Colorado

Nonpoint Source Program

FY 2006 Annual Report

Colorado Department of Public Health and Environment

Water Quality Control Division
Colorado Department of Public Health and Environment

Grape Creek Water Quality Project streambank stabilization

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I. Introduction

This report fulfills the requirements of Section 319(m)(1) of the federal Clean Water Act of 1987. The Colorado Department of Public Health and Environment's Water Quality Control Division annually prepares this report to inform the public, the U.S. Congress and the U.S. Environmental Protection Agency (EPA) on the state's progress in the area of nonpoint source water pollution abatement. Although this report should not be considered a complete enumeration of all nonpoint source activities, it describes the most important features of Colorado's nonpoint source program.

The twofold goal of Colorado's nonpoint source program is to restore to full designated use those waters impaired by nonpoint sources of pollution and to prevent future impairments by using an open process that fully involves the public.

Through fiscal year 2006, the division continued to administer the *Colorado Nonpoint Source Management Program*, which EPA approved in January 2000. The Colorado Water Quality Control Commission adopted the Supplement to the Colorado Nonpoint Source Management Program in January 2005. The document is available upon request or online at http://www.cdphe.state.co.us/wq/nps/2005NPSAnnual.pdf. In addition, Regulation № 93 – Section 303(d) List of Water Quality Limited Segments Requiring TMDLs and the *2006 Status of Water Quality in Colorado* 305(b) report also were used for program implementation activities. The 305(b) report serves as a periodic update of the nonpoint source assessment.

Any comments or questions on this report or on Colorado's nonpoint source program may be directed via e-mail to nps@state.co.us.

1) Colorado Nonpoint Source Council

The Colorado Nonpoint Source Council, a voluntary assembly of government agencies and public interest groups, advises the division in the implementation of the nonpoint source program. The council and its committees provide advice in helping the division prepare and maintain the state's nonpoint management programs and in encouraging the public to become involved in nonpoint source control efforts. The council, in coordination with the division, also works with interested project sponsors to prepare projects for funding consideration under Section 319(h) of the Clean Water Act. The goal of the Nonpoint Source Council is to promote an effective nonpoint source program designed to achieve and maintain designated uses of the waters of Colorado. Each representative's primary duties and responsibilities include the following: [Use numbers for items done in order; use bullets otherwise.]

1. serve as a liaison from member organization/agency to the council
2. serve as a liaison from the council to member organization/agency
3. actively represent nonpoint source water quality issues and provide input from member organization/agency for the benefit of Colorado water quality
4. promote the nonpoint source program within the member organization/agency and as other opportunities are presented
5. participate in the evaluation process for the nonpoint proposals submitted each year, including committee proposal review meetings

6. participate in council policy and program development
7. work with a multitude of agencies and organizations, which may hold divergent points of view
8. approach resolution of challenges through teamwork
9. stay informed and inform others about nonpoint issues and water quality concerns
10. participate in statewide meetings and seminars on nonpoint source

2) 2006 Member Organizations of the Nonpoint Source Council

U.S. Bureau of Land Management
Colorado Association of Stormwater and Flood Plain Managers
Colorado Department of Transportation
Chatfield Watershed Authority
Colorado Cattlemen's Association
Colorado Livestock Association
Colorado Farm Bureau
Colorado Lake and Reservoir Management Association
Colorado Mining Association
Colorado River Water Conservation District
Colorado Division of Wildlife
Colorado Division of Minerals and Geology
Colorado State Conservation Board/Colorado Department of Agriculture
Colorado State University Cooperative Extension
Colorado Water Quality Control Division
U.S. Department of Agriculture (USDA) Natural Resources Conservation Service
U.S. Geological Survey
Northern Colorado Water Conservancy District
North Front Range Water Quality Planning Association
Pikes Peak Area Council of Governments
Denver Regional Council of Governments
Sierra Club
League of Women Voters
USDA Forest Service
Left-hand Watershed Oversight Group
Colorado Water Quality Control Commission (ex officio)
U.S. Environmental Protection Agency, Region VIII (ex officio)

II. Nonpoint Source Implementation Activities

Congress began appropriating funds for Section 319 implementation activities in 1990. Prior to and including 1990, states had the option of redirecting some of their construction grant funding for nonpoint source activity. Below is a list of open grants from the congressional appropriation that Colorado is using for nonpoint source implementation.

1) Section 319(h) Nonpoint Source Funding

FY 99	$2,000,200	FY 03	$2,369,400
FY 00	$2,000,200	FY 04	$2,339,700
FY 01	$2,407,200	FY 05	$1,962,700
FY 02	$2,382,200	FY 06	$1,929,334

Colorado experienced a reduction in funds in 2006, due to a commensurate decrease in the congressional appropriation. As a result, fewer funds were available for base program activities.

These funds support a wide variety of activities that are implemented to prevent or reduce nonpoint source loading to Colorado waters. Tables 2 and 3 summarize funded projects by pollutant category and activity. In a few instances, the numbers may differ from previous years due to changes in the definitions of some of the categories and activities.

TABLE 1. PROJECTS BY POLLUTANT CATEGORY, 1990-2006

Category	Number of Projects
Agriculture	65
Silviculture	3
Urban/Construction/Roads/Highways/Septics	39
Mining	67
Hydrologic Modification	3
Crosscutting - addresses more than one category	69

TABLE 2. PROJECTS BY ACTIVITY, 1990-2006

Watershed, including planning and restoration	118
Information and Education	73
Assessment, including groundwater	36
Demonstration	16
Technical Assistance/Staffing and Support	9

2) Staffing and Support

Funding for staffing and support is administered through the annual Performance Partnership Agreement and Grant. The 2006 staffing and support grant was $575,000, which funds 4.52 full-time equivalents (FTEs). The FTEs include a full-time program coordinator, portions of the time of the division's four watershed coordinators and support from other units, such as contracting.

3) 2006 Targeted Priorities

The following priority project categories were identified for 2006 funding, within the context of the management program:

1. **Nonpoint source activities in watersheds impacted by Clean Water Act Section 303(d)-listed waters.** Approximately $1,000,000 was targeted for this category, with $100,000 set-aside for development of watershed-based plans.
2. **Watershed planning in non-303(d) impacted watersheds.** $100,000 was targeted for watershed planning in non-total maximum daily load (TMDL) impacted watersheds, with a maximum grant of $25,000 for each planning project.
3. **Other proposals.** Projects that address *specific action items* in any of the NPS Action Plan items of the ***Supplement to the Colorado Nonpoint Source Management Program (January 2005)*** also were eligible**.** These proposals could include prevention projects or other watershed efforts where the target water body is not identified on the "303(d) List of Waters Still Requiring TMDLs" or they could address information/education needs of the program, as related to the action items. The amount targeted for the "Other Proposals" was approximately $680,000.

A full description of the targeted priorities is in Appendix A.

4) Projects Approved for Funding in 2006

The proposal process for 2006 (Appendix A) generated 18 proposals that requested more than $1.8 million. Individual proposals ranged in value from $15,000 to nearly $400,000. Seventeen new projects were funded. See Appendix B for the list of projects approved in the 2006 process. [Appendix B not included in this document.]

