New Mexico Environment Department

How Natural and Nature-Based Features (NNBF) can Support NMED Programs & How NMED Programs can Support NNBF.

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NMED-Surface Water Quality Bureau-Watershed Protection Section

May 7th & 8th, 2025

Mission Statement

- NMED's mission is to protect and restore the environment and to foster a healthy and prosperous New Mexico for present and future generations.
  - **NMED-Surface Water Quality Bureau preserves, protects, and improves New Mexico's surface water quality for present and future generations.**

How Natural and Nature-Based Features Support NMED Programs

NNBFs support:

- CWA Section 401
- Antidegradation Policy
- Water Quality Standards

CWA Section 401

- Clean Water Act Section 401. (a)(1) "*Any applicant for a Federal license or permit to conduct any activity including, but not limited to, the construction or operation of facilities, which may result in any discharge into the navigable waters,* ***shall provide the licensing or permitting agency a certification from the State*** *in which the discharge originates or will originate, or, if appropriate, from the interstate water pollution control agency having jurisdiction over the navigable waters at the point where the discharge originates or will originate, that any such discharge will comply with the applicable provisions of sections 301, 302, 303, 306, and 307 of this Act*."
  - 301 and 302 – Related to Developing Effluent Limits for Discharge Permits
  - 303 – Water Quality Standards requirements; List of Impaired Waters; TMDLs
  - 306 and 307 – New Source Performance Standards, Pretreatment Standards, and Toxic Effluent Standards

Antidegradation

- The Federal Antidegradation Policy at 40 CFR 131.12(a) requires states to adopt an antidegradation policy.
- New Mexico's Antidegradation Rule is at 20.6.4.8 NMAC and Policy is in Appendix A of NM's Water Quality Management Plan.
  - "Dredge or Fill permits are often used for temporary construction measures in or near a watercourse that may result in disturbance or deposition of sediments in the water. The primary tool for limiting the discharge of pollutants (e.g., sediment and contaminated sediment) from these activities is through **certification conditions mandating the installation and operation of BMPs that prevent pollutant transport to a watercourse and thereby degradation**."

Water Quality Standards (20.6.4 NMAC)

- **20.6.4.13.J NMAC:** Turbidity attributable to other than natural causes shall not reduce light transmission to the point that the normal growth, function, or reproduction of aquatic life is impaired or that will cause substantial visible contrast with the natural appearance of the water. Activities or discharges shall not cause turbidity to increase more than 10 NTU over background turbidity when the background turbidity, measured at a point immediately upstream of the activity, is 50 NTU or less, nor to increase more than twenty percent when the background turbidity is more than 50 NTU. However, limited-duration turbidity increases caused by dredging, construction or other similar activities may be allowed provided all practicable turbidity control techniques have been applied and all appropriate permits, certifications and approvals have been obtained.

https://www.env.nm.gov/surface-water-quality/dredgeandfillactivities/

Phone: 505-827-2855 | 1-800-219-6157 | Environmental Emergencies: 505-827-9329 (24 hours)

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Watershed Protection

The **US Army Corps of Engineers** (USACE) administers a regulatory program to implement Section 10 of the Rivers and Harbors Appropriation Act and Section 404 of the Clean Water Act. The USACE-Albuquerque District authorizes the discharge of dredged or fill material within Waters of the United States which include certain wetlands, lakes, and streams. If you plan to work in a surface waterbody, contact the Regulatory Division of the USACE-Albuquerque District to determine whether you need such permit coverage.

Under Section 401, the CWA provides States or Tribes the opportunity to certify 404 permits. In New Mexico, this certification process depends on where your project is located and the kind of permit the USACE will use. If your project is on non-Tribal lands within New Mexico, then SWQB is probably the 401 certifying authority. The SWQB Mapper can help identify Tribal lands.

SWQB's § 401 certification ensures that the federal permit is consistent with State law and otherwise complies with Water Quality Standards (20.6.4 NMAC), the Water Quality Management Plan/Continuing Planning Process (WQMP/CPP) including Total Maximum Daily Loads (TMDLs), and the current Antidegradation Policy. SWQB generally certifies § 404 permits conditionally, meaning that we certify the permit if those conditions are followed.

See the attached 401 Contact Map to find the NMED contact for your county.

