



Colorado Department
of Public Health
and Environment



Colorado Nonpoint Source Management Area

FY 2010 Annual Report

Water Quality Control Division
Colorado Department of
Public Health and Environment



Blue River near Breckenridge, Colorado

Table of Contents

Executive Summary	3
I – Introduction	6
II – Grant Management and Program Administration	6
Current Section 319(h) Nonpoint Source Funding	6
1) Staffing Support	7
2) Milestones	7
Projects ended in FFY10	8
3) Active Colorado NPS projects	9
4) Watershed-based Plans	10
5) Projects Approved for Funding in FFY10	12
III – NPS Program Strategic Approach	13
a) 2010 Funding Cycle	13
1) 2010 Incremental Funds	14
2) 2010 Base Funds	14
b) Integrating TMDLs and NPS Activities: Priority Watersheds	14
c) Colorado NPS Alliance	16
d) Load Reduction	17
e) Sampling and Assessment Activities	18
IV – Outreach Activities	18
Keep-it-Clean Neighborhood Stewardship Program	18
Colorado Foundation for Agriculture	19
AWARE Colorado	19
Colorado NPS Connection	19
Information and Education Outreach Grant Program	19
Watershed Conference – Sustaining Colorado’s Watersheds	19
Data Sharing Network	19
npscolorado.com	19
V – State Programs Contributing to NPS Management	20
a) Source Water Assessment and Protection Program	20
b) Groundwater Protection Program	20
c) Division of Reclamation, Mining and Safety	21
d) Department of Transportation	21
e) Division of wildlife	21
f) Water Conservation Board	21
g) Basin Roundtables	22
VI – Federal Consistency	22
VII – Federal Agency Contributions to NPS Management in Colorado	23
U.S. Bureau of Land Management	23
U.S. Department of Agriculture Forest Service	24
U.S. Department of Agriculture NRCS	26
U.S. Geological Survey	26
Appendix A – Target Basin Rotation Schedule	28
Appendix B – Priority Watersheds Map	30

Executive Summary

Colorado CDPHE WQCD continues to implement the NPS Program and direct funding into basins impaired by NPS pollution. In addition, the WQCD is continuing to work toward implementation of the watershed approach, which incorporates the use of EPA’s key watershed planning components with NPS implementation using the nine key elements of watershed-based planning. The WQCD also is committed to a continual improvement in coordination among the Water Quality Programs including NPS, TMDLs, Integrated Reporting, Source Water Protection, Groundwater, Clean Water State Revolving Loan Fund and 319 projects.

Summary of Colorado NPS projects active during FFY10

	Project Title	Project Sponsor	Watershed	Project Type	NPS Award
1	Lower Animas Watershed Plan (FFY04 and 07)	San Juan Resource Conservation and Development Council	Animas River Basin	Watershed Plan	\$25,000
2	Dolores River Watershed Plan (FFY07)	Dolores Water Conservancy District	Colorado River Basin	Watershed Plan	\$26,750
3	Lower Gunnison River Watershed Plan (FFY03 and 06)	Colorado River Water Conservation District	Gunnison River Basin	Watershed Plan	\$32,479
4	Mancos River Watershed Plan (FFY06)	Mancos Conservation District	San Juan River Basin	Watershed Plan	\$35,000
5	Uncompahgre Basin Watershed Plan (FFY08)	Shavano Conservation District	Gunnison River Basin	Watershed Plan	\$49,500
6	Watershed Restoration Planning - Lake Fork Gunnison River (FFY09)	Hinsdale County	Gunnison River	Watershed Plan	\$235,475
7	Colorado Silviculture BMPs Evaluation (FFY07)	Colorado State University	Statewide	Information Dissemination	\$33,605
8	Data Sharing Network (FFY07)	South Platte CURE	Statewide	Information Dissemination	\$72,354
9	Outreach Coordinator (FFY06 and 08)	Colorado State University	Statewide	Information Dissemination	\$168,148
10	Watershed Planning Support (FFY09 and 10)	Colorado Watershed Assembly	Statewide	Information Dissemination	\$158,400