III. Program Milestones

1) NPS Management Program Update

The *Colorado Nonpoint Source Management Program* was updated and approved by the Water Quality Control Commission in August 2005 as a supplement to the 2000 program document. Much of the background information in the 2000 program remains relevant, so it was not repeated in the 2005 document. The 2005 program document focuses on updating the priorities and action items and provides guidance for 2006 and beyond. Several key policy changes also were made.

2) Use of NPS funds on private land

One requirement for NPS grant funding is long-term operation and maintenance of any best management practice implemented with NPS funds. Long-term operation and maintenance is best assured when the landowners and/or operators (for instance, lessees) in a watershed are active participants both in the stakeholder organization and in voluntarily implementing best management practices.

Landowners and/or operators will be required to commit to a minimum period of operation and maintenance, which will be determined on a project-by-project basis, and is based on the expected life of the project. Several organizations, including USDA, have developed best management practice life-span guidelines, which will be used, in part, to determine an appropriate project life span.

Landowners and/or operators also will be required to participate financially in implementing best management practices on their land. The expected contribution is at least 25 percent of the cost of best management practice implementation on their properties. Their contribution can either be by direct cost contributions, i.e., cash, or through in-kind services, e.g., labor.

In appropriate circumstances, the program will require affected landowners to execute an environmental covenant in exchange for the use of nonpoint source grant funds on their properties. An environmental covenant is a mechanism by which current and future owners of a property agree to maintain and/or not interfere with any institutional controls (such as a cap, fencing, access requirements, diversion ditches, water well prohibitions, etc.) that are part of an approved remedy and are necessary to protect public health, safety and the environment. An environmental covenant is appropriate where nonpoint source grant funds are used on a project that results in residual contamination at levels that have been determined to be safe for one or more specific uses, but not all uses, or that include the incorporation of an engineered feature or

structure that requires monitoring, maintenance or operation or that will not function as intended if it is disturbed.

If the landowner obtains the benefit of nonpoint source grant funds, it is fair, as a matter of policy to attach reasonable conditions that help ensure that the remedy paid for with such funds remains effective. In appropriate circumstances, priority will be given to projects where the landowner agrees to a covenant.

3) Public access to lands restored/improved with NPS grant funds

There is precedent in the Clean Lakes Program to require public access to those water bodies improved or restored with the use of public funds:

> *The Clean Lakes Program will only address publicly owned lakes with public access to the lake through publicly owned contiguous land so that any person has the same opportunity to enjoy nonconsumptive privileges and benefits of the lake as any other person. If user fees are charged for public use and access through State or sub-state operated facilities, the fees must be used for maintaining the public access and recreational facilities of this lake or other publicly owned freshwater lakes in the State, or for improving the quality of these lakes (40 CFR 35.1605-3).*

When nonpoint source grant funds are used for stream restoration/improvement projects, the watershed plan that prioritized the stream project also must describe how public access will be provided to the improvements gained by the project. Proposals for nonpoint source grant funding that provide public access will be given priority for funding, assuming all other criteria are met. NPS funds may not be used on projects that could improve a fishery used for private or exclusive purposes or for private or personal gain or benefit.

4) Total Maximum Daily Loads (TMDLs)

Section 303(d) of the federal Clean Water Act requires states to identify water bodies or stream segments that are water quality-limited. In Colorado, water quality-limited segments are identified on the 303(d) lists for 1998, 2002, 2004 and 2006. Water quality-limited segments are those water bodies or stream segments for which one or more assigned use classifications or standards are not fully achieved.

To date, seven of the 10 TMDLs identified as priorities in the 2000 *Colorado Nonpoint Source Management Program* have been addressed. Colorado's TMDL program, including links to all TMDLs completed to date and the delisting rationale, may be viewed online at http://www.cdphe.state.co.us/wq/Assessment/TMDL/tmdlmain.html.

5) Other Milestones

As the requirements to measure the results of financial investment become more important to the nonpoint source program, both in Colorado and nationally, the annual report will include more information related to the program activity measures identified in the EPA's National Water Program Strategic Plan for 2004-2008.

TABLE 3. PROGRAM ACTIVITY MEASURES

Watershed plans being developed	Watershed plans being implemented
- Animas River above Silverton - Lake Fork of the Gunnison, Palmetto Gulch - Snake River - Slate River - Coal Creek and tributaries from Crested Butte water supply intake to Slate River - Upper Rio Grande, including Willow Creek, to Alamosa County line - Straight Creek - Cherry Creek - Grand Valley Tributaries - North Fork of the Gunnison - Clear Creek, above the mouth of the canyon - Big Thompson River, Rocky Mountain National Park to Home Supply Canal - Lefthand Creek, including James Creek and Little James Creek - Eagle River, including Black Gore Creek - North Fork of the Republican River - Big Thompson River - Fountain Creek - Bear Creek	- Animas River, San Juan River Basin - Cherry Creek, South Platte River Basin - Straight Creek, Upper Colorado River Basin - Black Gore Creek, Upper Colorado River Basin

6) Projects Completed in 2006

Award Fiscal Year	Project Title
1998 Total Budget $1,500,000 NPS Funds $156,948	*Silver Bell Tailings Impoundment Closure* Between 1890 and 1960, gold and silver were mined and processed in a mill near Ophir, Colo. These Silver Bell tailings from at least 12 different mines were deposited into the impoundment known as the Roanoke Tailings Pile. The pile sits above the natural landscape. Although capped, Howard Fork flows nearby and sometime before 1988 breached the north tailings slope. After years of erosion, this formed a residual tailings area downslope and some tailings discharged into Howard Fork, causing sedimentation and degraded chemical quality. This project consolidated and contained the tailings, eliminated discharge into Howard Fork, reduced the seepage water discharge from the tailings and constructed a wetland below the impoundment to passively treat storm water and seepage from the tailings.

Award Fiscal Year	Project Title
2003 Total Budget $48,470 NPS Funds:$29,081	*Gunnison Basin Selenium Task Force Coordinator Position.* The Gunnison Basin Selenium Task Force was formed in 1998 when multiple segments of the Lower Gunnison and Lower Uncompaghre rivers were listed for selenium impairment. By 2000, the task force was overseeing nonpoint source grants totaling more than $638,000, and it was clear a task force coordinator was needed. This project provided support for a coordinator to manage existing projects and develop new projects. To date, projects for characterization studies, research, demonstration, piping and lining for selenium reduction total more than $6.3 million.
2002 Total Budget $183,282 NPS Funds$103,782	*Best Management Practices for Water Conservation and Irrigation Management reducing new sources of selenium and salt*. This project developed best management practices to minimize the creation of new selenium sources from land use changes, primarily changes from undeveloped or agricultural to rural residential. The project developed nine best management practice educational products and many outreach activities to disseminate the information. Products include watershed tours, workshops, television, print and radio. Partnerships were formed that led to creation of the Western Slope Wise Water Use Council. Publications included a "Wise Water Use for Residential Landscapes," "Best Management Practices for Irrigating Golf Courses In Western Colorado," "Water-Wise Approaches For Building a Pond," "Wise Water Use for Inside Residential Homes," "Water Wise, Residential Landscape and Irrigation guide for Western Colorado," and a Water Wise video.  *Selenium and salts surface on local soil looking like snow. (Photo: Dr. Curtis Swift)*
2001 Total Budget $147,043 NPS Funds$58,968	*Grand Valley Selenium Task Force Coordinator Position.* This project was developed to support a coordinator for the Selenium Task Force in managing and coordinating a variety of projects while pursuing additional funding to achieve selenium remediation. This effort has assisted in beginning the institutionalization of the Selenium Task Force through reporting and documentation processes while moving forward on the remediation of selenium

