

Section 1. Regulatory and Permitting

Overview of Section 1

1.0

Section 1 addresses the following introductory topics:

Section 1.1, **The GESC Permit**, introduces Arapahoe County's Grading, Erosion, and Sediment Control (GESC) Permit Program.

Section 1.2, **Reasons for the Permit**, points out the need to control the high rates of erosion and sedimentation from construction sites in an effort to protect valuable land and water resources.

Section 1.3, **Legislative Mandate**, summarizes how the GESC Permit Program is mandated by legislation, including the Federal Clean Water Act's National Pollutant Discharge Elimination System (NPDES) Stormwater Phase II Regulations and the Colorado Water Quality Control Act.

Section 1.4, **Authorization of the GESC Manual**, states that the GESC Manual is authorized by passage and adoption of a resolution by the Board of County Commissioners. This section discusses the interpretation and enforcement of the GESC Permit requirements described herein.

Section 1.5 discusses **State Permitting**, such as the following:

- ◆ Stormwater Management Plan.
- ◆ Dewatering Permit.
- ◆ Air Quality Permitting.

Section 1.6 discusses **Federal Permitting**, including:

- ◆ Federal Emergency Management Agency map revisions.
- ◆ Department of Army Corps of Engineers Section 404 Permit.
- ◆ Threatened and Endangered Species approvals.
- ◆ The Migratory Bird Treaty Act

Gradating,
Erosion, and
Sediment
Control



Rates of erosion increase dramatically during construction.

The GESC Permit

1.1

Arapahoe County has a permitting program for grading, erosion, and sediment control on public and private construction projects within the unincorporated areas of the County. This Grading, Erosion and Sediment Control Manual (*GESC Manual*) describes the permitting program that has been adopted to promote environmentally-sound construction practices in the County.

Terminology

The Grading, Erosion, and Sediment Control Permit is termed simply the “GESC” Permit for short (“GESC” has a hard “g” and is pronounced like “desk”).

Reasons for the GESC Permit

1.2

The goal of the GESC Permit Program is to implement effective erosion and sediment control Best Management Practices (BMPs) as a standard for all land disturbance activities to reduce increases in erosion and sedimentation over pre-development conditions. During the relatively short period of time when undeveloped land is converted to urban uses, a significant amount of sediment can erode from a construction site and be transported to adjacent properties and receiving waters. Erosion caused by construction and downstream sedimentation can damage property and degrade the quality of streams and lakes. Sediment is a transport mechanism for many stormwater pollutants. Sediment can disturb riparian and aquatic habitat and, since eroded sediments often contain significant phosphorus, can lead to unwanted algae growth in lakes and reservoirs.



Eroded sediment can clog downstream receiving waters.



Nutrients associated with eroding sediments can lead to undesirable algae blooms.

Arapahoe County is committed to protecting water resources and ensuring that future development continues in an environmentally-sound manner.

Legislative Mandate

1.3

1.3.1 NPDES Regulations. The development, implementation, and enforcement of the Arapahoe County GESC Permit Program is mandated by both the Federal Government and the State of Colorado. The Federal Clean Water Act's National Pollutant Discharge Elimination System (NPDES) Stormwater Regulations require that stormwater discharges from certain types of facilities be authorized under discharge permits (40 C.F.R., 122.26). The goal of the NPDES stormwater permits program is to reduce the amount of pollutants entering streams, lakes, and rivers as a result of stormwater runoff from residential, commercial, and industrial areas.

The original 1990 regulation (**Phase I**) covered municipal (i.e., publicly-owned) storm sewer systems for municipalities over 100,000 population. The regulation was expanded in 1999 to include smaller municipalities, as well as some counties, including Arapahoe County. This expansion of the program is referred to as **Phase II**.