	Project Title	Project Sponsor	Watershed	Project Type	NPS Award
11	Colorado Clean Marinas (FFY09)	Colorado Marinas Association	Statewide	Information Dissemination	\$203,260
12	West Creek Water Quality Improvement (FFY06)	Douglas County	South Platte River	Stream Restoration BMPs	\$74,757
13	Kerber Creek Restoration (FFY07)	Trout Unlimited	Rio Grande Basin	Stream Restoration BMPs	\$413,000
14	Lefthand Canyon OHV Area Rest. II (FFY08)	James Creek Watershed Initiative	South Platte River Basin	Stream Restoration BMPs	\$150,000
15	Rio Grande Riparian Stabilization III (FFY08)	CO Rio Grande Restoration Foundation	Rio Grande Basin	Stream Restoration BMPs	\$250,000
16	Hecla Wash Restoration and Sedimentation (FFY08)	CO Dept of Natural Resources	Upper Arkansas River Basin	Stream Restoration BMPs	\$425,000
17	Edwards - Eagle River Restoration (FFY09)	Eagle County	Colorado River	Stream Restoration BMPs	\$600,000
18	Selenium Control: Loutzenhizer Lateral Piping (FFY02,03,04 and 07)	Uncompahgre Valley Water Users Association	Gunnison River Basin	Agriculture BMPs	\$800,000
19	Data and Models for Planning Nonpoint Source SE Management in Lower Arkansas (FFY07 and 06)	Colorado State University	Lower Arkansas River Basin	Agriculture BMPs	\$501,735
20	Trail Creek Orphanage Remediation (FFY07)	Clear Creek Watershed Foundation	Clear Creek	Abandoned Mine Reclamation BMPs	\$290,400
21	Coal Creek Watershed Plan Implementation (FFY07)	Town of Crested Butte	Coal Creek	Abandoned Mine Reclamation BMPs	\$141,296
22	Porphyry Mountain Mine Waste Restoration	Lefthand Watershed Oversight Group	St. Vrain	Abandoned Mine Reclamation BMPs	\$57,750

	Project Title	Project Sponsor	Watershed	Project Type	NPS Award
23	Little Frying Pan WQ Improvement (FFY08)	Colorado Mountain College Natural Resource Management	Lower Arkansas River Basin	Abandoned Mine Reclamation BMPs	\$172,500
24	Upper Animas Mine Drainage Control (FFY06)	San Juan Resource Conservation & Development Council	San Juan River Basin	Abandoned Mine Reclamation BMPs	\$187,440
25	Gilson Gulch Orphan Mine Remediation (FFY06)	Division of Reclamation, Mining & Safety	Clear Creek	Abandoned Mine Reclamation BMPs	\$255,000
26	Technical Assistance (FFY04 and 08)	Division of Reclamation, Mining and Safety	Statewide	Abandoned Mine Reclamation BMPs	\$150,000
27	Peru Creek Water Quality Improvement (FFY09)	Northwest CO Council of Governments	Snake River	Abandoned Mine Reclamation BMPs	\$170,250
28	I-70 High-Priority Structural BMPs above Straight Creek (FFY 06)	Town of Silverthorne	Colorado River Basin	Urban / Stormwater BMPs	\$277,590
29	Fountain Creek Water Quality Improvement (FFY08)	City of Pueblo	Arkansas River Basin	Urban / Stormwater BMPs	\$250,000
30	Measurable Results (FFY05 and 07)	Colorado Watershed Assembly	Statewide	Water Quality / Results Assessment	\$129,582
31	Sugarloaf Mountain Mining District BMP Performance Monitoring (FFY09)	CO Mountain College - Natural Resources Management	Arkansas River	Water Quality / Results Assessment	\$163,953

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 two-fold goal of Colorado's nonpoint source program is to *restore* to full designated beneficial use those waters impaired by nonpoint sources of pollution and to *protect* existing water quality from future impairments by using an open process that fully involves the public.

Through Fiscal Year 2010, 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; this document updated some of the information described in the 2000 document and is also used to guide the administration of the Colorado NPS program. The document is available upon request or online at: <http://www.npscolorado.com/2005MgtProgFinal.pdf>. In addition, Regulation № 93 – Section 303(d) List of Water Quality Limited Segments Requiring TMDLs and the *2008 Status of Water Quality in Colorado* 305(b) report were also used for program implementation activities. Nonpoint source assessment is integrated in the Water Quality Status 305(b) report and is periodically updated.

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.

