

CITY OF GARLAND WATER UTILITIES

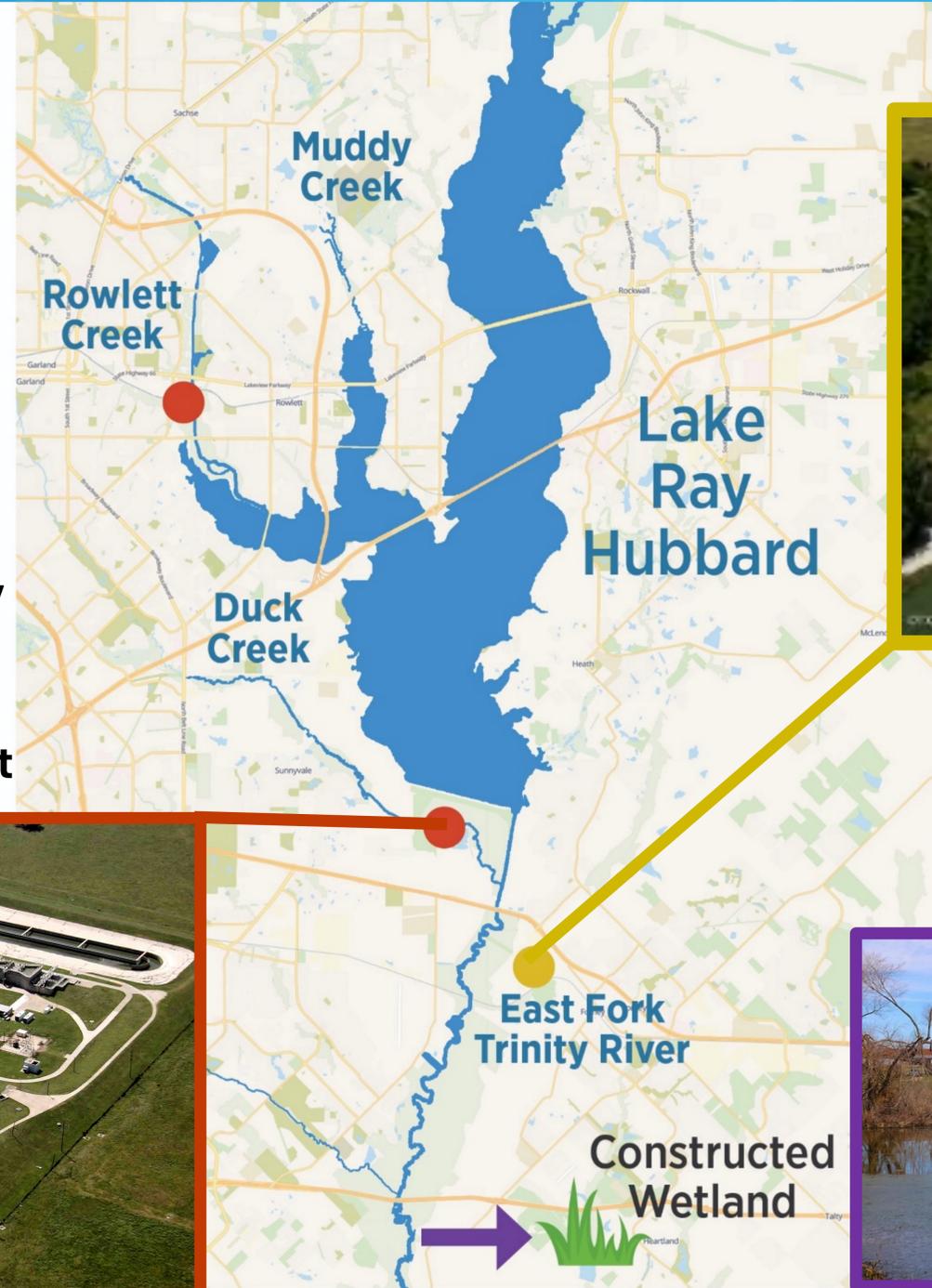
Recycled Water Program

NEAA26 COMMUNITY LEADERSHIP



National Environmental
Achievement
AWARDS

- 26 years of leadership in sustainable water reuse.
- ~ 14 million gallons/day of highly treated effluent are reclaimed from the Duck Creek Wastewater Treatment Plant.
- Recycled water is delivered to Luminant's Forney Energy Center, supporting the Texas power grid.
- Remaining treated effluent helps sustain a 1,840-acre constructed wetland, improving water quality in the Lake Ray Hubbard watershed.



Luminant's Forney Energy Center



Duck Creek Wastewater Treatment



**John Bunker Sands
Wetland Center**



GARLAND

WATER UTILITIES

Member Spotlight: City of Garland's Direct Use Recycled Water Program

The City of Garland, Texas, has become a leader in sustainable water management through its innovative Direct Use Recycled Water Program. Since 1999, the City has demonstrated how a forward-thinking approach to wastewater reuse can meet environmental compliance goals while driving economic and ecological benefits for the region.

Each day, the program reclaims approximately 14 million gallons of highly treated effluent from the Duck Creek Wastewater Treatment Plant. Roughly 20 percent of this recycled water is delivered to Luminant's Forney Energy Center, where it is used for cooling and steam generation—supporting the production of 1,800 megawatts of power for the Texas electrical grid. The remaining 80 percent of the treated effluent sustains a 1,840-acre constructed wetland that enhances wildlife habitat, restores ecological balance, and improves water quality within the Lake Ray Hubbard watershed.

By diverting 100 percent of treated effluent for beneficial reuse, Garland meets stringent state and federal compliance requirements while significantly reducing freshwater demand and CO₂ emissions. The program now provides 39 percent of the city's total water supply, ranking among the largest direct reuse systems in the nation. This cost-effective initiative has reduced water treatment and procurement costs, while demonstrating how infrastructure investment can yield long-term sustainability gains. Beyond environmental benefits, the program supports economic growth and recreation in the community surrounding Lake Ray Hubbard. Cleaner water has enhanced local amenities such as Windsurf Bay Park and Bass Pro Shops, attracting visitors and boosting the local economy. Through strategic planning, partnerships, and innovation, the City of Garland has created a national model for environmentally responsible and financially efficient water reuse—showcasing what's possible when sustainability and practicality work hand in hand.