

**STATE OF NEW MEXICO  
WATER QUALITY CONTROL COMMISSION**

**IN THE MATTER OF FINAL 2020-2022  
STATE OF NEW MEXICO CLEAN  
WATER ACT SECTION 303(D) AND  
SECTION 305(B) INTEGRATED  
REPORT.**

**WQCC No. 20-66**

**ORDER APPROVING INTEGRATED REPORT**

THIS MATTER having come before the Water Quality Control Commission (“Commission”) at its regularly scheduled meeting on December 8, 2020, on the oral request of John Verhuel, counsel for the New Mexico Environment Department (“Department”), that the Commission, as “the state water pollution control agency for [the State of New Mexico] for all purposes of the [Federal Water Pollution Control Act of 1948, as amended],” (*see*, NMSA 1978, § 74-6-3(E) (2007)), approve the State of New Mexico’s biennial report to the United States Environmental Protection Agency (“EPA”) under § 303(d) of the Federal Water Pollution Control Act of 1948, as amended, (commonly known as the “Clean Water Act”), 33 U.S.C. § 1313(d) (2000), and § 305(b) of the Clean Water Act, 33 U.S.C. § 1315(b) (1977), which two reporting requirements are combined into the final draft of the 2020-2022 State of New Mexico Clean Water Act § 303(d)/§ 305(b) Integrated Report received by the Commission on October 28, 2020 (“Integrated Report”), a copy of which report, as corrected and revised, is incorporated by reference into this Order Approving Integrated Report; and the Commission having considered the presentation of the Department’s Surface Water Quality Bureau (“Bureau”) on the Integrated Report, and having discussed its contents, the Commission makes the following findings based on the Department’s representations to the Commission:

1. § 305(b) of the Clean Water Act requires States to prepare and submit a biennial report to the EPA, which report is to include, as to each State: (a) a description (or assessment) of the water quality of all navigable waters; (b) an analysis of the extent which all navigable waters provide for the protection

and propagation of a balanced population of shellfish, fish, and wildlife, and allow recreational activities in and on the water; (c) an analysis of the extent to which the elimination of the discharge of pollutants and a level of water quality which provides for the protection and propagation of a balanced population of shellfish, fish, and wildlife and allows recreational activities in and on the water, have been or will be achieved by the requirements of 33 U.S.C. Ch. 26 (“Water Pollution Prevention and Control”), together with recommendations as to additional action necessary to achieve such objectives and for what waters such additional action is necessary; (d) an estimate of (i) the environmental impact, (ii) the economic and social costs necessary to achieve the objective of 33 U.S.C. Ch. 26, (iii) the economic and social benefits of such achievement, and (iv) an estimate of the date of such achievement; and (e) a description of the nature and extent of nonpoint sources of pollutants, and recommendations as to programs to be undertaken to control each category of such sources, including an estimate of the costs of implementing such programs.

2. The Commission is without technical staff of its own; therefore, it has delegated responsibility for water quality management activities to several constituent agencies, as that term is defined in the singular in NMSA 1978, § 74-6-2(K) (2019), primarily the Department. *See*, NMSA 1978, Section § 74-6-4(F) (2019). Responsibility for activities involving surface waters, including development of the Integrated Report, is delegated to the Bureau.

3. The Integrated List, Appendix A of the Integrated Report, contains the Bureau’s surface water quality assessment conclusions, and includes the attainment status for each assessment unit (*i.e.*, water body or stream reach) based on water quality standards in the most recent Commission and EPA-approved Standards for Interstate and Intrastate Surface Waters at NMAC 20.6.4, through application of the assessment procedures described in the Bureau’s most recent Comprehensive Assessment and Listing Methodology, available at <https://www.env.nm.gov/surface-water-quality/calm/>.

4. Water quality standards consist of the designated uses of surface waters of the State, the

(associated) water quality criteria necessary to protect those uses, and an antidegradation policy. See, 20.6.4.6(A) NMAC. Designated uses include aquatic life, fish culture, wildlife, wildlife habitat, primary and secondary contact (including cultural, religious, ceremonial, and recreational purposes), agricultural, municipal, domestic, and industrial water supply, irrigation, and livestock watering. *See*, 20.6.4.6(B) NMAC.