In Colorado, stormwater discharge permits are issued by the Colorado Department of Public Health and Environment, Water Quality Control Division ("Division"). Such permits are part of the Colorado Discharge Permit System, or CDPS, under Regulation No. 61. Regulation No. 61 was promulgated to assist the Division in implementing its stormwater permits program. The Phase II municipal separate storm sewer systems (MS4s) will be covered under a general permit for stormwater discharges from MS4s. As per the Division's regulation, the main requirement of this general permit will be for Arapahoe County to develop and implement six stormwater management programs, or minimum control measures. One of these six measures is **construction site stormwater runoff control**.



Control of construction site erosion in Arapahoe County is mandated by Federal and State law.

Regulation No. 61 states that the County must "develop, implement, and enforce a stormwater management program designed to reduce the discharge of pollutants from unincorporated lands in the County to the Maximum Extent Practicable (MEP), to protect water quality, and to satisfy the appropriate water quality requirements of the Colorado Water Quality Control Act (CWQCA) (Colorado Code of Regulations (CCR) 61.8(11)(a)(i))."

In short, the County must develop a stormwater management program that meets the requirements of the six minimum control measures and protects state waters from pollution, contamination, and/or degradation.

Section 1. Regulatory and Permitting

Legislative Mandate, continued

1.3.2 Cherry Creek Reservoir Control Regulation No. 72. In addition to the CDPS program requirements, Arapahoe County is responsible for complying with Cherry Creek Reservoir Control Regulation No. 72, promulgated by the Division pursuant to the CWQCA, Sections 25-8-202(1)(c)

The Colorado Water Quality Control Act (CCR 61.8(11)(a)(ii)(D)) Requires Arapahoe County to:

“...develop, implement, and enforce a program to reduce pollutants in any stormwater runoff to the MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. Reduction of pollutants in stormwater discharges from construction activity disturbing less than one acre must be included in the program if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more. The program must be developed and implemented to assure adequate design, implementation, and maintenance of best management practices (BMPs) at construction sites within the MS4 (Arapahoe County) to reduce pollutant discharges and protect water quality. The program must include the development and implementation of, at a minimum:

- ◆ *An ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions to ensure compliance, to the extent allowable under State or local law;*
- ◆ *Requirements for construction site operators to implement appropriate erosion and sediment control BMPs;*
- ◆ *Requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality;*
- ◆ *Procedures for site plan review which incorporate consideration of potential water quality impacts;*
- ◆ *Procedures for receipt and consideration of information submitted by the public; and*
- ◆ *Procedures for site inspection and enforcement of control measures.”*

The GESC Permit Program complies with these requirements.

and 25-8-205, *et seq.*, C.R.S. This regulation, affecting approximately 18.6 square miles of Arapahoe County within the Cherry Creek Watershed, identifies specific requirements for erosion and sediment control BMPs on construction sites, including placing limits on the area of land that can be disturbed at any one time. The intent of the regulation is to protect the water quality of Cherry Creek Reservoir.

Section 1. Regulatory and Permitting

Authorization of the GESC Manual

1.4

The *GESC Manual* is authorized and approved by the Arapahoe County Board of County Commissioners (adopted February 22, 2005).

1.4.1 Jurisdiction. The GESC Permit Program shall apply to all land within the unincorporated areas of Arapahoe County.

1.4.2 Amendments and Revisions. These policies and criteria may be amended and revised as new technology is developed and experience is gained. The Board of County Commissioners (BOCC), following the recommendations of the Public Works and Development Director (herein referred to as "Director"), may consider such amendments and revisions. Minor revisions that do not affect policy may be made without the action of the Board.

1.4.3 Enforcement Responsibility. The Board of County Commissioners, acting through the Director, shall enforce the provisions of the *GESC Manual*.

1.4.4 Review and Acceptance. The County, or its designated agent, will review all *GESC* Plan submittals for general compliance with these criteria contained herein. An acceptance by the County does not relieve the Permittee(s) or Design Engineer from responsibility of ensuring that calculations, plans, specifications, construction and as-built drawings are in compliance with the criteria contained herein. Additionally, acceptance by the County does not alleviate the Permittee(s) or Design Engineer from complying with all other applicable Federal, State, or Local regulations.