Award Fiscal Year	Project Title
	in the Grand Valley area. A major study was completed and reported in: "Evaluation of Remediation Measures to Offset Selenium Impacts in Tributaries/Drains in the Grand Valley of Western Colorado." Research information and other accomplishments are shared in a "Selenium Tidbits" newsletter. The site http://www.seleniumtaskforce.org contains archives and educational materials, as well as links to partnering agencies and organizations.
2003 Total Budget $183,282 NPS Funds $103,782	*Lower Rio Blanco Habitat Restoration Project.* This Phase II project was to restore the natural stability of 2.25 miles of the Rio Blanco channel. This section is contiguous with a previously restored 1.1-mile section of the river. Enhancement of riffles and pools have improved habitat as measured by the Colorado Division of Wildlife pre- and post-project. Efforts to improve sedimentation, temperature and low dissolved oxygen also have succeeded, according to Division of Water Resources monitoring. The river has experienced increased usage in swimming, fishing and floating as well as other visitor activities, since restoration. Additionally, property valuations and well levels along the river have both increased.
2004 Total Budget $53,250 NPS Funds$20,000	*Stollsteimer Creek Watershed Plan*. Stollsteimer Creek watershed contains several water storage reservoirs, including two for raw drinking water. The upper watershed lies in a county with no drainage or land use policies and the lower watershed is a mixed-use region. Observations in the upper watershed noted bank erosion and sediments from human-caused activity. Development in the lower watershed was occurring on the stream banks without setbacks or other protection. In the agricultural portions of the lower watershed, the effect of overgrazing and use of the stream by livestock resulted in severe cut banks and heavy sediment loads. Concerned stakeholders held a series of meetings in the watershed and determined that a master watershed planning effort would be needed to address the current problems and anticipated future development. The county, town of Pagosa Springs, southern Utes and several federal and state agencies provided cash and expertise, which, added to this grant, allowed professional facilitation of technical aspects to inform the Watershed Steering Committee and stakeholders. The plan assessed stream health, assessed public and private land condition, inventoried irrigation systems, developed an assessment and monitoring program, identified any other concerns and developed a watershed policy and plan.
2001 Total Budget $499,540 NPS Funds$237,500	*Water and Nutrient Management in Western Yuma County.* This project was a longitudinal effort to study the effect of implementing best management practices on large areas of farmland on nutrient, pest and irrigation management on area water quality. The project involved 45,000 acres, and 30 fields were selected for deep soil and water tests for nitrogen content. A total of 28 irrigated farm operations made up of at least 60 individual producers were involved. These producers demonstrated that best management practices are effective in reducing the cost of inputs while protecting groundwater, and their activities highlighted the value of conservation activities. Producers enrolled in the project want to do more root studies and conduct leaf and tissue studies for

Award Fiscal Year	Project Title
	nitrogen content. These activities can be coordinated with the USDA Natural Resources Conservation Service, Colorado State University and Irrigation Research Farm studies.

IV. Water Quality Information

1) Sampling and Assessment Activities

Part of the update to the NPS Management Program was to reaffirm Colorado guidance on funding monitoring and assessment projects. U.S. EPA limits the amount of grant funds that may be used for monitoring and assessment, which includes the development of total maximum daily loads (TMDLs) and watershed plans. NPS funds may be used only to

- collect data in direct support of the development and implementation of a total maximum daily load;
- determine measurable results from on-the-ground NPS projects;
- develop watershed plans identified as priorities in the annual proposal guidance.

NPS funds may not be used to determine "baseline" conditions. For example, they cannot be used to capture current conditions outside the development of a TMDL. Collecting data to evaluate current water quality classifications and standards or to conduct a use attainability analysis also is not eligible for NPS funding.

Any proposal to fund assessment in watersheds where water bodies are identified as impaired must be coordinated through the TMDL program at the Water Quality Control Division prior to submittal of the proposal.

2) SB90-126 Agricultural Chemicals and Groundwater Protection

The Agricultural Chemicals and Groundwater Protection Program is administered as a joint effort between the Colorado Department of Agriculture, the Colorado Department of Public Health and Environment, and Colorado State University Cooperative Extension. Due to a difference in annual reporting, the following reflects activities in 2005.

3) Groundwater Monitoring

- Continued the long-term monitoring project in the Weld County portion of the South Platte River Basin, a high priority watershed for SB 90-126 efforts. During this sampling year (2005) the program sampled 18 monitoring wells and 53 irrigation wells.
- Mailed out 2004 sampling results for the Weld County long-term network and used the opportunity to seek sampling permission in advance of fieldwork in order to avoid this time-consuming task.
- Edited the monitoring portion of the comprehensive program report, a 12-year summary report on all program work to date.

- Sampled the network of dedicated monitoring wells installed in the Arkansas Valley in 2004.
- Established and sampled an urban monitoring well network along the Front Range urban corridor utilizing existing monitoring wells.
- Continued development of a long-term monitoring plan as a guide to program sampling efforts for the next five years.
- Completed the monitoring portion of the program's 2005 annual report.
- Assisted in the refinement of a database for the program's ground water monitoring data. Assisted in the design for a GIS interactive database.
- Collaborated with the Department of Agriculture Standards Laboratory to revise and refine the laboratory analysis used on all ground water samples. Evaluated the pesticide survey data to extract information needed to improve laboratory analysis.
- Addressed groups on SB 90-126 and issues related to agricultural chemicals and ground water quality. Groups addressed include chemical dealers, ground water management districts, crop and livestock producers, and agency personnel.
- Distributed fact sheets and reports on Colorado ground water quality to interested parties and fielded questions by phone and e-mail from Colorado citizens.
- Cooperated with county extension agents on disseminating information about Colorado ground water quality.
- Worked to coordinate efforts of the Agricultural Chemicals and Ground Water Protection program with other state and federal programs in Colorado.

4) Weld County Long-Term Monitoring

In 2005, the program completed the 11th year of a long-term monitoring effort in the South Platte alluvial aquifer from Brighton to Greeley. The long-term monitoring network was established in 1995 and is a combination of three types of wells designed to sample a complete cross-section of the aquifer (Figure 1). The network well types are a) 20 dedicated monitoring wells permitted by the Central Colorado Water Conservancy District, b) 55 irrigation wells that have been sampled continuously since 1994, and c) 10 domestic wells first sampled in 1992. The monitoring and irrigation wells are sampled each year; the domestic wells every three years.

TABLE 4. WELD COUNTY NITRATE MONITORING

	Monitoring Wells	Irrigation Wells
Number of wells sampled	26.1	15.4
Mean	21.4	13.0
Median	25.6	9.4
Standard deviation	3.4	0.24
Minimum	99	38.7
Maximum	18	53

Pesticide results for the monitoring well portion of the network revealed three pesticides, Atrazine, Metolachlor and 2,4-D, present in the Weld County monitoring well samples. The breakdown product of Atrazine, Di-ethyl Atrazine, also was detected. Atrazine was present in six wells and Di-ethyl Atrazine was present in 10 of the wells. Six wells contained both triazine

compounds. Metolachlor was detected in three wells and 2,4-D in one. The total number of wells with pesticide detection was 13 of the 18 sampled (72 percent). Levels detected ranged from 0.02 for 2,4-D to 1.4 ug/L (ppb) for Di-ethyl Atrazine. No pesticide was detected at a level that exceeds the applicable standard.

