

BEST MANAGEMENT PRACTICES PROJECT (URBAN): KEEPING SOIL ON SITE: CONSTRUCTION BEST MANAGEMENT PRACTICES

Conducted by: Denver Regional Council of Governments
 On the Web: www.drcog.org
 Project Partners: Urban Drainage and Flood Control District (UDFCD),
 Colorado Department of Transportation (CDOT)
 Contract Period: 1996-1998
 NPS Funding: \$65,000
 Matching Funds: \$76,510

In 1996, the Denver Regional Council of Governments (DRCOG), the Urban Drainage and Flood Control District (UDFCD) and the Colorado Department of Transportation (CDOT) set out to create an educational project addressing erosion and sediment control at construction sites. This effort included the development and distribution of a video and workbook as well as hosting training programs for the construction industry, public works departments, municipalities and other implementing agencies.

DRCOG combined efforts with an existing training program which had been developed with assistance from UDFCD and CDOT at Red Rocks Community College. This collaboration provided existing material which was updated, and improved the distribution network for the video and workbook.

The script development group included representatives from UDFCD, DRCOG, CDOT, several cities and counties, Red Rocks Community College and the Colorado Department of Public Health and Environment (CDPHE). In addition to drafting the script, this group selected filming locations and created an outline for the workbook.

The final script and notebook identified and addressed 18 key best management practices (BMPs) related to sedimentation and erosion control for use during the construction process. Following an introduction, the video explored environmental quality, economic motivations and regulatory requirements for the use of construction site BMPs. The video then discussed the design, installation and maintenance requirement for each of the selected BMPs.

CDOT handled most of the actual filming, and more than 30 construction and stabilization sites were visited during the course of the project. Creating erosion event footage was a challenge on the limited shooting schedule. Additional footage was drawn from DRCOG resources. All of the raw video created for this project is stored at DRCOG for use in future projects. In addition to the site footage, interviews with

five experts were added to the project. These interviewees included:

Dan Beley, CDPHE
 Micheal Hodgson, CDOT
 Larry Mugler, DRCOG
 Alan Searcy, City of Lakewood
 Ben Urbonas, UDFCD

Final editing of the video was done at the Educational Technology Training Center (ETTC), part of the Colorado Community Colleges. ETTC professionals guided the editing process, created additional graphics and provided professional narration.

With the video complete, the workbook was created to follow the same outline as the video. The workbook featured a fact sheet for each BMP and key concept areas. The material was presented in a three-ring binder to facilitate updates.

Following completion of the video and workbook, the material was used as part of the erosion control supervisor certification course at Red Rocks Community College and was presented to a number of different audiences across the state. In the end, more than 500 copies of the tape and workbook were distributed.

Best Management Practices

- Construction phasing
- Vehicle tracking controls
- Detention/sedimentation basins
- Drainageway protection
- Material storage and staging areas
- Sediment traps
- Silt fences
- Surface roughening
- Mulching
- Erosion control blankets
- Filter strips
- Slope drains
- Temporary diversion dikes
- Inlet protection
- Roadside swales
- Rough cut street controls
- Revegetation
- Sodding