1.4.5 Interpretation. In the interpretation and application of the provisions of this *GESC Manual*, the following shall govern:

These provisions shall be regarded as the minimum requirements for the protection of the public health, safety, comfort, convenience, prosperity, and welfare of the residents of the County. The



The GESC Permit Program is designed to fulfill a legislative mandate and significantly reduce construction erosion.

Section 1. Regulatory and Permitting

Authorization of the GESC Manual, continued

GESC Manual shall therefore, be regarded as remedial and shall be liberally construed to further its underlying purposes.

Whenever a provision in these criteria and any other provision of the Arapahoe County Land Development Code or any provision in any law, ordinance, resolution, rule or regulation of any kind, contain any restrictions covering any

The GESC Manual shall be considered the minimum requirements and Arapahoe County reserves the right to apply more stringent criteria. Additionally, the County reserves the right to change, modify, or alter these requirements at any time.

of the same subject matter, **whichever are more restrictive or impose higher standards shall govern.** In the event that there is a discrepancy in the interpretation of the *GESC Manual*, the Director shall have the final determination of the intent of the *GESC Manual*.

The *GESC Manual* shall not abrogate or annul any permits or accepted drainage reports and construction plans issued before the effective date of the *GESC Manual*.

1.4.6 Relationship to Other Standards. Relationship to Other Standards. If a special district imposes more stringent criteria, such differences are not considered conflicts. For example, the Arapahoe County Public Airport Authority, Centennial Airport, may require additional control measures on development within this special district. As such, those more stringent requirements are applicable. When differences arise, the more stringent requirements shall apply. If Federal or State law imposes stricter criteria, standards or requirements, these shall be incorporated into the County's requirements after proper notice and public hearing(s) needed to modify the County's regulations, standards, and ordinances.

State Permitting

1.5

The State of Colorado requires permits for construction-related activities, which are in addition to permitting requirements of Arapahoe County. The Applicants or the Design Engineer shall contact the State of Colorado, Water Quality Control Division (WQCD) for specific State permitting information for their specific projects. Contact information for the WQCD is provided in Appendix A.

Information on some of the State permits that may be applicable includes the following (this is not to be considered an exhaustive list; therefore, applicants are advised to contact the State):

1.5.1 Stormwater Management Plan. In compliance with the NPDES Stormwater Permit Program, the State requires that Stormwater Management Plans (SWMPs) be prepared for construction projects exceeding one (1) acre of disturbance.

1.5.2 Construction Dewatering Permits. The State issues a permit for Discharges Associated with Construction Activities to manage dewatering discharges from construction projects. The permit establishes water quality standards and BMPs for dewatering discharges.

Section 1. Regulatory and Permitting

State Permitting, continued



Control of airborne emissions is included in the GESC Plan Standard Notes and may be subject to State regulations.

1.5.3 Air Quality Plans. As described in the Urban Drainage and Flood Control District's *Urban Storm Drainage Criteria Manual -Volume 3, (Volume 3)*, as amended, the surface stabilization measures identified for control of precipitation-induced erosion generally inhibit soils from becoming windborne. Applicable State regulations pertaining to air quality shall be addressed by the Permittee.

The Air Pollution Control Division of the Colorado Department of Public Health and Environment (CDPHE) has passed air quality regulations consistent with Federal legislation. Regulation No. 3 requires submittal of an Air Pollutant Emission Notice (APEN) for sources of fugitive dust from construction sites, as well as other sources.

Regulation No. 1 defines particulate emission control regulations for haul roads and roadways.

