2024-2026
State of New Mexico
Clean Water Act
§303(d)/§305(b)
Integrated Report

Appendix C

Response to Comments

Prepared by:
New Mexico Environment Department
Surface Water Quality Bureau
1190 St. Francis Drive
Santa Fe, New Mexico 87505
https://www.env.nm.gov/surface-water-quality/

RESPONSE TO COMMENTS

ON THE
2024-2026 STATE OF NEW MEXICO
CLEAN WATER ACT
§303(d)/§305(b)
INTEGRATED LIST OF ASSESSED SURFACE WATERS

February 23, 2024

Table of Contents

SUMMARY OF CHANGES TO THE DRAFT 2024-2026 INTEGRATED LIST DUE TO SOLICITED PUBLIC COMMENTS AND/OR DUE TO ADDITONAL STAFF REVIEW DURING THE COMMENT PERIOD: 2

COMMENT SET 1 – Amigos Bravos, Taos, NM 3

COMMENT SET 2 – Buckman Direct Diversion, Santa Fe, NM 14

REFERENCES 18

PLEASE NOTE:

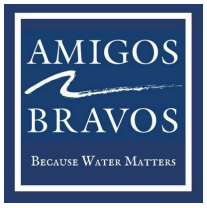
Original letters and emails were converted to Microsoft Word when possible. When not possible (i.e. due to unreadable PDFs), screenshots of each comment were inserted into the Word document followed by the response. Submitted comments were converted to Calibri font with standard page margins for ease of collation. All original comment letters/emails are on file at the NMED-SWQB office in Santa Fe, NM and are available electronically.

SUMMARY OF CHANGES TO THE DRAFT 2024-2026 INTEGRATED LIST DUE TO SOLICITED PUBLIC COMMENTS AND/OR DUE TO ADDITONAL STAFF REVIEW DURING THE COMMENT PERIOD:

New Mexico Environment Department ("NMED") solicited public comments on the draft 2024-2026 Integrated List during a 45-day period (December 11, 2023 through January 24, 2024) and made the following changes during and after the public comment period:

1. *Revised the wording in the definition field of the Integrated List to clarify that the "assessed" date does not denote data collection dates.*
2. *Removed the duplicate definition of "assessed" in the definition field of the Integrated List.*
3. *Reviewed Assessment Unit (AU) comments for consistency; removed out-of-date comments, such as comments referring to sampling conducted during previous monitoring rotations, and moved anecdotal AU comments inferring existing or designated uses to standards revision planning documents.*
4. *Added an AU Comment indicating if an AU falls within a designated ONRW.*
5. *Minor revisions/clarifications to the associated Assessment Rationale (formerly known as the "Record of Decision (ROD)").*
6. ***Bluewater Lake (NM-2107.B_00)** and **Quemado Lake (NM-9000.B_096)** – These lakes were sampled in 2022 for fish tissue but due to issues outside of SWQB's control data was not received from the laboratory until late December 2023. Some fish tissue samples contained methylmercury concentrations greater than the water quality criterion of 0.3 mg/kg. Therefore, a "Mercury - Fish Consumption Advisory" listing was added during the public comment period.*
7. ***Rio Fernando de Taos (Tienditas Creek to headwaters) (NM-98.A_001)** – Added temperature and specific conductance impairments that were missing due to a data entry error that occurred on the 2020-2022 Integrated List but were included in the assessment rationale (RDO) for that cycle, which read: "Sampled as part of the 2017-2018 URG survey. […] Thermograph data document temperature impairment. SC impairment was documented with sonde data. […] temperature and SC were listed." The assessment rationale (ROD) for the 2024-2026 cycle was updated to address the error: "Sampled as part of the 2017-2018 URG survey, during which long term deployment data documented temperature and specific conductance impairment. Due to a data entry error these listings were not added during the 2020 cycle but added this cycle."*
8. *Changed name of AU "**Burns Lake (Rio Arriba)**" to "**Laguna del Campo" (NM-9000.B_025)** to align with external references to the lake, added an AU Comment regarding the name change, and changed the AU from IR Cat from 5A to 5C to indicate that while still impaired, more data collection is needed.*

COMMENT SET 1 – Amigos Bravos, Taos, NM



WATER IS LIFE

It's Our Duty to Protect It.

Meredith Zeigler, Assessment Coordinator
New Mexico Environment Department
Surface Water Quality Bureau
1190 S. St. Francis Drive. Suite N2050
Santa Fe, NM 87505
Meredith.Zeigler@state.nm.us
January 24, 2024

Submitted on 1/19/24 via the NMED Public Comment Portal at:
https://nmed.commentinput.com/comment/search

Re: Comments on the Public Comment Draft of the 2024-2026 CWA 303(d)/305(b) Integrated List of Assessed Surface Waters.

Dear Ms. Zeigler:

As a statewide river conservation organization dedicated to protecting and restoring New Mexico's waters, Amigos Bravos submits the following comments for consideration on the draft 2024-2026 303(d)/305(b) Integrated List of Assessed Surface Waters ("Integrated List").

General Comments:

1) We request a more specific definition of the term "Assessed". The current definition in the Integrated List states "[t]his field generally notes the last Integrated Reporting Cycle when data for this particular watershed were assessed and reported". However, as stated in the CALM, "[f]or example, verified and validated data from May 1, 2018 through May 1, 2023, will be collated to develop the draft 2024 Integrated List". This seems to indicate, contrary to the definition in the Integrated List, that assessment (data collection), and reporting (the integrated list) are not done in the same years. This makes it unclear if the date listed under "assessed" for each assessment unit (AU) means the data collection date or the reporting date. Please clarify in the definition of "assessed" if it means the sampled collection date, or the reporting date. If it can be either one, we request clarity in the Integrated List for each "assessed" date indicating whether it is a "collection assessed" date or a "reported assessed" date.

   ***NMED RESPONSE**: The current definition is an accurate description of the process; "Assessment" for the purposes of CWA 303(d) reporting refers to the reporting year rather than the data collection dates. SWQB revised the wording in the definition field of the Integrated List to clarify that the "assessed" date does not denote data collection dates.*

2) The definition of "assessed" is listed twice in the "Useful Definitions" on page ii.

***NMED RESPONSE**: The duplicate definition has been removed.*

3) In the Integrated List, there are approximately 20[1] listings with a 33 year gap between the "Assessed" column, and the "Monitoring Schedule" column. Does this mean that the waterbody has not been visited by NMED for 33 years?