5. The process for developing the Integrated Report is specified in Section IV of the Statewide Water Quality Management Plan and Continuing Planning Process adopted by the Commission pursuant to NMSA 1978, § 74-6-4(B) (2019), and available at <https://www.env.nm.gov/surface-water-quality/wqmp-cpp/>. *See also*, 40 C.F.R. § 130.5 (2003). The Integrated Report, once finalized, becomes a component of a State's Water Quality Management Plan and Continuing Planning Process. *See*, 40 C.F.R. § 130.6(c) (2003).

6. The Integrated Report is acceptable to the Commission, subject to the corrections and revisions agreed to by the Commission and the Department, as set forth in Exhibit A attached to and made a part of this Order Approving Integrated Report.

**IT IS THEREFORE ORDERED** that the Integrated Report is approved by the Commission, as corrected and revised, which Integrated Report is to become a component of New Mexico's Statewide Water Quality Management Plan and Continuing Planning Process previously adopted by the Commission.

DATED this 18th day of December, 2020.

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Jennifer J. Pruett  
Commission Chair

scheduled for development. TMDLs and other planning documents provide information on the probable source(s) of the water quality impairment which is used to determine the best approach to improve water quality. Field observations, available geographic information system (GIS) layers and land use imagery, and both stakeholder and staff watershed knowledge are combined to develop draft Probable Source lists which are finalized in TMDL documents and summarized in the IR. The vast majority of surface water quality impairments identified in New Mexico are due to nonpoint sources of water pollution. ~~[Agricultural practices (including rangeland grazing), increased runoff from roads and other impervious surfaces, and onsite treatment systems are the leading probable sources of impairment in New Mexico's rivers and streams where TMDLs or alternative planning documents have been prepared.]~~ The top ten probable sources in New Mexico's streams and rivers include agriculture/grazing, drought-related impacts, flow alteration/diversion, loss of riparian habitat, on-site treatment systems, road/bridge runoff, recreation, streambank modification, waterfowl, and wildlife. Additional data and resources are needed to substantiate probable sources.

The EPA recommends and the SWQB has prepared the 2020-2022 IR consistent with previous guidance memorandums, including EPA's significant 2006 IR Guidance supplemented by subsequent memorandums typically released for each listing cycle (EPA 2005, 2017a). The 2018 IR cycle started a new approach to reporting that is intended to reduce reporting burden to states, tribes, and territories. Starting with EPA's process improvement event in 2015 (which the SWQB was invited to participate in as one of a handful of states), EPA has worked with states, tribes, and territories to streamline the IR reporting process through updating the system for recording IR data, namely the Assessment and Total Maximum Daily Load Tracking and Implementation System (ATTAINS). The new ATTAINS provided an opportunity for New Mexico to streamline the narrative portion of the IR. Accordingly, the main body of the IR has been significantly re-organized and shortened, as compared with pre-2018 IRs, to better describe New Mexico's current water quality framework and focus on required IR elements that are not reported electronically via ATTAINS. The re-design is also intended to make the IR a more user-friendly document by providing additional hyperlinks to additional information should the user want to learn more about specific programs or restoration activities.

There are many challenges in meeting the objectives of the CWA and the WQA, namely climate change, stormwater management, the 2020 Navigable Waters Protection Rule, watershed management, wildfire, nutrient reductions strategies, and inadequate funding to identify and address water quality issues in New Mexico.

## [Significant Challenges to Water Quality Management in New Mexico

This section highlights some of the more significant surface water quality issues in New Mexico.

### ***Climate Change***

~~The impact of climate change on the state's water resources should be acknowledged because the science shows that these changes will lead to further problems and uncertainties. Droughts are predicted to increase in both frequency and severity in many regions of the world, including the southwestern U.S., due to climate change. In general, droughts and the immediate recovery period have substantial water quality effects on the waterbody and its watershed. For example, decreases in stream flow typically increase pollutant concentrations due to evaporation and less dilution.~~

Other water quality impacts associated with climate change and drought include higher water temperatures, enhanced algal production, toxic algal blooms, and lower dissolved oxygen levels, all of which are stressors to aquatic life. As temperature and precipitation patterns undergo extreme cycles, more frequent and more powerful storms will increase pollutant runoff from the watershed, physically modify and erode riparian habitat, and disrupt biological communities that depend on these habitats. In addition, shifting temperature and precipitation patterns affect vegetation composition and density and increase the propensity for wildfire in non-fire adapted ecosystems.