Haul Roads, as defined by the Air Quality Control Commission, Regulation 1 (5 CCR 1001-3), are roads which are used for commercial, industrial or governmental hauling of materials and which the general public does not have a right to use. Any owner or operator of any new or existing haul road which has vehicle traffic exceeding 40 haul vehicles or 200 total vehicles per day (averaged over any consecutive 3-day period) from which fugitive particulate emissions will be emitted shall be required to use all available practical methods which are technologically feasible and economically reasonable in order to minimize such emissions in accordance with the requirements of Section III.D. of Regulation 1. Additional control measures or operating procedures, including but not limited to road watering, chemical stabilization, road carpeting, paving, suggested speed restrictions and other methods or techniques approved by the Air Quality Control Division, may be necessary to fully comply with these regulations at the construction site. The CDPHE should be contacted about APENs and other air quality requirements.

Federal Permitting

operator of any new or existing haul road which has vehicle traffic exceeding 40 haul vehicles or 200 total vehicles per day (averaged over any consecutive 3-day period) from which fugitive particulate emissions will be emitted shall be required to use all available practical methods which are technologically feasible and economically reasonable in order to minimize such emissions in accordance with the requirements of Section III.D. of Regulation 1. Additional control measures or operating procedures, including but not limited to road watering, chemical stabilization, road carpeting, paving, suggested speed restrictions and other methods or techniques approved by the Air Quality Control Division, may be necessary to fully comply with these regulations at the construction site. The CDPHE should be contacted about APENs and other air quality requirements.

1.6

Applicants are also responsible for complying with all applicable Federal permitting. This may include, but is not limited to the FEMA map revision process, the Department of the Army Corps of Engineers Section 404 Permit and US Fish and Wildlife Service, Endangered Species Action Section 10 and/or Section 7 Permits.

Information on some of the Federal programs and permits that may be applicable include the following (this is not to be considered an exhaustive list; therefore, applicants are advised to confirm the Federal requirements that may apply):

1.6.1 FEMA Map Revisions. As mentioned in Section 2.9.9, projects that impact the regulatory floodplain may need to obtain a Conditional Letter of Map Revision (CLOMR) and/or Letter of Map Revision (LOMR) from FEMA. In this case, proper documentation needs to be submitted to

Section 1. Regulatory and Permitting

Federal Permitting, continued



*A Preble's Meadow
Jumping Mouse.*

FEMA for review and approval.

Contact Information for FEMA is provided in Appendix A. from FEMA. In this case, proper documentation needs to be submitted to FEMA for review and approval.

Contact Information for FEMA is provided in Appendix A.

1.6.2 Section 404 Permitting. Excavation activity associated with a dredge and fill project in "Waters of the United States" (including streams, open water lakes, ponds, wetlands, etc.) may require a Section 404 Permit. The level of permitting is dependent on the extent of disturbance along the water body of interest. It should be reviewed with the U.S. Army Corps of Engineers as to whether a Nationwide Permit or an Individual Permit is required. Individual Permits will require more detailed information about the project and preparation of exhibits specific to the project site.

Contact Information for the U.S. Army Corps of Engineers is provided in Appendix A.

1.6.3 U.S. Fish and Wildlife Service Threatened and Endangered Species Clearance. The U.S. Fish and Wildlife Service has established guidelines for surveys to determine the presence or absence of threatened and endangered species within a project's limits. The most prominent of these species in this area are the Preble's Meadow Jumping Mouse (*Zapus hudsonius preblei*) and Ute Ladies' Tresses Orchid (*Spiranthes diluvialis*). Clearance of these species from a project site is dependant on spatial, regional requirements determined by the U.S. Fish and Wildlife Service.

Contact Information for the U.S. Fish and Wildlife Service is provided in Appendix A.



*Ute Ladies' Tresses
Orchid.*

1.6.4 Migratory Bird Treaty Act. The Migratory Bird Treaty Act (MBTA) is an Act of Congress which prohibits, unless permitted by regulations, to “pursue, hunt, take, capture, attempt to take, capture or kill, possess...” all migratory birds, nests, and eggs protected by the MBTA. The MBTA protects almost all birds, including common species such as swallows, crows, and geese. The U.S. Fish and Wildlife Service is responsible for administering the MBTA.

Contact Information for the U.S. Fish and Wildlife Service is provided in Appendix A.