***NMED RESPONSE**: The "Assessed" column indicates the last cycle for which there were enough water quality data to analyze for designated use attainment (i.e., assess), not necessarily the last time a waterbody was sampled. While the reason for gaps in sampling vary, specific waterbodies may not have been sampled during the most recent monitoring period within the statewide rotation due to prioritization of waterbodies based on available resources. For comprehensive reports on waterbodies sampled during SWQB's rotational surveys, please visit the Water Quality Monitoring section's water quality survey reports: https://www.env.nm.gov/surface-water-quality/water-quality-monitoring/.*

NMED welcomes assessable, readily available submitted data for waterbodies for which there are monitoring data gaps as long as the data meet NMED's QA/QC requirements for assessment.

4) We are concerned about the display of category 3/3A waterbodies in the integrated list. There is an "assessment" date, but really, none of the uses have been assessed, which is misleading. Please clarify if the "assessed" date means the last time it was visited, and if that is the only time it was visited. It would also be helpful if the AU Comments explained why the data was "insufficient or not reliable" for these 3/3/A listing. Sometimes "difficult access" is stated, or "n=1 is not sufficient data" but many of them have no details under the "AU Comment" section.

***NMED RESPONSE**: To capture national and statewide listing efforts, EPA uses the Assessment and TMDL Tracking and Implementation System (ATTAINS), an online database that provides integrated state-reported information on water quality assessments, impaired waters and TMDLs to the public. SWQB is required to upload our data to ATTAINS, and there are many required fields including IR category and an Assessed date. An integrated reporting category is required for each assessment unit in the state, regardless of when the waterbody was last monitored. The purpose of the Integrated Reporting category is to indicate designated use attainment status and the corresponding assessment date indicates the last cycle that recent available data were reviewed to determine designated use attainment and is not intended to represent monitoring and/or sampling dates. The year(s) that relevant data collection(s) occurred are often noted in the Integrated List preface and/or the Assessment Rational (ROD) because data may come from a variety of sources and there may be multiple dates of collection. The Assessment Rationale (ROD) is available under "2024-2026 Supporting Documents and Websites" at https://www.env.nm.gov/surface-water-quality/303d-305b/.*

Thank you for pointing out this inconsistency in the AU comments. SWQB will review AU comments for consistency.

5) We would like to encourage the prioritization of drinking water sources. For example, Rattlesnake Spring Lake is noted as the drinking water source for Carlsbad Caverns but

[1] Examples include Dennis Chavez Lake, Tule Lake, Ned Houk Parks Lake, Lane Salt Lake, and Laguna America.

has not been assessed for 2 of the 4 uses, and shows a 15 year gap between the "assessed" date and the "monitoring schedule" date.

***NMED RESPONSE**: SWQB applies the designated uses specified in 20.6.4.97-899 NMAC. The water quality standards reference for Rattlesnake Spring Lake is 20.6.4.99 NMAC. The designated uses under 20.6.4.99 NMAC are warmwater aquatic life, livestock watering, wildlife habitat and primary contact; therefore, only the criteria for these uses apply to this waterbody. Rattlesnake Spring Lake is not designated as a domestic water supply nor public water supply. SWQB has reviewed the AU comments and removed any anecdotal comments that may infer designated uses and added these to water quality standards (WQS) planning documents.*

6) The CALM states "20.6.4 NMAC does not contain any specific criteria related to the presence of toxic algae or fish kills. SWQB currently does not list waterbodies as impaired due to these occurrences. Documented occurrences are noted in AU Comments on the Integrated List and the corresponding Record of Decision entries for these particular waterbodies. SWQB will also continue to post information regarding these blooms on our web site." Is there a specific timeline for establishing water quality standards or assessment protocols for blue green algae? If not, we request that NMED develop such a timeline.

***NMED RESPONSE**: While there are no specific numeric criteria for blue green algae, the most recent triennial review added numeric criteria for the toxins (microcystin and cylindrospermopsin) those algae can produce to protect primary contact recreation in waterbodies. See 20.6.4900 (D) NMAC. SWQB can assess for the primary contact designated use where there are adequate available microcystin and cylindrospermopsin data to assess against these criteria as described in NMAC.*

SWQB responds to reports of harmful algae blooms (HABs) and/or fish kills by working with the appropriate waterbody management agencies, Department of Game and Fish and Department of Health, to investigate further, post advisories and alert the public. SWQB recognizes the need for a HABs program and has created an NMED "Harmful Algal Blooms (HABs)" website: https://www.env.nm.gov/surface-water-quality/habs/ and initiated an interagency workgroup. This website will be updated later this year to include more information on NMED's HAB monitoring efforts and related activities.

7) On page 3 of the List it has "Rio Fernando de Taos (R Pueblo d Taos to USFS bnd at canyon)" and "Rio Fernando de Taos (UFSF bnd at canyon to Tienditas Creek)" listed but is missing Rio Fernando (Tienditas Creek to headwaters" AU ID NM-98.A_001, which is listed as impaired for *E. coli*.

***NMED RESPONSE**: Rio Fernando de Taos (Tienditas Creek to headwaters) (AU ID NM-98.A_001) is listed on page 115 of the Integrated List. Pages 1-11 of the Integrated List is the List of Impaired Waters only, waters in IR Category 5 (impaired and awaiting TMDL development, additional data collection, or standards review). This AU is not listed on page 3 because it is not an IR Category 5 water. Rio Fernando de Taos (Tienditas Creek to headwaters) is an IR category 4 water (4A), which means that it is impaired (for E. coli) but a TMDL has already been developed (EPA approved 9/13/2012).*

8) The 2024-2026 Integrated Report plus all appendices is still Pending on the NMED SWQB website. Will this Report be available for public comment separately from the 2024-2026 Integrated List?

***NMED RESPONSE**: Other than the §303(d) Integrated List (Appendix A), the draft 2024-2026 Clean Water*

Act §303(d)/§305(b) Integrated Report is not available for public comment per Table XIV-1 of the current WQCC-approved Water Quality Management Plan/Continuing Planning Process (WQMP-CPP, https://www.env.nm.gov/surface-water-quality/wqmp-cpp/). The draft Integrated Report will be posted on the SWQB website (https://www.env.nm.gov/surface-water-quality/303d-305b/) by April 1, 2024 prior to submittal to EPA.

