



# STATE OF THE WATERSHED

Newsletter of the Big Dry Creek Watershed Association

## Special Urban Community Edition

### **Phase II Storm Water Rule to Affect Big Dry Creek Cities and Counties**

The Phase II storm water rule automatically regulates operators of small municipal separate storm sewer systems (MS4s) located in urbanized areas and operators of construction activities that disturb equal to or greater than one and less than five acres of land. The Storm Water Phase II Final Rule, which was published in the Federal Register on December 8, 1999, lists governmental entities that meet the definition of urbanized areas based on the 1990 census. In the Big Dry Creek watershed, these governmental entities include the cities of Broomfield, Westminster, Northglenn, Thornton, Arvada, Federal Heights, and Jefferson, Adams and Weld counties. The draft regulation for the State of Colorado will be published in the Colorado Register on September 10, 2000.

Under the Phase II rule, operators of regulated small MS4s would be required to:

- ❑ Apply for National Pollutant Discharge Elimination System (NPDES) permit coverage, develop a storm water management program which includes six minimum control measures.
- ❑ Implement the storm water management program using appropriate storm water management controls or best management practices (BMPs).
- ❑ Develop measurable goals for the programs.

- ❑ Periodically evaluate the effectiveness of the program.

The six minimum measures that will be required for compliance under general permits include:

1. Public Education and Outreach
2. Public Participation and Involvement
3. Illicit Discharge Detection and Elimination
4. Construction Site Runoff Control
5. Post-Construction Runoff Control
6. Pollution Prevention/Good Housekeeping.

Section 122.30 (d) of the Phase II rule states “EPA strongly encourages partnerships and the watershed approach as the management framework for efficiently, effectively, and consistently protecting and restoring aquatic ecosystems and protecting public health.”

Under the public education and outreach minimum measure, a regulated entity is required to develop a program to distribute educational materials to the community or conduct equivalent outreach activities about the impact of storm water discharges on water bodies and the steps that the public can take to reduce pollutants in storm water runoff. The Big Dry Creek Watershed Association will be useful in assisting communities within the watershed in fulfilling the public education and information requirement. As a first step in this direction, the Watershed Association has compiled a notebook of existing educational materials related to minimizing pollutant contributions to storm

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water. Some of the excellent existing key resources included in this notebook are summarized below.

Additionally, EPA is scheduled to prepare a menu of BMPs for use by municipalities and publish a model general permit in the Federal Register by October 2000. EPA is scheduled to issue guidance on the measurable goals to assess the success of minimum control measures in October 2001. The state will use the model permit as a starting basis for its own general permit to be published by December 2002. Municipalities will need to apply for a Phase II general permit by March 2003. By the end of their first permit terms (typically 5 years), operators of regulated small MS4s will have to fully implement their management programs.

***Educational/Informational Resources Regarding Minimization of Pollutants in Storm Water (emphasis on Colorado-based materials)***

Colorado Department of Transportation's *Erosion Control and Storm Water Quality Guide*

Colorado State University Cooperative Extension *Homeowner's Guide Series*

Denver Regional Council of Governments/Colorado Nonpoint Source Council Publications (e.g., *Keeping Soil on Site* Notebook/Video)

EPA Publications (e.g., Phase II Storm Water Regulation Fact Sheet series)

Colorado League of Women Voters Colorado Water Protection Kit

National Storm Water Best Management Practices Database ASCE/EPA

Urban Drainage and Flood Control District *Drainage Criteria Manual, Volume 3*

Urban Drainage and Flood Control District *Clear Choices for Clean Water* series

A one-day seminar on the Storm Water Phase II rule is being offered to municipalities by EPA on September 23, 2000 in Denver. Those municipalities interested in the free workshop can register via the Internet at [www.epa.gov/owm/sw/training](http://www.epa.gov/owm/sw/training). See EPA's Web site at [www.epa.gov/owm/sw/phase2](http://www.epa.gov/owm/sw/phase2) for more information on the Phase II rule.

***Activities of the Big Dry Creek Watershed Association***

Since 1997, the Big Dry Creek Watershed Association has been working to scientifically assess conditions in the Big Dry Creek watershed. The Association also diligently works to serve as a forum where a variety of perspectives can be expressed and considered as watershed concerns and issues are explored in bimonthly meetings.

Over the last few years, the Association has collected and analyzed biological, chemical and physical data collected along the creek. Results indicate that the stream is in relatively good condition and is an amenity to the communities in its watershed. As a result of these findings, one of the key priorities for the Watershed Association is to promote riparian zone stewardship to avoid losing this important natural feature as urban development continues in the basin. Enforcement of storm water quality and quantity controls and implementation of erosion and sediment control practices during construction are key priorities for communities in the urban area to protect the stream. In the agricultural area, controlling cattle access to the stream would help to reduce impacts. Even with implementation of these measures, increased flows in Big Dry Creek resulting from development will put pressure on the stream system, accelerating the natural erosion process. In addition to working to restore areas that are already impacted, it will be important for the Watershed Association to continue monitoring conditions in the watershed, work to limit adverse influences on the stream and inform other appropriate parties of conditions needing improvement in their jurisdictions.

