2022-2032 Vision for the New Mexico Clean Water Act Section 303(d) Program

New Mexico Environment Department
Surface Water Quality Bureau

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Abbreviations

ARP	Advanced Restoration Plan
AU	Assessment Unit
CALM	Comprehensive Assessment and Listing Methodology
CFR	Code of Federal Regulations
CWA	Clean Water Act
FSP	Field Sampling Plan
HUC	Hydrologic unit code
IR	Integrated Report and List of Assessed Waters
MASS	Monitoring, Assessment, and Standards Section
MT	Monitoring Team
MS4	Municipal separate storm sewer system
NM	New Mexico
NMAC	New Mexico Administrative Code
NMED	New Mexico Environment Department
NPDES	National Pollutant Discharge Elimination System
NPS	Nonpoint source
ONRW	Outstanding National Resource Water
PSRS	Point Source Regulation Section
QA	Quality Assurance
QAO	Quality Assurance Office
QAPP	Quality Assurance Project Plan
QC	Quality Control
SPR	Standards, Planning, and Reporting
SWQB	Surface Water Quality Bureau
SQUID	Surface water QUality Information Database
TAT	TMDL and Assessment Team
TMDL	Total Maximum Daily Load
EPA	U.S. Environmental Protection Agency
USFS	U.S. Forest Service
WBP	Watershed-based plan
WPS	Watershed Protection Section
WQBEL	Water Quality-based Effluent Limit
WQMP	Water Quality Management Plan
WQS	Water quality standards
WWTP	Wastewater treatment plant

Executive Summary

EPA's New Vision and Goals

According to EPA (2022), "*This 2022 Vision comes as EPA, states, territories, tribes, local governments, and citizens mark the 50th Anniversary of the CWA and chart a path to promote continued improvements in water quality as we start the next 50 years. The purpose of this document is to articulate a renewal of the initial 2013 long-term Vision and associated Goals, as well as to introduce new Focus Areas for the CWA Section 303(d) program."* The Goals of the updated Vision are planning and prioritization, restoration, protection, data and analysis, and partnerships.

As a result of the updated Vision and Goals, the Total Maximum Daily Load (TMDL) program in New Mexico is being updated with a greater focus on state water quality priorities, encourage TMDL ARP, and emphasize the value of protecting waterbodies that are not impaired. This document summarizes the prioritization of monitoring and TMDL activities in New Mexico. It also describes integration with other CWA programs (primarily Section 319 Nonpoint Source Management Program and Section 402 National Pollutant Discharge Elimination System (NPDES) permitting program), and discusses TMDL ARP that will be used, where appropriate, by the state.

New Mexico's Current Program

The current 303(d) Program in New Mexico consists of three major steps: monitoring of surface waters; assessing monitoring data against water quality standards (WQS); and developing TMDLs for those waters not meeting water quality standards (i.e., impaired).

Monitoring of surface waters currently occurs on an 8-10 year rotational watershed approach, meaning a given waterbody is generally surveyed intensively, on average, every 8-10 years. Monitoring occurs during the non-winter months (i.e., March through November), focuses on physical, chemical, and biological conditions in perennial waters, and includes sampling for most pollutants that have numeric and/or narrative criteria in the WQS. While a majority of New Mexico's perennial waters are sampled, each assessment unit is represented by a small number of monitoring stations (often only one), each of which receives only 4 – 8 site visits during the survey.

Assessment of surface waters against the WQS occurs after the monitoring data have been verified and validated, using the most recent assessment protocols. These protocols are updated every odd year and are opened for the EPA, as well as public, review and comment as part of the update process. Waterbodies determined to be impaired are reported as such every even year on the State's CWA 303(d)/305(b) Integrated Report and List of Assessed Waters. TMDLs and TMDL ARP are then developed from the 303(d) List of Assessed Waters.

New Mexico's Prioritization Framework

The Prioritization Framework will maintain the rotational monitoring and TMDL cycle. Assessments will continue to be based on the most recently updated assessment protocols, and impaired waters will be reported every even year in the 303(d)/305(b) Integrated Report and List of Assessed Waters.

As discussed in the TMDL Prioritization Section of this document, impaired waters (i.e., Integrated Reporting Category 5 on the List of Assessed Waters) will be ranked for TMDL and TMDL ARP development based on a number of factors, such as length of time the number of years the listing has been known, the severity of impairment, and the number of non-point source projects completed in the AU. TMDLs or TMDL ARP will then be developed based on resource availability and workload.

I. Introduction

The Total Maximum Daily Load (TMDL) program in New Mexico includes a focus on state water quality priorities, development of TMDL Advanced Restoration Plans (ARP), and emphasizes the value of protecting waterbodies that are not impaired. This document summarizes the prioritization of surface water quality monitoring and TMDL development in New Mexico. It also describes integration with other federal Water Pollution Control Act (i.e., the Clean Water Act (CWA)) programs (primarily Section 319 Nonpoint Source (NPS) Management and Section 402 National Pollutant Discharge Elimination System (NPDES) permitting programs) and associated quality assurance (QA) efforts, and discusses TMDL ARP that will be used, where appropriate, by the state.

States and territories have been using the Goals outlined in the 2013 Vision to guide program management since the first TMDL Vision and Goals were finalized in December 2013. New Mexico TMDL staff coordinated with the Environmental Law Institute and EPA during Vision 2.0 planning workshops in 2020 and 2022 as detailed in **Appendix A**. The 2022-2032 Vision for the CWA Section 303(d) Program was finalized on September 22, 2022, and is attached in **Appendix A**.

The goals and focus areas of the 2022-2032 Vision are the following:

1. **Planning and Prioritization Goal:** States, territories, and tribes develop a holistic strategy for implementation of Vision Goals, systematically prioritize waters or watersheds for TMDL and other plan development (restoration and/or protection), and report on the progress towards development of plans for priority waters.
2. **Restoration Goal:** States, territories, and tribes design TMDLs and other restoration plans to attain and maintain water quality standards, facilitate effective implementation, and drive restoration of impaired waters.
3. **Protection Goal:** In addition to recognizing the protection benefits that TMDLs and other restoration plans can provide, states, territories, and tribes may develop protection plans to prevent impairments and improve water quality, as part of a holistic watershed approach.
4. **Data and Analysis Goal:** The CWA Section 303(d) program coordinates with other government and non-governmental stakeholders to facilitate data production and sharing, and effectively analyzes data and information necessary to fulfill its multiple functions.
5. **Partnerships Goal:** The CWA Section 303(d) program meaningfully communicates and collaborates with other government programs and non-governmental stakeholders to restore and protect water quality effectively and sustainably.
6. **Focus Areas:** Environmental Justice, Climate Change, Tribal Water Quality and Program Development, and Program Capacity Building.

II. New Mexico's Priority Framework Overview

The details of New Mexico's 303(d) Vision are described below, and generally follow the requirements outlined by the EPA in **Appendix A**.

New Mexico also considered several state-specific drivers and variables during the development of the Prioritization Framework. These are each discussed briefly below.

Water Quality Standards. The water quality standards (WQS) form the basis for assessment and listing of a water body, and influence what waters are prioritized for monitoring and TMDL development.

Funding/Resources. Funding levels and staffing levels are not anticipated to increase in the future to support additional water quality activities, thus staff will have to prioritize within the constraints of current resources levels. The monitoring team (MT) of the Surface Water Quality Bureau (SWQB) currently has six staff to monitor the entire state. The TMDL and Assessment Team (TAT) has five staff, of which two are dedicated TMDL writers. The other three staff are responsible for TMDL program management, performing assessments, development of the Integrated Report and List of Impaired Waters, and special project management such as probabilistic monitoring and fish consumption advisories.

Water Quality Data. As discussed previously, most assessments are based on relatively limited datasets. Considering the inherent variability in these data due to weather, fires, natural variability, etc., when possible, impairment determinations should be based on as many data as possible.

Population and Land Use Changes. New Mexico's population increased between the 2010 and 2020 census; from 2,059,179 to 2,117,522 (https://www.census.gov/quickfacts/NM). This increased population can influence the uses of surface waters as well as the potential pollution sources that may affect the quality of these waters.

Recreational Activity. New Mexico's larger, perennial surface waters are substantially utilized for recreation due in part to the relatively limited number of perennial waters in the state. Swimming, boating, and fishing are the primary recreational activities that the CWA strives to protect.

Weather. The variability and impacts of weather create challenges for any environmental monitoring program. Whether it is variations in snowpack, drought, scouring floods, or extended periods of unusually warm air temperatures, these conditions can cause water quality conditions that are outside of conditions that were used to develop the WQS. The Assessment Protocols (NMED 2023) detail in what situations weather events may affect the representativeness of the data.

Wildfires. Whether anthropogenic or natural, wildfires impact the landscape. These impacts can be from many factors, such as the loss of vegetation leading to greater rates of erosion, in-stream pollution caused by the suppressants used to combat the fire or the release of nutrients, metals, and organics from soil due to high temperatures. Assessing the water quality of an area after a wildfire can be challenging as it may be difficult to determine the cause of any impairments and when the fire-caused conditions are no longer influencing the watershed. Wildfire impacts on water quality in New Mexico are addressed online at: https://www.env.nm.gov/surface-water-quality/wildfire-impacts-on-surface-water-quality/.

