Is the Verde River Protected by the Clean Water Act?

Clean Water Act jurisdiction, water quality standards & other legal miscellany.

Steve Pawlowski
Sierra Club Water Sentinels Program Coordinator
YES

Do you have any questions?
For every complex problem there is an answer that is clear, simple and wrong.
Federal Water Pollution Control Act Amendments of 1972

- More commonly known as the Clean Water Act.
- We’ve come a long way since the days when our waters were so polluted that rivers caught fire.
Primary Objective of the CWA

“...to restore and maintain the chemical, physical and biological integrity of the Nation’s waters.”

Section 101(a) of the CWA
Ambitious Clean Water Act Goals

To eliminate the discharge of pollutants into navigable waters by 1985.

(We haven’t achieved this goal yet!)
CWA Prohibits the Discharge of Toxic Pollutants

“It is the national policy that the discharge of toxic pollutants in toxic amounts be prohibited.”

Section 101(a)(3)

(Still working on this one, too.)
Interim Clean Water Act Goals

To achieve, wherever attainable, a level of water quality which provides for the protection of fish, shellfish and wildlife and provides for recreation in and on the water (by 1983).
“Fishable and Swimmable”
Maintain and protect water quality for aquatic life and wildlife
Important CWA Provisions

- Section 106: Water quality monitoring
- Section 303: Water quality standards
  Total Maximum Daily Loads
- Section 305: Water quality assessment
- Section 319: Nonpoint source pollution
- Section 402: NPDES permit program
- Section 404: Dredge and fill permit program
Navigable Waters

The provisions of the Clean Water Act apply to -

“navigable waters”
What does “navigable water” mean?
“Navigable water” includes streams navigable by canoes & kayaks

Verde River
Congress defined “navigable waters” in the Clean Water Act

“The term, ‘navigable waters,’ means the waters of the United States, including the territorial seas.”

Section 502(7) of the Clean Water Act
33 U.S.C. 1362(7)
Congress did not define “waters of the United States” in the Clean Water Act. They left the definition of “WOTUS” to EPA & the U.S. Army Corps of Engineers.
Waters of the United States
40 CFR 122.2

- Territorial seas;
- Waters subject to the ebb and flow of the tide;
- All interstate waters (including interstate wetlands);
- All other waters such as intrastate lakes, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds);
- Impoundments;
- Tributaries; and
- Adjacent wetlands.
Interstate and international waters
Traditional navigable waters in AZ

Colorado River
Impoundments of navigable waters
Tributaries
Wetlands adjacent to traditional navigable waters

- **United States v. Riverside Bayview Homes** (1985)
- 9-0 SCOTUS decision
- Court held that wetlands adjacent to traditional navigable waters were covered by the CWA.

Tavasci Marsh
The Supreme Court has created a “navigable waters” controversy.
Two SCOTUS cases
“muddy the jurisdictional waters”

- Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers (SWANCC) (2001)

- Rapanos v. United States (2006)
In a 5-4 decision, the Supreme Court held that isolated wetlands within a state were not protected by the CWA if the only basis for jurisdiction was the use of the isolated wetland by migratory birds (and there was no other connection to interstate commerce).
Rapanos

In a plurality opinion (4-1-4), four SC justices would protect only “relatively permanent” water bodies connected to traditional navigable waters under the CWA.

Justice Kennedy (the swing vote) would require a “significant nexus” to a traditional navigable water to be protected under the CWA. This nexus would have to be determined on a case-by-case basis.
Does CWA apply to small headwater streams or non-navigable tributaries?

Fossil Creek

Granite Creek
Ephemeral washes & dry rivers?
Prairie potholes? Playas?

Prairie potholes in Minnesota

Wilcox Playa
Intermittent or seasonal streams?
Losing CWA protections in Arizona

ADEQ estimates 96% of streams in Arizona are intermittent or ephemeral. They could be at risk of losing Clean Water Act protections because they are not relatively permanent, not traditionally navigable and they often do not have a “significant nexus” to a traditionally navigable water.
There have been efforts in Congress to amend the CWA to clarify its original legislative intent re: the scope of the CWA and to undo the legal uncertainty that has been caused by the SWANNC & Rapanos decisions:

- Clean Water Restoration Act [S. 787]
- America’s Commitment to the Clean Water Act [H.R. 5508]
The Congressional Fix