9) It would be helpful to identify in the Integrated List which AUs are designated as Outstanding National Resource Waters ("ONRWs"). This could be done simply by adding "ONRW" or "Partial ONRW" in the "WQS REF" or "WATER TYPE" boxes for each AU that is wholly or partially respectively designated as an ONRW.

***NMED RESPONSE**: The ATTAINS-required field "WQS REF" identifies the applicable NMAC segment and the field "WATER TYPE" identifies the relevant water type from a pre-defined list and cannot be used as suggested. The ONRW layer is provided on NMED's Mapper application and the ONRW webpage (https://gis.web.env.nm.gov/oem/?map=swqb; https://www.env.nm.gov/surface-water-quality/onrws/). This layer will be used in combination with the Assessed Waters layer to determine ONRW and Assessment Unit (AU) overlap, and SWQB will indicate if an AU is part of an ONRW in the AU Comment field in the Integrated List.*

10) There are segments of 5 currently designated ONRW streams newly listed as impaired for one or more parameters in the draft Integrated List.[1]* In addition, there is one or more segments of 5 ONRW streams that were newly delisted for one or more parameters in the draft Integrated List. Amigos Bravos requests that a summary of these ONRWs with new impairments and with delistings be included in the upcoming Integrated 305b/303d Report along with a description of next steps to be taken in terms of notifying the appropriate land management agencies.

***NMED RESPONSE**: There are six currently designated ONRW Assessment Units (AU) newly listed as impaired for one or more parameters and there were seven AUs within designated ONRWs that were newly delisted for one or more parameters. SWQB has been utilizing and will continue to follow the process outlined in the 2023 NMED-USFS MOU (available under Key Documents at https://www.env.nm.gov/surface-water-quality/watershed-protection-section/). SWQB notified the appropriate land manager(s) and has actively discussed ONRW impairments and needed land management attention at several follow up opportunities. A summary of ONRW AU impairments and delistings will not be included in the Integrated Report because that information is included in the Integrated List (Appendix A of the Integrated Report). As noted in response #9, SWQB will indicate if an AU is part of an ONRW in the AU Comment field in the Integrated List.*

**SWQB notes that it appears that Amigos Bravos omitted the footnote specifying these water segments.*

Segment Specific Comments:

We recommend the following segments and criteria be listed in the 2024-2026 Impaired List based on data submitted from Amigos Bravos (*Quality Assurance Project Plan for Amigos Bravos' Water Sentinels Rios de Taos Water Monitoring Project Revision 2*).

Rio Hondo: Our data indicate that specific conductance and nutrient (Nitrate and Phosphate) levels warrant new impairment listings on the upper segment of the Rio Hondo.

1) Specific Conductance in the Rio Hondo (South Fork to Lake Fork) AU ID: NM-2120.A_602.

This segment is listed as fully supported for all uses with an IR of 1. Since 2014, there have been 53 specific conductance/electrical conductivity grab samples taken in this segment (sites at the WWTP, Sutton Place Bridge, Children's Center, and the Bavarian). Of these 53 samples, 22 of them (41.5%) have shown significant exceedances of specific conductance (the lowest exceedance was 1,289 ms/cm). Table 3.4 (page 25) of the 2023 CALM states that if there are more than 10 samples, and the exceedance is over 10%, then it is not fully supporting Aquatic Life Use Support and our data shows 41.5% exceedance. The CALM states that with 4-10 samples, that the water body is not supporting Aquatic Life Use if there is more than one exceedance. If the data is analyzed on a yearly basis, then in 2022 alone, there were 12 samples taken, with 11 exceedances for a 91.7%. And in 2021 there were 12 samples taken, with 7 exceedances, for a 58.3% exceedance rate. Therefore, our data indicate that this segment should be listed as impaired for specific conductance/electrical conductivity.