II -- Grant Management and Program Administration

During FFY2010, Colorado NPS program received \$2,033,603.00 in federal section 319(h) grant funds, under US EPA Grant # C9-99818610. Colorado continues to award the federal funds to local sponsors, which can be local government entities, watershed groups and others. Federal funds are used at the local level to implement projects that address water quality impairments, to develop watershed-based plans and for education and dissemination of information related to nonpoint sources of pollution.

In addition to the 2010 funds, Colorado continues to manage five other annual grant awards, which have been expended to a varied degree. The following table summarizes grant awards per year and the approximate percentage that has already been expended in each grant.

Current Section 319(h) Nonpoint Source Funding		
Federal Fiscal Year	Grant Award	Percent Expended
FFY05	\$1,962,700	100%
FFY06	\$1,916,132	70%
FFY07	\$2,182,827	36%
FFY08	\$1,868,100	30%

Current Section 319(h) Nonpoint Source Funding		
FFY09	\$1,754,218	41%
FFY10	\$2,033,603	Expected to start in January 2011

1) Staffing and Support

Funding for staffing and support is administered through the annual Performance Partnership Agreement and Grant. The 2010 staffing and support grant is \$688,882.00, which funds approximately 5.3 FTE. These FTEs include 4.2 FTE that directly deal with implementation of the NPS program. The remaining FTEs represent additional assistance from other units, such as monitoring and fiscal and contracting support.

2) Milestones: Colorado continues to improve and enhance grant management processes

- All “legacy” grants are fiscally and administratively closed. All grant and project information has been entered in the federal Grants Reporting and Tracking database (GRTS).
- FFY02 fiscally and administratively closed during FFY10; FFY03 and 04 were closed fiscally.
- Colorado has updated all the information for the active projects in the GRTS. Colorado has developed a process and protocols to better gather sediment and nutrient load reduction information and report those data in GRTS. The process is being implemented and used in all projects that involve on-the-ground BMP work. More data and more accurate load reduction reporting are expected starting in FFY11.
- Following EPA Nonpoint Source Program Implementation guidance, Colorado is managing the federal grants in five year-increments, closing out one older grant and starting a new one every year. This year is the first year that Colorado has achieved this in the history of the Colorado NPS program.
- Colorado continues to track and manage grants that are currently active. Information is kept current for all project expenditure totals, accumulating match amounts, progress reports and other project management detail. This process also allows for federal grant expenditure and match accrual totals to be updated frequently and regularly.
- Colorado Success Story Report: Box Canyon Creek Watershed Restoration Project has been approved by EPA Headquarters and is posted on the EPA website at: http://water.epa.gov/polwaste/nps/success319/co_box.cfm . Colorado has submitted the draft Success Story: Lower Blanco River Restoration. Colorado is anticipating submitted the next draft Success Story before the end of the year.
- The NPS program team held a half-day workshop to disseminate information regarding NPS funding application process. The workshop agenda focused on the project solicitation process and “business-ready” considerations for potential applicants.
- Colorado revised the Request for Proposals (Project Solicitation) process for FFY10 to improve the quality of information received and to make the process available electronically. The project solicitation process for 2010 generated 27 proposals which totaled \$3,938,170.00 requested. Individual proposals ranged in value from \$25,000 to \$700,000. Fourteen new projects were approved for funding.
- Colorado continues to engage other state and federal agencies and the general public on nonpoint source pollution issues through the Nonpoint Source Alliance (Alliance). The Alliance is a diverse group of stakeholders that provide volunteer support to the NPS program by assisting

with education and outreach, mentoring prospective project proponents, and providing technical expertise from their respective fields.

- Colorado continues to maintain and update regularly the www.npscolorado.com website. This site contains programmatic and general CDPHE regulatory and non-regulatory information. It also contains federal water quality information, reference and news. The site is regularly visited by an average of 650 persons per day.
- Colorado continues to improve NPS contract close-out practices. During FFY10, the NPS team closed out 12 projects from the FFY03 through FFY08 grants. In addition, project close out requirements, such as final invoice, match reconciliation and final reports, are being communicated more clearly and systematically to project sponsors. The following table contains the information about projects closed-out during FFY10:

