



HALEY WARD

ENGINEERING | ENVIRONMENTAL | SURVEYING

Wastewater Management Services

Without adequate treatment, wastewater can be a source of ground or surface water pollution.

Wastewater carries pollutants including nutrients, petroleum products, pesticides, metals, pathogens and particulate matter. Wastewater management plans are required by state and federal agencies.

Haley Ward's Wastewater Management Services includes planning, piloting, design, permitting, monitoring, modeling, regulatory compliance, peer review and construction services.

WASTEWATER DESIGNS

- Piloting of new treatment technologies
- Use of best technology matched to site constraints
- Compliance with stormwater performance standards
- Evaluation of existing infrastructure - collection, pumping & treatment
- Facility inspection, operation & maintenance plans
- Contract documents
- Cost opinions
- Construction management & operational services

REGULATORY & MONITORING

- Design & implementation of complete wastewater management plans
- Review of existing wastewater management plans for regulatory compliance
- Preparation of groundwater discharge permits & amendments

- EPA-approved sampling protocols
- Review for conformance to local, state & federal standards
- Review of wastewater treatment adequacy, needs & inventory
- Preparation of standards, & rules & regulations

MODELING

- Pipe flow models for optimum pump & pipe sizing
- Water quality models designed to evaluate treatment efficiencies & alternative technologies
- Hydrogeologic analysis of groundwater mounding
- Mass balance analysis of nutrient loading
- Streamflow analysis
- Hydraulic analysis of flow gradients through treatment plant
- Collection system modeling and flow projections for master planning

REPRESENTATIVE CLIENTS

- GAC
- CBEC
- Wyman's of Maine
- ReEnergy Livermore Falls
- WR Allen – Orland
- Merrill Blueberry – Ellsworth
- Franklin Processing Inc.
- AIM – Bucksport
- Soil Preparation – Plymouth
- Town of Lincoln – Former Mill Site
- Fernald Enterprises LLC
- UniFirst Corporation – Bangor
- Look's Gourmet Foods – Whitting
- Monhegan Island Inn
- Stored Solar – West Enfield
- Tate & Lyle – Houlton
- Narraguagus Estates
- Aroostook Waste Solutions
- MDI High School
- Mapleton Sewer District
- Golden Gate Trailer Park
- Patten Wastewater Treatment Facility
- Pineland Farms
- Penobscot McCrum
- Presque Isle Sewer District