

Stillwater OKLAHOMA
stillwaterok.gov

REGIONAL WATER PROJECTS

Assistance Request



Stillwater Regional Water serves more than
123,800 people, includes Payne, Noble,
Pawnee, Lincoln, Osage, and Creek Counties,
and covers 900+ square miles.

WHO WE SERVE

The City of Stillwater is the primary water supplier for residents, businesses, industry and nearby unincorporated areas, and serves as a secondary and back-up supplier for a large portion of North Central Oklahoma.

Stillwater owns and operates a municipal water system and two rural water systems, Rural Systems D1 and C3. Communities that rely directly or indirectly on our conveyance and treatment system include: Pawnee, Glencoe, Maramec, Morrison, Yale, Blackburn, Skeedee, Cleveland, Mannford, Agra, Hallett, Otoe-Missouria Tribe, Red Rock, and Osage Cove Fire District Association.

There are 24 systems and municipalities included in Stillwater's water service area.

Most of our customers outside Stillwater are rural water systems that provide safe drinking water for people who don't have other options.

Fifty-One East Water, Inc.: Our largest customer – supplies directly to consumers, municipalities and other rural water systems across multiple counties.

Payne County Rural Water District #3: Our second largest customer – supplies a populous rural area south of Stillwater that extends to Perkins.

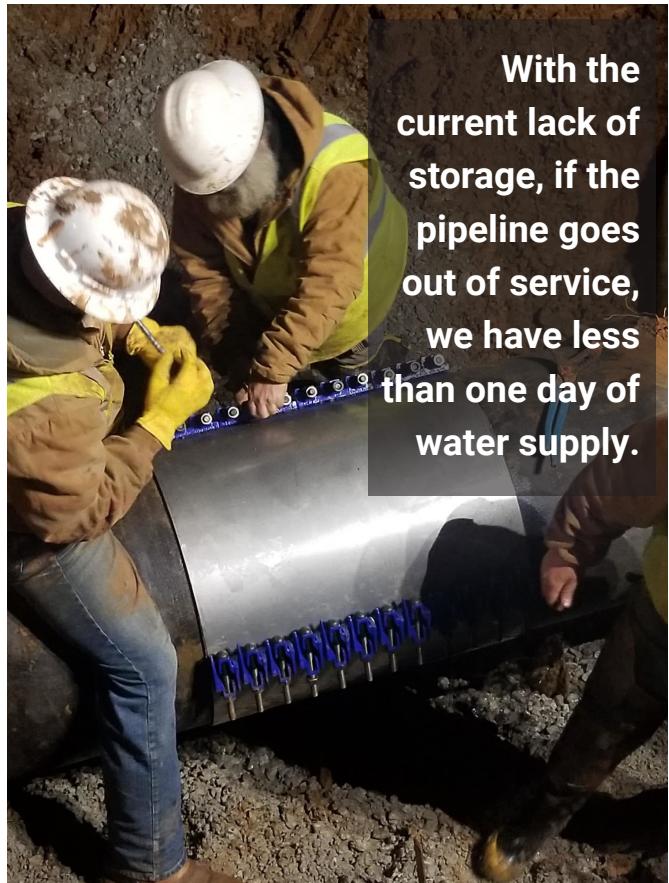
Lone Chimney Water Authority: We serve as a back-up supply of treated water for areas stretching into eastern Creek Co.

Payne County Rural Water District #4: This area is served by Lone Chimney Water Authority.

Noble County Rural Water District #2: More than 148 square miles of Noble Co. receive water from Stillwater. We provide half this system's supply through direct sales and support the other half through our sales to Lone Chimney Water Association.

Pawnee County Rural Water Districts #3 & #4: We provide treated water to these two districts which serve a large portion of rural Pawnee Co.

Otoe-Missouria Tribe: We deliver raw water to the Tribe's water treatment plant for a system that serves tribal members and others in the rural area around Red Rock. The system also serves Frontier Public Schools.



With the current lack of storage, if the pipeline goes out of service, we have less than one day of water supply.

Lincoln County Rural Water & Sewer District #4: We are a secondary supplier for this system through Lone Chimney Water Assoc. and 51 East Corp.

In times of drought, which happens frequently in this region, communities outside of our system that rely on municipal wells or other suppliers have identified Stillwater as a potential emergency source of water.