Key Dredge and Fill Permit documents

- How to obtain a CWA Section 404 permit and Section 401 water quality certification
- 2022 CWA Section 401 Expedited Water Quality Certification for the 13 Nationwide Permits
- 2021 CWA Section 401 Water Quality Certification for the 41 Nationwide Permits
- 401 public notices
- USACE Regulatory Program and Permits
- State of New Mexico-Federal permit certification regulations 20.6.2.2002 NMAC

401 Certification *with Conditions* for the 2021 Nationwide Permits

Condition 3. Best Management Practices

- Scheduling
- Crossings
- Diversions
- Heavy Equipment
- Fuel
- Construction Materials
- Demolition Activities
- Trenching
- Dewater Discharges
- Dust Control
- Erosion Control
- Wetlands
- Post-construction Stabilization

NNBFs that incorporate wetlands and re-vegetation/post-construction stabilization into the project design support CWA 401 compliance.

401 Certification *with Conditions* for the 2021 Nationwide Permits

Condition 5. Low Impact Development

When the discharge of fill material results in the replacement of wetlands or waters of the U.S. with impervious surfaces, **the Project Proponent shall select and implement low impact development practices (e.g. native landscaping, bioretention and infiltration techniques, and constructed green spaces) to the extent practicable.** More information including low impact concepts and definitions is available at: https://www.epa.gov/nps/urban-runoff-low-impact-development.

- "The percentage of impervious area at which degradation of water quality begins is varied, ranging from 4–5% to 10–12% (USEPA Office of Water, Recovery Potential Metrics Summary Form, Watershed Percent Impervious Cover)."
- Natural and Nature-Based Features (NNBF) that incorporate LID principles support CWA 401 compliance.

401 Certification *with Conditions* for the 2021 Nationwide Permits

Specific Condition for NWP-14 Linear Transportation Projects –NMED certifies this NWP subject to the General Conditions above and with the following permit-specific conditions:

Structures and culverts at stream crossings must allow for the passage of sediment, bedload, woody debris, aquatic life, and prevent erosion problems such as headcuts, incision, bank erosion, and the diversion of the stream from its natural channel during flood events. The Project Proponent shall *consider* options that minimize disturbance and allow for uninterrupted flow such as low water crossings instead of culverts (for low standard rural roads), bottomless arch culverts, and spans that preserve bank full geometry, depending on site characteristics and level of service needs.

- Natural and Nature-Based Features (NNBF) that maintain form and function (i.e. preserve bank full geometry) support CWA 401 specific conditions.