5) Arkansas River Monitoring Well Network

In 2004, a network of permanent, dedicated monitoring wells was installed in the Arkansas River valley alluvial aquifer. This work was made possible by a grant from the EPA. Well locations were determined by analysis of existing monitoring data, agricultural chemical use and aquifer sensitivity and vulnerability models developed by the program. The Arkansas River alluvial aquifer was lacking in monitoring well coverage before this project.

The Arkansas network was first sampled in 2004, shortly after installation. In 2005, the Colorado Department of Public Health and Environment gave Colorado Department of Agriculture $5,000 to conduct sampling for selenium in the Arkansas valley monitoring wells. The program also was able to collect another round of pesticide and nitrate samples while helping the Colorado Department of Public Health and Environment collect data on selenium.

Nitrogen analysis indicated that only one of the 20 wells sampled (5 percent) showed a nitrate level in excess (13.7 mg/L) of the EPA standard for drinking water (10 mg/L). Three wells tested below the laboratory detection limit of 0.1 mg/L. The remaining 16 wells (80 percent) tested positive for nitrate but were below the EPA standard.

6) Front Range Urban Corridor Monitoring Well Network

The Front Range urban corridor is an area the program intends to continue monitoring for agricultural chemicals. The development density of this area creates special considerations and challenges for monitoring. The current project is to build a monitoring network from existing monitoring wells. There are hundreds of dedicated monitoring wells installed throughout the metropolitan area, but a majority of these wells was installed for site investigations of leaking underground storage tanks and is unusable for investigations related to agricultural chemicals. To avoid the expense of installing a monitoring well, we have contacted numerous monitoring well owners in this area to enlist their cooperation in our sampling effort.

The program selected and sampled 40 urban monitoring wells in 2005: four in Greeley, one in Windsor, and the remaining in the Denver metro area. The majority of the wells sampled in 2005 had some nitrate, and five exceeded the drinking water standard of 10 mg/L. Eight wells were non-detect for nitrate.

7) Gilpin County

The Gilpin County extension agent was interested in testing water quality in this area and contacted our program in 2004. Gilpin County is located on the Front Range of the Rocky Mountains, and the majority of ground water occurs in a fractured granite system. Almost all development, excluding the towns of Black Hawk and Central City, comprises mountain

subdivisions. Twenty-seven residents had contacted the county agent and expressed an interest in water quality sampling, and the program was able to accommodate all well owners. No well samples exceeded the nitrate standard for drinking water (10 mg/L). Nine of the samples were non-detect and 15 contained nitrates, but were less than 5.0 mg/L. No pesticides were detected in the Gilpin County samples.

The 2005 annual report for the Agricultural Chemicals and Groundwater Protection Program may be obtained by contacting the program at (303) 239 -5704.

V. Outreach Activities

1) Keep It Clean Neighborhood Stewardship Program

Since March 2006, Watershed Approach to Stream Health (WASH) has successfully led the Keep it Clean Neighborhood Stewardship Program in two WASH communities, has initiated teams in two additional communities and has plans for the final community team. Sixteen adult representatives from 11 households in Louisville and Longmont completed a total of 62 water protection/conservation actions and have 18 actions planned for the future. The Louisville team reported a 43 percent water savings, while the Longmont team reported a 30.9 percent savings. Team members report that they enjoyed meeting their neighbors and learning about their local water (where it comes from, how to protect it, etc.). In addition, many report that the program helped them become more aware of their water usage and how they can change their behavior.

2) Colorado Foundation for Agriculture

The Colorado Foundation for Agriculture continues its outreach efforts to reach Colorado school children through a multifaceted approach. Key to the program is the Colorado Reader that reaches more than 1,500 schools in the state. An electronic newsletter and an online watershed game were developed. In 2006, preliminary design and research began for conducting a baseline survey of water knowledge in the state that will serve the Nonpoint Source Program outreach efforts, as well as local information and education efforts in succeeding years. More information can be found at http://www.growingyourfuture.com/.

3) AWARE Colorado

The Education Fund of the League of Women Voters of Colorado continues an outreach effort based on the University of Connecticut's Nonpoint Education for Municipal Officials program. ***A***ddressing ***W***ater ***A***nd natural ***R***esource ***E***ducation (AWARE) is a statewide program designed to educate local decision makers about the impacts of land use choices on water quality. AWARE will provide research-based, non-advocacy material so decision makers can better consider water quality impacts when making land use decisions. The program is guided by an advisory group of more than 30 stakeholders. More information can be found at http://www.awarecolorado.org.

4) Colorado NPS Connection

The nonpoint source newsletter, *Colorado NPS Connection*, now publishes as an electronic-only newsletter. Past issues of the newsletter are available on the Colorado Water Protection Project Web site at http://www.ourwater.org.

5) Information and Education Outreach Grant Program

For several years, the nonpoint source program has set aside $10,000 from the regular Section 319(h) allocation for small, highly focused educational efforts. In 2001, with the concurrence of the EPA regional office, the amount available was increased to $30,000, with the intent of expanding the area of influence into the other categories of the program. These small-scale projects typically leverage the modest amounts of money into major community-outreach efforts with statewide transferability. Fund availability is marketed to schools, nonprofit organizations and local watershed groups. Organizations that are members of the Colorado Nonpoint Source Council are not eligible to apply. A total of $9,835 was awarded in 2006.

TABLE 5. OUTREACH GRANTS AWARDED IN 2006

Name	Sponsor	$ Request
It Starts With the Children	Lower Arkansas Water Conservancy District	$5,000
The Rio Grande Watershed Water Fest	The Rio Grande Watershed Association of Conservation Districts	$4,835

6) Nonpoint Source Forum 2006

The Nonpoint Source Forum 2006 "More than Brochures—Real Change" was held on September 6 and 7. The Forum was a one-day workshop presented by Doug McKenzie-Mohr on community-based social marketing. Because of demand, the workshop was repeated a second day.

The 2006 Hall of Fame awards were presented to three individuals:

1. Marie Lee, coordinator of the Grant Reporting Tracking System (GRTS) for U.S. EPA Region 8, for depth of knowledge of GRTS, as well as databases in general, which has made her a valuable asset
2. Jim Herron, environmental protection specialist with the Colorado Division of Reclamation, Mining and Safety, for his work in guiding many mine remediation projects
3. Bill McKee, retired watershed coordinator for the Upper Colorado River Basin at the Colorado Department of Public Health and Environment, for nearly 28 years of dedication to water quality in Colorado

VI. Federal Consistency

Federal agencies own, manage or otherwise influence a significant portion of Colorado's land area. In fact, nearly 37 percent of the surface land and water in the state is federally owned, largely in headwaters areas. Consequently, federal consistency with state water quality standards and programs is critical to achieving water quality goals in all river basins in the state.

The division periodically conducts federal lands management reviews to determine the following:

1. Is water quality addressed in the planning stage?
2. What best management practices were to be implemented?
3. Were they implemented properly?
4. Were the best management practices effective in reducing erosion or protecting the stream from nonpoint source pollution?
5. If not, what changes can be made to protect water quality?