Lone Chimney Lake reached critically low levels that threatened the water supply for more than 16,000 people across the region at least three times since 2000. Stillwater has an agreement with Lone Chimney Water Association to provide up to 25 million gallons of treated water per month during an emergency, if our system has the capacity.

Stillwater also has a mutual aid agreement with Oklahoma State University to provide water during an emergency.

Perkins (pop. 3,270), and Cushing (pop. 8,391), have expressed interest in receiving water from Stillwater.

WHO WE ARE

The City of Stillwater is a regional drinking water provider with 50 million gallons per day of water rights in Kaw Lake. That allocation from the Oklahoma Water Resources Board is projected to support 100 years of growth. Our system supplies more than 2.4 billion gallons of water annually to North Central Oklahoma.

Our water system is a safe, reliable source of drinking water and serves the surrounding area, either through sales to other water systems, direct delivery or as a back-up supply in times of drought or emergency.

Raw water is delivered from Kaw Lake to our water treatment plant and to raw water customers through a 36-mile pipeline. Both the pipeline and the treatment plant were built in the 1980s.

The 36-inch steel pipeline is the only source of water for City of Stillwater customers. Between 1981-2012,

the line experienced 20 leaks. In recent years, there has been a steady increase in leaks, with 10 in 2022, 36 in 2023, and 15 in 2024. Leak repair is extremely difficult, time sensitive and costly. Active leaks cause a reduction to supply volume from Kaw Lake.

The City's water treatment plant currently has a maximum capacity of 18 million gallons per day. The system can store 16 million gallons of treated water and 4 million gallons of raw water.

The water treatment plant's raw water storage is not enough to meet even one day of usage during the time of lowest demand. The pump station at Kaw Lake has the ability to deliver 14.4 million gallons per day, not enough for the plant to produce its rated capacity of 18 million gallons per day.

Our system continues to meet water quality regulations but our equipment is aging and our infrastructure is inadequate to meet current and future needs.