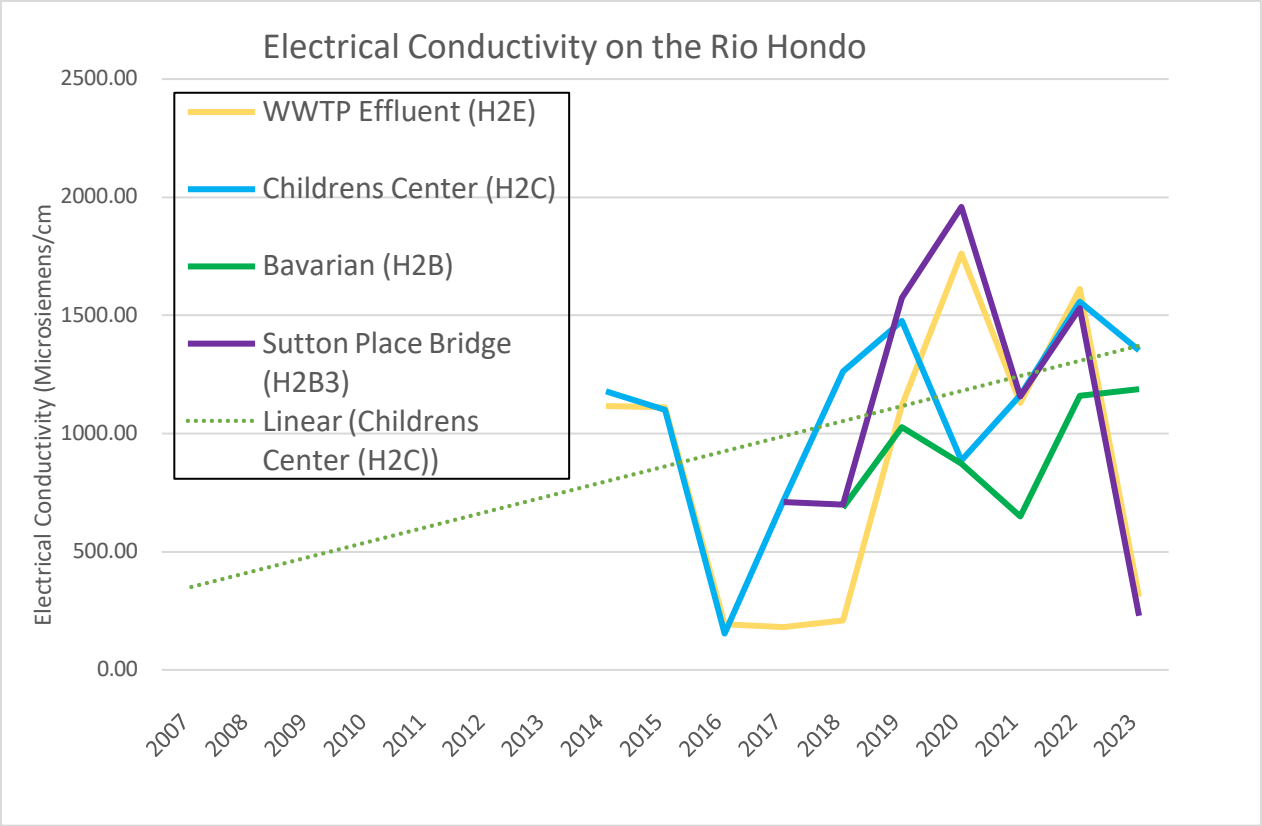


Figure 1: Graph of electrical conductivity/specific conductance data collected by Amigos Bravos in the segment "Rio Hondo (South Fork to Lake Fork) AU ID: NM-2120.A_602" (sites H2E, H2C, H2B, and H2B3). The trend line shows the increase in this segment over the last 9 years.

***NMED RESPONSE**:*

During the data quality determination process, the SWQB Quality Assurance Officer assigned a Data Quality Level 2 for instantaneous measurements (i.e., pH, temperature, specific conductivity, dissolved oxygen, and turbidity) collected by Amigos Bravos analyzed by stream-side meters (i.e., Eutech Instruments PCTestr 35 from Oakton, Oakton PCTSTestr™ 50 Waterproof Pocket pH/Cond/TDS/Salinity Tester, Premium 50 Series) or test kit (Hach Test kit Model 5-EP and CHEMets - Dissolved Oxygen Kit, Model K-7512) and submitted for consideration in the

development of the IR (2020, 2022, and 2024). The SWQB QA Officer's "2024 IR External Data Quality Determinations" are available under "2024-2026 Supporting Documents and Websites" at https://www.env.nm.gov/surface-water-quality/303d-305b/. The CALM states "[d]ata of a quality level 2 may be used as supporting information or for planning, screening, or prioritizing further sampling." The specifications of the equipment utilized by Amigos Bravos does not meet the minimum sensitivity requirements identified in the SWQB Quality Assurance Project Plan (QAPP). Another major concern regarding the data quality was the lack of a post-calibration verification procedure and/or temperature accuracy check on equipment used to collect data, indicating a possibility of substantial instrument drift (per Shannon Romeling email dated August 11, 2023). These data quality concerns have been documented in numerous emails and the External Data Determination letters from the 2024, 2022, 2020 Integrated Reporting cycles published at https://www.env.nm.gov/surface-water-quality/303d-305b/. Because of the broad consequences for listing in the Integrated Report, it is imperative that the data used for assessment is of the highest quality, meets acceptable minimum QA requirements, and conforms with the SWQB QAPP and CALM.

SWQB sincerely appreciates volunteer-led data collection programs like Amigos Bravos, and we would like to continue to work with you to improve your data collection and reporting methods so that all data are eligible for assessment. Since 2018 SWQB has held trainings, Microsoft Teams meetings/presentations, exchanged guidance emails and phone calls and provided data determination letters to Amigos Bravos with the intention of helping the organization collect data that will consistently meet SWQB's data QA requirements.

SWQB looks forward to continuing to work with Amigos Bravos on ensuring that all instantaneous measurements meet sufficient data quality assurance requirements to be used for attainment decisions. SWQB is available to meet early and often with any stakeholder group as they develop their sampling plans and QAPPs for data collection and will continue to work with Amigos Bravos to improve data collection and reporting.

2) Nutrient (Nitrate and Phosphate) levels in the Rio Hondo (South Fork to Lake Fork) AU ID: NM-2120.A_602.

The Nutrient Listing Methodology for Streams and Rivers detailed in the 2023 CALM does not apply to the Rio Grande in NM. The NMED currently does not have listing methodology for the criteria for the Rio Grande in NM . 20.6.4.13 NMAC states for Plant nutrients: "Plant nutrients from other than natural causes shall not be present in concentrations that will produce undesirable aquatic life or result in a dominance of nuisance species in surface waters of the state." So while there is a numeric Water Quality Standard of <0.10 mg/L for phosphate in segments of the Upper Rio Grande for example, there is no way to determine if the segments we sample in should be listed for phosphate exceedances. We urge the NMED to create specific criteria and listing methodology for at least phosphate, because there are some numeric standards, and then nitrates. At the very least, there should be listing methodology for implementing the narrative standard for Plant Nutrients from NMAC 20.6.4.13.

The Phosphate water quality standard for this segment of the Rio Hondo is <0.10mg/L. Phosphate levels were very high in 2020 and again 2021, up to 47 times over the limit coming out of the Children's Center sample site in 2021 (H2C). In 2021, there were 7 samples taken in this segment and 3 of them were exceedances well above the standard: 4.72mg/L, 1.9mg/L, and 1.63mg/L. The highest two were at the Children's Center (H2C), and the lowest exceedance was at the Waste Water Treatment Effluent site. At site H2C, there have been 12 samples collected since 2015, 5 of which were exceedances (41.7%), and two of these were in 2021 as mentioned above. At the Wastewater Treatment Plant (site H2E), there have been 9 samples since 2015, 5 of which were exceedances (55.5%).

***NMED RESPONSE**: SWQB applies the narrative nutrient criteria listed in 20.6.4.13 (E) NMAC via numeric assessment thresholds developed for total phosphorus and total nitrogen as indicators of excessive plant nutrients. While the nutrient assessment and listing methodology for streams and rivers in the 2023 CALM does not currently apply directly to the Rio Grande mainstem in New Mexico (along with a handful of other large river mainstems), it does apply to streams within the Rio Grande basin including Rio Hondo (South Fork to Lake Fork) if an assessable dataset is collected.*

NMED does not currently have numeric criteria or thresholds developed specifically for phosphates; however, there are several examples of segment-specific numeric criteria for total phosphorus in the standards, including this Rio Hondo assessment unit. For assessment units in which segment-specific total (unfiltered) phosphorus numeric criteria apply (<0.1 mg/L), assessable phosphorus data are assessed according to table 3.4 "conventional parameters (e.g. specific conductance, total phosphorus)" on page 25 of the CALM. SWQB does not assess end-of-pipe effluent nor data collected within the mixing zone of a discharge against ambient surface water quality standards, nor data sets collected within 7 days of each other (see CALM pg. 12, section 2.1.8 "Non-representative data" and CALM pg. 9 section 2.1.2 "Duplicates, compliance monitoring sampling data, and temporal independence"). SWQB also notes that the reporting limit for "phosphate as P" (0.20 mg/L) on the laboratory reports provided by Amigos Bravos exceeds the applicable water quality standard for the segment specific total phosphorus criteria (0.1 mg/L) indicating that the laboratory methods are not sensitive enough for this data to be assessed against the segment specific criteria for determining full support. Taking all of this information into consideration, SWQB determined that the remaining eligible dataset above the MRL did not indicate non-support for total phosphorus, with only one exceedance noted.

