



Douglas A. Ducey
Governor

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY



Misael Cabrera
Director

September 24, 2021

Lindsey A. Perry
Auditor General
2910 N. 44th Street, Suite 410
Phoenix, AZ 85018-7271

Dear Ms. Perry:

This letter provides the Arizona Department of Environmental Quality's (ADEQ) response to the September 17, 2021 revised preliminary draft of the department's Water Quality Performance Audit report. We appreciate the diligence and hard work of the Auditor General's staff in completing this report and their consideration of our feedback on the previous draft.

The auditors identified 12 recommendations for improvement the department should address. Specifically:

Finding 1: Department has not developed all required aquifer water quality standards, potentially putting private well users at risk of having unsafe water

Recommendation 1: The Department should adopt AWQS in rule to match federal drinking water standards by the end of fiscal year 2023, consistent with its plans, or a State alternative AWQS, for the 8 contaminants that do not have a developed or updated AWQS, as required by statute.

Department response: The finding of the Auditor General is agreed to and the audit recommendation will be implemented.

Response explanation: The implementation is dependent on obtaining a funding source and the appropriate funding levels being provided pursuant to recommendations 2 and 3.

Recommendation 2: The Department should perform a workload analysis to assess the cost of developing AWQS. This assessment should include a documented analysis of its workload, and any available staff resources, and then identify the resources it needs to develop AWQS.

Department response: The finding of the Auditor General is agreed to and the audit recommendation will be implemented.

Response explanation: ADEQ is developing an estimate of the cost of rulemakings, including expenditures associated with setting standards such as AWQS.

Recommendation 3: Based on the assessment performed in Recommendation 2, the Department should then work with the Legislature to seek a statutory change by the 2022 legislative session to authorize funding from the WQFF and obtain the needed resources from the WQFF to develop AWQS, such as modifying the fees that contribute to the WQFF to increase the amount of revenues generated for this Fund.

Department response: The finding of the Auditor General is agreed to and the audit recommendation will be implemented.

Response explanation: ADEQ acknowledges that a revision to state statute is required to use WQFF for developing AWQS. ADEQ also notes that the WQFF currently has a structural deficit creating a lack of sufficient funding for WQD programs. The agency is actively working with state leadership to implement this recommendation.

Finding 2: Department has not conducted key groundwater monitoring responsibilities, limiting its ability to keep groundwater safe

Recommendation 4: The Department should conduct statutorily required ambient groundwater monitoring, including:

- Detecting the presence of new and existing contaminants.
- Determining whether water in aquifers meets water quality standards.
- Assessing water quality trends.
- Determining how effectively the Department's guidance for permittees prevents or reduces pollution discharge.
- Evaluating the effects of contaminants in groundwater on public health or the environment.
- Developing and implementing policies and procedures for conducting ambient groundwater monitoring.

Department response: The finding of the Auditor General is agreed to and the audit recommendation will be implemented.

Response explanation: In early January 2020, ADEQ began a project to compile data from multiple databases and sources to identify the priority locations where monitoring needs to occur. ADEQ receives significant amounts of groundwater data from regulated facilities under the Aquifer Protection Program, the Safe Drinking Water program, state and federal Superfund programs, Underground Storage Tanks program, and Hazardous Waste programs. Other state agencies and water providers (such as Salt River Project) also collect and share groundwater data with ADEQ.

In addition, ADEQ has allocated initial funding of \$200,000 to conduct ambient groundwater monitoring in FY22. This funding will cover the cost of contract resources to monitor 67 locations across the state. Initial funding of \$200,000 is from a one-time transfer into the WQFF in FY22 and federal grants.

Recommendation 5: The Department should, in conjunction with performing workload analyses for developing AWQS and agricultural pesticide monitoring (see Findings 1 and 3, pages 7 through 10 and 14 through 17, respectively), perform a workload analysis to assess its costs for conducting ambient groundwater monitoring. This assessment should include a documented analysis of its ambient groundwater monitoring workload, and any available staff resources, and then identify the resources it needs to conduct ambient groundwater monitoring.

Department response: The finding of the Auditor General is agreed to and the audit recommendation will be implemented.

Response explanation: ADEQ is currently gathering existing data to understand the scope of ambient monitoring that needs to occur. Once the scope is determined, ADEQ will estimate the cost of the program.

Recommendation 6: Based on the assessment performed in Recommendation 5, the Department should then work with the Legislature to obtain any needed resources, such as modifying fees that contribute to the WQFF to increase the amount of revenues generated for this Fund.

Department response: The finding of the Auditor General is agreed to and the audit recommendation will be implemented.

Response explanation: ADEQ acknowledges that the WQFF currently has a structural deficit creating a lack of sufficient funding for WQD programs. As statute requires ADEQ to seek legislative approval to revise fees for the Aquifer Protection Program, the program charged with conducting ambient groundwater monitoring, the agency is actively working with state leadership to implement this recommendation. Initial funding of \$200,000 is from a one-time transfer into the WQFF in FY22 and federal grants.

Finding 3: Department has not conducted required monitoring of agricultural pesticides in groundwater and surrounding soil.

