



## **Water Resources**

The words pioneer, leader, innovator and expert embody Daniel W. Mead's life and his career as a water resources engineer. They also describe Mead & Hunt today. That same sense of leadership and quest for innovation have guided us past our 110th year – a tremendous milestone in our journey. Moving forward, our dedication to water resources engineering follows that same commitment to excellence.

## Types of Clients We Serve

- Flood protection and drainage
- Irrigation infrastructure
- Water and wastewater
- Pump stations
- Stream restoration
- Ports and harbors











## **Water Resources Services**

### **Design and Evaluation**

- Pump and lift stations
  - · Sewer lift stations
  - · Water booster stations
  - Storm water, flood control and irrigation
- Water storage
  - · Concrete
  - · Steel
  - · Earthen (lined and unlined)
- Water conveyance
  - · Pipelines
  - · Open and closed channels
  - · Canals

### Levees and Floodwalls

- Embankment and floodwall design
- Levee freeboard and geometry analysis
- Levee certification
- Encroachment surveys
- Conditions assessment
- Probable coincidental flood analysis
- Emergency action plans
- Embankment and floodwall stability and seepage analysis
- Levee settlement analysis
- Internal drainage study
- Operations and maintenance

# Hydrology and Hydraulic Analyses

- Deterministic and stochastic hydrology
- Water quality and groundwater modeling
- Stream gage analysis
- Regional hydrologic analyses
- Flow duration analyses
- Reservoir management
- Drainage master plans
- Watershed planning

### **Regulatory Compliance**

- Agency review coordination and negotiation
- Environmental permitting
- Section 404 permitting
- Local storm water permitting
- NEPA documentation
- Historic resource assessment and management planning
- Funding applications
- Species inventory
- Habitat assessment
- Water quality sampling
- Avian, aquatic and terrestrial studies
- Wetland delineation and functional assessments
- Wetland permitting

- Wetland mitigation, restoration and enhancement
- Wetland monitoring and longterm management
- Lake and stream management plans
- Erosion and sediment control plans

# Channel Stabilization and Restoration

- Natural channel design
- Soil bioengineering
- Conventional bank and channel protection
- Fluvial geomorphology

#### Geotechnical

- Slope stability analysis
- Seepage analysis
- Shallow and deep foundation analysis
- Earthwork design
- Soil and rock modification design

#### **Ports and Harbors**

- Dockwalls and revetments
- Ship launch facilities
- Mooring dolphins and structures
- Marinas
- Load out facilities
- Shoreline protection





