New Mexico Environment Department

UPDATE

DISCHARGER-SPECIFIC NUTRIENT TEMPORARY STANDARD FOR THE CITY OF RATON WASTEWATER TREATMENT PLANT

NMED – Surface Water Quality Bureau
Water Quality Control Commission Meeting
May 13, 2025

Topics for Today's Update

- Background on Nutrients
- What is a Temporary Standard?
- History of Raton Temporary Standard
- Re-Evaluation of Temporary Standard
- NMED Recommendation

Watershed Priorities
New Mexico Environment Department

Nutrients are a leading cause of impairment in NM streams and rivers

Legend

- Impaired Streams
- Assessed Waters
- Priority Watersheds
- County

Miles

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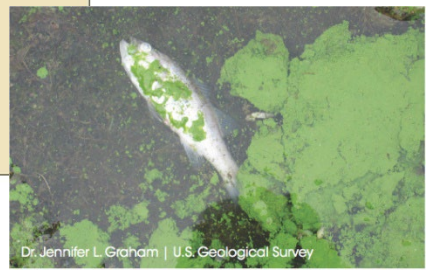

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Applicable In-Stream Threshold Values

"Plant nutrients from other than natural causes shall not be present in concentrations which will produce undesirable aquatic life or result in a dominance of nuisance species in surface waters of the state."
20.6.4.13(E) NMAC

- Doggett Creek is an effluent-dominated stream
- Average catchment slopes are < 15%
- Not in "volcanic" geology site

	TN (mg/L)			TP (mg/L)		
	TN Flat	TN Moderate	TN Steep	TP High-Volcanic	TP Flat-Moderate	TP Steep
Threshold	**0.69**	0.42	0.30	0.105	**0.061**	0.030

Temporary Standards in NM

- Temporary standard (NM) = WQS variance (federal)
  - 20.6.4.10(F) NMAC
  - 40 CFR § 131.14
- A **time-limited** designated use and criterion
  - for a specific pollutant(s) or water quality parameter(s)
  - that reflects the highest attainable condition during the term of the temporary standard.
- A regulatory mechanism that **allows progress toward attaining underlying designated use and criterion** that is not currently attainable and helps address nutrient management to achieve significant nutrient reductions.
- A temporary standard is a change to the WQS and provides an **adaptive management approach** to address excess nutrients.

History of Raton & Doggett Creek

Doggett Creek has been impaired for nutrients since the mid- to late 1990's.

- NMED drafted a TMDL in 2011, but it was tabled due to concerns that the wasteload allocation for the Raton WWTP would be unachievable and NMED was directed to work with the NM Municipal League to develop alternative limits.
- The workgroup devised a strategy for alternative limits in NPDES permits; however, EPA struggled with the idea because there was no regulatory mechanism to require EPA to incorporate the alternative limits into permits.
- NM incorporated a temporary standard provision into the WQS in 2017 to provide a regulatory mechanism for alternative effluent limits.
- **The WQCC and EPA approved the Raton Wastewater Treatment Plant discharger-specific nutrient temporary standard in 2020.**

NMED + NMML + EPA R6 + WQCC

20.6.4.318 CANADIAN RIVER BASIN: Doggett creek.

A. Designated uses: Warm water aquatic life, livestock watering, wildlife habitat and primary contact.

B. Criteria: The use-specific criteria in 20.6.4.900 NMAC are applicable to the designated uses, except that the following site-specific criteria apply: the monthly geometric mean of E. coli bacteria 206 cfu/100 mL or less, single sample 940 cfu/100 mL or less.

C. Discharger-specific temporary standard:

(1) Discharger: City of Raton wastewater treatment plant

(2) NPDES permit number: NM0020273, Outfall 001

(3) Receiving waterbody: Doggett creek, 20.6.4.318 NMAC

(4) Discharge latitude/longitude: 36° 52' 13.91" N / 104° 25' 39.18" W

(5) Pollutant(s): nutrients; total nitrogen and total phosphorus

(6) Factor of issuance: substantial and widespread economic and social impacts (40 CFR 131.10(g)(6))

(7) Highest attainable condition: interim effluent condition of 8.0 mg/L total nitrogen and 1.6 mg/L total phosphorus as 30-day averages. The highest attainable condition shall be either the highest attainable condition identified at the time of the adoption, or any higher attainable condition later identified during any reevaluation, whichever is more stringent (40 CFR 131.14(b)(1)(iii)).

(8) Effective date of temporary standard: This temporary standard becomes effective for Clean Water Act purposes on the date of EPA approval.

(9) Expiration date of temporary standard: no later than 20 years from the effective date.

