

Arizona Department of Environmental Quality Water Quality Protection Responsibilities

Department has 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

Audit purpose

To determine whether the Department met its responsibilities to develop aquifer water quality standards (AWQS), conduct ambient groundwater monitoring, monitor agricultural pesticides in groundwater and the surrounding soil, and reduce impaired surface waters in the State; and provide information on recent developments related to per- and polyfluoroalkyl substances (PFAS) and water quality contamination in the State.

Key findings

- The Department's Water Quality Division is responsible for administering the Department's water protection and improvement programs, including developing AWQS to help protect the State's groundwater.
- The Department has not developed required AWQS for 8 contaminants, including arsenic and uranium, to help ensure that the water in aquifers is safe and protected, potentially putting private well users at risk of having unsafe water. The Department has been out of compliance for 7 to 29 years in developing AWQS for these 8 contaminants.
- The Department has not conducted key ambient groundwater monitoring responsibilities since 2017, such as detecting the presence and evaluating the effect of contaminants in groundwater.
- The Department has not conducted required monitoring of agricultural pesticides in groundwater and surrounding soil since 2013, as required by statute.
- Although it has established a goal to do so, the Department has not reduced the total number of impaired surface waters in the State that do not meet federal surface water quality standards to address pollutants that affect the safe use of these waters and potentially negatively impact the environment. From 2014 to 2020, the number of impaired surface waters in Arizona has increased from 136 to 155 impaired surface waters.
- Contamination from PFAS is an ongoing threat to the State's water. The Department reported it has worked with affected public water systems and private well users to address PFAS contamination, including taking various steps to monitor, investigate, and remediate PFAS found in Arizona's water.

Key recommendations

The Department should:

- Adopt AWQS in rule to match federal drinking water standards or a State alternative AWQS for the 8 contaminants that do not have AWQS, as required by statute.
- Conduct statutorily required ambient groundwater monitoring and agricultural pesticide monitoring in groundwater and soil.
- Perform a workload analysis to assess its costs for developing AWQS and conduct ambient groundwater and agricultural pesticide monitoring and then work with the Legislature to obtain the needed resources.
- Reduce the number of impaired surface waters in the State by developing and reviewing implementation plans for reducing impaired surface waters in a timely manner.