Water Releases and Diversions. Surface waters in the arid southwest are a valuable and limited resource and are highly managed through the water rights process. Releases from reservoirs and diversions from streams during certain times of the year can have significant impacts on instream flow, pollutant concentrations, and the ability of aquatic systems to assimilate pollutants. Careful construction of the field sampling plan to capture all flow conditions, as well as using the most appropriate critical flow condition during TMDL development helps to ensure that waters are protected during all flow conditions.

NPDES Permits. Water pollution comes from two broad categories of sources: point and nonpoint. Nonpoint sources are non-discrete sources, such as stormwater runoff, cattle and wildlife, or atmospheric deposition. Point sources are discrete sources of pollution, most commonly wastewater treatment plants (WWTPs) or other types of treatment facilities that discharge their waste stream directly through a pipe and into a receiving water. Point sources, which include stormwater from urbanized areas as well as construction and industrial activities, are required to have a permit to operate through the National Pollutant Discharge Elimination System (NPDES) program to discharge to a surface water of the State. These NPDES permits contain requirements for monitoring of their effluent for pollutants of concern as well as maximum concentrations for some, or all, of these pollutants.

Outstanding National Resource Waters. New Mexico has designated certain waters of the state as Outstanding National Resource Waters (ONRWs). These waters are streams, lakes and wetlands that receive special protection against degradation under New Mexico's water quality standards and the federal CWA. Waters eligible for ONRW designation include waters that are part of a national or state park, wildlife refuge or wilderness areas, special trout waters, waters with exceptional recreational or ecological significance, existing water quality is equal to or better than the numeric criteria for protection of aquatic life and contact uses and the human health-organism only criteria, and high quality waters that have not been significantly modified by human activities. ONRWs are identified in the WQS. See 20.6.4.9 NMAC for ONRW definitions and https://www.env.nm.gov/surface-water-quality/onrws/ for ONRW locations in New Mexico.

III. Water Quality Monitoring Prioritization

As stated in the New Mexico Environment Department (NMED) Surface Water Quality *10-Year Monitoring and Assessment Strategy* (NMED 2016), SWQB's statewide monitoring and assessment efforts provide for the evaluation of all watersheds in New Mexico on a rotational basis and attempt to prioritize data collection needs based on addressing the five questions noted below using available resources.

1. What is the overall quality of waters in the state?
2. To what extent is water quality changing over time?
3. What are the problem areas, and which areas need protection?
4. What level of protection is needed?
5. How effective are CWA projects and programs?

To address these questions, SWQB currently uses a rotating basin approach to monitor surface waters in New Mexico. Individual stream and lake assessment units are currently selected within a basin by the SWQB MT with input from stakeholders and other SWQB programs. Current information about the surface water quality monitoring program is available online at: https://www.env.nm.gov/surface-water-quality/water-quality-monitoring/ and the *10-Year Monitoring and Assessment Strategy* is available online at: https://www.env.nm.gov/surface-water-quality/protocols-and-planning/.

Priority Determination

Water quality data inform standards, assessments and impairment conclusions, and drive the development of TMDLs, stream restoration projects, and point source regulation. The SWQB MT will consider and target the priorities of the SWQB Monitoring, Assessment, and Standards Section (MASS), Watershed Protection Section (WPS), Point Source Regulation Section (PSRS), watershed groups, and stakeholders by designing water quality surveys that incorporate the goals and priorities of these groups. Preliminary monitoring prioritization factors are listed in **Table 1**.

Outreach and Collaboration

The SWQB evaluates all existing, high quality, and readily available data to determine whether surface water quality standards are being attained. Although the SWQB MT currently generates the majority of data used for assessment determinations, other groups also collect water quality data in New Mexico, including the SWQB PSRS and WPS, watershed groups, municipalities, and other state and federal agencies. While these groups typically conduct monitoring to meet the specific needs of their programs, there are often common goals and opportunities for collaboration and data sharing that can augment the data available for surface water quality assessments.

In an effort to make assessment conclusions and water management decisions with as many high quality data as possible, the SWQB MT will dedicate resources to collaboration efforts and collecting data generated by outside entities to help ensure that as many of the data as possible meet the rigorous quality assurance and quality control (QA/QC) requirements. By reaching out to water quality data

collectors before monitoring begins, via email, phone and public meeting, the SWQB MT and the SWQB QA officer (QAO) can promote and train proper QA/QC procedures to prospective data submitters. These QA/QC procedures are essential to ensure high quality data are collected, and are a requirement of the SWQB Comprehensive Assessment and Listing Methodologies (CALM).

The SWQB MT will also work closely with the SWQB WPS to align monitoring locations, field visits, procedures, and protocols to maximize data, minimize duplication of effort, and ensure data usability from stream restoration effectiveness monitoring projects. Whenever possible, SWQB MT will provide documentation support, training, and resources to WPS staff and their contractors. Documentation support would include review and revision of QA/QC documents, sampling and analysis plans, and reporting. Training would include demonstrations of standard operating procedures and other relevant protocols. When resources allow, SWQB MT may offer WPS staff, their contractors, and cooperators other assorted resources such as monitoring equipment and chemical analysis of water samples.

Intra-Basin Segment Priority Determination

The SWQB MT currently conducts routine monitoring of selected stream and lakes assessment units in New Mexico. These monitoring locations are selected based on information collected via coordination with other SWQB sections, watershed groups, land management agencies, private landowners, and the public. Within the Prioritization Framework, this coordination and outreach process has been formalized to allow the SWQB MT to target stream and lake assessment units that meet a wide range of programmatic and public priorities and focus resources appropriately. Prioritization of monitoring locations is available online here: https://www.env.nm.gov/surface-water-quality/water-quality-monitoring/

Based on the prioritization scoring, resource availability, and other factors associated with the upcoming survey season, the SWQB MT will assign each stream and lake AU a priority ranking of “primary” or “secondary”. The priority factors and priority ranking will define the relative level of effort that each stream and lake AU will receive over the course of the two-year survey. For each monitoring survey, typically at the basin scale, Primary and Secondary monitoring locations will be established based on the criteria described in Table 1 and the availability of resources. The proportion of primary and secondary sites is not a fixed value but will depend on the unique variables presented in each survey basin.

MASS seeks to include outside data sources in the datasets available for water quality assessments. MASS staff will provide technical support and assistance with chemical analysis, as resources allow, to stakeholders to help ensure that high quality, usable, and adequate data are generated through their monitoring efforts. MASS requests outside datasets every odd-numbered year to supplement MASS datasets to enable more thorough assessments. Outside data submittal guidelines are available online here: https://www.env.nm.gov/surface-water-quality/data-submittals/

Table 1. Preliminary priority factors for the prioritization of monitoring locations in New Mexico

Category	Priority Factor
Watershed Protection / Nonpoint Source	Water Quality Improvement Priority
	Water Quality Protection Priority (ONRW)
	Restoration with Effectiveness Monitoring
	Restoration without Effectiveness Monitoring
Point Source	NPDES Discharge
	NPDES Discharge – Impaired
	Upgraded Facility Since Previous Monitoring
	NPDES Permit Renewal
	MS4/sMS4 Permit – Urban Areas
TMDL	Existing TMDL/TMDL ARP
	Impairment without a TMDL
	Previously Unmonitored/Unassessed Perennial Water
	High Impairment Severity
Monitoring	Standards Review Needed
	Monitoring Team Priority
	Drinking Water Supply
Public	Stakeholder Priority
	Ongoing Monitoring - SWQB Collaboration (non-WPS)
	High Use/Recreation

IV. TMDL Prioritization

Section 303(d)(1)(A) of the CWA, 33 U.S.C. Section 1313 (CWA 2015), requires that states develop a priority ranking system for waters not meeting water quality standards and that the ranking system should be developed "taking into account the severity of the pollution and the uses to be made of such waters." Prior to 2009, TMDL priorities were assigned based on the priorities set forth in the 1996 Consent Decree (US District Court for the District of New Mexico 1997). After the dismissal (US District Court for the District of New Mexico 2009) of the Consent Decree in 2009, all impaired waterbodies were designated as high priority, but were not further ranked. The "estimated TMDL date" field in the 303(d)/305(b) Integrated List of Impaired Waters is based on the rotating basin approach for water quality monitoring; specifically, TMDLs for a particular waterbody-pollutant pair were scheduled for completion two years after the water quality survey was completed. However, under the 2022-2032 Vision, the SWQB will plan the development of TMDLs and TMDL Advanced Restoration Plans (ARP) using a priority ranking system based on the factors shown in **Figure 1**.