- Removes the confusing term, “navigable water” from the CWA.
- Replaces “navigable water” with “waters of the United States” to restore the historically broad scope of the CWA to include waters protected before the SWANNC decision (for example – isolated wetlands, small headwater streams, intermittent waters)
- Adopts a statutory definition of “waters of the U.S.” based on the current EPA definition at 40 CFR Section 122.2
The Verde River is a “water of the United States”

The Verde River is “traditionally navigable.”
The Verde River is a relatively permanent “intrastate water”
Healthy Waters Start with

WATER QUALITY STANDARDS

Water quality standards set the goals to protect rivers, streams, lakes, and wetlands in your community. You can play a role in this.

www.epa.gov/waterscience/standards
CWA Requirements for WQS

- Protect public health or welfare;
- Enhance the quality of water;
- Take into consideration the use and value of the water for public water supplies, propagation of fish & wildlife, recreational purposes, and agricultural, industrial and other purposes.
Water Quality Standards

The Clean Water Act requires ADEQ to adopt water quality standards for the Verde River. Water quality standards must:

- Consist of designated uses and water quality criteria based on those uses;
- Be adopted with public participation;
- Are subject to EPA review (EPA reviews state-adopted standards for consistency with CWA requirements.)
Triennial Review

“The State water pollution control agency…shall from time to time (but at least once each three year period beginning with the date of the enactment of the Federal Water Pollution Control Act Amendments of 1972) hold public hearings for the purpose of reviewing applicable water quality standards and, as appropriate, modifying and adopting standards.”

Section 303(c)(1)
Standards for Toxic Pollutants

Whenever ADEQ goes through a triennial review, ADEQ must adopt criteria for all toxic pollutants listed pursuant to CWA 307(a)(1) for which EPA has published national criteria recommendations.

EPA has listed 126 priority pollutants listed under 307(a)(1).
ADEQ has adopted water quality standards for the Verde River:

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Numeric Water Quality Standards

- **Arsenic**
  - DWS: 10 µg/L
  - FBC: 30 µg/L
  - A&Ww: 150 µg/L (chronic) (D)
    - 340 µg/L (acute) (D)

- **E. coli bacteria**
  - FBC: 126 cfu / 100ml (5-sample geometric mean)
    - 235 cfu / 100 ml (single sample maximum)
Narrative Water Quality Standards

A surface water shall not contain pollutants in amounts or combinations that:

- Settle to form bottom deposits that inhibit or prohibit the habitation, growth, or propagation of aquatic life...

- Are toxic to humans, animals, plants, or other organisms...

- Cause the growth of algae or aquatic plants that inhibit or prohibit the habitation, growth, propagation of other aquatic life or that impair recreational uses...
NPDES Permits

- Technology-based limits (e.g. secondary treatment for wastewater treatment plants), and

- Water quality-based effluent limits based on what is needed to achieve water quality standards of the Verde River.
What About Flow Protection?

“...the authority of each State to allocate quantities of water shall not be superseded, abrogated or otherwise impaired by this Act....nothing in this Act shall be construed to supersede or abrogate rights to quantities of water which have been established by any State.”

Section 101(g)

Water Sentinel sampling on the Upper Verde River
Can Clean Water Act be used to regulate ground water withdrawal?

NO
What about protection of groundwater under the CWA?

- Groundwater is protected for drinking water purposes under state law, not the CWA.

- Arizona adopted aquifer water quality standards (AWQS) for groundwater.
Aquifer Protection Permit (APP)

- APP program regulates discharge of pollutants to groundwater.
- Technology-based requirements (BADCT)
- Comply with AWQS at a point of compliance in the aquifer.
Reclaimed Water Quality Standards

- Reclaimed Water Quality Standards
  A+, A, B+, B, and C

- Apply to “direct reuse” of reclaimed water

- Would not be used to regulate groundwater recharge projects
Direct Reuse

- Landscape irrigation - B
  - Golf courses, parks, schoolyards
- Food crop irrigation - A
- Snowmaking - A
- Landscape impoundments - B
- Recreational impoundments - A
- Dust control - B
- Toilet flushing - A
Reclaimed Water Quality Standards

Don’t apply to ground water recharge projects
  - (AWQS and APP apply)

Don’t apply to discharges to “waters of the United States”
  - (WQS and AZPDES permits apply)