As waters become stressed by climate change, drought, wildfires, overuse, and groundwater mining, many perennial and intermittent streams and springs will fade. Currently, many perennial “rivers” and “tributaries” in New Mexico contain non-perennial sections. As a result of climate change, these “perennial” waters will likely diminish and the need for clean water will strain these systems even further.

To address some of these concerns, in 2019 Governor Lujan Grisham signed executive order 2019-003 on Addressing Climate Change and Energy Waste Prevention. Executive order 2019-003 directs all State agencies to evaluate the impacts of climate change on their programs and operations and integrate climate change mitigation and adaptation practices into their programs and operations. The IR ties in directly with various initiatives for resource management in the State of New Mexico, including executive order 2019-003. Water quality challenges identified in this report are important to address as improved watershed health is our most effective tool in increasing waterbody and watershed resilience to climate change.

### ***Stormwater Management***

Controlling stormwater runoff and its impact is a serious issue facing communities across New Mexico. Urban and highway stormwater runoff is rainfall or snowmelt that runs off the ground or impervious surfaces such as buildings, roads, and parking lots, and drains into natural or man-made drainage systems. In most cases, it drains directly into streams, river, lakes, or wetlands without receiving any treatment to remove pollutants. Because of this, stormwater is a leading cause of water pollution.

Changes in land use have a major effect on both the quantity and quality of stormwater runoff. Urbanization, if not properly planned and managed, can dramatically alter the natural hydrology of an area because it increases impervious cover, decreases the amount of rainwater that can naturally infiltrate into the soil, and consequently increases the volume and rate of stormwater runoff. Stormwater runoff also typically contains elevated concentrations of a variety of constituents that exceed water quality standards (e.g., copper, lead, and zinc; polycyclic aromatic hydrocarbons (PAHs) and pesticides; oil and grease; nutrients (nitrogen and phosphorus); sediment; and E. coli bacteria). Untreated stormwater entering our waterways can kill aquatic life and result in the contamination of fish tissue and drinking water supplies; prohibit or limit swimming, fishing or boating; present dangers to public health and safety; and increase the frequency and magnitude of flooding.

Polluted stormwater runoff also is commonly transported through municipal separate storm sewer systems (MS4s) in urbanized areas to local waterbodies. To prevent harmful pollutants from being washed or dumped into MS4s, certain operators are required to obtain National Pollutant Discharge Elimination System (NPDES) permits and develop stormwater management programs (SWMPs). The SWMP describes the stormwater control practices that will be implemented consistent with permit requirements to minimize the discharge of pollutants from the urbanized area. Furthermore,

effective water quality protection requires the “treatment” of stormwater through the use of various preventive and control measures (e.g., best management practices, low impact development, structural controls) to reduce the impact of impervious surfaces and minimize increases in stormwater runoff.

The EPA’s “Procedures for Implementing NPDES Permits in New Mexico – NMIP”<sup>4</sup> establishes procedures to effectively incorporate state water quality standards and TMDLs into NPDES permits. EPA Region 6 is the NPDES permitting authority in New Mexico. As such, EPA Region 6 uses the NMIP to explain NPDES permitting decisions in New Mexico. The EPA developed the NMIP in coordination with the NMED SWQB. Specific measures to ensure permitting effectiveness and appropriate implementation of New Mexico’s water quality standards and TMDLs are contained in the NMIP.

### ***Navigable Waters Protection Rule and “Waters of the U.S.”***

In 2019, the EPA and the U.S. Army Corps of Engineers proposed the Navigable Waters Protection Rule<sup>2</sup> to define “waters of the U.S.” and delineate which waters are protected under the federal CWA. The rule was finalized in April 2020 and went into effect on June 22, 2020. The new rule interprets the term “waters of the U.S.” to encompass the following four categories of waters:

1. — Territorial seas and traditional navigable waters;
2. — Perennial and intermittent tributaries to territorial seas and navigable waters;
3. — Certain lakes, ponds and impoundments of jurisdictional waters; and
4. — Wetlands adjacent to other jurisdictional waters.

The new rule identifies twelve categories that are not “waters of the U.S.” and therefore, not federally regulated or protected under the CWA, including ephemeral features that flow only in response to rainfall, groundwater, wetlands not adjacent to a jurisdictional water, many farm and roadside ditches, certain artificial lakes and ponds, and waste treatment systems.