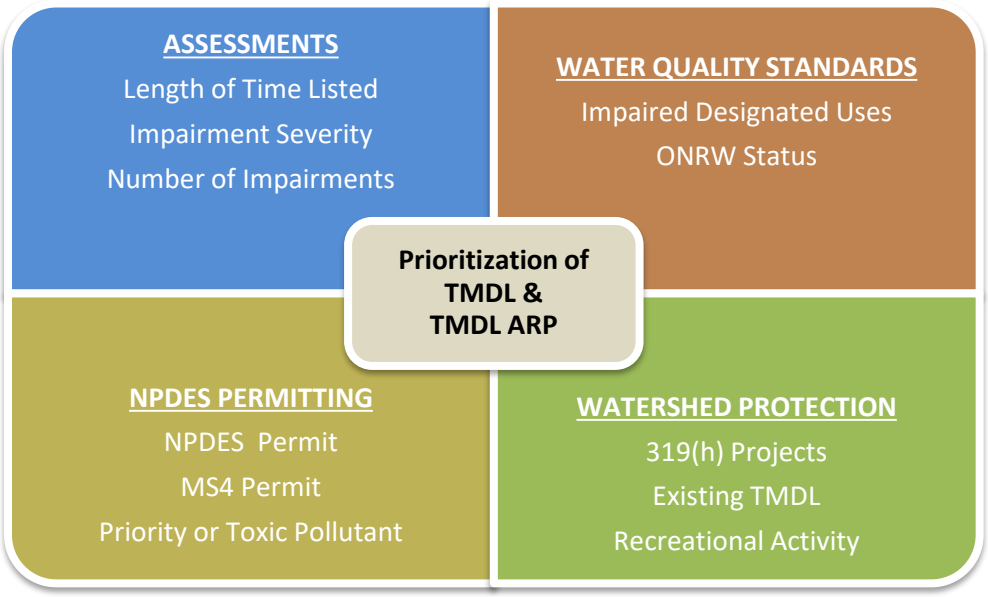

Figure 1. Factors used to prioritize TMDL and TMDL ARP development

Prioritization Ranking System

The factors shown in **Figure 1** are equally weighted when used to determine a priority ranking scheme for the development of TMDLs and TMDL ARP. The factors represent facets of various SWQB programs, including assessment, water quality standards, NPDES permitting, and watershed protection. Each factor shown in **Figure 1** is assigned a preliminary scoring scheme, as listed in **Table 2**. The rational for each factor is as follows:

- Length of Time Listed. The SWQB aims to have an impairment addressed within eight years (four listing cycles) of its first listing on the 303(d)/305(b) Integrated List of Impaired Waters. This is consistent with EPA guidance suggesting that states address impairments within 8-13 years of its

first appearance on the 303(d)/305(b) Integrated List of Impaired Waters. While the SWQB strives to address each impairment within 8-13 years with a TMDL or TMDL ARP, the waterbody may not achieve water quality standards within that time frame.

- Impairment Severity. The impairment severity represents the magnitude of impairment with respect to the water quality standards. For numeric criteria, this will generally be determined using the exceedance ratio which expresses how many samples in the dataset exceeded the water quality standard and by how much the water quality standard is exceeded. For narrative criteria, the impairment severity score will be detailed in the applicable assessment protocol.
- Number of Impairments. Assessment units with more than one impairment will be given a higher priority to be addressed with TMDLs or TMDL ARP.
- Impaired Designated Uses. The "fishable and swimmable" goals of the CWA are described in 101(a)(2) (EPA 2024b). The New Mexico Water Quality Standards for Interstate and Intrastate Surface Waters define designated uses in 20.6.4.900 NMAC. Development of TMDLs and TMDL ARP for waterbodies with impaired CWA Section 101(a)(2) uses will be a priority. These uses include aquatic life and contact uses. Other priority designated uses include public water supply, irrigation, and wildlife habitat, followed by all other designated uses.
- ONRW Status. Water quality impairments on ONRWs may be a priority for TMDL and TMDL ARP development. ONRWs are listed in 20.6.4.9(D) NMAC.
- NPDES or MS4 Permits. The presence of a MS4 or NPDES permitted discharge to an impaired waterbody will be a priority for TMDL and TMDL ARP development. Multiple permits and major dischargers will cause higher scores than single permits or minor dischargers. A facility must also have the potential to cause or contribute to the impairment, based on effluent water quality data, reasonable potential analysis, or staff input. A list of NPDES permits can be retrieved from the SWQB.
- Priority or Toxic Pollutant. A water quality impairment for either an EPA-defined priority (EPA 2014d) or toxic (US Government Publishing Office 2015) pollutant, as well as nutrients, will be a priority for TMDL and TMDL ARP development. Alternatively, New Mexico may consider the top impairments in the state (i.e., nutrients; *E.coli*; temperature; sediment) as a priority for TMDL and TMDL ARP development.
- 319(h) Projects and Existing TMDL. Waterbodies are generally eligible for CWA 319(h) funding once a TMDL has been developed and often addressing one non-point source of impairment may positively affect other non-point sources of impairment. Therefore, SWQB will prioritize the development of TMDLs and TMDL ARP on waterbodies for which a TMDL has not yet been developed or for which a 319(h) project has not yet been initiated.
- Recreational Activity. Impairments on waterbodies that are more heavily used by the population will be a priority for the development of TMDL and TMDL ARP. These scores will be determined annually from county, tourism, or park visitation statistics. The definition of high, moderate, and low are to be determined on a percentage basis. Initially the state will assign a high priority to the top 25% of the recreated areas by usage. The state may narrow this approach after the first application of the scoring system.

Implementation

To develop the list of priorities for TMDL and TMDL ARP development for the 2022-2032 303(d) Program Vision, NMED will use the scoring matrix in **Table 2** as an example guide in addition to information from the 303(d)/305(b) Integrated List of Impaired Waters. A list of annual commitments for TMDL and TMDL ARP will be uploaded to the EPA ATTAINS database by September 30 of each even-numbered year.

Table 2. Example scoring matrix for TMDL and TMDL ARP development

Points	Length of Listing	Impairment Severity[a]	Number of Impairments	Impaired Designated Uses [b]	ONRW Status	NPDES/MS4 Permit[c]	Priority or Toxic Pollutant	319(h) Projects	Existing TMDL	Recreational Activity
4	≥4 cycles	≥75%	≥>4	PWS or contact	Yes	>1 Permit, at least 1 major	Yes	0	No	High
3	3 cycles	50-74%	3	ALU	--	1 Permit, major	--	1	--	Moderate
2	2 cycles	25-49%	2	IRR or WH	--	>1 Permit, no major	--	2	--	Low
1	1 cycle	<25%	1	any DU	--	1 Permit, minor	--	≥3	Yes	--

(a) Example shown here based on exceedance ratios of numeric criteria

(b) ALU= aquatic life use. PWS=public water supply. IRR= irrigation. WH=wildlife habitat. DU = designated use..

(c) Points are only awarded if there is at least one permit and the permitee has the potential to cause or contribute to the potential impairment. Major = major discharger. Minor = minor discharger.

For reporting purposes, the TMDL prioritization score for each assessment unit will be converted to "high", "medium", or "low" priority based on the following scale: High (≥34 points), Medium (33-23), Low (<22). TMDL and TMDL ARP, however, will generally be prepared by SWQB staff in order of highest score to lowest score; the number of assessment units addressed in any given year will be based on staff resources and the complexity of the specific TMDL and TMDL ARP. How the TMDL and TMDL ARP are assigned to staff will be determined annually by the TMDL Coordinator. TMDL documents will continue to be bundled together based on the HUC 8 watershed or by water quality survey area. Current TMDL priorities are outlined in **Appendix B**.

Alternative Restoration Planning Tools

Assessment units that are assigned Category 5 constitute New Mexico's CWA Section 303(d) List of Impaired Waters. Section 303(d), and supporting regulations, requires states to develop a TMDL for each impaired assessment unit – pollutant combination. TMDLs establish pollution reduction goals necessary for an impaired water to attain applicable water quality standards (WQS). New Mexico, like many other states, has traditionally used TMDLs as the primary mechanism for addressing impaired water. Like TMDLs, alternative restoration planning tools focus on an impaired assessment unit – pollutant

combination including a water quality target, describe pollution controls and reduction goals necessary to achieve WQS, and establish point and nonpoint source loadings required to attain these goals. If a point source is contributing to the impairment, the alternative restoration planning tools (and NPDES permit) should include (1) water quality-based effluent limits (WQBELs) or other requirements to meet WQS in the impaired AU, (2) a schedule of compliance to meet WQBELs or other requirements, and (3) an in-stream monitoring requirement to demonstrate the WQS are being met. New Mexico currently utilizes the following three alternative restoration planning tools:

1. *TMDL Advanced Restoration Plan.* An Advanced Restoration Plan (ARP) is a plan that includes schedules and milestones to achieve water quality standards for an impaired waterbody. The ARP combines elements of a TMDL and a Watershed Based Plan (WBP). ARP and nine-element WBP contain much of the same elements and information, thus combining these two efforts is the most efficient path forward once impairments have been identified. Combining these efforts is expected to reduce the time it takes to get from planning to on-the-ground projects. The nine elements, and the information common to both TMDL and WBP formats, plus a crosswalk of WBP elements compared to ARP components, are all included in NMED ARP. The ARP may also include a crosswalk to address similar elements in the US Forest Service-Watershed Restoration Action Plans. The ARP waterbody is listed in IR Category 5R after successful acceptance of the plan by EPA. EPA provides additional ARP information here- https://www.epa.gov/tmdl/advance-restoration-plans

2. *Category 4b Demonstrations.* EPA regulations recognize that alternative pollution control requirements may delay the need for a TMDL because both mechanisms (TMDL or TMDL ARP) would achieve the same surface water quality goal. Specifically, TMDLs are not required if technology-based effluent limitations, more stringent effluent limitations, and/or other pollution control requirements (e.g., best management practices) required by local, State, or Federal authority are stringent enough to implement an applicable WQS within a reasonable period of time (see 40 CFR 130.7(b)(1) and Appendix I of SWQB's most recent Assessment Protocol - https://www.env.nm.gov/surface-water-quality/calm/

   This TMDL alternative planning document is for waters that are impaired for one or more designated uses, but do not require the development of a TMDL because other pollution control requirements are reasonably expected to result in the attainment of the water quality standards in the near future. Category 4b demonstrations are typically initiated by outside entities and developed with input and review by the state. New Mexico recently completed its first category 4b demonstration project with Los Alamos National Securities (LANS) for dissolved copper in Sandia Canyon (NMED 2024). As Category 4b demonstrations are part of the 303d/305b Integrated Report via their inclusion on the Integrated List (Appendix A of the Integrated Report), the SWQB views these documents as part of the New Mexico Water Quality Management Plan (WQMP). As such 4b demonstrations and TMDL have equal standing for EPA's development of NPDES permits as well as State Certification under section 401 of the Clean Water Act.