Reviews of the U.S. Forest Service and the Bureau of Land Management offices originally scheduled for 2004 were rescheduled to federal fiscal year 2005, as noted below. 2005 completes a five-year cycle and the division's approach is under review to best use limited resources for both the state and the federal land management agencies.

TABLE 6. FEDERAL CONSISTENCY REVIEW SCHEDULE

Year	Forest Service/Bureau of Land Management Office	Schedule
2000	Routt National Forest San Juan Field Office	Sept 25 – 26, 2000 June 6, 2001
2001	Grand Mesa, Uncompahgre and Gunnison National Forest Grand Junction Field Office Uncompahgre Field Office Gunnison Field Office	July 24 – 25, 2001
2002	Arapaho-Roosevelt National Forest Pawnee National Grasslands Little Snake Field Office White River Field Office Kremmling Field Office	August 12 – 15, 2002 August 12 – 15, 2002 August 5 – 8, 2002 August 5 – 8, 2002 August 5 – 8, 2002
2003	Rio Grande National Forests San Juan National Forests La Jara Field Office Saguache Field Office	July 7 – 10, 2003 July 7 – 10, 2003 August 4 – 6, 2003 August 4 – 6, 2003
2004	White River National Forest Pike and San Isabel National Forests Comanche National Grasslands Royal Gorge Field Office Glenwood Springs Field Office	Spring 2005 November 8, 2004 November 9 – 10, 2005 November 9, 2004 July 12 – 13, 2005
2005	Comanche National Grasslands	2005

VII. Federal Agency Contributions to NPS Management in Colorado

1) U.S. Bureau of Land Management

a) Water Resources Inventory and Monitoring (Sites)

Approximately 880 units of inventory and 920 units of monitoring work were completed. These numbers appear high, but each water quality parameter (e.g., pH, specific conductance, metals, etc.) measured counts as one unit. At abandoned mine land sites, a whole suite of parameters is analyzed, but typically only a few parameters are collected at each site. Water resources inventory and monitoring occurs while staff is conducting proper functioning condition surveys or conducting watershed-based land health assessments. A comprehensive seeps and springs inventory is occurring out of the San Juan Public Lands Center to ultimately determine if coal-bed methane development is de-watering seeps, springs or streams. The USGS is assisting with synoptic sampling.

Sixteen acres of soil survey work occurred in the Gunnison Gorge National Conservation Area

b) Lake/Wetland Inventory (acres) and Stream/Riparian Inventory (miles)

The purpose of the inventory work is to determine aquatic system and/or fisheries habitat conditions and/or functionality. Field Offices utilize the *Proper Functioning Condition* guidance, and to a lesser degree, the Rosgen and Pfancuck guidance. Approximately 7,200 acres of wetland area inventories were completed. The purpose of the stream/riparian inventory is to collect data on water quality, aquatic, fisheries or riparian habitat to better understand these areas. Approximately 595 acres of riparian habitat were monitored.

c) Watershed-based Land Health Assessments

Approximately 1.04 million acres were assessed for the five public land health standards: soils, water quality, riparian, plant and animal communities, and special status/threatened and endangered species. This is typically done by an interdisciplinary team of specialists. Most offices have analyzed at least half of their acreage, and several are nearly done.

d) On-the-Ground Projects

Approximately 1,000 feet of the San Miguel River near Placerville, Colo. was stabilized by installing Rosgen "J-hooks," armoring streambanks with a combination of rock, mulch and willow plugs. The river was cutting into the scenic highway.

Cooperative research efforts with the USGS are continuing in the Gunnison Gorge National Conservation Area and the Badger Wash watershed (near Mack, Colo.) to analyze vegetation, rainfall-runoff, erosion and the interactions of these processes on Mancos Shale landscapes. The focus in Badger Wash is grazing impacts and off highway vehicle use in the Gunnison Gorge National Conservation Area.

Soap Creek restoration project is continuing with Rosgen channel surveys, removal of grazing in the area and work with the local water users. Increases in water releases from upstream have affected channel stability.

Approximately 75 wetland/stream/riparian projects were completed. Activities include riparian exclosures, plantings, weed eradication, reservoir improvements, etc. Focus areas are Government Creek, West Badger Creek, Rio Grande River (San Luis Valley), and the "6&50" reservoir in the Colorado Canyons National Conservation Area. Russian knapweed, tamarisk and houndstongue are problematic along some stream reaches, and approximately 85 miles were treated for control and eradication.

Abandoned mine land cleanup and monitoring efforts are focused in the Lake Fork of the Gunnison, Lake Fork of the Arkansas and upper Animas watersheds.

Road maintenance, road relocation out of Ford Creek (San Luis Valley) riparian area, two bridge construction projects, culvert replacements, recreation site improvements, and construction of two boat launches have direct water quality benefits.

2) U.S. Department of Agriculture Forest Service

The general approach to nonpoint source pollutant management for the Rocky Mountain Region of the USDA Forest Service, which includes all National Forest System lands in Colorado, is found in Chapter 20 of the Watershed Conservation Practices Handbook (FSH 2509.25-2006-3). This chapter outlines a nonpoint source management strategy to apply Watershed Conservation Practices (i.e., best management practices) when implementing all land management projects, monitor implementation and effectiveness of those practices, and adjust those practices where monitoring shows concerns about the effectiveness of the practice. National forests in Colorado use these Watershed Conservation Practices and Forest Plan standards and guidelines to ensure that state water quality standards are met and classified uses of water are protected when projects are designed and implemented on the ground. National Forest Service staff conducts formal and informal monitoring of these practices and adjusts them as necessary, per the nonpoint source management strategy.

USDA Forest Service also has direction in a number of program areas to restore watersheds to reduce or prevent additional nonpoint source pollution.

a) Burned Area Emergency Rehabilitation

The purpose of this program is to alleviate emergency conditions following wildfire to help stabilize soil; to control water, sediment and debris movement; to prevent permanent impairment of ecosystem structure and function; and to mitigate significant threats to health, safety, life, property or downstream values. In 2006, there were no fires on National Forest System lands in Colorado that required Burned Area Emergency Rehabilitation treatments. However, the National Forest Service spent $44,400 to continue work on fire areas that burned in the previous three years, including continued work on the Overland, Campbell, Craig Draw and McGruder fires. Treatments include seeding, mulching, upslope treatments such as log and/or straw erosion barriers, road reconstruction, drainage structure improvements, noxious weed treatments, and emergency warning systems. A total of 5,360 acres were treated in 2006.

b) Watershed Restoration
The purpose of this program is to improve watershed conditions using upland and instream treatments. Possible projects include road improvements such as correction of cut or fill slope failures, scarification of compaction on upland areas (old skid trails, for example), reclamation of old gravel quarries, etc. The National Forest Service reported accomplishments of about 5,300 acres of soil and water improvements in Colorado in 2006.

c) Road Maintenance
The regular road maintenance program includes inventory for maintenance needs, actual maintenance of roads to improve "travelability" and reduce resource damage, and road decommissioning. Road decommissioning encompasses a range of activities, from posting a sign or installing a gate to close a road to public use to "storm-proofing" a road by pulling drainage structures to road obliteration including scarification and seeding of the road surface or actually re-contouring the slope to eliminate the road prism. The National Forest Service in Colorado reported accomplishments of about 5,347 miles of road maintenance and another 165 miles of road decommissioning in Colorado in 2006.

d) Road and Trail Deposit Fund
A portion of the receipts generated from activities (timber sales, special use permit fees, etc.) on National Forest Service lands are redistributed back to the National Forest Service to be used for restoration projects to reduce erosion and sediment from roads and trails, improve passage of aquatic organisms at crossings and improve forest health. In 2006, the National Forest Service used approximately $814,200 in these funds in Colorado, combined with $859,100 from various partners, to repair roads and trails, recreational facilities and stream crossings; decommission roads; and for general watershed protection and restoration activities.

e) Abandoned Mine Program
The National Forest Service initiated and/or completed restoration work on seven abandoned mines projects in Colorado in 2006. This work consisted primarily of work around 124 features including 35 old mine shafts and adits and two structures. While much of this work was for human health and safety, some was focused on reducing acid mine drainage and sediment delivery to nearby stream channels.

