

Oklahoma Water Reuse Action Plan



Purpose and Background of the Oklahoma Water Reuse Action Plan

The Oklahoma Water Reuse Action Plan (OWRAP) was developed through a multi-agency collaborative effort in conjunction with the development of the 2025 update to the Oklahoma Comprehensive Water Plan (OCWP). Water reuse is a proven strategy for efficiently using locally available supplies; its implementation necessarily reflects site-specific needs, economics, and values and priorities. Reuse was identified as a typically, potentially, or partially effective water management strategy in 32 Basins to address their potential water shortage of up to 750,000 AFY.

The overarching goal of the OWRAP is to identify and remove implementation challenges for water reuse such that reuse of any type is a viable option for water users (municipal, agricultural, industrial, and others). There is no intent to mandate water reuse, but it should be a viable path for those that want to consider and/or implement reuse.

The OWRAP is designed to be a collaborative framework for resolving hurdles and ultimately removing roadblocks and facilitating water reuse of all types, including but not limited to the following:

- **Municipal nonpotable water reuse:** Recycling treated water from a municipal water recovery facility (WRF) to satisfy water demands that do not require drinking water (potable) quality, such as industrial cooling or landscape irrigation.
- **Municipal potable water reuse:** Recycling treated water from a municipal WRF to augment drinking water supplies. This can be accomplished through the use of an advanced water purification facility to augment surface water or groundwater supplies (indirect potable reuse [IPR]) or by directly augmenting potable water supplies for distribution to the community (direct potable reuse [DPR]).
- **Agricultural water reuse:** Examples include recycling treated water from a municipal WRF to augment crop irrigation and/or livestock water needs or reusing tailwater runoff from crop irrigation to support these uses.
- **Industrial water reuse:** Recycling treated water from a municipal WRF to help meet industrial water demands, and/or reusing water from an industrial facility for its onsite needs. This can include industries of any type that use water and/or produce industrial wastewater, including the energy industry (e.g., produced water from oil and gas operations), power generation, or any other industrial water user and producer.

Workgroup members included representatives from:

- Chickasaw Nation
- City of Bartlesville
- City of Duncan
- City of Guymon
- Norman Utilities Authority
- Oklahoma City Water Utilities Trust
- Oklahoma Conservation Commission
- Oklahoma Department of Agriculture, Food, and Forestry
- Oklahoma Department of Environmental Quality
- Oklahoma Rural Water Association
- Oklahoma State University
- Oklahoma Water Resources Board
- U.S. Environmental Protection Agency
- University of Oklahoma

The OWRAP workgroup began meeting in 2022 and continued meeting generally quarterly through 2024. The OWRAP Workgroup tackled current reuse challenges in five strategic areas. Subcommittees identified the drivers, barriers, and goals for each area, and the actions necessary to advance reuse in each area. The five areas are: Economic (E), Organizational (O), Regulatory (R), Social (S), and Technical & Training (T).

The following ten actions were identified as implementation priorities:

- **E-02:** Develop fact sheet on existing state and federal funding programs that are geared toward or suitable for funding reuse projects.
- **E-05:** Develop information that illustrates economic benefits of providing water suitable for intended purpose.
- **O-01:** Create a top level Inter-organizational Reuse Team; Identify persons within each supporting agency with expertise and capacity to advance water reuse in Oklahoma.
- **R-01:** Prepare concise guidance document or fact sheet summarizing current legal ability to reuse municipal return flows and receive credit for augmenting supplies with recycled water.
- **R-04:** Evaluate what-if scenarios to assess water availability implications of additional reuse, using updated Oklahoma H2O Tool.
- **S-01:** Organize an Interagency Water Reuse Education and Outreach Team.
- **S-03a:** Compile existing education materials from across the nation and adapt them for use in Oklahoma.
- **S-05:** Evaluate and track how perception of reuse is changing over time (statewide and/or targeted communities).
- **T-04:** Identify IPR/DPR demonstrations and full-scale systems (Oklahoma/adjoining states) that could host technical tours/training for operators and regulators.
- **T-05:** Develop a FAQ/fact sheet highlighting exemplars of successful reuse across multiple types of reuse (e.g., municipal, agricultural, industrial).

To review the action fact sheets, read the [Oklahoma Water Reuse Action Plan – Executive Summary](#).

As part of the OCWP Water Supplies and Storage recommendation, it is recommended that the OWRAP Workgroup continue and coordinate implementation of identified priority actions as funding is available.