3. *Protective TMDLs.* TMDLs have historically been developed only after a water body is determined to be impaired for one or more pollutants. However, since a TMDL is a calculation that determines the maximum amount of a pollutant that a water body can assimilate before it is impaired, it can be developed at any time, regardless of impairment status of the water. Further, TMDLs, once written, can be incorporated into NPDES permits, thus when developed prior to impairment can help ensure that a water body does not become impaired. While TMDLs do not have any direct influence over nonpoint sources of pollution, they do make the associated waters eligible for Section 319 funding through the WPS of the SWQB. In both of these ways, protective TMDLs can help ensure that waters do not become impaired. Protective TMDLs will be prioritized alongside TMDLs for impaired waters, using the same scoring framework described above for TMDL development.

Adaptive Management

One of the strengths of New Mexico's Prioritization Framework is that it continues to evaluate and consider all surface waters in the state for every pollutant with a WQS, but prioritizes monitoring frequency and TMDL development on factors that have relative weights (i.e., scores) and resource availability. Thus, as additional public input is obtained, as resources increase or decrease, or as certain prioritization factors become more important in the future, the state's strategy can evolve without fundamentally changing the mechanics of the overall process.

Monitoring plans and TMDL commitments are made annually, thus the prioritization strategy will be regularly reviewed and updated, at least every 303(d) Listing cycle.

In addition, the final decisions on where to monitor and what TMDLs to write will not be based solely on a prioritization score, but will also consider staff, public, and EPA input. For example, if a wastewater treatment plant permit is up for renewal on an impaired water, writing a TMDL for that water, even if not the highest priority numerically, regardless of impairment status, may make sense as the TMDL can inform the design of the plant and will allow the permit limits and monitoring requirements to be correctly written into the facility's permit, helping to ensure that water quality standards are achieved or maintained.

Schedule for Addressing Priority Waters

New Mexico's ability to monitor its surface waters and write TMDLs for impaired waters is based on the resources (i.e., staff) that the state has who are dedicated to these tasks. However, by maintaining the 8-year rotating basin approach for monitoring and considering all surface waters when prioritizing TMDL development, the state is ensuring that no waters will be ignored. In addition, one of the primary factors considered in developing TMDLs will be length of the time that the water has been listed, with higher prioritization given to waters that have been listed as impaired the longest. This will encourage turnover in the TMDL prioritization process and help ensure that all impairments are addressed as quickly as possible.

Public Engagement

New Mexico's existing public engagement progress for the establishment of water quality priorities exceeds what is required by the EPA. This includes a robust website with links to relevant documents, public notices, and key staff contact information. In addition, New Mexico encourages public comment on their water quality-related activities through email notification, newspaper notices, public meetings and direct communication with permitees and watershed groups. All public participation requirements for water quality monitoring and the 303(d) program are outlined in Section XIV of the NMED-SWQB WQMP/CPP available here- https://www.env.nm.gov/surface-water-quality/wqmp-cpp/

V. 2022-2032 New Mexico CWA 303(d) Vision Goals and Focus Areas

1. **Planning and Prioritization Goal:** States, territories, and tribes develop a holistic strategy for implementation of Vision Goals, systematically prioritize waters or watersheds for TMDL and other plan development (restoration and/or protection), and report on the progress towards development of plans for priority waters.

   The Planning and Prioritization Goal is addressed in Sections III and IV of this document.

2. **Restoration Goal:** States, territories, and tribes design TMDLs and other restoration plans to attain and maintain water quality standards, facilitate effective implementation, and drive restoration of impaired waters.

   The NM 303(d) program will utilize alternative restoration planning tools as described in Section IV of this document.

3. **Protection Goal:** In addition to recognizing the protection benefits that TMDLs and other restoration plans can provide, states, territories, and tribes may develop protection plans to prevent impairments and improve water quality, as part of a holistic watershed approach.

   The NM 303(d) program will utilize Protection TMDLs as described in Section IV of this document. TMDLs will continue to be developed for outstanding national resource waters (ONRW) as part of scheduled, rotational TMDL development. Existing ONRW TMDLs can be revised and updated as staff time and resources allow.

4. **Data and Analysis Goal:** The CWA Section 303(d) program coordinates with other government and non-governmental stakeholders to facilitate data production and sharing, and effectively analyzes data and information necessary to fulfill its multiple functions.

   The NM 303(d) program encourages the submittal of water quality data collected by stakeholders. The NM 303(d) program will advertise a call for outside data every odd-numbered year using the data submittal process outlined here- https://www.env.nm.gov/surface-water-quality/data-submittals/ All water quality survey summaries and data are available from NMED-SWQB here- https://www.env.nm.gov/surface-water-quality/water-quality-monitoring/. NMED-SWQB aims to coordinate with stakeholder groups and tribal partners in the collection and submittal of water quality data collected in state waters and is available to assist these partners in building their programs, as staff time and resources allow. The development of a citizen science monitoring program would be a useful tool to help achieve this goal.

5. **Partnerships Goal:** The CWA Section 303(d) program meaningfully communicates and collaborates with other government programs and non-governmental stakeholders to restore and protect water quality effectively and sustainably.

   The NM 303(d) program will coordinate with federal, state, local, and tribal partners with the goal to improve New Mexico surface water quality. For example, the NM 303(d) program is coordinating with the NMED-SWQB Watershed Protection Section and the US Forest Service to create one ARP document to satisfy the reporting requirements for each program; TMDL, Watershed Based Plans, Watershed Restoration Action Plans. The NM 303(d) program will coordinate with federal and state NPDES staff during TMDL and WLA development.

6. **Focus Areas:** Environmental Justice, Climate Change, Tribal Water Quality and Program Development, and Program Capacity Building.

   a) The NM 303(d) Program will coordinate with the NMED-Environmental Justice Coordinator during the development and public outreach of Field Sampling Plans, Comprehensive and Listing Methodologies, 303(d)/305(b) Integrated List, and TMDLs. Additional NMED-Environmental Justice information is available here- https://www.env.nm.gov/general/environmental-justice-in-new-mexico/. Staff will follow NMED policies 07-11 and 07-13 during 303(d) program outreach activities.

   b) The NM 303(d) Program will coordinate with the NMED-Climate Change Bureau and the Water Protection Division-Climate Resiliency Coordinator regarding climate change issues during the development of Field Sampling Plans, collection and assessment of water quality data, and TMDL development. Additional Climate Change Bureau information is available here- https://www.env.nm.gov/climate-change-bureau/. Climate change is addressed in the New Mexico Standards for Interstate and Intrastate Surface Waters in 20.6.4.6 NMAC and 20.6.4.7 NMAC. Climate change is addressed as a special topic in Section V-C of the 2024-2026 CWA §303(d)/§305(b) Integrated Report. TMDLs will include climate change discussions in the TMDL uncertainty, margins of safety, and reserve capacity sections.

   c) The NM 303(d) Program will coordinate with the NMED Tribal Liaison during the development and public outreach of Field Sampling Plans, Comprehensive and Listing Methodologies, 303(d)/305(b) Integrated List, and TMDLs. Additional NMED-Tribal Liaison is available here https://www.env.nm.gov/tribal-liaison/ Tribal water quality standards will be used when calculating TMDL and WLA values for TMDLs on state waterbodies upstream of tribal waters. NM 303(d) Program will be available to coordinate with tribal partners related to surface water quality data collection, assessment and listing methods, and TMDL development.

d) The NM 303(d) Program will focus on program development and capacity building by strengthening the onboarding process to ensure that cross-training between other NMED-SWQB programs consistently occurs. The NM 303(d) staff are encouraged to build related skills, such as modeling, GIS, and programming. The NM 303(d) staff will share and borrow 303(d) program ideas with other federal, state, and tribal partners. NM 303(d) staff will utilize EPA resources for program development and capacity building, such as the EPA TMDL Foundations Training.

References

CWA, 40 C.F.R. 401.15 (CWA). 2015. Available at: http://www.epw.senate.gov/water.pdf

New Mexico Environment Department (NMED). 2016. New Mexico Surface Water Quality 10-Year Monitoring and Assessment Strategy. Available at: https://www.env.nm.gov/surface-water-quality/water-quality-monitoring/

_____. 2024. Integrated 303(d)/305(b) Water Quality Monitoring and Assessment Report. April 2024. Santa Fe, NM. Available at: https://www.env.nm.gov/surface-water-quality/303d-305b/

U.S. District Court for the District of New Mexico. 1997. Forest Guardians of the Southwest Environmental Center (Plaintiffs) v. Carol Browner, in her official capacity as Administrator, EPA (Defendant): Joint Motion for Entry of Consent Decree. April 29.

_____. 2009. Forest Guardians of the Southwest Environmental Center (Plaintiffs) v. Carol Browner, in her official capacity as Administrator, EPA (Defendant): Motion to Terminate Consent Decree and Dismiss Action. April 21.