3) U.S. Department of Agriculture Natural Resources Conservation Service

Not every Natural Resources Conservation Service resource issue deals directly with water quality, but most tend to have a positive net impact on it. For example, grazing land improvements promote better range land health, which typically reduces excess surface runoff and can have a slight-to-significant improvement to water quality due to reduced sediments and organics carried in the surface waters. Wildlife habitat, riparian management and forest management often will have the same effect. Soil erosion control reduces sediments and the sediment-carried nutrients, organics, etc. The Ground and Surface Water program focuses on reducing net water use, which also can have a positive impact on water quality due to less net water being applied to and used by crops. Invasive species control also can have an impact on water quality by reducing the water-borne seeds, and in the case of tamarisk, the salinity cycling.

FY 06 Environmental Quality Implementation Projects [?] Total Funds by resource issue for approved applications	
Water Quality / Quantity	$10,613,949
Grazing Land Improvements	4,435,596
Wildlife Habitat	523,225
Riparian Mgt & Improvements	277,432
Soil Erosion Control	2,305,650
Animal Waste Systems/CNMP	148,094
Forestry Mgt & Improvements	510,659
Ground and Surface Water	3,797,428
Salinity Control	7,687,792
Invasive Species Control	567,286
Total	**$30,867,111**

4) U.S. Geological Survey

The U.S. Geological Survey's (USGS) mission is not to protect water quality; however, the USGS provides data and information that can help others protect water quality. The USGS provides reliable scientific information to describe and understand the earth, which helps others manage water, energy, mineral and biological resources. Some of the scientific information from the USGS could be used to identify impaired streams or ground-water resources. Some of the scientific information from the USGS could be used to evaluate the success of nonpoint source projects or even parts of the Colorado Nonpoint Source Program. The following are three examples of USGS work that can be used to evaluate the success of nonpoint source projects or the Colorado Nonpoint Source Program:

1. USGS long-term data-collection sites downstream from on-the-ground nonpoint source projects. Site locations and site data are available online from the *Directory of Project Information and Data Collection Sites* at http://co.water.usgs.gov/.
2. USGS projects designed specifically to monitor and evaluate on-the-ground nonpoint source projects, such as the USGS Grand Valley projects (described in USGS Fact Sheet FS-159-97 by Butler and USGS WRIR 01-4204 by Butler). Project areas, site locations and site data are available online from the *Directory of Project Information and Data Collection Sites* at http://co.water.usgs.gov.
3. National or regional USGS projects that include water quality trend analyses, such as the USGS National Water Quality Assessment Program, South Platte Study Unit (e.g., USGS Fact Sheet FS-153-95 by Heiny).

USGS Activities Relevant to Nonpoint Source Pollution

1. Design water quality studies.
2. Develop methods for water-resources investigations.
3. Develop and refine analytical methods and sampling procedures.
4. Develop and update water quality models.
5. Model hydrologic and water quality responses of flow systems.
6. Monitor water quality and changes in water quality.
7. Compile and evaluate retrospective water quality data sets.

8. Provide water quality and hydrologic data to interested parties.
9. Provide water quality expertise to organizations and groups.
10. Characterize water quality of streams, lakes and groundwater.
11. Characterize hydrologic conditions, including local or statewide trends.
12. Determine water quantity in order to calculate constituent loads in streams.
13. Evaluate stream morphology and sediment transport.
14. Identify pollution sources.
15. Study fate and transport of compounds and pollutants.
16. Evaluate effects from events (such as wildfire) or change (such as urbanization) on water quality.
17. Perform research related to water quality issues.

Recent Relevant USGS References Available Online
http://co.water.usgs.gov/Pubs/index.html

1. **Fact Sheets**

   Fact Sheet 2005-3143
   Sustainability of Ground-Water Resources in the Upper Arkansas River Basin between Buena Vista and Salida, Colorado, 2000–2003
   by K.R. Watts

   Fact Sheet 2005-3037
   The Cache la Poudre River, Colorado, as a Drinking-Water Source
   by Jim A. Collins and Lori A. Sprague

   Fact Sheet 2005-3031
   Simulated Effects of the Proposed Sulphur Gulch Reservoir Operations on Colorado River Quantity and Quality
   by M.J. Friedel

2. **Data Series**

   DS152
   Water-quality, streamflow, and ancillary data for nutrients in streams and rivers across the Nation, 1992-2001
   by D.K. Mueller and N.E. Spahr

3. **Investigations Series**

   SIR 06-5109
   A Preliminary Evaluation of Vertical Separation between Production Intervals of Coalbed-Methane Wells and Water Supply Wells in the Raton Basin, Huerfano and Las Animas Counties, Colorado, 1999-2004
   by Kenneth R. Watts

   SIR 06-5101A
   Effects of Urbanization on Stream Ecosystems in the South Platte River Basin, Colorado and Wyoming
   by Lori A. Sprague, Robert E. Zuellig, and Jean A. Dupree

   SIR 06-5050
   Vulnerability of Recently Recharged Ground Water in the High Plains Aquifer to Nitrate Contamination
   by Jason J. Gurdak and Sharon L. Qi

   SIR 06-5012
   County-Level Estimates of Nutrient Inputs to the Land Surface of the Conterminous United States, 1982-2001
   by Barbara C. Ruddy, David L. Lorenz, and David K. Mueller

SIR 05-5236
SIR 05-5214
Surface Water-Quality and Water-Quantity Data from Selected Urban Runoff-Monitoring Sites at the Rocky Mountain Arsenal, Commerce City, Colorado, Water Years 1988–2004
by John D. Gordon, Donald E. Schild, Joseph P. Capesius, and Cecil B. Slaughter

SIR 05-5179
Hydrogeology and Quality of Ground Water in the Upper Arkansas River Basin from Buena Vista to Salida, Colorado, 2000-2003
by Kenneth R. Watts

SIR 05-5174
Historical Perspective of Statewide Streamflows During the 2002 and 1977 Droughts in Colorado
by Gerhard Kuhn

SIR 05-5167
Effects of Emission Reductions at the Hayden Powerplant on Precipitation, Snowpack, and Surface-Water Chemistry in the Mount Zirkel Wilderness Area, Colorado, 1995-2003
by M. Alisa Mast, Donald H. Campbell, and George P. Ingersoll

Appendix A:
Project Proposal Process for 2006

Priority Project Categories
(Excerpted from *FY 2006 Guidance for Prospective Sponsors*)

Within the context of the ***2005 Supplement to the Colorado Nonpoint Source Management Program (August 2005)***, the following priority project categories are identified for 2006 funding. Proposals outside the following categories will not be considered.