Under the new rule, at least 89 percent of the state’s rivers and streams and approximately 40 percent of the state’s wetlands lose federal regulation and protection from pollution. New Mexico is one of three states in the U.S., and the only state in the arid southwest, that does not have authority (aka “delegation”) from the EPA to administer and implement the NPDES program under Section 402 of the CWA. The NPDES program regulates facilities that discharge pollutants into “waters of the U.S.” and includes permit issuance, compliance, and enforcement activities.

This federal rollback of environmental protections for streams and wetlands will put more burden on the State’s water quality management agencies, especially the NMED, to ensure continued protection of surface waters of the state and adequate resources to maintain and improve water quality. Without a state permitting program to authorize discharges to surface waters of the state, including waters of the U.S., the NMED is unable to fill the regulatory gap created by the Navigable Waters Protection Rule.

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Currently, the NMED is actively investigating available options. This includes conducting a NPDES gap analysis that (1) evaluates statutory, regulatory, and programmatic gaps associated with potential pursuit of NPDES program authorization for the State of New Mexico, and (2) identifies actions necessary to eliminate the gap and assume authority over the program.

***Watershed Management and Water Quality***

Interagency collaboration has always played a significant role in managing watersheds on public lands within New Mexico. There are many federal and state agencies with varying missions and priorities for utilizing and protecting New Mexico's natural resources. In part, these activities include habitat restoration, water quality management, water rights management, mining, grazing, silviculture, conservation management, wildlife management, outdoor recreation, hunting, and fishing. This IR, as well as the WQMP/CPP, identifies some of those entities the State engages with to ensure continued water quality protection for the State of New Mexico.]

## C. Special State Surface Water Concerns and Recommendations

Agencies and other stakeholders that implement New Mexico's water management programs work continuously to protect surface water quality. However, there are still many challenges in meeting the objectives of the CWA and the WQA. ~~[The Executive Summary provides a summary of current, significant challenges to water quality management in New Mexico, namely **climate change, stormwater management, and the 2020 Navigable Waters Protection Rule.**]~~ Below are ~~[additional]~~ significant surface water quality issues in New Mexico.

### **Climate Change**

The impact of climate change on the state's water resources should be acknowledged because the science shows that these changes will lead to further problems and uncertainties. Droughts are predicted to increase in both frequency and severity in many regions of the world, including the southwestern U.S., due to climate change. In general, droughts and the immediate recovery period have substantial water quality effects on the waterbody and its watershed. For example, decreases in stream flow typically increase pollutant concentrations due to evaporation and less dilution. Other water quality impacts associated with climate change and drought include higher water temperatures, enhanced algal production, toxic algal blooms, and lower dissolved oxygen levels, all of which are stressors to aquatic life. As temperature and precipitation patterns undergo extreme cycles, more frequent and more powerful storms will increase pollutant runoff from the watershed, physically modify and erode riparian habitat, and disrupt biological communities that depend on these habitats. In addition, shifting temperature and precipitation patterns affect vegetation composition and density and increase the propensity for wildfire in non-fire adapted ecosystems.

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### **Wildfires**

New Mexico has experienced a growing number of wildfires with increasing size and severity. Wildfires can produce significant watershed changes that may impact water quality, fish and other aquatic organisms, drinking water supplies and wastewater treatment systems. The primary water quality concerns after a wildfire are: (1) the introduction of sediment and debris into the surface waters; (2) the increase of nitrate and other plant nutrients from burned vegetation; (3) the introduction of radionuclides and heavy metals from ash, soils, and geologic sources; and (4) the introduction of fire retardant chemicals into waterbodies. The magnitude of these effects is largely dependent on the size, intensity, and severity of the fire, and on the condition (e.g., healthy or poor) of the watershed at the time of burning.

A watershed may take decades to completely recover from the effects of a wildfire, during which time the waters may exceed WQS for one or more pollutants. Assessing the water quality of an area

Certificate of Service

I hereby certify that on December 18, 2020 a copy of the foregoing **Order Approving Integrated Report** was emailed to the persons listed below. A copy will be mailed first class upon request.

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**Pamela Jones** Digitally signed by Pamela Jones  
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