U.S. Environmental Protection Agency (EPA). 2024. New Policies for Establishing and Implementing Total Maximum Daily Loads. Available at: http://water.epa.gov/lawsregs/lawsguidance/cwa/tmdl/ratepace.cfm

_____. 2024b. Clean Water Act Section 101(a). Available at: http://water.epa.gov/lawsregs/guidance/101a.cfm

_____. 2024c. Priority Pollutants. Available at: https://www.epa.gov/eg/toxic-and-priority-pollutants-under-clean-water-act

U.S. Government Publishing Office. 2015. Title 40: Protection of the Environment. Available at: http://www.ecfr.gov/cgi-bin/retrieveECFR?gp=&SID=fd63445c424b6ce4abe39a59d68923ed&n=pt40.29.401&r=PART&ty=HTML#se40.29.401_115

Appendix A

USEPA 2022-2032 Vision for the Clean Water Act Section 303(d) Program

(September 2022)

2022 - 2032 Vision for the Clean Water Act Section 303(d) Program

The Clean Water Act Section 303(d) program strives to strategically plan and prioritize activities, engage partners, and analyze and utilize data to develop water quality assessments, plans, and implementation approaches to restore and protect the Nation's aquatic resources.

The *2022 - 2032 Vision for the Clean Water Act Section 303(d) Program* ("2022 Vision") identifies opportunities to manage effectively Clean Water Act (CWA) Section 303(d) program activities to achieve water quality goals for the Nation's aquatic resources such as streams, rivers, lakes, estuaries, and wetlands. This 2022 Vision comes as EPA, states, territories, tribes, local governments, and citizens mark the 50th Anniversary of the CWA and chart a path to promote continued improvements in water quality as we start the next 50 years. The purpose of this document is to articulate a renewal of the initial 2013 long-term Vision and associated Goals, as well as to introduce new Focus Areas for the CWA Section 303(d) program. The Goals outline aspirations and highlight opportunities to implement CWA Section 303(d) program activities in the following categories – Planning and Prioritization, Restoration, Protection, Data and Analysis, and Partnerships. Focus Areas provide four cross-cutting themes of national, regional, and local importance, consistent with EPA priorities, to consider in CWA Section 303(d) program implementation – Environmental Justice, Climate Change, Tribal Water Quality and Program Development, and Program Capacity Building. This Vision outlines a framework to organize program activities; it does not constitute regulation, policy, or new mandates.

The Vision is designed to help coordinate and focus efforts to advance the effectiveness of CWA Section 303(d) program implementation in the coming decade. The 2022 Vision builds on the experience gained from implementing the 2013 Vision outlined in *A New Long-Term Vision for Assessment, Restoration, and Protection under the Clean Water Act Section 303(d) Program*.[1] Like the 2013 Vision, the 2022 Vision is intended to encourage flexible and innovative approaches for states, territories, and authorized tribes[2] ("states, territories, and tribes") to implement CWA Section 303(d), as well as to identify ways to best use limited resources to lead to restoration and protection, to leverage partnerships, and to encourage development of solutions to emerging and difficult waters quality issues.

The CWA Section 303(d) program made significant advances implementing the 2013 Vision. For example, states and territories engaged in a long-term planning and prioritization process, through meaningful public engagement, to develop support for and address challenging priorities through integrated assessment, planning, standards, and implementation processes. All states developed long-term frameworks that reflect their priorities for development of total maximum

[1] https://www.epa.gov/sites/default/files/2015-07/documents/vision_303d_program_dec_2013.pdf

[2] Several federal environmental laws authorize EPA to treat eligible federally recognized tribes in a similar manner as a state (TAS) for implementing and managing certain environmental programs (for more information go to: https://www.epa.gov/tribal/tribal-assumption-federal-laws-treatment-state-tas). This document will discuss tribes both as potential entities to be authorized to implement CWA Section 303(d), through TAS, and tribes that do not yet have TAS. When referring to entities that may implement CWA Section 303(d) this document uses "states, territories, and tribes."

daily loads (TMDLs), other restoration plans, and protection approaches.[3] As of the drafting of this document, states and territories were over three quarters of the way towards putting plans in place for priorities identified in implementing the 2013 Vision. States and territories were effective in using baseline assessments to inform priorities and in evaluating water quality effects of implementation of TMDLs and other plans. States and territories used the best planning tools for the task at hand; along with developing thousands of TMDLs, at least 24 states have pursued other restoration approaches, and 9 states have pursued protection plans in implementing the 2013 Vision. States and territories were particularly strong ensuring partnerships with other authorities and local stakeholders to enhance communication and drive water quality results.

For the past decade, EPA's national CWA Section 303(d) program has centered its trainings and work products around the Goals of the 2013 Vision. EPA has met with states, territories, and tribes on the Vision Goals at least annually during this time. EPA has worked with various program partners to put together training workshops and supporting documents that created a robust collection of information to advance the Goals of the 2013 Vision.[4] Execution of multiple goals of the 2013 Vision and the development and use of enhanced data systems has improved information sharing and transparency and helped gain significant efficiencies in program execution. As indicators of improvement, the number of timely integrated reports submitted by states increased by five times in 2022 compared to earlier cycles, and EPA has maintained an effective elimination of backlog in acting on submitted CWA Section 303(d) lists and TMDLs.

2022 Vision Development Process

States and territories have been using the Goals outlined in the 2013 Vision to guide program management for the past ten years. The 2020 National CWA Section 303(d) Training Workshop[5] served as a catalyst for collective reflection on the successes and challenges of the 2013 Vision. The Association of Clean Water Administrators (ACWA) led a series of meetings with program representatives to further capture perspectives on the content and implementation of the 2013 Vision, culminating in support for and recommendations to help shape a subsequent long-term Vision.[6] In a parallel effort, EPA developed and distributed proposed principles to guide program management into the future and discussed them with state, territorial, and tribal representatives. In October 2021, the Environmental Law Institute (ELI), under a cooperative agreement with EPA, hosted a Vision Writing Summit where state, tribal, and EPA staff worked together to develop language that would become the foundation for this 2022 Vision.

EPA and ELI jointly hosted two workshops in April 2022 with states, tribes, and stakeholders from multiple nonprofit environmental organizations, agricultural organizations, and water utilities. The workshop objectives were to train a diverse group of participants on the CWA Section 303(d) program and to gain perspective from individual participants on specific aspects

[3] https://www.eli.org/freshwater-ocean/state-and-territorial-prioritization-frameworks
[4] https://www.epa.gov/tmdl/vision
[5] https://www.eli.org/freshwater-ocean/cwa-303d-training-workshops
[6] https://www.acwa-us.org/wp-content/uploads/2021/09/ACWA-Recommendations-for-Updating-the-2013-Long-Term-Vision-for-the-CWA-303d-Program.pdf

of this Vision – climate change and environmental justice. A similar workshop in May 2022 consisted of participants from dozens of tribes across the country focusing on the 2022 Vision and aspects of tribal engagement in the CWA Section 303(d) program.

EPA received and addressed comments from states, ACWA, National Tribal Water Council, and several non-governmental organizations. The draft 2022 Vision was presented at the ACWA Annual Meeting in August 2022. The product of these collaborative efforts is this 2022 Vision.

Relationship to EPA Performance Metrics for the CWA Section 303(d) Program

CWA Section 303(d) program implementation of the 2013 Vision and enhanced data systems helped to provide the superstructure for the larger Office of Water metric for improvements in the Nation's surface waters. For several years, EPA's strategic plan has featured a metric that tracks watersheds with surface water meeting standards that previously did not meet standards. CWA Integrated Reports (IRs) provide key water quality information for this metric. Further, TMDLs and other restoration and protection plans are important tools for restoring water quality.

EPA will continue to track and share key CWA Section 303(d) program activities, consistent with the Vision, through a suite of CWA Section 303(d) program-specific metrics. Beginning in January 2021, EPA initiated a workgroup with several states to discuss development of measures that would help continue to track the CWA Section 303(d) program's success in light of the forthcoming Vision and Goals. The workgroup was tasked with identifying options for a set of metrics that would promote accountability by tracking development of plans over the period of long-term planning and consider additional ways to show program progress and success. EPA led discussions with states through the ACWA Watersheds Committee and at the Vision Writing Summit where states provided additional feedback on metrics.

In response to this work and discussion, EPA is taking several steps to utilize new and improved metrics. EPA has coordinated with states to develop a metric as a "bridge" between the 2013 Vision and this 2022 Vision that will measure state priority plans in place or in development during fiscal year (FY) 2023 and FY24. Further, EPA is developing – in coordination with states, territories, and tribes – a metric that would be in place starting in FY25. The metric would be in place from FY25-FY32 and would measure the extent of state, territorial or tribal priority waters addressed by TMDLs and other restoration plans in impaired waters or by protection approaches in healthy waters. States, territories, and tribes would have the flexibility to begin and complete plans over the course of multiple metric reporting cycles. EPA is also working on additional metrics to communicate overall program progress.

Goals

The 2022 Vision Goals outline aspirations and highlight opportunities to implement CWA Section 303(d) program activities. Goals are presented beginning with the cornerstone Goal of *Planning and Prioritization* as the foundation to guide organization and implementation of the other Goals. The next two Goals of *Restoration* and *Protection* recognize that CWA Section 303(d) programs may utilize different types of plans to advance their water quality objectives. The *Data and Analysis* Goal is a key means to inform water quality assessment and listing, TMDL development, and implementation activities. Finally, under the *Partnerships Goal*, coordination of CWA Section 303(d) and other water quality program objectives and involvement of stakeholders around mutually identified priorities are key themes to promote water quality restoration and protection.

