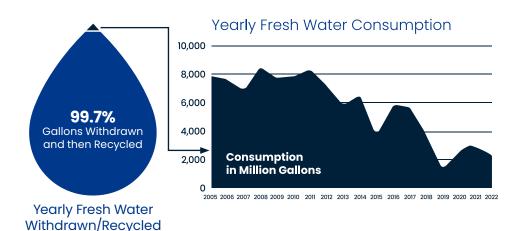


# OG&E Water Use and Stewardship Fact Sheet

Water plays an integral part in power generation. Each day, OG&E relies on quality water to generate affordable and reliable electricity. Using fresh surface and ground water sources, as well as reuse water from municipal waste water treatment systems, **the company returns 99 percent of the water used to generate electricity** for its customers each year. OG&E strives to ensure that this natural resource is used – and reused – in a manner that is efficient, responsible and sustainable.

# Water is withdrawn, but not always consumed

To understand water use in power generation, it is important to know the difference between water withdrawn and water consumed. Water withdrawn is the total volume brought into the plant from a water source, such as a lake or river. At OG&E, a large portion of water withdrawn is returned to the source or reused. Water consumed is tehe amount of water that is withdrawn for use and not returned to the source.





### How power plants use water

The largest portion of a power plant's water use and consumption comes from cooling. The type of cooling system can affect the volume of water withdrawn and consumed. There are two common types:

- "Closed cycle" cooling system routes water through a cooling tower to reduce heat and back to the plant to cool the steam cycle once again.
- "Once-through" cooling system withdraws water from a manmade reservoir and routes the water through the facility one time before returning nearly all of it to the reservoir. Very little water is consumed.

## Regulation

OG&E facilities are regulated and permitted by multiple state and federal agencies that ensure water quality as well as water quantity regulations are being followed. Most OG&E powergenerating facilities have water use permits that consist of ground or surface water rights under which the water used is measured and reported to the appropriate agency each year. OG&E facilities also have Oklahoma Pollutant Discharge Elimination System (OPDES) permits that regulate and ensure the quality of water being discharged from the facilities complies with state water quality standards.

# Stewardship

Water is vital to Oklahoma's economic success and quality of life. A consistent water supply also impacts the ability to generate electricity reliably. OG&E strategically plans for future water needs and continues to seek ways to use water more efficiently. As Oklahoma grows and demand for electricity and water rises, OG&E will be prepared to continue to provide reliable service.

Two of OG&E's plants, McClain and Redbud, were designed to conserve fresh water. Both plants' cooling towers rely on water from municipal wastewater treatment facilities. This is just one example of OG&E's commitment to good stewardship of one of Oklahoma's most precious resources.

# **Community Recreation**

In 1971, OG&E became the first electric company in Oklahoma to open one of its cooling reservoirs for public recreation. Today, Oklahomans and outdoor enthusiasts from around the country enjoy boating and fishing at four of OG&E's power plants. The Oklahoma Department of Wildlife Conservation periodically stocks the lakes at Sooner, Horseshoe Lake, Seminole and River Valley power plants with game fish, contributing to Oklahoma's travel and tourism industry.