401 Certification *with Conditions* for the 2021 Nationwide Permits

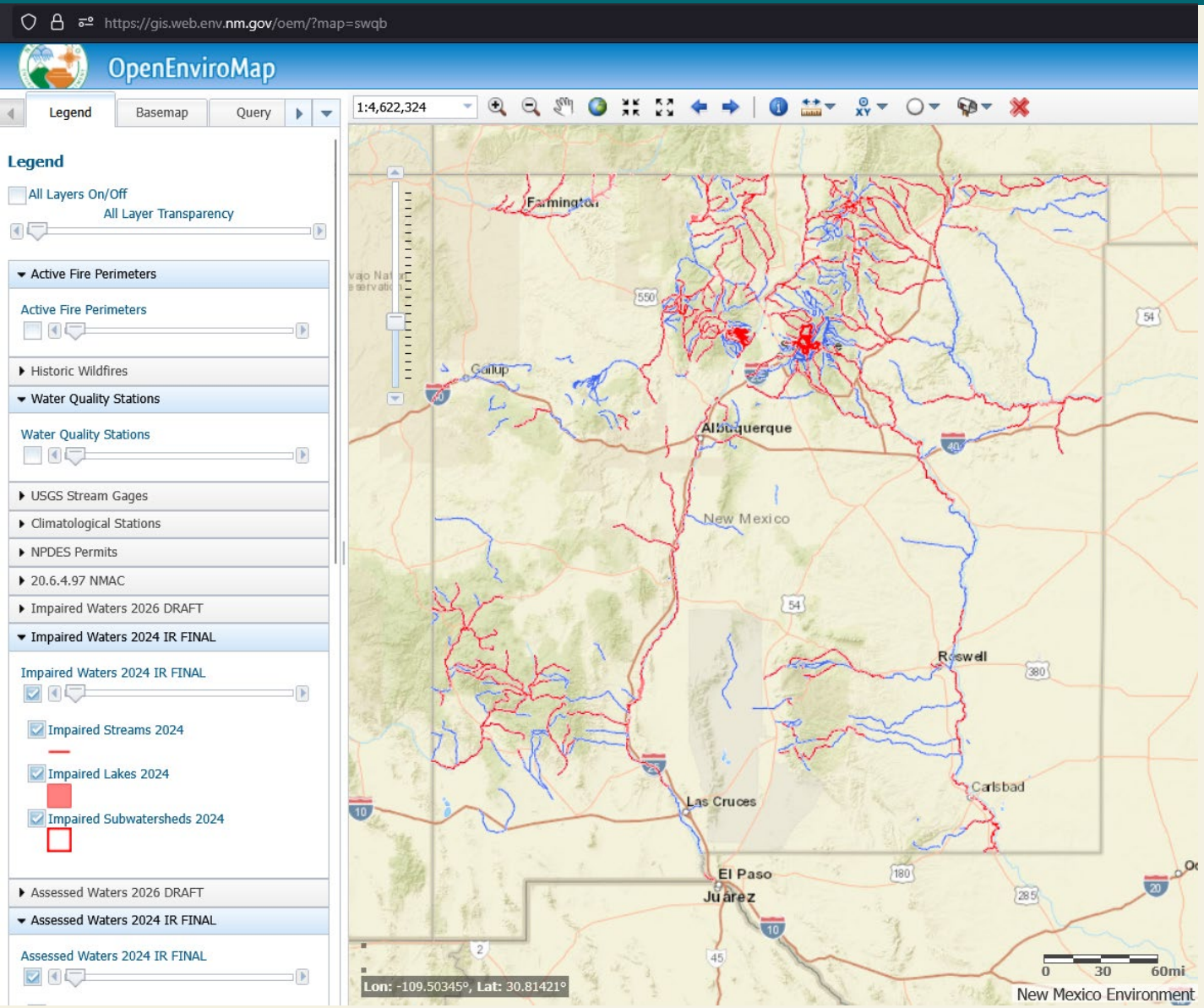
Specific Denial for NWP-13 Bank Stabilization

NMED denies Certification for bank stabilization projects that use concrete, soil cement, or other materials to line channels either partially or wholly with impervious surfaces. In these cases, the Project Proponent must apply to NMED for an Individual Certification pursuant to 20.6.2.2002 NMAC. NMED strongly recommends that all bank stabilization projects involve either the sole use of native vegetation or other bioengineered design techniques (e.g., willow plantings, root wads, large woody debris, etc.) or alternatively, a combination of hard-armoring (e.g., rock) and native vegetation or bioengineered design techniques.

- Natural and Nature-Based Features (NNBF) that incorporate bioengineering principles are *not* denied certification.

2024 Impaired Waters

https://gis.web.env.nm.gov/oem/?map=swqb



Over 45% of assessed surface waters in New Mexico listed as impaired because they fail to meet water quality standards.

