# **EZflow and IM-Series Tanks** Used in System for New Recreational Resort

# Canton, IL

### SYSTEM SPECIFICATIONS

Water Recycling System with 500 GPD & 1,000 GPD MBRs

# **PRODUCTS**

IM-Series Septic Tanks EZflow® Aquaworx Control Panels

#### **INSTALLATION DATE**

2014/2015

# **OWNER**

**Herman Brothers** 

#### **INSTALLER**

New Excavating Technology, Inc., St. Anne, IL

# **DESCRIPTION**

Giant Goose Ranch is an 800 plus acre reclaimed strip mine property in Fulton County, Illinois, consisting of more than 50 lakes famous for incredible fishing. The Herman Brothers' family updated an existing campground by adding resort cabins and 90 campsites.

The property consists almost entirely of reclaimed coalmine spoils and lakes in close proximity to each other and posed some extremely challenging wastewater situations. The inconsistent soils, numerous lakes, and drastic elevation changes challenged system designers along with stringent new code requirements.





NSF350 water recycling membrane bioreactor systems (MBR) were installed inside Infiltrator IM-Series Tanks. The numerous MBRs are either 500 or 1,000 GPD units and are built to suit the location with single units for individual cabins and 1,000 GPD MBRs to serve clusters of resort cabins, beach houses, a store, and a banquet hall. Installing the MBRs in the Infiltrator IM-Series Tanks allowed the units to be constructed in a shop to specifications and delivered for installation around the property without a heavy boom truck thus saving substantial expenses. EZflow by Infiltrator was used for the treated effluent dispersal fields, eliminating heavy trucking and the spreading and compaction challenges of stone. The Infiltrator IM-Series Tanks are also used for trash and pump tanks and the dispersal fields are time dosed by Aquaworx IPC Control Panels. A blower outside the tanks in a plastic enclosure blows air to scour the membrane to keep it clean, keeping the biomass alive and growing. A 1.5amp marine pump is attached to each MBR to slowly draw the recycled water out. The system then transitions to gravity flow to disperse to the EZflow drainfields.