Planning and Prioritization Goal

States, territories, and tribes develop a holistic strategy for implementation of Vision Goals, systematically prioritize waters or watersheds for TMDL and other plan development (restoration and/or protection), and report on the progress towards development of plans for priority waters.

The intent of the *Planning and Prioritization Goal* is to encourage states, territories, and tribes to coordinate program activities in the context of their broader water quality objectives and identify corresponding waters for plan development (priorities) that align with those objectives. The CWA Section 303(d) program has an inherent planning role because it applies water quality standards to develop pollutant loading targets for the point source permitting and nonpoint source management programs, as well as other programs under and outside of the CWA. Coordinating CWA Section 303(d) program activities with those of other programs can aid in strategically focusing limited resources to address broader water quality objectives most effectively. Furthermore, implementation of the 2013 Vision has demonstrated that establishing long-term CWA Section 303(d) program priorities as part of this planning process can lead to more efficient and effective program management and yield meaningful progress toward water quality restoration and protection.[7]

Carrying out CWA Section 303(d) statutory and regulatory obligations through the lens of a state, territory, or tribe's long-term priorities can help motivate partners and stakeholders to take the actions needed to implement TMDLs and improve water quality. Prioritization facilitates focusing the location and timing for developing and/or revising TMDLs and other restoration and protection plans in ways that are best suited to the broader water quality objectives of each

[7] Under the 2013 Vision, "[a]ll states completed a new prioritization process, developed commitments for plan development under the Vision, improved coordination and collaboration and are continuing to complete development of plans for priority waters. Additionally, some programs embraced the concept of developing alternative planning approaches or working on water quality protection." (ACWA Recommendations Document, 2021, link)

state, territory, or tribe. Prioritization also provides the foundation to guide the planning and implementation of the other Vision Goals. EPA intends to continue to assist and collaborate with states, territories, and tribes in identifying their priorities.[8] Important venues for such collaboration may include the Performance Partnership Agreement/Performance Partnership Grant (PPA/PPG) discussions and development of CWA Water Quality Management Plans and IRs.

Flexibility and adaptability are central to this Goal because each state, territory, or tribe is unique and subject to changing circumstances. Each state, territory, or tribe's planning objectives will be shaped by what is important to its public and stakeholders, the resources and information that are available, and many other factors. States, territories, and tribes can identify their long-term CWA Section 303(d) program priorities in their own unique manner using any of a myriad of approaches including, but not limited to, specific geographic areas, pollutants, designated uses, or pollutant-use combinations. Each state, territory, and tribe can express long-term priorities in its Prioritization Framework with as much detail as it deems appropriate, from narrative explanations of the geographic priority area(s), pollutant(s), etc. to specific priority waters or watersheds for the entire Vision period. It is then anticipated that states, territories, and tribes would identify and communicate specific waterbodies to be addressed over shorter increments. Each state, territory, and tribe is encouraged to involve an array of partners and stakeholders at all stages of the prioritization process as it finds beneficial. There are significant advantages in meaningfully engaging other CWA programs, statutory programs, government agencies, tribes, stakeholders, communities with environmental justice concerns, and the broader public on planning and prioritization.

A state, territory, or tribe's Prioritization Framework, including CWA Section 303(d) program long-term priorities and rationale for selecting those priorities, and its general strategy for implementing the Goals of the 2022 Vision over the next decade should be transparent to its stakeholders. The Prioritization Framework for each state, territory, or tribe should be shared with EPA by April 1, 2024 and may be updated if needed. States, territories, and tribes are encouraged to utilize the IR public process to develop and share their respective Prioritization Frameworks or use an independent public process (i.e., separate from the IR process). Regardless of how states, territories, and tribes choose to communicate their Prioritization Frameworks, the use of IRs to report on the progress towards development of TMDLs, other restoration plans, and protection plans is encouraged.

[8] EPA has several tools to assist with prioritization, including the Watershed Index Online (https://www.epa.gov/wsio) and the Recovery Potential Screening Tool (https://www.epa.gov/rps).

Restoration Goal

States, territories, and tribes design TMDLs and other restoration plans to attain and maintain water quality standards, facilitate effective implementation, and drive restoration of impaired waters.

The intent of the *Restoration Goal* is to encourage the identification, development, and implementation of the most effective approaches for restoring water quality. This Goal acknowledges how vital creativity and collaboration are for restoration plans to be successful in restoring waters. Restoration plans refer to TMDLs and other beneficial plans that address impaired waters. This includes, but is not limited to, waters assigned to Integrated Reporting Categories 5, 5r/5alt, 4b, and 4c.[9]

The *Restoration Goal* recognizes that TMDL development will continue to be a primary feature of the program. In addition to TMDLs, there are other types of plans that may be more immediately beneficial or practicable for restoring water quality. EPA notes that, while the CWA requirement to develop TMDLs remains for impaired waterbodies in Category 5, waterbodies may be given a lower priority for TMDL development while other restoration plans are pursued.

The 2013 Vision highlighted, and this 2022 Vision emphasizes that TMDLs and other restoration plans have a greater likelihood of yielding successful implementation when they involve enhanced engagement, coordination with stakeholders, integration among programs, and greater overall buy-in. TMDLs and other restoration plans can guide implementation in many ways to achieve their intended outcome. For example, TMDLs provide a target for restoring beneficial uses, identify pollutant sources and allocations with an appropriate level of detail; describe strategies or processes to be used to best achieve allocations and targets, including available regulatory controls; and present a structure for active review of implementation practices and monitoring data.

Plans and implementation activities that adjust to changing circumstances and new data (often referred to as "adaptive management") can facilitate successful implementation. This Goal can serve to further explore and identify how principles of adaptive management can most effectively be applied to achieve water quality standards, regardless of the type of restoration plan used. Adaptive management may promote the monitoring of plan effectiveness and the incorporation of new data and information into plan implementation and revision. It could also build new opportunities and actions to pursue under the *Partnerships Goal*. The Water Quality Management Plan and Continuing Planning Processes are two possible tools that could be used by states, territories, and tribes to effectively track implementation activities and adjust implementation approaches, as well as inform revisions of TMDLs and other restoration plans, as needed. Under this *Restoration Goal*, states, territories, and tribes will continue to enhance use of these various techniques to improve the likelihood that plans will be successfully implemented, and water quality restored and maintained.

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[9] See EPA's website on Integrated Reporting for discussion of EPA's reporting categories (https://www.epa.gov/tmdl/integrated-reporting-guidance-under-cwa-sections-303d-305b-and-314).

Protection Goal

In addition to recognizing the protection benefits that TMDLs and other restoration plans can provide, states, territories, and tribes may develop protection plans to prevent impairments and improve water quality, as part of a holistic watershed approach.

The intent of the *Protection Goal* is to encourage a proactive and holistic consideration of management actions to protect healthy waters.[10] Protection of waters is a specific objective of the CWA – "restore and maintain the chemical, physical, and biological integrity of the Nation's waters" (CWA Section 101). Also, protection and restoration are interdependent goals regarding the "integrity of the Nation's waters." For example, protection of healthy headwaters and wetlands helps reduce downstream restoration challenges and costs, while restoration reduces risks to adjacent protected, healthy waters. Including protection in and alongside restoration planning and implementation contributes to a holistic watershed approach that uses resources efficiently.

Planning for protection can take many forms independent from or in combination with restoration. For example, healthy waters at risk of degradation can benefit from protection plans designed to hasten implementation of actions that will keep the waters from becoming impaired. For healthy waters not at immediate risk of impairment, the thresholds necessary to maintain those higher quality characteristics can be identified, and plans can be designed to retain those thresholds. TMDLs and other restoration plans can aid in the identification and protection of unimpaired or unassessed waters included within the broader watershed area by helping to ensure that segments do not degrade, as well as facilitating water quality improvements in impaired segments. After restoration, TMDLs remain in effect, helping to protect the waterbody from becoming impaired again.

Although not all states, territories, and tribes may ultimately choose to use protection planning approaches, opportunities for protection within the context of the state, territory or tribe's water quality goals can be an important component to achieving water quality objectives. Protection can be less costly, both fiscally and ecologically, than restoration. Proactively protecting watersheds and waterbodies can help with future threats such as emerging water quality problems, loss and fragmentation of aquatic habitat, altered water flow and availability, invasive species, and climate change, and can protect the surrounding communities impacted by these threats. Examples of waters that could benefit from protection plans include, but are not limited to:

- Outstanding National Resource Waters or other specific category of high-quality waters;
- Waters with unique, valuable, or threatened species or their habitats;
- Waters and watersheds that constitute a public drinking water supply;

[10] For a specific waterbody, protection as described in this Vision is the sustained minimization or avoidance of water quality degradation due to stressors and/or watershed alterations that would present threats to its current condition. Under the Vision, protection is oriented toward healthy waters, including, but not limited to, those of high quality, simply unimpaired, or with limited impairments (to uses other than those for which protection is being sought). See EPA's website for details (https://www.epa.gov/tmdl/protection-approaches).

