Water Conference, Durham. University of New Hampshire. National Groundwater Association Event; Social Distancing Accommodated. For info: www.ngwa.org/events-and-education/ngwa's-event-calendar

August 11-12 OR & WEB

Shoreline Development & Permitting Seminar, Seaside. Seaside Civic & Convention Center, 415 First Avenue. For info: The Seminar Group, 800/574-4852, info@theseminargroup.net or www.theseminargroup.net

August 13-14 AZ

29th Annual Superconference: Arizona Water Law - Moving Forward: Development, Drought & Climate, Scottsdale. Hilton Hotel. For info: CLE International, 800/ 873-7130 or www.cle.com

August 17-18 Alberta

RESCHEDULED: 10/8&9/20
5th Annual Canadian Frac-Sand Exhibition & Conference, Calgary. For info: www.canada.frac-sand-conference.com

August 17-19 WA

StormCom Conference & Expo, Seattle. Washington State Convention Center. Advancing Stormwater Management. For info: www.stormcon.com/stormcon/375627

August 17-20 OR

Oregon Association of Water Utilities - Annual Summer Classic Conference, Seaside. TBA. For info: <https://oawu.net/training-events/annual-summer-classic-conference-seaside/>

August 18-20 CA

POSTPONED: DATE TBA
4th California Adaptation Forum 2020, Riverside. TBA. Presented by the Local Government Commission & the California Governor's Office of Planning and Research. For info: Kelsey Wolf-Cloud at kwolfcloud@lgc.org or www.californiaadaptationforum.org

August 20-21 NM

Natural Resources Damages 13th Annual Conference on Litigating NRD Cases, Santa Fe. La Fonda Santa Fe Hotel. Interactive ZOOM Webcast If Necessary. For info: Law Seminars International, 206/ 567-4490, registrar@lawseminars.com or www.lawseminars.com

August 25-26 Australia

Australian Smart Water Utilities 2020: Reducing Water Leakage Across the Network Conference, Melbourne. For info: www.australia.smart-water-utilities.com/?join=VR

August 27-28 WA & WEB

3rd Annual Water Law in Central Washington, Ellensburg. Central Washington University, 400 E. University Way. Available Via Live Webcast. For info: The Seminar Group, 800/ 574-4852, info@theseminargroup.net or www.theseminargroup.net

August 27-28 CA

Clean Water & Wetlands in California Conference, Los Angeles. DoubleTree by Hilton Downtown. Interactive ZOOM Webcast If Necessary. For info: Law Seminars International, 206/ 567-4490, registrar@lawseminars.com or www.lawseminars.com

September 1-3 TX

2020 Texas Groundwater Summit, San Antonio. Hyatt Regency Hill Country Resort. For info: <https://texasgroundwater.org/texas-groundwater-summit/>

September 9-10 MT & WEB

20th Annual Montana Water Law Seminar, Helena. Great Northern Hotel. Available Via Live Webcast. For info: The Seminar Group, 800/ 574-4852, info@theseminargroup.net or www.theseminargroup.net

September 13-16 WEB

35th Annual WaterReuse Symposium: "Reaching New Heights in Water Reuse", Moves Online. RE: Water Reuse Laws, Policy, Funding, Research, Technology, & Public Acceptance. For info: <https://wateruse.org/news-events/conferences/35th-annual-waterreuse-symposium/>

September 14-15 WA

PFAS Litigation in the Pacific Northwest Conference, Seattle. Westin Seattle Hotel. For info: Law Seminars International, 206/ 567-4490, registrar@lawseminars.com or www.lawseminars.com