



WATER & WASTEWATER ENGINEERING



Water is the lifeblood of this planet and all life on it, so it is imperative that we act as stewards of a safe and reliable water supply. SynTerra helps clients meet this objective in an economical manner, while helping them stay in compliance with laws, regulations, and good industry practices. Our Water & Wastewater Engineering team has experience in virtually every aspect of a water or wastewater utility, from planning to design to operation.



Our team of professionals has experience offering a wide range of water and wastewater services.

(not all-inclusive)

PLANNING

Successful operation of a water or wastewater system begins with establishing the right foundation. We have successfully assisted clients with planning services that are critical to providing value to a utility's customers while staying in regulatory compliance and preparing for the future. Services offered include:

- Master Planning
- Engineering Reports
- Hydraulic Modeling
- Feasibility Studies
- GIS/Mapping
- Basin Studies

PERMITTING

Effective and efficient permitting is a critical part of operating any utility. We work with our clients throughout this process to make it as painless as possible. SynTerra has a long history of success in applying for and securing a variety of permits for our clients. Perhaps our most valuable attribute is our ability to effectively negotiate with regulators on behalf of our clients, thus saving time and money. Some of our permitting capabilities include:

- NPDES
- Air Quality
- Inter-basin Transfer
- Stormwater (inc. SWPPP and SPPC)
- Construction
- Surface Water Withdrawal
- Wetlands

OPERATIONS AND MAINTENANCE (O&M)

SynTerra's services do not end with project completion and closeout. We continue to work with our clients to assist them in effective and efficient operations. Because O&M costs are significant, it is important to focus on optimizing operations.

Our O&M services include:

- Standard Operating Procedures
- Process Optimization
- Permit Renewals
- Regulatory Negotiations
- O&M Manual Development
- Energy Audits & Optimization
- Taste & Odor Control
- Plant Control Strategies and Systems

MISCELLANEOUS SERVICES

SynTerra is here to serve our clients and help them meet their objectives. While the services highlighted above are our core services offered to the water and wastewater industry, we offer additional environmental engineering and science services that may be beneficial to a water or wastewater utility. These include:

- Environmental Site Assessments
- Hazardous Material Handling
- Industrial Hygiene Studies
- Geotechnical Engineering
- Lead and Asbestos Inspections
- Environmental Risk Assessments
- Site Remediation
- Groundwater Modeling and Monitoring
- Civil Engineering
- Solid Waste Engineering

DESIGN

In order to provide high-quality service at a great value, utilities must optimize system design. We work with our clients to evaluate design alternatives and make decisions based on sound engineering practice in accordance with local regulations. In addition, we focus on total cost of ownership rather than on selecting the least expensive option. This provides greater value for both a utility and its customers. Design services include:

- Treatment Facilities
- Water Transmission & Distribution Systems
- Gravity Sewers
- Metering Solutions
- Instrumentation & Control
- Pump Stations
- Storage Tanks
- Sewer Force mains
- Residuals Handling
- Alternative Treatments

BIDDING ASSISTANCE AND CONSTRUCTION ADMINISTRATION

We provide the full range of Bidding Assistance and Construction Administration services that is customary for typical water and wastewater projects. Our relationships with our clients and other partners help us make this process as smooth as possible. This allows our clients to focus on meeting their objectives and operating their systems. In addition, we are able to provide full-time site representatives in order to better protect the interests of a project owner and design intent. Most importantly, it helps protect the interests of a utility's customers.

BUSINESS SERVICES

Because it is vitally important for a utility to provide a high level of product and service at a good value, sound business practices must be a core component of a utility's culture. Water and wastewater systems should not only be good stewards of the environment, but also of their customers' financial resources. SynTerra is able to assist in developing this type of financial stewardship. Our business consulting services include:

- Rate Studies and Development
- Budget Review and Preparation
- Litigation Support
- General Business Advice and Planning
- Capacity Fee Studies and Development
- Short- and long-term Financial Planning
- Funding Assistance
- Community Relations