- Healthy segments in watersheds with impaired segments, including headwaters above downstream waters that are impaired;
- Healthy waters near areas with rapid land use changes;
- At-risk waters that are not yet impaired but showing signs of degradation;
- Other waters facing elevated risks of degradation.

Intergovernmental and external partnerships, as well as leveraging additional watershed program authorities (e.g., CWA Section 319, CWA Section 401 certification, antidegradation policies, Clean Water State Revolving Fund, Drinking Water State Revolving Fund, Natural Resources Conservation Service, Wild and Scenic Rivers System), can be valuable in protecting healthy waters and habitats. EPA's Healthy Watersheds Program can support the efforts of CWA Section 303(d) programs to identify, protect and maintain healthy watersheds across the United States.

Data and Analysis Goal

The CWA Section 303(d) program coordinates with other government and non-governmental stakeholders to facilitate data production and sharing, and effectively analyzes data and information necessary to fulfill its multiple functions.

The *Data and Analysis Goal* highlights multiple ways that states, territories, and tribes can expand on and improve the data and information available for CWA Section 303(d) functions. In the context of this Goal, such functions include:

- Determining the water quality condition for use in categorizing waters in the Integrated Report (i.e., Categories 1-5);
- Supporting the development of TMDLs, other restoration plans, and protection plans; and
- Evaluating the effectiveness of plan implementation in restoring and protecting water quality, thereby facilitating adaptive management so that plans remain productive.

State, territorial, and tribal CWA Section 303(d) programs are encouraged to collaborate and foster effective data sharing processes internally to develop and gather the data and information needed for CWA Section 303(d) functions. States, territories, and tribes also are encouraged to coordinate and foster effective data sharing processes externally to develop and gather data and information at different geographic scales from other agencies, universities, volunteer groups (e.g., local watershed groups), other interested organizations, and communities. States, territories, and tribes are encouraged to work with outside parties interested in submitting data or information to ensure they are aware of data quality and format expectations. EPA understands there may be challenges associated with compiling data with different requirements and in different formats coming from various sources and will continue to work to improve data tools that help with this task.

States, territories, and tribes will continue to enhance data consideration and analysis practices that support the multiple CWA Section 303(d) functions. Practices include:

- Applying appropriate geographic and temporal scales for the implementing programs' functions;

- Working towards evaluating water quality standards attainment in previously unassessed waters and waters where there is insufficient information to make an attainment decision, such as those in Category 3;
- Supporting development of water quality models for TMDL and other restoration and protection plan development;
- Addressing emerging program priorities (e.g., areas with environmental justice concerns and the effects of climate change); and
- Enabling a demonstration of program successes (e.g., supporting the conclusion that a particular waterbody is no longer impaired).

Advances in science, technology and data transmission offer potential for improvements in the amount of data available and the efficiency of data integration and interpretation. Each biennial CWA Section 303(d) listing cycle provides an opportunity for states, territories, and tribes to develop or revise assessment methodologies as needed to reflect the latest standards and science. As a general matter, ambient monitoring (which may include targeted monitoring and statistical surveys with a reasonably high level of confidence) provides essential water quality data for the CWA Section 303(d) assessment and listing process. For TMDL development, water quality models and other assessment tools provide essential information linking pollutant sources to water quality impairment. Other information sources such as satellite imagery, geospatial analysis, and climate forecasting may provide important information for watershed characterization.

Under this *Data and Analysis Goal,* states, territories, tribes, and EPA will continue to apply existing tools and explore new ones as appropriate. As states, territories, and tribes continue to gain experience utilizing these tools, they will be in a better position to employ them in the assessment and listing process, the development of restoration and protection plans, and the evaluation of the overall effectiveness of those restoration and protection efforts. Among other capacity building efforts, EPA plans to continue tribal Assessment and Total Maximum Daily Load Tracking and Implementation System (ATTAINS) trainings to facilitate tribal implementation of CWA Section 303(d) program functions.

Partnerships Goal

The CWA Section 303(d) program meaningfully communicates and collaborates with other government programs and non-governmental stakeholders to restore and protect water quality effectively and sustainably.

The intent of the *Partnerships Goal* is to encourage communication with governmental entities and non-governmental stakeholders in ways that lead to productive, sustained collaboration, and ultimately better water quality. The Goal consists of two distinct but related approaches: programmatic coordination, and stakeholder involvement and engagement. Both approaches rely on:

- Clear and effective communication that is appropriate for the target audience;
- Identification of work towards shared goals;
- Development and maintenance of strong working connections and relationships; and

- Creation of structures and processes to weave partnerships throughout CWA Section 303(d) program activities.

Programmatic Coordination

The CWA Section 303(d) program seeks to coordinate with and complement efforts across CWA programs, other statutory programs, and the water quality efforts of other governmental departments and agencies to identify and achieve shared goals. This coordination can include, among other approaches, organizing and aligning processes with partner entities working on CWA implementation; generating plans that are user friendly and broadly implementable across programs; and identifying and drawing in additional programs, authorities, and resources across government entities (including tribes) and the research community to achieve water quality goals.

Stakeholder Involvement and Engagement

The CWA Section 303(d) program seeks to facilitate engagement early and often with non-governmental entities and other stakeholders across various sectors and disciplines. Meaningful engagement aims to understand non-governmental stakeholders' values, learn from their data and knowledge, and use this input to inform water quality activities. Through this engagement, the program also seeks to: improve stakeholder understanding of matters such as the value of watershed management and the role of the CWA Section 303(d) program; encourage active involvement from those stakeholders in CWA Section 303(d) program activities; and empower the long-term contributions of stakeholders to water quality restoration and protection. This engagement should be fair and meaningful, identifying, and inviting input from all affected stakeholders, with particular attention to underrepresented communities and those with environmental justice concerns.[11] The engagement will also strive to support community efforts to value, protect, and advance water quality over the long-term, including facilitating watershed stewardship; assisting stakeholders in building capacity for meaningful involvement; and helping local champions and messengers. Communication is best when it is multi-directional and structured in a way that creates a feedback loop for iterative progress; builds and maintains trust and local champions; respects community knowledge and cultural and ecological values; and produces sustainable solutions that are community driven. Communication can also be most effective when the message is delivered in various ways using different media (e.g., in-person meetings, virtual, site visits).

[11] EPA defines "environmental justice" as the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. EPA defines "fair treatment" as meaning that no group of people should bear a disproportionate share of the negative environmental consequences resulting from industrial, governmental, and commercial operations or policies, and "meaningful involvement" as people have an opportunity to participate in decisions about activities that may affect their environment and/or health; the public's contribution can influence the regulatory agency's decision; community concerns will be considered in the decision making process; and decision makers will seek out and facilitate the involvement of those potentially affected. See EPA's website for more details.

Focus Areas

Focus Areas provide four cross-cutting themes of national, regional, and local importance to consider in CWA Section 303(d) program implementation. Highlighting these areas is one way to promote action and continue to make progress towards broader EPA priorities. Recognizing state, territorial, and tribal efforts already underway, EPA encourages further adoption and/or adaptation of these Focus Areas to tackle these important topics in the best manner according to individual state, territorial or tribal objectives. As with all other aspects of this Vision, these Focus Areas do not constitute regulation, policy, or new mandates.

Environmental Justice

It is essential that all individuals have fair and equitable access to the benefits of environmental programs. To facilitate this, EPA will work with states, territories, and tribes to assist in integrating environmental justice into EPA CWA Section 303(d) program activities. EPA continues to make achieving environmental justice part of its mission by developing programs, policies, and activities to address the disproportionately high and adverse human health, environmental, climate-related and other cumulative impacts on communities with environmental justice concerns.

The objective of the *Environmental Justice Focus Area* is to actively consider environmental justice in assessment, listing, TMDLs, and other restoration and protection plans to address disproportionately high and adverse environmental, water quality, climate-related, and other relevant impacts on underserved communities.

Thousands of communities and individuals can benefit from CWA Section 303(d) implementation through the work of state, territorial, and tribal programs. EPA recognizes that water quality and climate change impacts can disproportionately affect urban and rural communities that are predominately of color, indigenous, linguistically isolated, low-income, and/or impacted by other stressors. EPA applauds immediate and affirmative steps to improve the program's assessment, listing, plan development, monitoring, and engagement processes with a focus on pollution-burdened and underserved communities. The *Partnerships Goal* of this Vision speaks to some engagement approaches for integrating environmental justice into program work. EPA will collaborate with interested state, territorial, and tribal partners to further incorporate environmental justice into CWA Section 303(d) program activities. Opportunities to further integrate environmental justice into program implementation[12] may include, but are not limited to, the following:

- Actively engage the public and other stakeholders to improve and protect water quality as demonstrated by documented, inclusive, transparent, and consistent communication (e.g., requesting and sharing feedback on proposed approaches, providing equitable access to the public participation processes, and enhancing understanding of program objectives);

[12] See Environmental Justice Legal Tools for more opportunities across different programs including CWA Section 303(d): https://www.epa.gov/system/files/documents/2022-05/EJ%20Legal%20Tools%20May%202022%20FINAL.pdf

- Enhance understanding of the quality of more waterbodies near pollution-burdened, underserved, and tribal communities;
- Establish and communicate quality-controlled processes to use data and information more easily from community/watershed groups, universities, and other entities for assessment and listing;
- Consider prioritizing TMDLs, restoration and protection plans for development in areas most burdened by current and/or historical pollution;
- Consider environmental justice when assigning allocations to sources that would directly impact overburdened communities who may already be recipients of significant exposure to pollution, and possible constraints of low-income communities; and
- Integrate environmental justice into the implementation of water quality assessment, listing, and planning programs in Indian country and in other areas of interest to tribes, in partnership with federally recognized tribes.