2024 Impaired Waters

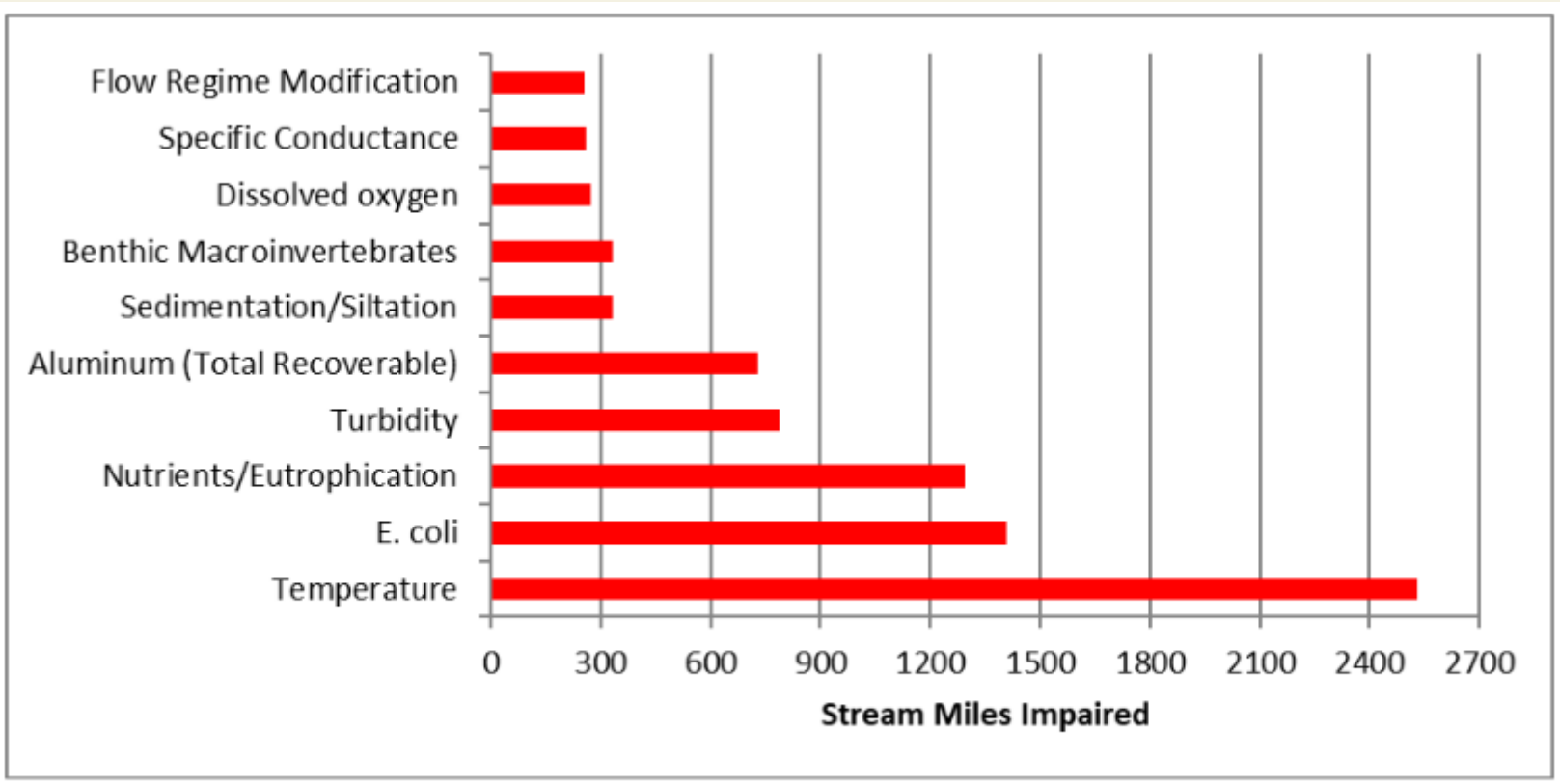


Figure 16. Top Causes of Surface Water Impairment for Rivers and Streams

List of Probable Sources of Impaired Waters from NM's TMDLs

Drought related, wildfire related, urban runoff/storm sewers, flow alterations from water diversions/groundwater withdrawals, hydromodifications, dam impoundment, agriculture, municipal, land development (site clearance), residences/buildings, roads, bridges/culverts/RR crossings, off-road vehicles, municipal point source discharges, industrial discharges, aquaculture, septic systems, rangeland/riparian grazing, livestock feed operation, silviculture harvesting, resource extraction, streambank modifications/destabilization, habitat modification, removal of riparian vegetation, loss of riparian habitat, pavement/impervious surfaces, inappropriate waste disposal, stream channelization, dumping/garbage/trash/litter, hiking trails/recreation, waste from pets, waterfowl, wildlife, natural sources, mass wasting, source unknown.

Natural and Nature-Based Features (NNBF) can minimize potential impacts and support New Mexico's water quality!

