

STORMWATER MANAGEMENT SERVICES

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Stormwater runoff is a primary source of surface water pollution. Stormwater carries pollutants including nutrients, petroleum products, pesticides, metals, pathogens and particulate matter. Stormwater management plans are required by all local, state and federal agencies.



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



STORMWATER MANAGEMENT DESIGNS

- Design and implementation of complete stormwater management plans
- Review of existing stormwater management plans for regulatory compliance
- Use of best technology matched to individual site needs
- Sizing of stormwater drainage relative to the resource areas, soil and groundwater conditions, and other site constraints
- Compliance with stormwater performance standards
- Evaluation of existing structures
- Rain garden, permeable pavement, treatment train, infiltration system, piping & structure designs
- Channel/swale sizing
- Soil stabilization/sediment control plans
- Facility inspection, operation and maintenance plans
- Contract documents
- Construction services
- Permitting
- Cost estimates

REGULATORY & MONITORING

- EPA-approved sampling protocols
- Review of stormwater management systems for hydraulic and treatment adequacy
- Review for conformance to local, state and federal standards
- Review of stormwater quality adequacy, needs & inventory
- Preparation of stormwater bylaws, stormwater pollution prevention plans; spill control, containment & countermeasures plans; NPDES permit compliance.

MODELING

- Models developed to fit each situation, which vary greatly with stormwater sources
- Models designed to capture “first flush” stormwater runoffs
- Hydrologic analysis
- Floodplain Determinations and Compensatory Flood Storage Design
- Streamflow analysis
- Hydraulic analysis

PEER REVIEW SERVICES

CONSTRUCTION ADMINISTRATION SERVICES