1. Nonpoint Source Activities in Watersheds Impacted by Section 303(d) Listed Waters. Water bodies are placed on the 303(d) list under the Clean Water Act when they fail to meet one or more water quality standard. These waters require the development of Total Maximum Daily Loads (TMDLs) designed to improve water quality and return the water body to attainment of standards. Proposals in this category are to *develop and implement* watershed-based plans that address nonpoint source impairments in watersheds that contain Section 303(d) listed waters. All proposals in this category must be consistent with the Water Quality Control Division's efforts to meet TMDL program requirements. Prospective sponsors must contact the appropriate watershed coordinator or nonpoint source coordinator to discuss potential TMDL projects.

Approximately $1,000,000 is targeted for this category, of which $100,000 will be set-aside for the development of watershed-based plans.

- On-the-ground projects in this category must have a watershed-based plan before funds can be used for implementation. Each plan must address the nine watershed planning elements found in EPA's "*Nonpoint Source Program and Grants Guidance for 2004*." In addition, the Endangered Species Act requires that a biological evaluation (BE) be completed prior to any on-the-ground activity. While EPA Region 8 will complete the BE, the watershed plan should include information on the presence or absence of endangered species that may be impacted by the project. The following watersheds either have developed or are in the process of developing a watershed plan and may be eligible for implementation funding. Proposals from other watersheds will be considered if they meet the program criteria.

  - Animas River above Silverton*
  - Lake Fork of the Gunnison, Palmetto Gulch
  - Snake River
  - Slate River
  - Coal Creek and tributaries from Crested Butte water supply intake to Slate River
  - Upper Rio Grande, including Willow Creek, to Alamosa County line
  - Straight Creek*
  - Cherry Creek*
  - Grand Valley Tributaries
  - North Fork of the Gunnison
  - Clear Creek, above the mouth of the canyon
  - Big Thompson River, Rocky Mountain National Park to Home Supply Canal
  - Lefthand Creek, including James Creek and Little James Creek*
  - Eagle River, including Black Gore Creek
  - North Fork of the Republican River
  - Big Thompson River
  - Fountain Creek
  - Bear Creek

**** Indicates watershed with completed TMDL.***

- Project proposals to develop watershed-based plans are limited to no more than $25,000 NPS funds per planning proposal. The following watersheds are identified as needing watershed plans within the next 10 years. Proposals from other watersheds will also be considered if they meet program criteria.

    - Upper San Miguel River
    - Mancos River and tributaries above US Highway 160 East
    - Uncompahgre River, from Montrose to confluence with Gunnison River
    - Gunnison River, below Blue Mesa Reservoir
    - Colorado River, from confluence with Gunnison River to state line
    - Barr Lake and Milton Reservoir
    - Kerber Creek
    - Alamosa River
    - Upper Arkansas, above Buena Vista
    - Arkansas River, Pueblo Reservoir to John Martin Reservoir
    - Arkansas River, John Martin Reservoir to state line
    - Blue River above Dillon Reservoir
    - North Fork of the South Platte
    - Middle Fork of the South Platte
    - Rio Blanco River

- Monitoring and assessment projects related to 303(d) listed waters must be coordinated with the Water Quality Control Division prior to submittal. Failure to do so will result in rejection of the proposal.

2. Watershed Planning in Non-303(d) Impacted Watersheds.
Watershed planning is the heart of effective on-the-ground implementation. Planning provides an opportunity for stakeholders to compile their interests, data, priorities and strategies to address the goals of their watershed, which are not limited necessarily to solving a nonpoint source problem.

A watershed plan developed with nonpoint source funding should lead to prioritized implementation of best management practices (BMPs) to restore water quality or prevent impairments. Plans developed through these proposals must conform to the guidance outlined by EPA in their "*Nonpoint Source Program and Grants Guidance for 2004.*"

Approximately $100,000 is targeted for watershed planning in non-303(d) impacted watersheds, with a maximum grant of $25,000 for each planning project.

3. Other Proposals. Projects that address *specific actions items* in the ***2005 Supplement to the Colorado Nonpoint Source Management Program (August 2005)*** also may be proposed. These proposals may include prevention projects or other watershed efforts where the target water body is not identified on the List of Waters Still Requiring TMDLs (303(d) list), or they may address information/education needs of the program, as related to the action items.

- On-the-ground projects must be prioritized in a watershed plan, and include, to the extent possible, a quantified description of the water quality values to be protected. Values may include aquatic life health and habitat needs, drinking water source protection, or recreational use of the water body. If water quality data do not exist, surrogate descriptors of the water quality problem may be used, upon consultation with the Division.

    - On-the-ground proposals must describe the water quality improvements or protection expected from the completion of the project. In other words, the project must describe how it will measure success, for instance, in terms of pollutant load reductions or improved aquatic habitat.

    - Projects intended to reduce sediment loads in streams should use the "*Provisional Implementation Guidance for Determining Sediment Deposition Impacts to Aquatic Life in Streams and Rivers*" found at http://www.cdphe.state.co.us/op/wqcc/GeneralInfo/StatutesRegsPolicies/Policies/wqccprovisionalguidance98-1-2005.pdf to evaluate the impact sediment has on the attainment of aquatic life uses.

- Outreach Projects

The increased emphasis on measurable water quality improvement places outreach activities in the context of on-the-ground water quality improvements. While outreach activities are not subject to the same requirements to demonstrate water quality improvements, outreach needs to

be strategic and contextual. In other words, how will a proposed outreach effort lead to increased awareness and positive changes in behavior that ultimately will lead to improved or protected water quality? Outreach efforts specifically identified and prioritized in a watershed plan will receive priority for funding, assuming all other criteria are met. Specific questions regarding outreach proposals should be directed to the NPS Coordinator or the Nonpoint Source Outreach Coordinator.

The amount targeted for all "Other Proposals" is approximately $580,000.

Outreach targets for 2006 funding include:

- Development and production of a "Colorado Water Quality Academy."
- Development and production of select urban best management practice guides.
- Continued statewide coordination of outreach efforts and activities through a cooperative agreement with Colorado State University Cooperative Extension.
- Continued production of a statewide electronic nonpoint source newsletter.
- Continuation of the outreach mini-grants program.

Summary of Schedule and Process

(Excerpted from 9/1/2005 letter to potential project sponsors)

Deadline for submitting a 2006 proposal is November 15, 2005. Please refer to the document *Colorado Nonpoint Source Program, FY 2006 Grant Opportunity* for specific guidance on the types of projects eligible for 2006.

All project sponsors are strongly encouraged to meet with the appropriate nonpoint source committee before the deadline. Committees will provide technical and programmatic advice on each proposal, including appropriateness for NPS funding. Committees also will provide the final criteria that will be used by the Nonpoint Source Council to evaluate proposals and make its funding recommendation in February.

Committee Meeting Schedule

Agriculture – Silviculture Committee: October 5, 2005, 9 a.m. – Noon, Bureau of Land Management, 2850 Youngfield, Lakewood. Contact Ivan Steinke, 970-378-0500

Information and Education Committee: September 21, 2005 9 a.m. – Noon, Division of Wildlife, 6060 Broadway, Denver. Contact Loretta Lohman, 720-913-5285

Mining Committee: September 27, 2005, 9 a.m. – Noon, Room 520 Centennial Building, 1313 Sherman Street, Denver. Contact Julie Annear, 303-866-3567

Stream Restoration Committee: October 5, 2005, 1:30 – 4:00 p.m., Bureau of Land Management, 2850 Youngfield, Lakewood. Contact Ed Rumbold, 303-239-3722.