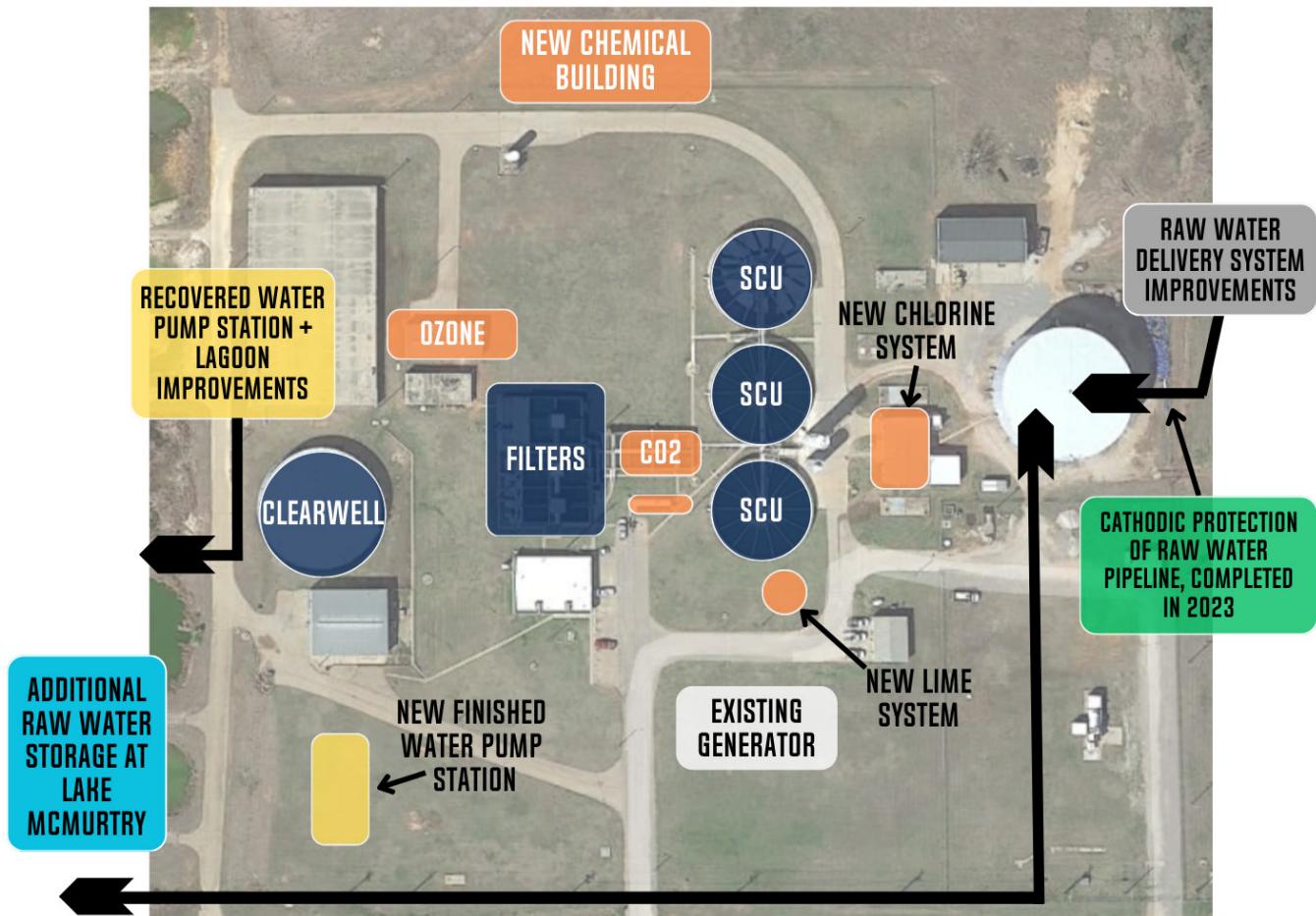
IMPACT ON TRIBAL CITIZENS

Much of the territory that relies on Stillwater's system lies within Native American tribal service areas and a healthy percentage of the population in those areas is Native American. Pawnee County RWD #3 and #4 board member Shirley Peckenpaugh estimates that up to 30% of the population served by District #3 and at least 10% of the population of District #4 consists of tribal members.

Stillwater's delivery of raw water to the Otoe-Missouria Tribe ensures its tribally-operated rural water system can provide safe drinking water for the majority of the Native American population around the tribal headquarters and to Frontier Public Schools, where 65% of students are Native American.

The rural water systems supported by the City of Stillwater and its customers operate within the jurisdictions of the Iowa Tribe of Oklahoma, the Sac and Fox Nation, the Pawnee Nation of Oklahoma, the Otoe-Missouria Tribe of Oklahoma and the Muscogee Nation.

PHASED IMPROVEMENT PLAN



The City of Stillwater has evaluated its raw water delivery and treatment systems to determine what is required to continue meeting the needs of current customers and to accommodate continued growth and economic development in our city and region.

To meet anticipated needs throughout the next 50 years, the system will require the following:

- Rehabilitate or replace the 36-inch water line from Kaw Lake;
- Replace and expand the raw water pump system;
- Increase storage, pumping and conveyance, through the new Lake McMurtry raw water delivery system, to have an approximate four week water supply available to allow maintenance activities or if the raw water from Kaw Lake becomes unavailable;
- Upgrade the water treatment plant; and
- Increase production to 30 million gallons per day of potable water.

The needed improvements will cost in the hundreds of millions of dollars. The City of Stillwater has identified funding for a portion of the necessary work and has begun addressing some of the most urgent items.

Funding the water system through the Stillwater Utilities Authority budget alone would excessively increase rates for all customers and significantly delay improvements. Both would hurt continued development and economic growth.

FUNDING NEEDS

● \$26 million: Finished water pump station, recovered water pump station and lagoon piping

Update: Funding received, construction underway.

● \$66.7 million: Utilize Lake McMurtry for additional raw water storage and supply

Imperative that funding is secured for this next.

● \$25 million: Lime system replacement and improvements to the Chlorine, Ammonia, Ozone and Carbon Dioxide systems, and caustic feed

