

New Mexico lifts pollutant limit for Red River amid efforts to fund restoration

By J.R. Logan

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State officials have withdrawn a limit meant to prevent harmful aluminum from entering the Red River. The limit was put in place in 2006 to protect the health of fish and other aquatic life, but officials say the measurement is now outdated.

The switch to the new criteria is based on studies presented to state regulators by Chevron Mining and Los Alamos National Labs, both of which are obligated to conduct periodic tests to ensure compliance with water quality standards.

The withdrawal voids official efforts to address aluminum contamination in the river and restricts the kinds of funding available for the watershed. The move comes months after the state's Water Quality Control Board voted to take the Red River off the state's list of "impaired" waters based on the same research.

The previous limit — known as a Total Maximum Daily Load or "TMDL" — intended to identify sources of the pollutant, and create an avenue to addressing the contamination.

James Hogan with the New Mexico Environment Department told *The Taos News* the proposal to withdraw the TMDL was thoroughly vetted by officials and the public before being removed last week. The agency held an open meeting in Red River last month, and it fielded written comments questioning the move from two local environmental groups and the village of Questa.

Hogan said the updated water samples used to withdraw the TMDL (taken in 2009) were lower than those used to justify the limit in 2006. He said the new samples were still above the previous benchmark for maximum allowable aluminum, but they are within current limits based on new measurement techniques.

"While there are elevated concentrations of aluminum in the Red River, given the best toxicological data that we have and the best toxicological studies that are out there, the levels in the Red River should not be causing a detriment to fish population or other aquatic life in that system," Hogan said.

That's a change from 2006, when the Environment Department said snowmelt samples were above "chronic aluminum" standards. In the document that imposed the aluminum limit, the state noted that high chronic levels of dissolved aluminum "can be toxic to fish, benthic invertebrates and single celled plants."

'Mainly symbolic'

Chevron spokeswoman Margaret Lejuste said in an interview that the removal of the TMDL was based on sound science. She called the action “mainly symbolic” and said it would not change any of the mine’s environmental obligations. “We’re not trying to worm out of anything,” Lejuste said.

A discharge permit administered by the EPA requires the mine to test for aluminum to ensure that it meets previous water quality standards.

Dave Berry, a spokesman for the EPA, told *The Taos News* that Chevron must adhere to the terms of its existing permit — including the aluminum cap — until the permit expires. That permit is currently in the renewal process, and Berry said the new criteria means the aluminum limit will not be a required part of the new permit.

While the EPA could add limits for aluminum and other potential pollutants on its own if it deems there is a threat, Berry said he could not speculate as to whether aluminum would be included in the new permit.

The Red River Wastewater Treatment Plant must also meet aluminum standards for the effluent it discharges into the Red River under an EPA permit. The treatment plant’s permit is not up for renewal for four years.

While water samples show the total amount of aluminum in the water, studies have not yet concluded exactly how much of the aluminum is naturally occurring and how much is coming from the mine or other man-made sources.

Chevron Mining is now in the early stages of an \$800 million, EPA-mandated cleanup intended to prevent further damage to the river. As a part of the cleanup planning process, the U.S. Geological Survey did a comprehensive study of the Red River from 2001 to 2005 to determine pre-mining ground water quality on the Red River.

Researchers found that much of the aluminum found in the Red River is naturally occurring, though they acknowledged that mine-related discharges contributed additional pollutants, especially in the past. The most recent copy of Chevron’s EPA permit notes that the mine’s efforts to contain harmful runoff have been largely successful.

At the same time, erosion scars upstream from the mine property were found to be dumping an enormous amount of aluminum into the Red River during snowmelt or major storm events. Runoff from the deep scars is highly acidic and carries dissolved heavy metals to the river. When the runoff meets the river, the acidic water neutralizes, creating a grayish white precipitate that glazes the river bed and has been found to damage habitat, coat fish fill gills and kill organisms that live on the bottoms of streams.