Urban and Construction Committee: September 15, 2005 10 a.m. – 1 pm, Urban Drainage and Flood Control District, 2480 W. 26th Avenue, Denver. Contact Russ Clayshulte, 303-751-7144

Remaining Schedule

November 15, 2005: deadline to submit proposals to the Water Quality Control Division, 5:00 p.m.

December 2005: Committees of the Nonpoint Source Council will meet to discuss and evaluate proposals.

January 5, 2006: Colorado Nonpoint Source Council will evaluate proposals and provide a funding recommendation to the Water Quality Control Division. *Sponsors **will not** make a presentation.*

February 13, 2006: Water Quality Control Division and Nonpoint Source Council present funding recommendation to Water Quality Control Commission

February 14, 2006 and beyond:

1. Approved project sponsors develop project implementation plans (PIPs) and submit to WQCD by April 1, 2006.
2. WQCD will submit PIPs to the Environmental Protection Agency for approval.
3. EPA will conduct biologic evaluations for each on-the-ground project as they receive the PIPs, to fulfill their Section 7 Endangered Species Act consultation requirements. PIPs must include information on the presence or absence of endangered species that may be impacted by the project, to facilitate the review process.
4. EPA approves PIPs and awards grants funds on a project-by-project basis.
5. WQCD will begin contracting with each project sponsor as EPA approves each PIP and awards the funds.

Because of the overall application schedule, ***sponsors should plan their project start dates no earlier than September 2006***. Adjustments to the planned start date can be made as the process progresses, as necessary.

FY 2006 Nonpoint Source Grant Proposal Scoring Criteria

	Below Expectations	Meets Expectations	Exceeds Expectations
1. Problem Statement: *Note: This criterion will be weighted at 2X.* What is the water quality problem? Is it a listed problem on the 303(d) list? For on-the-ground projects, the proposal should document the problem, using relevant data, both in the watershed and at the site of the proposed work. For information/education projects, the proposal should identify the target audience, its need for the information or education and the information or education gap or program need or requirement that will be filled by the project.			
2. Meet Colorado NPS Program Goals: *Note: This criterion will be weighted at 2X.* Do the problem and the proposed project address one or more goals and objectives identified in the Colorado Nonpoint Source Management Program?			
3. Conceptual Approach: How is the water quality problem going to be addressed? What is the goal of the project? Is the project-approach concept in the proposal appropriate for the water quality problem, in that particular watershed, at that particular site? Will this project result in improved water quality? For information or education projects, define how the target audience will be reached and why this approach can succeed.			
4. Technical Approach: What is the technical approach that will be used? Is the technical approach sound relative to aspects of engineering, ecology, communications, etc., whichever are applicable? Are the tasks relevant? Is there an expectation the approach will result in changes to benefit water quality? For information or education projects, what is the approach that will be used? Is the proposed approach sound relative to aspects of communication? Are the tasks relevant? Is there an expectation the approach will result in behavior changes to benefit water quality?			

	Below Expectations	Meets Expectations	Exceeds Expectations
5. Sustainability: How long will the water quality improvements gained by this project last? Will this project produce lasting, positive improvements to water quality or public attitudes? Will this project be self-sustaining after this grant, i.e., is the sponsor willing to continue this effort after the end of the project? Is there recognition of life after the project? Can the water quality improvements or other success measures achieved by this project be sustained (10 plus years)? Is there a commitment to maintain the best management practices implemented in this project? Have long-term funding plans been developed for the operation and maintenance and monitoring of restoration activities or best management practices implementation? For information or education projects, what is the life expectancy of the project (how long will the information/education effect last) versus how long it is needed to last? If needed, will the outreach/education activities be continued after the funding period ends?			
6. Partnerships: Is there evidence of appropriate partnerships and degree of commitment, both now and into the future? Are resources leveraged effectively to accomplish the project (people, money, equipment, etc.)? For information or education projects, identify existing efforts and how they will be leveraged or how this effort complements them.			
7. Evaluation: *Note: this criterion will be used as a tiebreaker, if necessary.* Does the proposal have measurable goals and objectives? Does the proposal include an appropriate plan or strategy for evaluating the success of the project, to determine if the project goals and objectives have been met? *(Note: There can be a difference between evaluating success of the project and measuring water quality improvements; it may be appropriate for a project to do both.)*			

	Below Expectations	Meets Expectations	Exceeds Expectations
8. Monitoring: *Note: this criterion will be used as a tiebreaker, if necessary.* How will the project show that it has improved or protected water quality from nonpoint sources? For information or education projects, how will the project demonstrate increased knowledge, skills or behavioral changes in the target audience that are connected to improving water quality?			
9. Funding: Is the budget appropriate for the project? Are nonpoint source funds the best source of funding for this project?			
10. Match: Is the proper amount and type of match identified? Does the project leverage the NPS funds with matching funds? Is the project overmatched?			

Appendix B:
Projects Approved for Funding in 2006

Projects Approved for Funding in 2006

Projects highlighted in bold below address waterbodies identified in Colorado's 2004 *List of Waters Still Needing TMDLs* (303(d) list).

Project Title	Sponsor/Contractor	Project Purpose	Grant Awarded
Roaring Fork River Watershed Plan	Roaring Fork Conservancy	Develop a Watershed Plan	$24,480
Castleton Mine Dump Remediation	Division of Minerals and Geology	Restoration - pre-TMDL restoration	$84,000
Gilson Gulch Orphan Mine/Orphanage Remediation	Clear Creek Watershed Foundation	Restoration - pre-TMDL restoration	$225,000
NPS Newsletter Continuation	League of Women Voters of Colorado Education Fund	Outreach	$25,000
NPS Outreach Coordinator	Colorado State University Cooperative Extension	Outreach	$199,905
Outreach Mini-grants	CDPHE-WQCD and various entities	Small grants (up to $5,000) for outreach or watershed start-up projects	$25,000
Colorado Animal Feeding Operations Program	Colorado Livestock Association	Site-specific restoration	$105,100
Lefthand OHV Area Restoration Phase 1	James Creek Watershed Initiative	Restoration	$156,000

Project Title	Sponsor/Contractor	Project Purpose	Grant Awarded
Palmetto Gulch TMDL Development	Hinsdale County	Assessment - TMDL development	$55,293
Upper Animas Mine Waste Control	San Juan Resource Conservation and Development Council	Restoration - TMDL implementation	$142,650
BMP Implementation Program	Colorado Cattlemen's Association	Outreach	$150,000
Minnequa Lake Stormwater Water Quality	City of Pueblo	Restoration - prevention	$200,000
Lower Gunnison Basin Watershed Plan Update	Colorado River Water Conservation District	Assessment - watershed planning	$5,050
Purgatorie and Apishapa Rivers Watershed Plan	Culebra Range Community Coalition	Assessment - watershed planning	$25,000
Lower South Platte Watershed Planning Project	Colorado Department of Agriculture	Assessment - watershed planning	$520,000
Animas Watershed Plan	San Juan Resource Conservation and Development	Assessment - watershed planning	$22,652