(10) Reevaluation period: at each succeeding review of water quality standards and at least once every five years from the effective date of the temporary standard (Paragraph (8) of Subsection H of 20.6.4.10 NMAC, 40 CFR 131.14(b)(1)(v)). If the discharger cannot demonstrate that sufficient progress has been made the commission may revoke approval of the temporary standard or provide additional conditions to the approval of the temporary standard. If the reevaluation is not completed at the frequency specified or the Department does not submit the reevaluation to EPA within 30 days of completion, the underlying designated use and criterion will be the applicable water quality standard for Clean Water Act purposes until the Department completes and submits the reevaluation to EPA. Public input on the reevaluation will be invited during NPDES permit renewals or triennial reviews, as applicable, in accordance with the State's most current approved water quality management plan and continuing planning process.

(11) Timeline for proposed actions. Tasks and target completion dates are listed in the most recent, WQCC-approved version of the New Mexico Environment Department, Surface Water Quality Bureau's "Nutrient Temporary Standards for City of Raton Wastewater Treatment Plant, NPDES No. NM0020273 to Doggett Creek."

Discharger-Specific Temporary Standard for the City of Raton Wastewater Plant

Highest Attainable Condition for Raton WWTP:

- 8.0 mg/L Total Nitrogen
- 1.6 mg/L Total Phosphorus
- 30-Day Averages

Expiration date of Temporary Standard:

- No later than 20 years from the effective date (July 24, 2040)

Re-evaluation period: at least once every five years from the effective date (July 2025). Public input on the re-evaluation will be invited during NPDES permit renewals or triennial reviews.

If Raton cannot demonstrate that sufficient progress has been made the Commission may (1) revoke approval of the temporary standard or (2) provide additional conditions to the approval of the temporary standard, which may require a rulemaking.

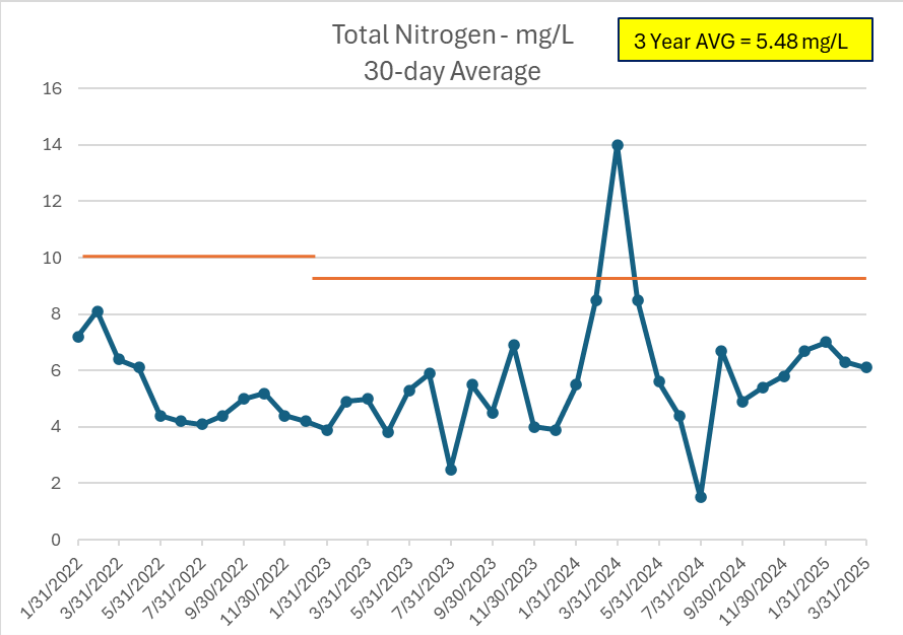
Re-Evaluation of Temporary Standard

- ✓ 6,885 people (2010)
- ✓ 6,041 people (2020)
- ✓ 5,978 people (2023)
- ✓ Approximately 40% White and 60% Hispanic
- ✓ Median age 44.8 (compared to 39.2 for NM as a whole).
- ✓ MHI = $52,007 (compared to statewide MHI of $62,125 and national MHI of $80,610)
- ✓ About 20% in poverty

- ❑ Since 2010, **Raton's population has been declining**.
- ❑ **Wages for jobs in Raton are generally lower** than wages in the state as whole.
- ❑ **Annual sewer rates would increase** from $400, or 0.8% MHI, currently to $1,430, or 2.8% MHI, with reverse osmosis.
- ❑ Almost all households and businesses in the community pay for wastewater treatment. **An increase in wastewater treatment rates would apply to almost the entire community.**

Requiring the City of Raton WWTP to meet the existing, in-stream nutrient thresholds would still cause **substantial and widespread economic and social impact.** **UNCHANGED**