On November 5th, 2021 SWQB staff including Quality Assurance Office Miguel Montoya and Assessment Coordinator Meredith Zeigler met with Amigos Bravos to discuss the process of submitting data to the state laboratory division (SLD) lab in Albuquerque for analyses that are not currently meeting our quality assurance standards. SWQB has expressed concerns over data collection and laboratory analysis methodologies in the past and hopes to address these concerns moving forward.

Rio Fernando: There are two segments of the Rio Fernando that warrant further listings for dissolved oxygen and specific conductance/electrical conductivity based on data collected and reported to NMED by the Amigos Bravos/Water Sentinels Rios de Taos.

1) Dissolved Oxygen in the Rio Fernando de Taos (Tienditas Creek to headwaters), AU ID NM-2120.A_513

Table 3 of the DO Listing Methodology in the 2023 CALM states that rivers or streams are not fully supporting if there are "DO criteria excursions in ≥ 10% of measurements, or more than one measurement if 4 to 10 data points are available." And "Fewer than 4 samples = not assessed."

We have two sample sites in this segment, one at Forest Road 5, and one at the Riparian Pasture downstream of Forest Road 5. Out of 46 samples collect since 2014, there have been 9 exceedances, which is 19.6%. If you look at individual years, there are 4-6 samples taken in this segment each year. In 2014 there were 2 exceedances, 1 in 2015, 2016, 2020 and 2022, and 3 exceedances in 2018. Looking at the data over time, and the 2014 and 2018 individually, this is two different ways that our data show that this segment should be listed as impaired for dissolved oxygen.

***NMED RESPONSE:** Please see the response to segment-specific comment #1 above regarding the data quality determination available under "2024-2026 Supporting Documents and Websites" at*

https://www.env.nm.gov/surface-water-quality/303d-305b/.

Sampling information submitted to SWQB indicate that dissolved oxygen data were collected using a streamside methodology (CHEMets - Dissolved Oxygen Kit, Model K-7512). The specifications of this methodology do not meet NMED's data quality assurance requirements and thus the SWQB Quality Assurance Officer assigned a Data Quality Level 2 (DQL 2) to these data, meaning the data are only eligible as supporting information or for planning, screening, or prioritizing further sampling.

2) Specific Conductance in the Rio Fernando de Taos (Tienditas Creek to headwaters), AU ID NM-2120.A_513

Using the Specific Conductance/Electrical Conductivity data collected from the same two sites described above, there have been on-going specific conductance exceedances in the upper Rio Fernando since 2014. There have been 49 samples taken, and 12 exceedances of the water quality standard for specific conductance, which is 24.5% exceedance rate. Table 3.4 (page 25) of the 2023 CALM states that if there are more than 10 samples, and the exceedance is over 10%, then it is not fully supporting Aquatic Life Use Support. If you consider the data yearly, there are 5-6 samples per year. The CALM states that with 4- 10 samples, that the water body is not supporting Aquatic Life Use if there is more than one exceedance. In 2021 and 2022, 3 of the 6 samples exceeded the specific conductance standard. A 24.5% exceedance rate over time, and 3 out of 6 exceedances in 2021 and 2022 are two different ways that our data show that this segment should be listed as impaired for specific conductance.

NMED RESPONSE: *Please see the response to segment-specific comment #1 above regarding the data quality determination available under "2024-2026 Supporting Documents and Websites" at https://www.env.nm.gov/surface-water-quality/303d-305b/.*

Sampling information submitted to SWQB indicate that specific conductance data were collected by stream side meters (i.e., Eutech Instruments PCTestr 35 from Oakton, Oakton PCTSTestr™ 50 Waterproof Pocket pH/Cond/TDS/Salinity Tester, Premium 50 Series). The specifications of this methodology do not meet NMED's data quality assurance requirements and thus the SWQB Quality Assurance Officer assigned a DQL 2 to these data, meaning the data are only eligible as supporting information or for planning, screening, or prioritizing further sampling.

3) Dissolved Oxygen in the Rio Fernando de Taos (R Pueblo d Taos to USFS bnd at canyon), AU ID NM-2120.A_512

We have been sampling dissolved oxygen at Fred Baca Park in this segment since 2006. We have collected 52 samples in that time, and there have been 25 exceedances for dissolved oxygen. This is a 48% exceedance rate, which far exceeds the 10% threshold when there's more than 10 sample points. Looking at recent years individually, there were 3 samples taken at this site each year. In 2018 and 2020, 2 of the 3 samples had dissolved oxygen levels below the standard of greater than or equal to 6ppm. In 2021 all 3 of the samples did not meet the standard, and in 2022, 1 of the 3 samples did not meet the standard. A 48% exceedance rate over time, 2 of 3 exceedances in 2018 and 2020, and 3 of 3 exceedances in 2021 are two different ways that our data show that this segment should be listed as impaired for dissolved oxygen.

NMED RESPONSE: *Please see the response to segment-specific comment #1 above regarding the data quality determination available under "2024-2026 Supporting Documents and Websites" at https://www.env.nm.gov/surface-water-quality/303d-305b/.*

Sampling information submitted to SWQB indicate that dissolved oxygen data were collected using a streamside methodology (CHEMets - Dissolved Oxygen Kit, Model K-7512). The specifications of this methodology do not meet NMED's data quality assurance requirements and thus the SWQB Quality Assurance Officer assigned a DQL 2 to these data, meaning the data are only eligible as supporting information or for planning, screening, or prioritizing further sampling.

Rio Pueblo de Taos: Rio Pueblo de Taos segment (R Grande del Rancho to Taos Pueblo bnd): A U ID NM-2120.A_511.

