

Stormwater Drainage and Management

Anderson Consulting Engineers has completed literally hundreds of stormwater drainage projects. These projects have ranged in scope from evaluation of site specific conditions for private residences to development of drainage master plans for several municipalities. Our reputation has been earned through the successful solution to complex problems and a proven approach to both large and small drainage projects.

Our approach relies heavily on our expertise in hydrologic and hydraulic analysis and modeling as well as our design experience in storm drainage facilities. Based on our experience in the development of stormwater management plans, ACE integrates the following components:

- Scoping and coordination meetings
- Data collection and field investigation
- Mapping and surveying
- Inventory of existing facilities
- Hydrologic analysis and modeling
- Hydraulic analysis and modeling
- Drainageway planning and alternative development
- Reporting and technical documentation
- Public relations, formal workshops and presentations
- Funding alternatives and financing

ACE produces comprehensive, yet flexible, stormwater management plans (SWMPs), because SWMPs are used as planning tools that help the users to make decisions related to stormwater management. This planning document typically provides the framework for administration of:

- (a) the long-term capital improvement and rehabilitation program of existing drainage facilities;
- (b) drainage corridor planning;
- (c) planning associated with integration of new developments within the urban growth boundary;
- (d) water quality management and planning; and
- (e) floodplain management.

The following secondary considerations are usually integrated into the SWMP: (a) other requirements of municipal infrastructure, (b) erosion and sediment control, (c) regulations related to wetland preservation, and (d) residents' values with respect to environmental benefits, recreational opportunities, open space and other corridor planning issues.

All master planning efforts culminate in the preparation of the master plan report. The information presented in the report is produced for a target audience of developers, planners, as well as engineers. Throughout the compilation of the master plan, our awareness of the use of this document as a planning tool will influence the presentation of the required material.

Stormwater Drainage and Management (Continued)

Examples of ACE's experience with drainage studies and hydrologic investigations include:

- Canal Importation Basin Master Drainage Plan, Fort Collins, CO
- Boxelder Creek/Cooper Slough Basin Master Drainage Plan, Fort Collins, CO
- Master Drainage Plan for the Town of Windsor, CO
- Centerport International Airport Stormwater Master Plan, Aurora, CO
- Interstate 25 Corridor Stormwater Master Drainage Plan, Weld County, CO
- Spring Creek Basin Master Drainage Plan, Fort Collins, CO
- Old Town Basin Master Drainage Plan, Fort Collins, CO
- Sheep Draw Basin Comprehensive Drainage Plan, Greeley, CO
- Country Club Basin Comprehensive Drainage Plan, Greeley, CO
- 28th Avenue Basin Comprehensive Drainage Plan, Greeley, CO
- Grapevine Basin Comprehensive Drainage Plan, Greeley, CO
- Downtown and North Greeley Basin Comprehensive Drainage Plan, Greeley, CO

Examples of ACE's experience with NPDES permitting include:

- Town of Windsor NPDES Phase II Permitting and Compliance, Windsor, CO
- Weld County School District NPDES Phase II Permitting Evaluation, Windsor, CO