

Watershed Services

Assisting local governments, regional organizations and private entities

AMEC provides a comprehensive suite of services related to watershed planning, assessment and management. The services cover both institutional and technical needs for local governments, regional organizations, and private entities. Services include water quantity, quality, and ecological aspects of local watersheds. The focus of our support to clients consists of these broad categories:

- Data Collection and Analysis
- Watershed and Floodplain Planning and Management
- Institutional and Public Education Services
- Regulatory Compliance



Data Collection and Analysis

Whether your needs include water quantity collection, infrastructure inventories, water quality monitoring, topographic mapping, satellite imagery, GPS or GIS applications, ecological assessment, risk analysis, or wetland surveys, AMEC staff provide state-of-the-art services incorporating the latest technology and information.

Staff have completed such projects as:

- Satellite Mapping of Vegetation with Raster Recognition for an Endangered Species Multi-objective Study

- Hand-held Computer/ GIS/ GPS Integrated Stormwater Infrastructure Inventories for Cities and Counties
- Ecological Risk Assessments for Numerous Commercial and Governmental Clients
- Bio-assessments of Streams and Riparian Corridors
- Wetlands Mapping Using GPS
- Water Quality Monitoring Studies
- Stream Gauging and Real-time Data Collection
- Hydrographic Surveys for Flood Studies
- Analyses of Sediment Accumulation in Ponds and Reservoirs
- Integration of Various Mapping Sources to Produce GIS Coverages and Applications
- Complaint Files and Response Systems

Watershed and Floodplain Planning and Management

Planning and operating on a watershed-wide scale is an approach fast growing in popularity among local governments. Riparian corridor areas are becoming a focal point of action for many local governments in the face of increasing flooding and water quality problems, and public demand for recreational and aesthetic access to streams. AMEC staff are experienced leaders in assisting local governments in all aspects of watershed and floodplain master planning. We have significant experience in the use of popular hydraulic, water quality, and hydrologic modeling packages, and have developed in-house modeling tools linked to GIS that provide an exceptional ability to automate data collection and reduction, perform model setup and execution, perform "what if" analysis, develop design solutions, assess water quality impacts, and perform a number of other important functions. We have performed a wide variety of watershed master plans from the traditional hydrology and hydraulic planning inherent in a flood study, to the more complex and holistic considerations that are part of a comprehensive multi-objective watershed

plan. We know how to harness technology and explain it clearly, making it useful to concerned, but non-technical, citizen groups.

Services in watershed and floodplain planning and management include:

- Holistic Watershed Master Planning
- Watershed Assessments
- Flood Studies and Capital Improvement Plans
- Greenway and Riparian Corridor Planning
- Floodplain Planning and Regulation
- Property Acquisition, Floodproofing and Non-structural Floodplain Management Programs
- Multi-objective Corridor Planning

Institutional and Public Education Services

Success in watershed planning and plan implementation often hinges not on technical merit, but on the ability to gain wide support for the plan among key stakeholders, and to implement the plan through a sound public education program and other key institutional factors.

AMEC staff are experienced in the development and implementation of master plans of many types, including flood hazard studies, planning studies, water quality plans, and comprehensive holistic watershed master plans. We have gained a clear understanding of local issues and local decision-making dynamics. We know how to bring a citizens group to consensus and build public and media support.



Services include:

- Public Participation Programs
- Stakeholder Consensus Building and Facilitation
- Public Education and Media Relations
- Graphic Development and Presentations
- Funding and Grant Applications
- Institutional Regulations, Programs and Processes
- Watershed Program Planning and Implementation

Regulatory Compliance

AMEC provides a wide variety of regulatory compliance services to local government clients in support of watershed programs. AMEC is a leader in stormwater National Pollutant Discharge Elimination System (NPDES) permitting and permit implementation having performed such services across the United States. Local government regulatory compliance services include:

- Water Quality Planning, Feasibility and Compliance, Including Phase I and II and Industrial NPDES
- Total Maximum Daily Load (TMDL) and Watershed Assessment Studies
- Floodplain Management, Federal Emergency Management Agency (FEMA) Related Flood Studies and Re-studies, Compliance and Flood Mitigation and Recovery
- Community Rating System (CRS)
- Sediment and Erosion Control Programs
- Regulatory and Local Inspection Programs
- Water Supply Watershed Studies

**For a list of office locations, company contacts and other services refer to:
www.amec.com**