While some aspects of water quality have generally improved since 2011 in the perennial arroyo to the Rio Pueblo (PS2), which receives flow from the Taos wastewater treatment plant, electrical conductivity, nitrates, and starting in 2021, phosphates continue to greatly exceed the standards given to neighboring waterways. The nitrate level of 18.7mg/L in August was nearly double the level of 10mg/L allowed in drinking water. The level continued to be high on the following sample day in September at 11.3mg/L. Phosphate levels also reached levels as high as 5.23mg/L in August, which is 52 times the water quality standard. These findings are also consistent with 2020 sampling, where phosphates were high in June and nitrates were high in the fall. Electrical conductivity levels are also often high at this location. We suggest that the NMED more closely monitor the Waste Water Treatment plant outflow and hold them accountable to standards applied to the segment the arroyo connects to, and neighboring rivers.

NMED RESPONSE*: SWQB Point Source Regulation Section (PSRS) is conducting an antidegradation analysis (as laid out in the WQMP-CPP Appendix A; https://www.env.nm.gov/surface-water-quality/wqmp-cpp/) for nutrients (total nitrogen and total phosphorus) for the upcoming Town of Taos WWTP NPDES permit renewal, NPDES permit NM0024066. SWQB will be certifying the Town of Taos WWTP NPDES permit NM0024066 under Section 401 of the Clean Water Act.*

Data in this segment of the Rio Pueblo de Taos also continues to display the listed *E. coli* impairment at two to three of our five sites in this segment each year. Site P1A (locally known as Merris Spring) has been known by the NMED to have septic tank pollution for over 20 years, with results confirmed by Amigos Bravos many times. The Rio Fernando 319 Watershed Based Plan also studied this area intensely and found the problem to be on- going and alarming. Sources found with Microbial Source tracking were primarily from humans and birds. We look forward to continued work with the NMED to address the contamination at this location.

NMED RESPONSE*: NMED looks forward to continuing to work with Amigos Bravos as well.*

Red River: Red River segment (Rio Grande to Placer Creek): AU ID: NM-2119_10

Site RR3 (Bridge by Hwy 522) on the Red River exceeded the chronic criteria for aluminum 4 years in a row in 2017. While it did not exceed this standard in 2018, the hardness levels were extremely elevated that year compared to previous years. In 2019, it exceeded chronic and acute criteria in June at an extremely high value of 10,050ug/L. In June 2020, site RR3 again exceeded acute and chronic criteria at a level of 5,660ug/L.

In 2022, the level was well above chronic standards, and close to exceeding the acute standard. RR1 exceeded the chronic and acute standard in 2022. These data indicate that this segment should be listed as impaired for aluminum criteria.

The huge difference between the Aluminum standard that applied to the Red River prior to 2010 and the current standard continues to be of concern. Many samples in 2013-2015 were above the 2010 standard and below the 2013 standard. More investigation should be done to determine if the current 2013 standard is actually protective of designated uses in the Red River.

***NMED RESPONSE**: SWQB's review of laboratory report files submitted by Amigos Bravos for 2020-2022 total recoverable aluminum data indicated that total hardness was collected and analyzed in conjunction with metals data. However, hardness-dependent metals criteria in 20.6.4 NMAC requires hardness as dissolved calcium and magnesium salts in water expressed in units of dissolved calcium carbonate (CaCO3) concentration (20.6.4 NMAC), not total hardness as indicated by laboratory sheets. Furthermore, SWQB could not determine if samples were filtered to minimize mineral phases as required per 20.6.4.900 (I)(1) NMAC to determine the applicable water quality criterion. Due to these issues, SWQB could not assess the hardness-dependent acute and chronic aquatic life criteria for metals with the data provided by Amigos Bravos (see 2020-2022 "External Data Quality Determination" under "previous versions" at https://www.env.nm.gov/surface-water-quality/303d-305b/).*

The Assessment Rationale (ROD) for the 2020 Action on this AU contains the following comment: "SWQB notes the downward trend in the total recoverable aluminum concentrations at certain water quality stations from 2014 to 2020, and an upstream to downstream increase in concentration in the Red River through the CMI Questa Mine site is also documented. Since water quality appears to be improving based on the most recent available data, the aluminum impairment is noted as IR Category 5C [impaired for one or more designated uses and additional data will be collected before a TMDL is scheduled]. This assessment unit will be re-assessed for aluminum for the draft 2022 Integrated List."

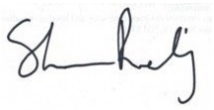
SWQB reassessed this AU in 2022 using the most recent submitted dataset collected by Arcadis U.S. and submitted to SWQB by NMED's Ground Water Quality Bureau. The 2022 ROD notes: "... [the data] indicate full support for total aluminum with no exceedances (0/4) of total aluminum chronic or acute criteria from furthest downstream site in the AU… The existing aluminum impairment will be removed."

Other actions SWQB is taking include the 2022 draft Upper Rio Grande TMDL package (pending WQCC approval), which includes a TMDL for turbidity in this assessment unit and will increase opportunities for watershed restoration activities to address aluminum concerns, and an antidegradation analysis for the NPDES permit renewal for Chevron Mining Inc. (CMI) - Questa Mine (NPDES permit NM0022306). Under Section 401 of the Clean Water Act, NMED is responsible for certifying that the conditions of federal permits (i.e., the NPDES permit) comply with the State's water quality standards. The purpose of the antidegradation analysis is to evaluate whether current or proposed discharges from CMI-Questa Mine are consistent with the State's Antidegradation Policy (NMAC 20.6.4.8) and whether new conditions (based on the antidegradation analysis) should be included in NMED's Section 401 certification of the NPDES permit.

NMED looks forward to continuing to work with Amigos Bravos on ensuring that submitted data meets sufficient data quality assurance requirements to be used for making attainment decisions. We are also available to meet early and often with any stakeholder group as they develop their sampling plans and QAPPs for data collection.

Please contact me for any more information about the attached report or data collection methods. Thank you for considering our comments.