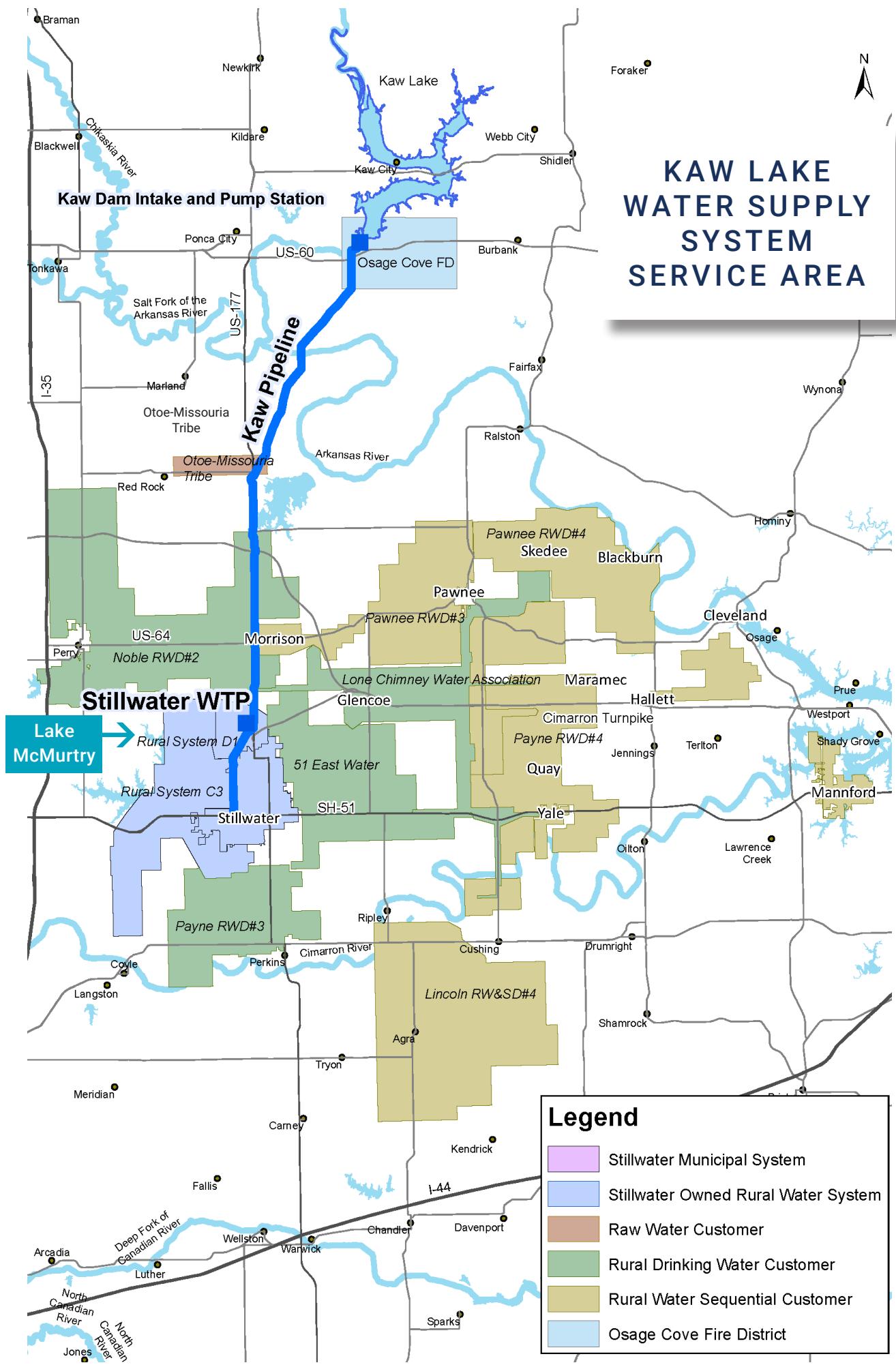
Update: Funding received, construction underway.

● \$26 million: Rehabilitate the solids contact units, filters and replace the steel clearwell

● \$40 million: Raw water delivery system improvements

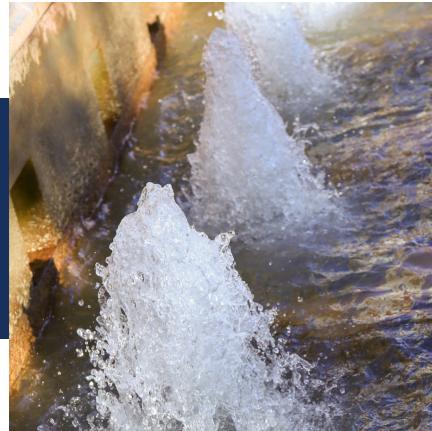
TOTAL: \$180-190 MILLION

KAW LAKE WATER SUPPLY SYSTEM SERVICE AREA



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More than 2,500 fire hydrants in the
Stillwater area are fed solely by the
Stillwater Water Utilities.