



HALEY WARD

ENGINEERING | ENVIRONMENTAL | SURVEYING

Water Works

Haley Ward is able to provide complete water works engineering services to water suppliers.

WATER SOURCES

- Test Well Exploration
- Production Well Development Evaluation / Rehabilitation
- Aquifer & Surface Source Watershed Protection
- Zone II & III Analyses
- Sanitary Surveys
- Groundwater Modeling
- Nitrogen Loading Analysis
- Groundwater Monitoring Program
- Contamination Investigation Site Design
- Pump Station Evaluation / Design / Renovation
- Instrumentation and Controls
- SCADA Design / Integration
- Facility Rehabilitation, Upgrades
- Pumping Unit Performance Tests
- Approvable Yield Analysis
- Facility Operation & Maintenance
- Water Management Act Permitting Operational Services
- O&M Manual Preparation
- Troubleshooting Assistance
- Licensed Contract Operations

- Utility Cloud Asset Management Storage Facilities
- Evaluation of Storage Volume Adequacy
- Safety & Security Checks
- Coating System Inspections & Evaluation
- Design, Repair, Rehabilitation, Retrofit Mixing System Design
- Siting of Storage Facilities

WATER SOURCES

- Watermains
- Pipe Condition Tests
- Hydrant Flow Tests
- System Hydraulic Modeling
- Water Quality Evaluation
- Rehabilitation & Replacement Alternatives Analysis
- Water-main Design
- Cleaning & Cement-Lining Design
- Phased Construction Programs
- Contract Documents
- Construction Services
- Leak Repair Programs
- Unidirectional Flushing Program Design & Mapping
- GIS, AutoCAD Mapping
- Maintenance Programs
- Cost Estimates

CONSTRUCTION SERVICES

- Construction Administration
- Cost Estimates / Bidding Assistance
- Contract Award Recommendations
- Shop Drawing Review
- Work Schedule Review
- Payment Estimates
- Resident Project Representative
- Performance Tests
- Work Acceptance Recommendations
- Grant Administration
- Record Drawing Preparation

PROJECT PEER REVIEW

- Development Peer Review
- Permit Compliance Oversight
- Cellular Equipment on Water Storage Facilities

PLANNING & STUDIES

- Master Planning
- Facilities Inspection & Testing
- Regulatory Planning
- Water Quality Investigations
- Utility Mapping Systems / GIS Mapping
- Environmental Assessments



- Cost/Benefit Analysis / Rate Studies / Water Audits
- Vulnerability Assessment & Emergency Response Plans
- Feasibility Studies
- Water Demand Projections
- Phased Construction Programs

TREATMENT

- Treatment Pilot Studies
- Water Quality Evaluation
- Treatment Alternatives / Adequacy / Efficiency Evaluations
- Facility Design / Rehabilitation / Upgrade

- Planning for Future Regulations / Quality Regulatory Environmental Permits
- Grant Applications
- Contract Documents
- Construction & Start-Up

WATERWORKS ADMINISTRATION/ MAINTENANCE

- Management, Organization, Evaluations Energy Conservation Programs
- Cost Estimates / Permitting / Funding Applications
- GIS Mapping & Database Building

- Water Quality Review
- Rules & Regulations Development
- Maintenance & Record Keeping Programs
- Community Relations
- Regulatory Permits Grant Applications
- Cross-connection Control, Water Conservation, Wellhead Protection Bylaws
- Water Department Rules, Regulations and Standards