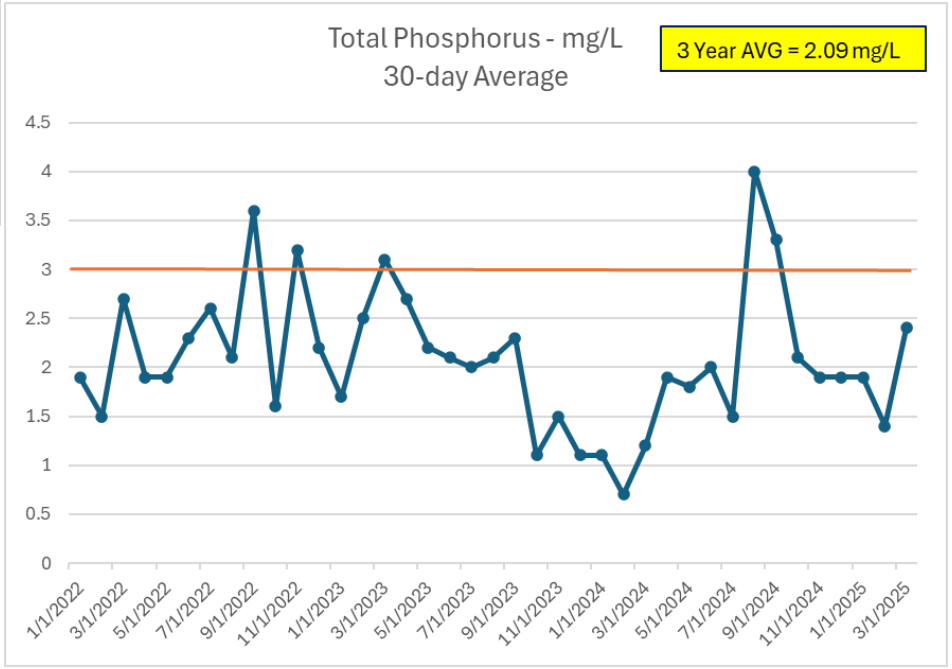
Re-Evaluation: Highest Attainable Condition



Pollutant Parameter	Highest Attainable Interim Effluent Condition (mg/L)
Total Nitrogen (TN)	5.0, long-term average; 8.0, 30-day average
Total Phosphorus (TP)	1.0, long-term average; 1.6, 30-day average

UNCHANGED

- The HAC is expressed as the "interim effluent condition that reflects the greatest pollutant reduction achievable."
- The HAC for Raton WWTP (NPDES permit no. NM0020273) is represented by the target effluent concentrations (TECs).



Implementation Schedule – PHASE 1, 10 Years Coagulation for Phosphorus Removal

Task	Target Completion Date
NPDES Permit Application/Renewal - Continued Optimization Efforts of Existing System - PER for SBR Upgrades to Achieve Nutrient Removal Goal - Pilot Testing of Coagulation - Zero Discharge Feasibility Study	January 2020 – January 2023
- Funding Applications - Zero Discharge Feasibility Study - continued	January 2023 – January 2025
NPDES Permit Application/Renewal - Evaluate Nutrient Temporary Standard Progress incl. Zero Discharge - Pilot Testing of Coagulation continued (revised) - Complete Final Phase 1 Design - Funding Applications continued (revised) - Bidding & Contract Award - Construction Completion of Phase 1 & Start Up	January 2025 – January 2029
- Optimization of New Processes - Evaluate Process Changes - Review & Evaluate PER Goals/Objectives and Plans	January 2029 – January 2030

Implementation Schedule – PHASE 2, 10 Years Aeration control upgrades for Nitrogen Removal

Task	Target Completion Date
NPDES Permit Application/Renewal - Evaluate Nutrient Temporary Standard Progress - Design Phase 2 (aeration control upgrade for nitrogen removal)	January 2030 – January 2031
- Pursue Funding - Complete Final Phase 2 Design	January 2031 – January 2032
- Bidding & Contract Award - Construction of Phase 2 - Construction Completion & Start Up	January 2032 – January 2035
NPDES Permit Application/Renewal - Evaluate Nutrient Temporary Standard Progress - Optimization of New Processes - Evaluate Process Changes - Review & Evaluate PER Goals/Objectives and Plans	January 2035 – January 2037
- Continued Optimization - Evaluate Nutrient Temporary Standard Progress End of Temporary Standard and End of Facility Life	January 2037 – January 2040

Recommendations

NMED concludes that progress has been made by the City of Raton and nutrient concentrations are decreasing but are not at the levels required of the temporary standard.

1. Therefore, NMED does not recommend revoking the temporary standard.
2. NMED recommends the discharger-specific temporary standard for the City of Raton WWTP to remain as written and approved in 20.6.4.318 NMAC.
3. NMED recommends approving the updated Proposed Actions and Implementation Schedule recommended by the City, which NMED can update in Table 7 of the Bureau's "Nutrient Temporary Standards for City of Raton Wastewater Treatment Plant, NPDES No. NM0020273 to Doggett Creek" as referenced in 20.6.4.318(C)(11) NMAC.

Recommendations

If the Commission approves “no changes” other than the *Proposed Actions and Implementation Schedule*, NMED will submit the re-evaluation of the temporary standard to EPA.

If the Commission approves changes or additional conditions or revokes the temporary standard, NMED will incorporate those changes into the upcoming Triennial Review.

Questions?

Surface Water Quality Bureau

www.env.nm.gov/surface-water-quality/