How NMED Programs Support Natural and Nature-Based Features

- River Stewardship Program
- CWA Section 319

River Stewardship Program

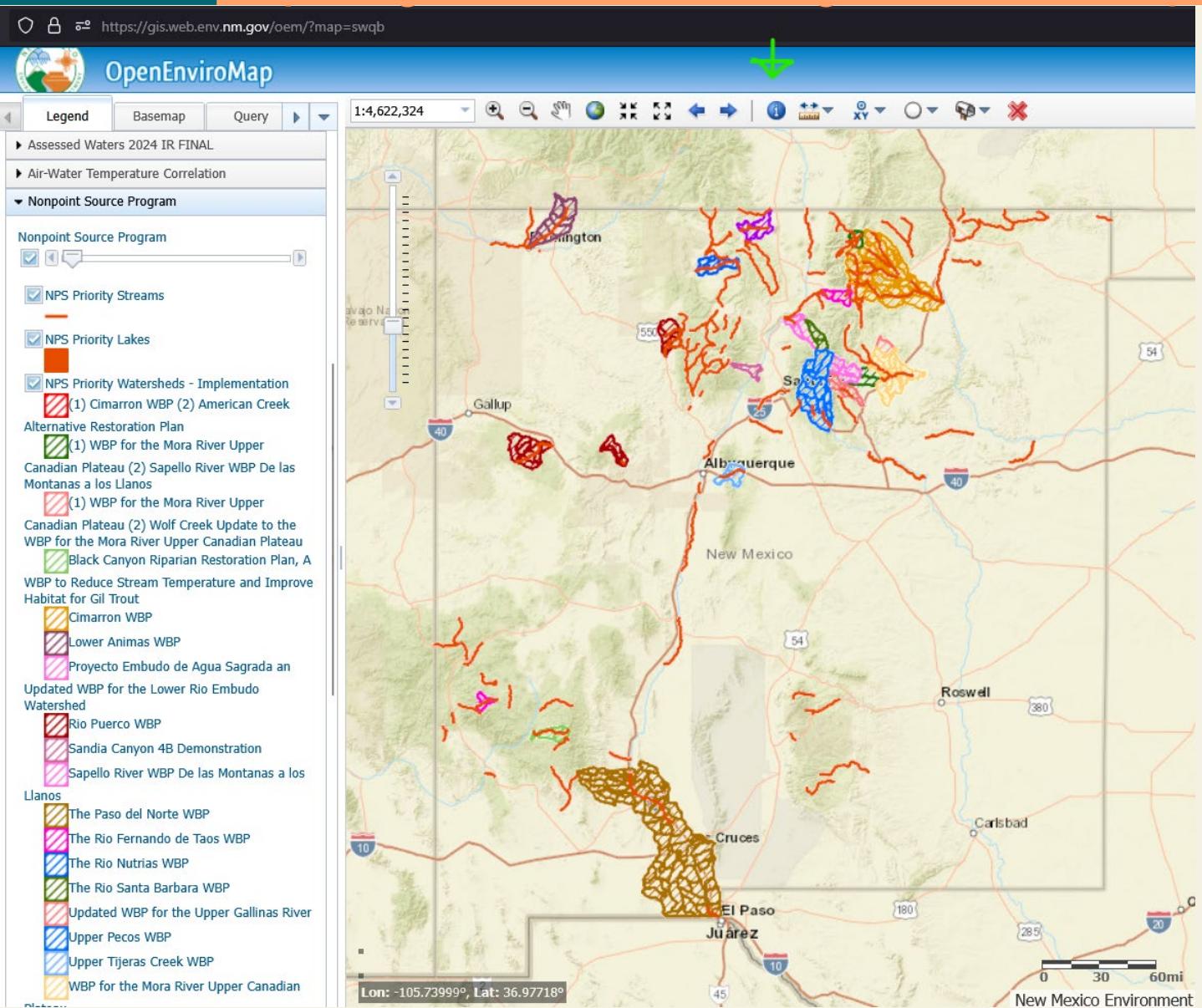
- NMED provides ~$2.25 million annually from New Mexico legislative appropriations to fund projects that improve surface water quality and/or river habitat statewide.
- Current RFP open until May 20th (approximately $6.5 m)
  - https://www.env.nm.gov/surface-water-quality/river-stewardship-program/
- A Natural and Nature-Based Features (NNBF) project that is designed to improve river habitat and water quality would be eligible for RSP funding.

CWA Section 319

- NMED is responsible for implementing New Mexico's Nonpoint source Management Plan under CWA Section 319.
- NMED receives federal funding and awards federal funds to projects (~$1.3 m annually) that develop Watershed-Based Plans (WBP) or implement projects that have been identified in WBPs.
- Many WBPs address temperature, E. coli and sediment impairments. NNBF projects that restore ecological functions, reconnect floodplains, restore incised channels, and support riparian vegetation may be eligible for 319 funding if such projects are identified in a WBP.

CWA Section 319

https://gis.web.env.nm.gov/oem/?map=swqb



"info" tool can click on any HUC12 to bring up the WBP link.

Red lines are priority streams that do not yet have a WBP

More 319 info: https://www.env.nm.gov/surface-water-quality/wbp/

Thank you!

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