Outside of these occasional runoff events, researchers concluded that the Red River’s water quality is normally adequate for aquatic life.

Doing better

Eric Frey, a fisheries biologist with the New Mexico Department of Game and Fish, seems to agree, at least to an extent.

Frey said certain sections of the Red River — above the town of Red River and below the fish hatchery west of Questa — already support “healthy trout populations.” The middle section — in the canyon and adjacent to the mine and several large erosion scars — has historically not supported trout.

In addition to silting problems, Frey said there isn’t much fish habitat.

Nick Streit, a member of Trout Unlimited and owner of Taos Fly Shop, said in spite of decades of poor fishing the Red River is holding more big fish in the section close to the Rio Grande than it has in his entire lifetime. “I’m not a scientist,” Streit said. “Is there too much aluminum in the river? I don’t know. But are the fish doing better? You bet.”

While things may be improving, it doesn’t mean the river is as healthy as it could be. Some are still concerned about the watershed’s overall condition, and they are worried the removal of the TMDL would partially derail efforts to improve water quality.

By removing the TMDL from the Red River, the watershed is no longer eligible for 319 grant funds, which are specifically aimed at addressing TMDL issues. A few years ago, Taos-based environmental group Amigos Bravos received a 319 grant to counter off-road vehicle use in the Red River’s headwaters. The village of Questa had twice unsuccessfully applied for 319 grants.

While 319 funds are now out of reach, the new criteria will not directly affect other efforts to restore fish habitat on the river around Questa.

The Questa Economic Development Fund is expected to give \$60,000 for river engineering and is working with several groups — including Trout Unlimited and the New Mexico Department of Game and Fish — to create a fishing park at Eagle Rock Lake. Chevron has pledged up to \$3.5 million to go to the nonprofit Questa Economic Development Fund, and Lejuste said the mine may be willing to provide equipment and crews to help with the work.

Hogan with the Environment Department said the agency is also asking the state Legislature for \$1.5 million in capital outlay funds to go to a “Healthy Rivers” initiative. The program would put money into addressing water quality and stream habitat problems, and would take into consideration the economic benefits of improved river health. The Red River has been identified as a potential recipient of funding from the program.

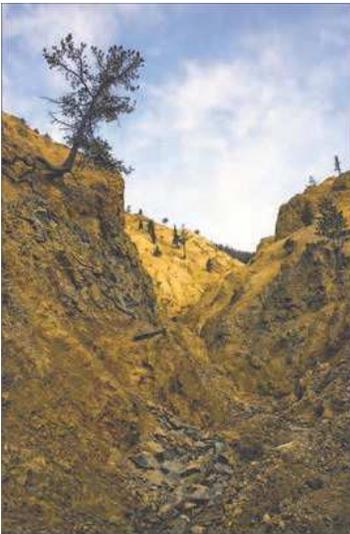
State Sen. Carlos Cisneros, D-Questa, told *The Taos News* that he was behind the Healthy Rivers idea and hoped to find additional funds to help on the Red River. Cisneros was able to get \$90,000 set aside for river restoration last session, though the money has not yet found a home.

Cisneros sits on the Legislative Finance Committee, which is charged with making funding recommendations to the state legislature. “I’m certainly supportive of any idea that addresses the issues at the Red River,” Cisneros said. “I’m looking forward to assisting in way that I can to advance that.”



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A grayish-white film said to be the precipitate of dissolved aluminum coats rocks and a leaf on the bank of the Red River near the Questa molybdenum mine property in this photo from 2011.



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Deep arroyos above the Red River have been cut in naturally occurring erosion scars, like this one photographed last fall. Researchers have determined that acid runoff from these scars contributes to the poor health of the river because the runoff is laden with harmful metals such as aluminum. During snowmelt or heavy storms, this toxic runoff floods into the river, causing a milky film to coat the streambed.