



Frequently Asked Questions

Q: What is a water audit?

A: The Hawaii WAVE program uses the AWWA water auditing methodology – an accounting procedure that uses the volumes of water entering and leaving a water distribution system along with other system variables to systematically determine real and apparent water losses.

Q: Who is required to submit water audits to the Commission on Water Resource Management (Commission)?

A: All county water supply departments, public water systems (utilities) serving a population of 1000 or more (large-capacity), and public water systems (utilities) in a water management area are required to complete water audits and submit them to the Commission.

Q: When are the water audits due?

A: The first audits from county-owned systems are due July 1, 2018. The first audits from large-capacity systems and those in water management areas are due July 1, 2020. Annual water audits are required thereafter.

Q: How do I do a water audit?

A: The Commission is providing free technical assistance and training for public water systems/utilities to complete water audits. Water audits shall be completed using the American Water Works Association (AWWA) free water audit software version 5.0. Sign up for the free workshops online at hawaiiwaterloss.org.

Q: Act 169 states that water audits shall be completed on a calendar year basis. Can fiscal year data be used?

A: It is important to comply with the law as much as possible. However, we understand that utilities may need time to translate their records from fiscal to calendar periods. Exceptions will be made on a case-by-case basis while meeting the intent and purpose of the law.

Q: We own/operate multiple public water systems. Do I need to complete a separate water audit for each of them?

A: Act 169, SLH 2016 requires water audits for all public water systems. We understand that this may not be possible at this time due to complications with source data and customer billing information. Nonetheless, the goal is to complete meaningful water audits at the finest detail possible. Exceptions will be determined on a case-by-case basis.

Q: What is a water management area?

A: Water management areas (WMA) are specially designated regions in the State of Hawaii where owner/operators of wells or stream diversions are required to obtain a permit to use the water due to a scarcity.



Q: Where are the water management areas in Hawaii?

A: Groundwater management areas include the Island of Oahu, except for the Waianae aquifer sector area; the Island of Molokai, and the Iao Aquifer system on Maui. Surface water management areas are the Waihee, Waiehu, Iao, and Waikapu hydrologic units (streams) on Maui.

Q: What else must I submit to the Commission with the water audit?

A: Act 169, SLH 2016 also requires that each water loss audit report submitted to the Commission shall be accompanied by information identifying steps taken in the preceding year to increase the validity of data used in the water audit and reduce the volume of apparent and real losses.

Q: How much water loss is acceptable?

A: There is no industry standard for water loss. Since every system is different, local economic and operational considerations must be made to determine an acceptable level of loss. The free AWWA water audit software provides utilities with performance indicators to help them assess the condition of their system(s).

Q: What does third-party Level 1 water audit validation mean?

A: Third-party Level 1 validated water audits have been examined by someone who did not compile the audit for inaccuracies evident in summary data and application of methodology. Furthermore, the validator will assess that the data validity grades assigned to audit inputs accurately reflect utility practices.

Q: What do I do now that I have done a water audit?

A: The AWWA free water audit software can help identify priorities for improving data reliability and/or recovering system water losses. You may wish to consult a water loss professional to discuss your next steps.

Q: What does the Commission do with the water audits?

A: The Commission will review the audits and the accompanying report detailing actions for reducing water losses. The Commission may be able to identify assistance opportunities that would help utilities implement programs and actions to improve their systems.

Q: How much will it cost me to complete annual water audits? Will I need to hire additional staff?

A: The Hawaii WAVE program will train participating utility personnel to understand the water audit concepts and data requirements. The Hawaii WAVE program is intended to build capacity within utilities so that they may complete water audits with existing in-house resources alone.