Sincerely,



Shannon Romeling
Projects and Foundation Coordinator
Amigos Bravos
575-758-3874 (office); 518-275-7681 (cell)
sromeling@amigosbravos.org

COMMENT SET 2 – Buckman Direct Diversion, Santa Fe, NM

Buckman Direct Diversion
341 Caja del Rio Santa Fe, NM 87506

January 22, 2024

Meredith Zeigler
Assessment Coordinator
NMED Surface Water Quality Bureau
1190 St. Francis Dr.
Santa Fe, NM 87505
Via email to: meredith.zeigler@env.nm.gov

RE: DRAFT 2024-2026 INTEGRATED LIST OF ASSESSED SURFACE WATERS COMMENTS FROM BUCKMAN DIRECT DIVERSION BOARD

Dear Ms. Zeigler:

The Buckman Direct Diversion Board (the Board) is the governing body for the Buckman Direct Diversion, a single diversion point on the Rio Grande that the City of Santa Fe, Santa Fe County, and their limited partner, Las Campanas, share to divert their San Juan-Chama and native Rio Grande water rights. Diverted water is treated and introduced into the regional water system. The government entities are represented on the Board.

The Buckman Direct Diversion (BDD) intake is on the Rio Grande approximately 3 miles downstream of Otowi Bridge. The draft 2024-2026 State of New Mexico Clean Water Act (CWA) §303(d)/305(b) Integrated List of Assessed Surface Waters (Integrated List) includes assessment of the segment of the Rio Grande within which the intake structure is located, and stream segments draining the Pajarito Plateau where Los Alamos National Laboratory (LANL) is located. Many of these waters flow to Los Alamos Canyon and enter the Rio Grande at their confluence approximately three miles upstream of the BDD intake structure. The Board is therefore understandably concerned about water quality in the Rio Grande and in Los Alamos Canyon and its tributaries. The Board provides the following comments.

Segment 114 Rio Grande (Cochiti Reservoir to San Ildefonso boundary)

As we noted in our 2022 comments on the draft 2022-2024 Integrated List, Segment 114 waters listed as impaired were not subject to Total Maximum Daily Loads (TMDLs), despite such action being a necessary first step to improving water quality. The Board pointed out that many of the TMDLs intended to address these years-long impairments were estimated to be listed in 2021. In its Response to Comments, the New Mexico Environment Department (NMED) informed the Board that TMDLs are usually issued four years after the last water quality survey (2017-2018). NMED further responded that the next water quality survey that would include the Segment 114 Assessment Unit would occur in 2023-2024, making the relevant TMDLs issued in 2027. NMED's list of TMDLs reviewed on December 15, 2023, at https://www.env.nm.gov/surface-water-quality/tmdl/ shows that none are in place for Segment 114.

The Draft Integrated Report now shows that Segment 114 is not subject to monitoring until 2025. The draft Impairment List nevertheless states that "[t]his AU is priority for follow-up data collection." The Board requests information about how NMED establishes these priorities, and how Segment 114 and its use as source water for the BDD fits into NMED's prioritization.

The draft Impairment List also notes that "[p]rocedures are in place, under the purview of the Buckman Direct Diversion Board, that are intended to not allow public water supply withdrawal from the Buckman Diversion during significant storm events." It is important to recognize that these procedures augment and do not replace appropriate water quality protections such as timely development of TMDLs for this segment. The Board requests that NMED accelerate TMDL issuance for stream segments like Segment 114 that are source waters for drinking water supplies.

***NMED RESPONSE**: NMED-SWQB uses several planning documents to prioritize decision-making. For example, SWQB identifies monitoring goals, objectives, and future directions and establishes methods of identifying and prioritizing water quality data needs in the 10-Year Monitoring and Assessment Strategy. Using a standard operating procedure (SOP), SWQB develops Field Sampling Plans for each water quality survey that specifies sampling locations, core and supplemental water quality indicators to be sampled, and frequency of data collection. SWQB determines sample site location, sampling frequency, and type of data to be collected using information detailed in the bureau's Monitoring and Assessment Strategy, Nutrient Reduction Strategy, Quality Assurance Project Plan (QAPP), and/or CWA §303(d) List. SWQB uses the Prioritization Framework and Long-Term Vision for Water Quality in New Mexico to prioritize TMDL development. SWQB plans to revise the Framework and Long-Term Vision, Monitoring and Assessment Strategy, and Water Quality Management Plan and Continuing Planning Process in late 2024 / early 2025. See the SWQB Monitoring, Assessment and Standards webpage for more information and links to these documents: https://www.env.nm.gov/surface-water-quality/monitoring-assessment-and-standards-section/.*

SWQB prioritizes TMDL development based on the CWA §303(d) List (IR Category 5A) and the Prioritization Framework and Long-Term Vision for Water Quality in New Mexico. SWQB released the Upper Rio Grande (URG) TMDLs for public comment June 13, 2022, and presented the TMDLs to the New Mexico Water Quality Control Commission (WQCC) for their approval on October 11, 2022. However, the WQCC decided to suspend review and approval of all NMED TMDL documents pending the outcome of the Court of Appeals Case Number A-1-CA-40799, NM Environment Department v. Water Quality Control Commission and the WQCC review of the 2023 updates to the NM Water Quality Act (NMSA 1978, §§ 74-6-1 to 74-6-17). The 2022 URG TMDLs included 33 TMDLs for 24 assessment units, but the Rio Grande (Cochiti Reservoir to San Ildefonso boundary) (AU ID: NM-2111_00) assessment unit was not included in this document because many of the impairments for NM-2111_00 are in IR Category 5C, meaning that more data are needed to complete the TMDLs. Given the WQCC delays in TMDLs approvals, SWQB plans to take this opportunity to update the 2022 Final Draft URG TMDL and add some of the Category 5A impairments for NM-2111_00 into the existing document and release the revised draft for public comment before the 2026-2028 Integrated Report cycle. Additional data collections to address the Category 5C impairments are planned as part of the upcoming Middle Rio Grande water quality survey.

Segment 128 and Certain Unclassified Waters on the Pajarito Plateau

As previously mentioned, the Board is particularly interested in water quality in Los Alamos Canyon and its tributaries. We note that some impairments in this watershed with likely LANL origin were listed nearly 20 years ago (e.g., PCB impairment first listed in 2006), with no TMDLs developed to address the water quality degradation. The Board further notes that no TMDL dates are listed in the draft report. The Board recommends NMED update the "TMDL List" field to estimate when TMDLs will be adopted for these segments.

The Buckman Direct Diversion plays a unique role by deriving drinking water from the Rio Grande downstream of LANL and delivering it safely and effectively to its regional customers. We appreciate that NMED recognizes this fact and has worked over the years to provide special provisions and assessments for stream segments from the Pajarito Plateau and the Rio Grande at the BDD intake in State Standards.

