



# New Mexico Environment Department

## Upper Rio Grande Watershed TMDLs

Final Approval and Incorporation into the State's Water Quality Management Plan  
of the Total Maximum Daily Loads (TMDLs)

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Water Quality Control Commission Meeting, October 11, 2022





# Federal Clean Water Act (CWA) (33 U.S.C. 1251, *et seq.*)

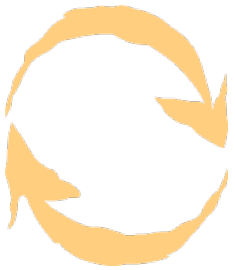
- The purpose of the CWA is to “restore and maintain the chemical, physical, and biological integrity of the Nation’s waters” in order to reach a level of water quality that “provides for the protection and propagation of fish, shellfish, and wildlife, and provides for recreation in and on the water.” 33 U.S.C. § 1251(a).
- Section 303(d) of the CWA requires states to develop TMDLs. *See also* NMSA 1978, § 74-6-4(B).





# Framework for Restoring Polluted Waters

Problem Identification



Problem Solving

Develop Water Quality Standards

Monitor and Assess Waterbodies

List Impaired Waters (303d list)

Develop TMDL

Issue/Revise  
Point Source Permits

National Pollutant Discharge  
Elimination System (NPDES)

Minimize  
Non-Point Sources

Best Management Practices (BMPs)





# Total Maximum Daily Loads (TMDL)

- A **TMDL** is the maximum amount of a pollutant that can enter a stream without causing an impairment (exceedance of the water quality standard).
- **TMDL** = WQS x Critical Flow x CF

**WQS** = Water Quality Standard

**Critical Flow** = the critical condition for receiving-water flow

**CF** = conversion factor to a daily load





# Total Maximum Daily Loads (TMDL)

- A TMDL document is a water quality plan that establishes specific goals to meet water quality standards and includes\*:
  - Pollution reduction estimates; and
  - Information and suggestions leading to the development of Watershed Based Plans which discuss control measures to protect the chemical, physical, and biological integrity of the waterbody.

\*Per 40 CFR Part 30 and EPA Guidelines for Reviewing TMDLs Under Existing Regulations Issued in 1992



# TMDL Allocations

$$\text{TMDL} = \text{LA} + \text{WLA} + \text{MOS}$$

*(MOS is the authorized margin of safety to account for uncertainty)*

**Load Allocation (LA)** is pollution from any non-discrete source and is addressed through BMPs.



**Waste Load Allocation (WLA)** is pollution from a known, confined source and is controlled through NPDES permits.





# General Requirements for TMDL Approval

- 40 CFR Section 130.6 requires New Mexico to incorporate TMDLs into the Statewide Water Quality Management Plan (WQMP) after EPA approval.
- TMDLs are subject to public review as outlined in the Continuing Planning Process (CPP) (*see* 40 CFR 130.7(e)(1)(ii)).
  - Public participation requirements are outlined in Section XIV of New Mexico's WQMP-CPP.



# 2022 UPPER RIO GRANDE TMDLs

## TOTAL RECOVERABLE ALUMINUM

Costilla Creek (Diversion above Costilla to Comanche Creek)

LaBelle Creek (Comanche Creek to headwaters)

North Fork Tesuque Creek (Tesuque Creek to headwaters)

Rio Medio (Rio Frijoles to headwaters)

Rio Quemado (Rio Arriba County boundary to headwaters)

Rio Quemado (Santa Cruz River to Rio Arriba County boundary)

Santa Cruz River (Santa Clara Pueblo boundary to Santa Cruz Dam)

Santa Cruz River (Santa Cruz Reservoir to Rio en Medio)

Vidal Creek (Comanche Creek to headwaters)





# 2022 UPPER RIO GRANDE TMDLs

## *E. coli*

Grassy Creek (Comanche Creek to headwaters)

LaBelle Creek (Comanche Creek to headwaters)

Rio Quemado (Rio Arriba Cnty bnd to headwaters)

Ute Creek (Costilla Creek to headwaters)

