



**REGION 9**

SAN FRANCISCO, CA 94105

Trevor Baggione  
Director, Water Quality Division  
Arizona Department of Environmental Quality  
1110 W. Washington Street  
Phoenix, Arizona 85007

By Email Only

Re: Arizona 2024 List of Impaired Waters under Clean Water Act section 303(d)

Dear Director Baggione,

With this letter the U.S. Environmental Protection Agency (EPA) affirms its May 24, 2024 addition of Patagonia Lake (Santa Cruz County) to Arizona's 2024 list of water quality limited segments requiring a Total Maximum Daily Load (TMDL) pursuant to Clean Water Act Section 303(d).

Per EPA regulations, EPA solicited public comments from May 24 to July 5, 2024 on its identification of Patagonia Lake as impaired for methylmercury in fish tissue. EPA received four comments, none of which opposed this action. After consideration of the public comments EPA affirms its decision to add Patagonia Lake as impaired for methylmercury in fish tissue to Arizona's 2024 List.

I look forward to our continued partnership to protect Arizona's water quality and advance human health and wildlife protection. Please call me if you would like to discuss further, or your staff may contact Diana Hsieh at (415) 972-3526 or [hsieh.diana@epa.gov](mailto:hsieh.diana@epa.gov) with specific questions concerning this decision.

Sincerely,

Tomás Torres  
Director, Water Division

Enclosure:

1. Summary of Public Comments

cc: Erin Jordan, ADEQ

## Enclosure

### Summary of Public Notification Process on EPA's Action to Identify Patagonia Lake as an Impaired Water Due to Methylmercury in Fish Tissue Under Clean Water Act Section 303(d)

#### Introduction

On May 24, 2024, EPA issued its decision to partially approve and partially disapprove Arizona's 2024 List of Impaired Waters requiring Total Maximum Daily Loads (TMDLs) under Clean Water Act (CWA) section 303(d). EPA found that Patagonia Lake (Santa Cruz County) did not meet Arizona's water quality standards for methylmercury in fish tissue that protects the fish consumption use. EPA, therefore, found the State's decision to omit Patagonia Lake from the List of Impaired Waters was inconsistent with CWA Section 303(d) and implementing regulations at 40 C.F.R. § 130.7(d)(2). EPA disapproved the omission of Patagonia Lake from the List of Impaired Waters.

On May 24, 2024, EPA began a public comment period on its identification of Patagonia Lake as impaired for methylmercury-in-fish-tissue. EPA solicited public comment by posting public notices on the national EPA Public Notices website and through the Arizona Department of Environmental Quality's email subscription list for Clean Water Act assessments. EPA's comment period was open for 42-days and closed on July 5, 2024. EPA received four comments through email.

#### Comments Received

##### **Comment 1**

I was happy to see Lake Patagonia added to the EPA's impaired waters list. I enjoy kayaking at the lake and have seen the signs and talked to park staff about the limits on eating catfish caught while fishing the lake. This state park is the only state park from Tucson South where Arizonans can hike, swim, fish, and boat, and as such, we should take steps to correct the contamination of Lake Patagonia. In addition to the threats to human health, we have area wildlife who may consume the contaminated fish. Also, as a reservoir, it's a regional storage facility for the county and flows into the endangered Santa Cruz River. The EIS for South32's mining project was just opened to public comment, and the mine is permitted to release millions of gallons of water into Harshaw Creek daily. That water will eventually make its way into Lake Patagonia as well, and although it should not contain excessive amounts of pollutants, mining accidents do happen. The area has unhealthy levels of PFAS in the water as well. I hope the EPA will take whatever steps are needed to clean up and help safeguard the water Santa Cruz County residents rely on.

Thank you for this opportunity to share my concerns.

**EPA Response:** EPA appreciates the involvement of the public and acknowledges the comment in support of the May 24, 2024 action.

**Comment 2**

This is to request that the EPA approve Patagonia Lake be included to 2024 Arizona Section 303(d) of Impaired Waterways.

This is to protect and enhance public health and the environment of Arizona

Now in addition to the levels of unacceptable methylmercury levels in fish there are further concerns of metal mobilization resulting from the anticipated discharge of 6.5 million gallons per day by Hermosa Mine into Lower Harshaw Creek, a known impaired creek from legacy mining which will make this situation worse.

Thank you for your conscientious efforts to keep Patagonia Lake and surrounding environment safe for the public.

**EPA Response:** EPA appreciates the involvement of the public and acknowledges the comment in support of the May 24, 2024 action.

**Comment 3**

I live in Patagonia and fully support EPA's action to add Patagonia Lake to Arizona's 2024 List of Impaired Waters under Clean Water Act, Section 303(d). Residents have seen signs up in the past referring to a limit on caught fish due to mercury poisoning, including no taking of catfish. With the proposed 6 million gallons of water a day coming down an impaired tributary of Sonoita Creek which outflows directly into Patagonia Lake, the problem may only get worse.

Thank you for the foresight and for acting to add Patagonia Lake to Arizona's 2024 List of Impaired Waters under Clean Water Act, Section 303(d).

**EPA Response:** EPA appreciates the involvement of the public and acknowledges the comment in support of the May 24, 2024 action.

**Comment 4**

Thank you for your looking into the status of the water in Lake Patagonia, Santa Cruz County, Arizona.

I moved to the Lake in April, 2021 with intentions of fishing, boating and swimming in the lake.

At the marina Arizona Dept of Environmental Quality, ADEQ, had a notice posted recommending that fish consumption from the lake not exceed 6 oz per week for adults and 3 oz per week for pregnant women and children under 6 years of age.

Then about a year ago the notice was changed to allow greater consumption levels.

That prompted me to contact ADEQ and request the scientific data that not only supported the previous warning but the data that showed an improvement in water quality that made greater fish consumption allowable.

ADEQ told me that there was never a previous notice of which I spoke, and only the one that was there now. Many friends and neighbors remembered the previous notice, and its conflict with the new notice, as they too were concerned about eating an unsafe level of fish from the lake.

When I re-contacted ADEQ they still insisted on their position that there was not a change in their notice.

I know people who will not even swim in the lake for safety concerns.

We all know of the Harshaw Creek impairment south of Patagonia as a result of legacy mining over the last 150 years. USGS is reluctant to make public the recent analysis of Harshaw Creek conducted by Floyd Gray as it will show just how impaired the water will become as a result of metal mobilization from the planned 6.5 million gallons per day discharge from Hermosa Mine into Harshaw Creek as permitted by ADEQ. ADEQ says it is not their responsibility to look into this situation, only required to monitor the quality of the water discharged by the mine at their property line.

This creek is the main source of water into Sonoita Creek which feeds Lake Patagonia. The impairment of the water in Lake Patagonia will only increase beyond its current level.

Please consider a bottom sampling program along the length of Lake Patagonia to confirm the current status, and also consider the USGS report on the soil status in Harshaw Creek.

I am concerned that the only viable body of water in Southern Arizona, Lake Patagonia, will become a dead lake unfit for any recreation at all.

We welcome your interest and oversight as we feel let down by the folks and Agencies in Arizona tasked to protect the public.

**EPA Response:** Thank you for your comment. This comment is beyond the scope of our action; however, EPA will follow-up with ADEQ to ensure correct and consistent advisories are being posted at Patagonia Lake.