

## CASE STUDY

# Wastewater Treatment At Tule River Tribe

**Project Type:** Municipality, Tribal, MBR

**Location:** Porterville, California

## HIGHLIGHTS

Installed a state-of-the-art 75,000 GPD package MBR system capable of producing high-quality effluent.

IWS expertly managed the civil installation of a massive duplex influent lift station for reliable conveyance.

Featuring a 600 KW standby generator and large storage capacity, guaranteeing continuous operation.

## ADVANCED WASTEWATER TREATMENT FACILITY IMPLEMENTATION

The successful completion of the Tule River Indian Tribe's Wastewater Treatment Facility provided the Tribe with a state-of-the-art 75,000 GPD Membrane Bioreactor (MBR) system and all associated infrastructure, constructed to strict specifications developed in conjunction with US Indian Health Services. This turnkey project successfully overcame complex challenges, including the installation of a 28-foot-deep influent lift station and integrating a 600 KW standby generator, ensuring reliable, compliant, and self-sufficient wastewater management for the community.

## CHALLENGES FACED

- **Integrating Complex Pre-Designed System:** The project required the implementation of a system based on a design completed by the Tribe in conjunction with US Indian Health Services, necessitating precise adherence to specifications, including the package Membrane Bioreactor (MBR) system.
- **Deep and Large Influent Lift Station Installation:** The installation involved a substantial and deep structure: a 96-inch diameter by 28-foot deep duplex influent lift station, which presents significant excavation, safety, and structural challenges.
- **Stringent Effluent Quality Requirements:** The final treated water was intended for dispersal, implying the need for high-quality effluent, which the MBR system and subsequent disinfection/dispersal systems were required to reliably meet.



## SOLUTIONS IMPLEMENTED

- **MBR System Deployment:** Installed the 75,000 GPD package MBR wastewater treatment plant with equalization tanks for advanced, high-quality treatment.
- **Specialized Civil Installation:** Successfully executed the deep, large-diameter influent lift station and all associated conveyance piping.
- **Turnkey Facility Build-Out:** Managed installation of all site components, including the 300,000-gallon storage tank, electrical controls (MCC/PLC), and the 600 KW standby power system.
- **Testing and Owner Support:** Provided full system testing, start-up, and ongoing support for a smooth transition to owner-operated status.



## OUTCOME AND IMPACT

- **High-Quality Wastewater Treatment:** The Tribe received a modernized, reliable 75,000 GPD MBR facility.
- **Achieved Environmental Compliance:** The system reliably meets the high standards required for effluent dispersal.
- **Enhanced Operational Resilience:** The facility features continuous operation capability due to the installed 600 KW standby generator.
- **Successful Integrated Delivery:** The successful completion of the entire scope, from deep lift station installation to MBR commissioning, site grading, and fencing, provided the Tribe with a turnkey, fully integrated operational system.

The Tule River Indian Tribe Wastewater Treatment Facility project successfully implemented a complex, pre-designed, high-capacity MBR system and all associated infrastructure. By expertly managing the installation of the critical, deep influent lift station, integrating all electrical and control systems, and delivering a complete site build-out, the project provided the Tribe with a robust, modern, and reliable solution for long-term wastewater management and environmental compliance.



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