Vidal Creek (Comanche Creek to headwaters)

## Plant Nutrients

Fernandez Creek (Comanche Creek to headwaters)

Rio Pueblo de Taos (Arroyo del Alamo to R Grande del Rancho)



# 2022 UPPER RIO GRANDE TMDLs

## SEDIMENTATION

LaBelle Creek (Comanche Creek to headwaters)

Rio Chupadero (USFS boundary to headwaters)

Rio en Medio (Aspen Ranch to headwaters)

## SPECIFIC CONDUCTANCE

Rio Fernando de Taos (Tienditas Creek to headwaters)

Rio Fernando de Taos (UFSF boundary at Canyon to Tienditas Creek)

Rio Fernando de Taos (Rio Pueblo d Taos to USFS Boundary at Canyon)



# 2022 UPPER RIO GRANDE TMDLs

## TEMPERATURE

Grassy Creek (Comanche Creek to headwaters)

Rio Grande (Ohkay Owingeh boundary to Embudo Creek)

Rio Grande (Santa Clara Pueblo boundary to Ohkay Owingeh boundary)

Rio Medio (Rio Frijoles to headwaters)

Rio Nambe (Nambe Pueblo boundary to headwaters)

Santa Cruz River (Santa Cruz Reservoir to Rio en Medio)



# 2022 UPPER RIO GRANDE TMDLs

## TURBIDITY

Chuckwagon Creek (Comanche Creek to headwaters)

Placer Creek (Red River to headwaters)

Red River (Rio Grande to Placer Creek)

Rio Frijoles (Rio Medio to Pecos Wilderness)

Rio Medio (Rio Frijoles to headwaters)

Rio Pueblo de Taos (Rio Grande to Arroyo del Alamo)

Sanchez Canyon (Costilla Creek to headwaters)





# Public Participation Process

- The public participation process was followed according to requirements outlined in the CPP.
- Public notice of the Upper Rio Grande Watershed TMDL was published on the SWQB website on June 10, 2022.
- The notice was also sent to the 1,908 email addresses on the SWQB GovDelivery email list on June 13, 2022.
- The 30-day public comment period started June 13, 2022 and ended July 13, 2022.
- The TMDL was made available for public review via the SWQB website and upon request.



# Upper Rio Grande Watershed TMDL – Public Meetings

- NMED hosted two virtual public meetings via WebEx on Wednesday, June 15, from 2:30-4:00 pm and 5:30-7:00 pm.
- A total of 11 stakeholders attended the two meetings.
- There were few comments during the meeting. A question was asked about critical flow determination. NPDES permit questions were asked and addressed by SWQB permit staff. SWQB was thanked for our presentation.



# Public Comments Received

SWQB received three sets of public comments from:

- Amigos Bravos
- GEI Consultants, on behalf of Chevron Mining, Inc.
- NM Department of Agriculture



# Changes to Public Comment Draft

- ❑ SWQB changed some text in the Executive Summary, Background, Future Growth and Implementation sections of the report, in response to public comment.
- ❑ Section 12 (Public Participation) was updated to include the date and times of the public meetings and to reference the Appendix containing SWQB responses.
- ❑ SWQB replaced the list of Threatened and Endangered Species in the project area, based on public comment.





# Final Draft TMDL Publication

- On September 29, 2022, SWQB made the final TMDL draft available to the public and WQCC via posting on the SWQB TMDL website page- (<https://www.env.nm.gov/surface-water-quality/tmdl>)
- NMED's Office of General Counsel reviewed the TMDL to ensure compliance with applicable state and federal laws.
- SWQB Recommendation: ***Approve and Incorporate the TMDL as proposed.***



# TMDL Next Steps

- If the TMDL is approved by the NM WQCC, the signed Order will be posted to the SWQB website.
- A letter requesting TMDL approval and approval of the update to the NM WQMP/CPP will be sent to EPA Region 6 along with the signed WQCC Order.
- Once final approval is received from EPA Region 6, the EPA approval letter and Final TMDL will be posted to the SWQB website.



# SWQB and TMDL Contacts

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