

The September 2021 Arizona Department of Environmental Quality—Water Quality Protection Responsibilities performance audit found that the Department had not developed all required aquifer water quality standards, conducted key ongoing groundwater monitoring of the State’s aquifers, monitored for agricultural pesticides in groundwater and surrounding soil, or reduced the number of impaired surface waters in the State, limiting its ability to keep these waters safe from pollution. We made 13 recommendations to the Department, and its status in implementing the recommendations is as follows:

Status of 13 recommendations

Implemented	3
In process	10

We will conduct a 24-month followup with the Department on the status of the recommendations that have not yet been implemented.

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

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.

Implementation in process—Although the Department has not yet adopted AWQS in rule to match federal drinking water standards for the 8 contaminants, it has taken some steps to help ensure it can do so. For example, the Department performed a workload analysis to assess the cost of developing AWQS and has worked with the Legislature to obtain the needed resources to develop AWQS (see explanations for Recommendations 2 and 3). According to the Department, it intends to begin the rulemaking process to align AWQS with federal drinking water standards during the second half of fiscal year 2023.

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.

Implemented at 12 months

3. The Department should, based on the assessment performed in Recommendation 2, 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.

Implementation in process—Statutory changes enacted by Laws 2022, Ch. 204, expanded the allowable uses of the WQFF for various water quality protection responsibilities, such as for developing AWQS and monitoring agricultural pesticides in groundwater and the surrounding soil in the State. These changes also authorized the Department to increase fees that contribute to the WQFF in rule. According to the Department, it plans to begin the rulemaking process to modify fees that contribute to the WQFF during the second half of fiscal year 2023.

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

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.

Implementation in process—The Department has resumed conducting some components of statutorily required ambient groundwater monitoring. For example, the Department has begun sampling groundwater from wells throughout the State to detect the presence of new and existing contaminants and has developed some policies and procedures for doing so. However, the Department has not yet fully implemented all components of statutorily required ambient groundwater monitoring, such as determining whether water in aquifers meets water quality standards, assessing water quality trends, and evaluating the effects of contaminants in groundwater on public health or the environment. We will further assess the Department's ambient groundwater-monitoring efforts during our 24-month followup.

5. The Department should, in conjunction with performing workload analyses for developing AWQS and agricultural pesticide monitoring (see Findings 1 and 3), 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.

Implemented at 12 months

6. The Department should, based on the assessment performed in Recommendation 5, 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.

Implementation in process—See explanation for Recommendation 3.

Finding 3: Department has not conducted required monitoring of agricultural pesticides in groundwater and surrounding soil, limiting its ability to identify and address potential pollution in groundwater

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.

Implementation in process—The Department has taken some steps to resume monitoring for agricultural pesticides in groundwater and soil throughout the State. For example, the Department has conducted some initial

pesticide groundwater monitoring at various wells throughout the State and reported the results to the AZDA. The Department has also developed policies and procedures for monitoring pesticides, such as coordinating some aspects of pesticide monitoring with ADHS and AZDA. Additionally, the Department reported that it is working with ADHS to identify a laboratory that has the capability to test for all potential agricultural pesticides in groundwater. We will further assess the Department's implementation of this recommendation during our 24-month followup.

8. The Department should, in conjunction with performing workload analyses for developing AWQS and conducting ambient groundwater monitoring (see Findings 1 and 2), 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.

Implemented at 12 months

9. The Department should, based on the assessment performed in Recommendation 8 and in conjunction with associated recommendations in Findings 1 and 2, 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.

Implementation in process—See explanation for Recommendation 3.

Finding 4: Department has not reduced total number of impaired surface waters in State to address pollutants that affect the safe use of these waters and potentially negatively impact the environment

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

Implementation in process—Although the Department has not yet reduced the overall number of impaired surface waters in the State, it has taken some steps to help address and reduce them. For example, the Department has developed and used various tools to help identify, monitor, and prioritize impaired waters, such as a dashboard to provide an overview of the State's water quality, including surface water quality. Additionally, the Department reported that its improvement projects have also helped to contribute to the removal of 28 contaminants from surface waters since 2020. We will further assess the Department's implementation of this recommendation during our 24-month followup.

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

Implementation in process—The Department has not yet developed TMDLs for pollutants contributing to surface waters that have been impaired for 15 years or more but reported that it is in the process of hiring new staff to identify and prioritize impaired waters so that it can begin to develop and review TMDLs for impaired surface waters. Additionally, the Department developed a 5-year strategic plan with associated steps to accelerate the identification of pollution sources and implement projects to improve water quality in impaired surface waters that include developing and updating TMDLs.

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.

Implementation in process—The Department has taken some steps to track when TMDLs need to be developed and reviewed. For example, the Department developed and began using a tracker in June 2022 for monitoring each impaired waterbody's TMDL status and whether a TMDL development or future TMDL review is due or overdue, including reviewing developed TMDLs once every 5 years. Additionally, the Department has developed some guidance for Department staff related to these monitoring activities. We

will further assess the Department's implementation of this recommendation during our 24-month followup.

- 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 5 years.

Implementation in process—See explanation for Recommendation 12a.