### **CSU Professors Interested in Streambank Stabilization Projects on Big Dry Creek**

At the June 2000 Big Dry Creek Watershed Association meeting, Dr. Brian Bledsoe and Dr. Chester Watson of the Colorado State University Civil Engineering Department spoke on "Stream Stabilization Principles and Approaches for Big Dry Creek." Both have had experience working on stream stabilization projects in rural and urban areas. Dr. Bledsoe is interested in pursuing 319 grant funding to implement a streambank stabilization demonstration project on Big Dry Creek. Several reaches of Big Dry Creek are experiencing accelerated erosion. If your community is experiencing these types of problems and would be interested in participating in such a demonstration project, please contact Jane Clary, Big Dry Creek Watershed Coordinator (303-480-1700) or Dr. Brian Bledsoe at CSU (970-491-8410).

### **Wildlife Habitat Incentive Program (WHIP) Funding Available**

Under the U.S. Department of Agriculture (USDA) 1996 Farm Bill conservation provisions, a variety of funding is available for conservation. The Wildlife Habitat Incentives Program (WHIP) is a voluntary program for those who want to develop and improve wildlife habitat. It provides both technical assistance and cost-share payments to help establish and improve fish and wildlife habitat.

Under the program, participants who own or control land agree to prepare and implement a wildlife habitat development plan. The Natural Resources Conservation Service (NRCS) offers participants technical and financial assistance for these practices. The USDA and the participant enter into a cost-share agreement for implementation of the plan, typically lasting from 5 to 10 years after the agreement is signed. Under the agreement, the landowner agrees to install and maintain the WHIP practices and allow NRCS or its agent access to monitor the effectiveness of the practices. The USDA agrees to provide technical assistance and pay up to 75 percent of the cost of installing the wildlife habitat practices.

### **Storm Water Management and Erosion Control at Construction Sites Training**

Red Rocks Community College offers a two-day storm water management and erosion control course focusing on the principles and practices of erosion and sediment control during construction activities. The course covers legal requirements, the process of erosion and sedimentation, erosion control, best management practices (BMPs) selection and application, and structural and non-structural installation guidelines. Continuing Education Units: 0.9.

Contact: Red Rocks Community College at 303-914-6420 or [www.osha-redrocks.org](http://www.osha-redrocks.org).

CETC 150 Dates:

2000

Section 035: October 12-13

Section 036: November 9-10

2001

Section 037: January 11-12

Section 038: March 29-30

Section 039: April 26-27

Section 040: June 14-15

Section 041: August 16-17

Section 042: October 11-12

WHIP funding is not restricted to agricultural lands and may be used to restore aquatic habitat as well as adjacent streambanks and uplands. WHIP may be a good resource for enhancing conditions on Big Dry Creek both in the urban and agricultural areas.

For more information, see [www.nrcs.usda.gov](http://www.nrcs.usda.gov) or contact Eugene Backhaus (303) 236-2903 or [Eugene.Backhaus@CO.USDA.GOV](mailto:Eugene.Backhaus@CO.USDA.GOV) at the NRCS Metro Field Office.

## **Who Are We?**

The Big Dry Creek Watershed Association is a voluntary association of individuals and entities who dedicate time and resources to developing a sound scientific understanding of water quality, flow, aquatic life and habitat conditions in the Big Dry Creek watershed and act to improve these conditions.

The Big Dry Creek Partnership, which includes the Cities of Broomfield, Northglenn and Westminster and Rocky Flats Environmental Technology Site (Rocky Flats), founded the Watershed Association in 1997. These four entities discharge wastewater into Big Dry Creek and have been heavily involved in monitoring stream conditions for many years. Since 1997, the Association has expanded to include representatives from other cities, counties, farmers, ditch companies, citizens and regulatory and resource agencies. The Association is open to those interested in cooperatively working towards understanding

and prioritizing efforts to improve basin conditions.

Activities of the Association during the last three years have been funded through the USEPA's 319 (as administered by the CDPHE) and Regional Geographic Initiative grant programs in combination with contributions from the cities of Broomfield, Northglenn and Westminster and the Rocky Flats Environmental Technology Site (USDOE and RMRS).

## **For More Information**

For more information on the Big Dry Creek Watershed Association, please contact Jane Clary, Watershed Coordinator, at Wright Water Engineers, Inc., 303-480-1700 or [clary@wrightwater.com](mailto:clary@wrightwater.com). The Big Dry Creek Watershed Association web page, which is hosted by the City of Broomfield, can be accessed at: [www.ci.broomfield.co.us/broomfield/wastewater/bigdrycreek.shtml](http://www.ci.broomfield.co.us/broomfield/wastewater/bigdrycreek.shtml).



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