The US Environmental Protection Agency (Tanner. Lori, USEPA, 2023; Clean Water Act Jurisdictional Analysis of the Waters of Los Alamos County Waters of the United States Jurisdictional Analysis Report), stated there is a hydrologic connection from Los Alamos Canyon and Pueblo Canyon surface waters which are conveyances that discharge stormwater directly to a traditional navigable water, the Rio Grande. The Board is justifiably concerned about water quality in the Rio Grande and Los Alamos Canyon and its tributaries.

Although NMED is proposing to assess selected reaches in Los Alamos Canyon, the Board is requesting that NMED assess the entirety of Los Alamos Canyon and its tributaries from its headwaters downstream to the BDD diversion on the Rio Grande for suitability as a Public Water Supply (PWS) commencing in 2024. The Board requests that the assessment for suitability as a PWS include sampling of both perennial reaches and storm water.

We appreciate the opportunity to provide these comments and look forward to your response.

NMED RESPONSE:

Public Water Supply (PWS) is not a designated or existing use for Los Alamos Canyon and its tributaries per 20.6.4.127 and 20.6.4.128 NMAC; therefore, the SWQB cannot assess these waters as BDD requested. The definition of "Public water supply" as it applies to surface water quality standards in New Mexico "means the use or storage of water to supply a public water system as defined by New Mexico's Drinking Water Regulations, 20.7.10 NMAC. Water provided by a public water system may need to undergo treatment to achieve drinking water quality" (20.6.4.7(P)(7) NMAC). No numeric criteria apply uniquely to the PWS use (20.6.4.900(A) NMAC) – it is assumed that the Safe Drinking Water Act and New Mexico drinking water regulations, including water treatment technologies, protect for the PWS use. According to the Comprehensive Assessment and Listing Methodology (CALM), the SWQB assigns all AUs with a Public Water Supply designated use as "Not Assessed" [on the Integrated List] because there are no criteria specific to PWS that the SWQB can assess. See section 3.7 of the CALM. The only evaluation that the SWQB can conduct regarding PWS is the biennial evaluation of radionuclide data and public disclosure memo for Segment 114 (see 20.6.4.114(B)(1) NMAC; the most recent public disclosure memo is available under "2024-2026 Supporting Documents and Websites" at https://www.env.nm.gov/surface-water-quality/303d-305b/).

The SWQB does not have the resources to staff, train, and maintain a stormwater monitoring sampling program anywhere in the state of New Mexico at this time. The SWQB utilizes available data of sufficient data quality downloaded from Intellus to make attainment decisions on the Pajarito Plateau, including Los Alamos Canyon and its tributaries. These data are collected by LANL and their contractors, and NMED's DOE Oversight Bureau.

EPA does not have adequate guidance available on how to develop stormwater-based TMDLs. Several states, including New Mexico, have repeatedly asked EPA for improved guidance on this important topic. While stormwater TMDLs have not been developed, the water quality data and impairment listings themselves have allowed SWQB and EPA to require additional water quality protections within and around Los Alamos National Laboratory (LANL). The most recent example is EPA's revised designation decision that certain storm water discharges from the Los Alamos Urban Area and LANL property are contributing to violations of NM water quality standards and require MS4 permit coverage under the Clean Water Act (CWA). LANL has also developed an IR category 4b demonstration for both Sandia Canyon assessment units, which is updated and submitted to EPA and NMED biennially. The 4b plan demonstrates how alternative pollution control requirements, including storm water flow controls, are stringent enough that water quality standards will be attained within the duration of the plan (4 years), and thus the development of a TMDL may be unnecessary. LANL is also required to surveil stormwater, surface water, and sediment through the NPDES Stormwater Individual Permit and the Consent Order with NMED. The Stormwater Individual Permit requires LANL to monitor stormwater discharges and implement and maintain stormwater controls that slow down and better control stormwater, stabilize stream channels and slopes, and trap sediment. Under the Consent Order, LANL also conducts geomorphic and wetland vegetation surveys and monitors baseflow. NMED certifies that the conditions of federal permits (i.e., NPDES and 404 permits) comply with the State's water quality standards and, if not, NMED conditions additional requirements to ensure compliance with the water quality standards.

Commissioner Anna Hamilton
Santa Fe County Commission District 4
BDD Board Chairperson

Councilor Carol Romero-Wirth
Santa Fe City Council District 2
BDD Board Vice Chairperson

Commissioner Anna Hansen
Santa Fe County Commission District 2
BDD Board Member

JC Helms
BDD Board Citizen-at-large Member

REFERENCES

Environmental Protection Agency (EPA). Assessment, Total Maximum Daily Load (TMDL) Tracking and Implementation System (ATTAINS). Available at: https://www.epa.gov/waterdata/get-data-access-public-attains-data

New Mexico Environment Department/Surface Water Quality Bureau (NMED/SWQB). 2023. Procedures for Assessing Standards Attainment for the State of New Mexico CWA §303(d)/ §305(b) Integrated Report: Comprehensive Assessment and Listing Methodology (CALM). Santa Fe, NM. Available at: https://www.env.nm.gov/surface-water-quality/calm/.

New Mexico Environment Department/Surface Water Quality Bureau (NMED/SWQB). 2021. Quality Assurance Project Plan for Water Quality Management Programs. Santa Fe, NM. Available at: https://www.env.nm.gov/surface-water-quality/qapps/

New Mexico Environment Department/Surface Water Quality Bureau (NMED/SWQB). 2016. State of New Mexico Surface Water Quality 10-year Monitoring and Assessment Strategy. Santa Fe, NM. Available at: https://www.env.nm.gov/surface-water-quality/water-quality-monitoring/

New Mexico Environment Department/Surface Water Quality Bureau (NMED/SWQB). 2015. Final Draft Prioritization Framework and Long-Term Vision for Water Quality in New Mexico. Santa Fe, NM. Available at: https://www.env.nm.gov/surface-water-quality/tmdl/

New Mexico Environment Department/Surface Water Quality Bureau (NMED/SWQB). 2014. State of New Mexico Nutrient Reduction Strategy for Protecting and Improving Water Quality. Santa Fe, NM. Available at: https://www.env.nm.gov/surface-water-quality/nutrients/

New Mexico Water Quality Control Commission (WQCC). 2020. State of New Mexico Statewide Water Quality Management Plan and Continuing Planning Process (WQMP-CPP). Santa Fe, NM. Available at: https://www.env.nm.gov/surface-water-quality/wqmp-cpp/.