EPA will promote opportunities through case studies, tools, and guidance as appropriate.

Climate Change

EPA is committed to integrating climate adaptation planning into the Agency's programs, policies, and rulemaking processes. The objective of the *Climate Change Focus Area* is to consider strategically how to account for the impacts of climate change, and address climate resiliency or vulnerability, in water quality assessment, impaired waters listing, and the development of TMDLs and other plans consistent with water quality standards. Examining the potential impact of changing climate conditions on CWA Section 303(d) program activities will often involve unique considerations depending on regional, local, or project-specific conditions. Actions taken to address climate change in CWA Section 303(d) program activities can be implemented with a focus on communities already experiencing disproportionately high adverse impacts (consistent with EPA's commitment to environmental justice) and considering efforts already underway by states, territories, and tribes.

EPA will collaborate with interested partners to further incorporate consideration of the impacts of changing climate conditions into program operations. Opportunities may include, but are not limited to, the following:

- Consider impacts of climate change on water quality in identifying impaired and threatened waters;
- Identify and utilize tools/resources that support prioritization of waters that may be particularly susceptible to changing climate conditions for protection and restoration;
- Consider the impact of changing environmental conditions when developing and implementing TMDLs, and other restoration and protection plans; and the ability of plans to achieve and maintain water quality standards;
- Build program capacity to highlight or develop products and/or approaches (including TMDLs, modeling methods, reasonable assurance, implementation plans, etc.) that are robust and adaptive when facing uncertain conditions;

- Target program resources and staff capacity towards areas and communities most impacted by changing climate conditions; and
- Engage the public and other stakeholders using available public processes to inform, solicit feedback, and enable constructive discourse to address impacts of climate change on CWA Section 303(d) program activities transparently and clearly.

EPA will promote opportunities through case studies, tools, and guidance as appropriate.

Tribal Water Quality and Program Development

EPA works closely with tribal partners to support tribal nations as they protect and steward their waters. The objectives of the *Tribal Water Quality and Program Development Focus Area* are to help interested tribes administer the CWA Section 303(d) program, assess waters, and plan for restoration and protection of tribal waters; ensure meaningful government-to-government consultation opportunities; and otherwise enable tribes to engage with EPA, states, and others on CWA Section 303(d) program activities relevant to tribal interests.

Tribal, state, and EPA representatives recognize the importance of tribal perspectives in implementing the CWA Section 303(d) program. Tribal-related topics may include, but are not limited to, the following:

- EPA promoting and assisting tribes to adopt and implement CWA Section 303(d) programs for reservation waters (i.e., treatment in a similar manner as a state or TAS);
- Developing tribal capacity necessary for water quality assessment and planning, including sustained data management and reporting activities, and for meaningful involvement in TMDLs and other restoration and/or protection plans;
- Coordinating/integrating with other water programs to promote restoration and protection of tribal waters and state waters where tribes have rights related to water quality;
- Consulting/coordinating with tribes on EPA CWA Section 303(d) actions in state areas that are important to tribes in order to account for tribal priorities;
- Facilitating coordination between state and tribal programs to support collaboration on shared water quality goals;
- Encouraging state and tribal coordination on CWA Section 303(d) actions early and throughout the process; and
- Considering the appropriate scope of direct implementation by EPA of CWA Section 303(d) listing and TMDL functions.

Program Capacity Building

The abilities of staff (and resilience in the face of turnover) are vital to sustained program effectiveness. These abilities and resilience are developed through training new staff, supporting existing staff in expanding their technical skills and subject matter knowledge, providing an information-exchanging community of practitioners across jurisdictions and levels of government, and fostering diverse perspectives and an inclusive work environment.

The objective of the *Program Capacity Building Focus Area* is to expand and build upon existing activities and resources to improve understanding of CWA Section 303(d) program foundations, familiarity with tools and various approaches to regular tasks and complex circumstances, and ability to accomplish statutory responsibilities and Vision Goals more efficiently and effectively. For example, the CWA Section 303(d) Webinar Series and annual National CWA Section 303(d) Training Workshop will strive to reach more program staff and provide valuable and innovative content for all levels of practitioners. EPA's Water Modeling Workgroup will strive to continue its webinar series and annual national training workshops on water quality modeling. Forthcoming EPA training resources will be of particular value to newer practitioners, and a project focused on communicating success will yield examples, templates, and collaborative resources.

EPA also intends to develop new guidance and factsheets on topics highlighted by program staff, and work with partner organizations, including the ACWA Watersheds Committee, to collaboratively support program development. Activities might include expanding the collection of documents cataloging and summarizing program practices on specific matters and supporting additional stakeholder trainings to improve program implementation. With input from new and experienced practitioners alike, these and other activities could fill notable knowledge gaps, advance critical thinking on issues of widespread interest, and improve collaboration inside the CWA Section 303(d) program as well as with other programs and stakeholders. In sum, the CWA Section 303(d) program will promote exceptional programmatic knowledge and skills, enhance resilience, and equip practitioners to engage citizens and other partners to best achieve water quality results.

2022 - 2032 Vision for the Clean Water Act Section 303(d) Program Summary Page

Vision Statement

The Clean Water Act Section 303(d) program strives to strategically plan and prioritize activities, engage partners, and analyze and utilize data to develop water quality assessments, plans, and implementation approaches to restore and protect the Nation's aquatic resources.

Goals

Outline aspirations and highlight opportunities to implement CWA Section 303(d) program activities.

Planning and Prioritization Goal:
States, territories, and tribes develop a holistic strategy for implementation of Vision Goals, systematically prioritize waters or watersheds for TMDL and other plan development (restoration and/or protection), and report on the progress towards development of plans for priority waters.

Restoration Goal:
States, territories, and tribes design TMDLs and other restoration plans to attain and maintain water quality standards, facilitate effective implementation, and drive restoration of impaired waters.

Protection Goal:
In addition to recognizing the protection benefits that TMDLs and other restoration plans can provide, states, territories, and tribes may develop protection plans to prevent impairments and improve water quality, as part of a holistic watershed approach.

Data and Analysis Goal:
The CWA Section 303(d) program coordinates with other government and non-governmental stakeholders to facilitate data production and sharing, and effectively analyzes data and information necessary to fulfill its multiple functions.

Partnerships Goal:
The CWA Section 303(d) program meaningfully communicates and collaborates with other government programs and non-governmental stakeholders to restore and protect water quality effectively and sustainably.

Focus Areas

Provide four cross-cutting themes of national, regional, and local importance, consistent with national EPA priorities, to consider in CWA Section 303(d) program implementation:

Environment Justice
Climate Change
Tribal Water Quality and Program Development
Program Capacity Building

Appendix B

List of 2022-2032 TMDL Priorities

(updated April 2024)

AU_ID	AU Name	Impairment
FFY 2023-24 BRIDGE METRICS (due September 30, 2024)		
NM-2212_05	El Porvenir Creek (SFNF bnd to Hollinger Canyon)	Temperature
NM-2213_21	Gallinas River (Perennial prt Aguilar Creek to Pecos Arroyo)	*E.coli*
NM-2214.A_072	Indian Creek (Pecos River to headwaters)	Specific conductance
NM-2211.A_00	Pecos River (Sumner Reservoir to Santa Rosa Reservoir)	*E.coli*
NM-2213_02	Pecos River (Cow Creek to Canon de Manzanita)	Chloride
NM-2213_00	Pecos River (Tecolote Creek to Villanueva State Park)	Total recoverable aluminum
NM-2213_00	Pecos River (Tecolote Creek to Villanueva State Park)	Chloride, *E.coli*, turbidity
NM-2213_01	Pecos River (Villanueva State Park to Cow Creek)	Chloride, *E.coli*, turbidity
FFY 2025-26 PLANNED TMDLS (due September 30, 2026)		
NM-9000.A_060	Gallegos Canyon (San Juan River to Navajo bnd)	*E.coli*, temperature
NM-2407.A_10	Los Pinos River (Navajo Reservoir to CO border)	Temperature
NM-2407.A_00	Navajo River (Jicarilla Apache Nation to CO border)	Total phosphorus, *E.coli*, turbidity
NM-2401_00	San Juan River (Animas River to Canon Largo)	*E.coli*
NM-2405_11	San Juan River (NM reach upstream of Navajo Reservoir)	Total recoverable aluminum, *E.coli*
NM-9000.A_021	Shumway Arroyo (San Juan River to Ute Mtn Ute bnd)	*E.coli*
NM-2401_11	Stevens Arroyo (Perennial prts San Juan R to headwaters)	*E.coli*
NM-2106.A_44	American Creek (Rio de las Palomas to headwaters)	*E.coli,* temperature
NM-2106.A_54	Clear Creek (Rio de las Vacas to San Gregorio Lake)	Total recoverable aluminum
NM-2106.A_12	Jaramillo Creek (East Fork Jemez to headwaters)	*E.coli*, sedimentation
NM-2106.A_11	La Jara Creek (East Fork Jemez to headwaters)	Temperature
NM-2106.A_50	Rio Cebolla (Rio de las Vacas to Fenton Lake)	*E.coli*
NM-2106.A_42	Rito Penas Negras (Rio de las Vacas to headwaters)	*E.coli*