Recommendation 7: The Department should monitor for agricultural pesticides in groundwater and soil throughout the State, as required by statute, by developing and implementing policies and procedures for:

- Determining how to analyze identified pesticides with the potential to pollute groundwater, in consultation with ADHS.
- Monitoring groundwater and soil in areas of the State where identified pesticides with the potential to pollute groundwater are primarily used or may migrate into groundwater.
- Reporting all monitoring results to AZDA.
- Determining if a pesticide threatens to pollute groundwater and, if necessary, notifying AZDA to cancel the pesticide's registration.

Department response: The finding of the Auditor General is agreed to and the audit recommendation will be implemented.

Response explanation: In FY22, ADEQ has allocated initial funding of \$200,000 to monitor pesticides in groundwater. This funding will cover the cost of contract resources to monitor 13 wells for all 101 pesticides on the Groundwater Protection list.

Recommendation 8: The Department should, in conjunction with performing workload analyses for developing AWQS and conducting ambient groundwater monitoring (see Findings 1 and 2, pages 7 through 13), perform a workload analysis to assess its costs for monitoring agricultural pesticides in groundwater and soil throughout the State. This assessment should include a documented analysis of its workload, and any available staff resources, and then identify the resources it needs to monitor agricultural pesticides in groundwater and soil throughout the State.

Department response: The finding of the Auditor General is agreed to and the audit recommendation will be implemented.

Response explanation: ADEQ will begin to determine the scope of monitoring needed and will document the resources required.

Recommendation 9: Based on the assessment performed in Recommendation 8 and in conjunction with associated recommendations in Findings 1 and 2 (see pages 7 through 13), the Department should then work with the Legislature to seek a statutory change to authorize funding and obtain the needed resources from the WQFF to monitor agricultural pesticides in groundwater and soil throughout the State, such as modifying the fees that contribute to the WQFF to increase the amount of revenues generated for this Fund.

Department response: The finding of the Auditor General is agreed to and the audit recommendation will be implemented.

Response explanation: ADEQ acknowledges that the WQFF currently has a structural deficit creating a lack of sufficient funding for WQD programs. The agency is actively working with state leadership to implement this recommendation.

Finding 4: Department has not reduced total number of impaired surface waters in the State, putting human and environmental health at risk.

Recommendation 10: The Department should reduce the number of impaired surface waters in the State.

Department response: The finding of the Auditor General is agreed to and the audit recommendation will be implemented.

Response explanation: Since ADEQ's last sunset review, the Agency has funded more than 45 surface water improvement projects for a total cost of approximately \$5.5 million. These efforts have reduced the top three contaminants reported to EPA, for these projects, by an estimated 94,000 tons, have reduced the number of impaired waters by 31 and have reduced concentrations of pollutants in other waterways.

In the past 2 years, ADEQ has remediated or supported remediation of surface waters at 4 legacy mine sites and is currently scheduled to remediate seven more. Improvements due to work at these sites are already apparent with six pollutants now meeting water quality standards in associated waters, and a reduction of pollutants by up to 90 percent in one water. See <https://www.youtube.com/watch?v=OFJlbJLY-EI> for an example of ADEQ's work around Boulder Creek.

Recommendation 11: The Department should develop TMDLs for pollutants contributing to surface waters that have been impaired for 15 years or more.

Department response: The finding of the Auditor General is agreed to and the audit recommendation will be implemented.

Response explanation: ADEQ acknowledges that TMDL development has not kept pace with statutorily mandated timeframes. ADEQ notes that there is no state funding for developing TMDLs. ADEQ relies on federal grants to provide resources to develop TMDLs and does not receive sufficient funding to complete all the required work. ADEQ receives approximately \$1.8 million each year from EPA and those funds are balanced across several required activities, including monitoring, assessment, permitting, and inspection of surface waters, leaving insufficient funds to develop TMDLs, which are estimated to cost on average \$300,000 each.

Recommendation 12: The Department should develop and implement policies and procedures to:

- a. Track and schedule when TMDLs need to be developed, and develop a TMDL for each impaired surface water pollutant within 15 years from when the water was listed as impaired.

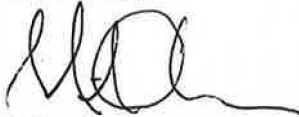
- b. Track and schedule when TMDLs need to be reviewed, and review developed TMDLs and implementation plans for surface waters still impaired at least once every five years.

Department response: The finding of the Auditor General is agreed to and the audit recommendation will be implemented.

Response explanation: ADEQ is developing a tracking board to document the backlog of TMDLs and make visual the TMDL development workflow. ADEQ is also drafting standard work associated with the development and tracking of TMDLs.

On behalf of ADEQ, we appreciate having had this opportunity to respond to the above recommendations. Moreover, we appreciate the professionalism and cooperation your audit team demonstrated in working with us throughout the performance audit process. We found the process and the results to be both constructive and informative, and we look forward to timely implementation of all the recommendations identified in your audit report.

Sincerely,

A handwritten signature in black ink, appearing to read 'Misael Cabrera', with a long horizontal flourish extending to the right.

Misael Cabrera, P.E.
Director