It's Time to Consider

# Membrane Bioreactor (MBR)

for Your Next Water Resource Recovery Project





Your MBR Experts

- 801.299.1327
- aquaeng.com

### Why use MBR?

Over the past 20 years, MBR technologies have become an essential part of the biological processes in wastewater treatment and water reclamation projects. These systems have many advantages over more conventional treatment technologies and are now the preferred option for cities and industries looking to produce high quality effluent, utilize their space efficiently, and have the capabilities to expand or upgrade their facilities with ease. MBRs can be configured to best fit your needs with a wide range of affordable hollow fiber, flat plate, or hybrid membrane products and technology suppliers.

**01**Better Quality
Effluent

MBR systems produce high quality effluent through effective pathogen/bacteria removal and micro/ultra filtration level tertiary treatment. MBRs require less chemicals to meet strict discharge requirements. They are often used as pretreatment for reverse osmosis where salt removal is needed.

**02** Smaller Spatial Footprint MBRs save space by concentrating solids more efficiently. MBR technologies utilize membrane filters that reject all solid materials, resulting in a very low turbidity effluent. They are able to utilize common wall construction and require smaller reactor tanks. MBRs elmininate the need for clarifiers and tertiary filters.

03 Upgradable & Efficient MBRs can be installed inside attractive facilities that can include de-centralized treatment and scalping plants. These facilities can expand and upgrade by simply adding more membranes. MBR systems require less manpower, are simple to operate, and can be monitored and controlled remotely with SCADA telemetry system management. They produce less waste solids.





## We are here to help!



#### **Your MBR Experts**

AQUA specializes in designing, engineering, constructing, and managing facilities that feature MBR solutions for wastewater treatment and water reclamation needs.

We provide services to clients nationwide.

We have extensive experience helping cities and industries succeed with MBRs

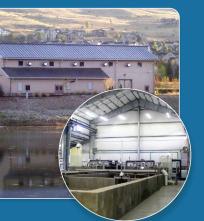
> Over 22 MBR Facilities Nationwide

AQUA Engineering was an early adopter of MBR technology and now has designed or is in design of over 22 facilities across the nation. Our first commissioned facility just recently replaced their membranes and were able to obtain over 15 years of life. Our facilities have capacities from 20,000 GPD to 6 million GPD. With our Electrical, Instrumentation, and Controls (El&C) Group, SKM, we are able to design and commission facilities that can be remotely monitored and controlled. Our operations group, Aqua Environmental Services, contract operates five MBR facilities giving us the feedback needed to design facilities for "operators". Together, with our construction partners, we can provide complete Engineer, Procure, and Construct (EPC) contracts, eliminating the risk of escalating costs between design and construction.

Jerome WRF



Wolf Creek Resort WRF



Hyrum WRF





### **Innovative Engineering Solutions**













#### Contact Us Today!

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Let Us Help You on Your Next Water Resource Recovery Project