

PERFORMANCE AUDIT

Report Highlights



Office of the
Washington
State Auditor
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Assessing the Effectiveness of Washington's Water Use Efficiency Regulations

Rapid population growth and changing climate are putting growing pressure on the availability of our fresh water supply. Managing the state's water resources is becoming an increasingly vital responsibility of the state. Drinking water is the state's second largest use of water, supplied primarily by its 2,065 municipal water systems. Municipal systems are only 12 percent of all systems, but supply 98 percent of all customers with drinking water. Two-thirds of municipal systems are privately owned; the remainder are publicly owned, usually by cities or counties. In 2003, the Legislature passed the Municipal Water Law, which included statutory requirements designed to address municipal water use efficiency, tasking the Department of Health (DOH) with their implementation. The statute (RCW 70A.125.170) was designed to advance water use efficiency through two methods: first, decreasing customer use of water by expanding water systems' conservation efforts, and second, ensuring the efficient supply of water by minimizing water loss as it travels through the distribution system.

DOH can help municipal water suppliers minimize loss by better managing supplier data and using industry leading practices

Most municipal water suppliers reported water use efficiency data to DOH, as required by agency rules. However, DOH's inventory of municipal water systems was inaccurate, and DOH has not maintained current contact information for some municipal water suppliers. DOH has already begun to improve the accuracy and completeness of its inventory. The water use efficiency data DOH maintains is incomplete and often unreliable for two main reasons: DOH does not collect all supplier data required by its rules, and the agency does not use some data it does collect. In addition, DOH did not identify which water systems were exempt from metering requirements. Because its data is unreliable, DOH cannot accurately determine compliance with its water use efficiency regulations. DOH does not use or require industry leading practices, such as water audits, that could help improve the reliability of water loss calculations. Changing the standard for water loss from percentage lost to an alternative benchmark could improve water system evaluations. DOH offered training on leading practices as part of a pilot, but has not implemented the project's final recommendations.

Current rules disproportionately affect small water systems; DOH should address small system challenges and expand assistance

Multiple factors contribute to the burden small water systems face in complying with DOH's regulations. Small water systems make up 90 percent of all municipal water systems but serve only 7 percent of customers. Small water systems struggle to comply with water use efficiency rules because they typically lack funds to do so. DOH recognized its rules were disproportionately burdensome for small water systems when it proposed them – a burden that persists. A sized-based regulatory floor for water systems, as the U.S. Environmental Protection Agency uses, would reduce the burden on small systems. Water suppliers, and in particular smaller system suppliers, lack access to essential technical assistance from DOH. Portions of DOH's water use efficiency website had nonworking or outdated links; the agency has begun to correct them. Surveyed suppliers had suggestions to improve DOH's technical assistance. DOH might consider using technical assistance practices used by other states.

The Legislature could reassign responsibility for water conservation from DOH to the Department of Ecology

DOH created rules around improving water conservation, but has focused few resources on implementing them. Water suppliers themselves recognized the importance of conservation in their survey responses. The Department of Ecology is well suited to provide water conservation oversight and assistance. Regardless of where future responsibility lies, better coordination on conservation issues could help ensure consistent policies and rules in the future.

State Auditor's Conclusions

When Washington created municipal water use efficiency requirements 20 years ago, many in our famously rainy state may have been skeptical of the need to conserve water. Today, however, our population is growing rapidly, and our water supplies are more constrained – most Washingtonians experienced drought conditions just over the past summer. The time is now to redouble our efforts to ensure sufficient fresh water for future generations, and this performance audit offers concrete recommendations to help do just that. Water suppliers were also overwhelmingly concerned about the importance of conservation. Conservation is the second of the main goals of state water use efficiency requirements. We found those efforts may be better housed within the state Department of Ecology, which already has expertise in natural resource conservation. In addition, the agency was recently directed by the Legislature to update the state's response to climate change. We only have to recall last year, when drought emergencies were declared in all of California's 58 counties, and sunken boats emerged from record-low water levels behind Hoover Dam, to know water supply is an important issue for Washington as well. This audit's recommendations offer a roadmap to reinvigorating our efforts to conserve that precious resource.

Recommendations

We made a series of recommendations to help DOH address issues we found in its regulation of municipal water loss. They included: that the agency collect all information from suppliers required by its rules; ensure calculations used to determine water system compliance use only reliable data; improve assistance to suppliers. We also recommended the Legislature grant DOH the authority to exempt small municipal water systems from water loss regulations. Finally, we recommended the Legislature revise the water use efficiency portion of the Municipal Water Law to grant Ecology oversight of conservation planning and implementation.