Project Title	Project Sponsor	Total NPS Award	Total NPS Expenditures	% Spent	Date Closed
Lake Fork Watershed Plan	Colorado Mountain College	\$25,000	\$25,000	100	December 2009
AWARE Colorado	League of Women Voters of Colorado	\$182,250	\$109,972	60.34	December 2009
NPS Connection Newsletter	League of Women Voters of Colorado	\$32,000	\$31,985	99.95	January 2010
NPS Educational Outreach – Middle & High School	Colorado Foundation for Agriculture	\$142,250	\$142,250	100	October 2009
Statewide Public Outreach – Survey	Colorado Foundation for Agriculture	\$155,000	\$155,000	100	October 2009
Understanding Polluted Runoff	Colorado Foundation for Agriculture	\$83,500	\$83,500	100	October 2009
Assessing Irrigation-Induced Selenium and Iron in the Stream-Aquifer System of the Lower Arkansas River Basin	Colorado State University	\$286,895	\$273,229	95.24	October 2009
Evaluation of the Impact of Best Management Practices on Ground Water and River Water Quality in Irrigated Valley	Colorado State University	\$100,000	\$100,000	100	December 2009

Project Title	Project Sponsor	Total NPS Award	Total NPS Expenditures	% Spent	Date Closed
Field-Scale Assessment of Improved Irrigation Practices Impacts on Drainage Water Dissolved Chemical Constituents and Receiving Stream Salt-Loading Vulnerability	Southeast Colorado Resource Conservation and Development	\$91,708	\$91,708	100	December 2009
Owl Mountain / North Platte Project	Colorado Wildlife Heritage Foundation / Owl Mountain Partnership	\$146,000	\$146,000	100	August 2009
City of Aspen Storm Water Treatment System	City of Aspen	\$150,000	\$150,000	100	September 2010

3) Summary of Colorado NPS projects active during FFY10:

Project Title	Project Sponsor	Watershed	Project Type	NPS Award
Lower Animas Watershed Plan (FFY04 and 07)	San Juan Resource Conservation and Development Council	Animas River Basin	Watershed Plan	\$25,000
Dolores River Watershed Plan (FFY07)	Dolores Water Conservancy District	Colorado River Basin	Watershed Plan	\$26,750
Lower Gunnison River Watershed Plan (FFY03 and 06)	Colorado River Water Conservation District	Gunnison River Basin	Watershed Plan	\$32,479
Mancos River Watershed Plan (FFY06)	Mancos Conservation District	San Juan River Basin	Watershed Plan	\$35,000
Uncompahgre Basin Watershed Plan (FFY08)	Shavano Conservation District	Gunnison River Basin	Watershed Plan	\$49,500
Colorado Silviculture BMPs Evaluation (FFY07)	Colorado State University	Statewide	Information Dissemination	\$33,605
Data Sharing Network (FFY07)	South Platte CURE	Statewide	Information Dissemination	\$72,354
Outreach Coordinator (FFY06 and 08)	Colorado State University	Statewide	Information Dissemination	\$168,148
West Creek Water Quality Improvement	Douglas County	South Platte River	Stream Restoration BMPs	\$74,757

Project Title	Project Sponsor	Watershed	Project Type	NPS Award
(FFY06)				
Kerber Creek Restoration (FFY07)	Trout Unlimited	Rio Grande Basin	Stream Restoration BMPs	\$413,000
Lefthand Canyon OHV Area Rest. II (FFY08)	James Creek Watershed Initiative	South Platte River Basin	Stream Restoration BMPs	\$150,000
Rio Grande Riparian Stabilization III (FFY08)	CO Rio Grande Restoration Foundation	Rio Grande Basin	Stream Restoration BMPs	\$250,000
Hecla Wash Restoration and Sedimentation (FFY08)	CO Dept of Natural Resources	Upper Arkansas River Basin	Stream Restoration BMPs	\$425,000
Selenium Control: Loutzenhizer Lateral Piping (FFY02,03,04 and 07)	Uncompahgre Valley Water Users Association	Gunnison River Basin	Agriculture BMPs	\$800,000
Data and Models for Planning Nonpoint Source SE Management in Lower Arkansas (FFY07 and 06)	Colorado State University	Lower Arkansas River Basin	Agriculture BMPs	\$501,735
Trail Creek Orphanage Remediation (FFY07)	Clear Creek Watershed Foundation	Clear Creek	Abandoned Mine Reclamation BMPs	\$290,400
Coal Creek Watershed Plan Implementation (FFY07)	Town of Crested Butte	Coal Creek	Abandoned Mine Reclamation BMPs	\$141,296
Porphyry Mountain Mine Waste Restoration	Lefthand Watershed Oversight Group	St. Vrain	Abandoned Mine Reclamation BMPs	\$57,750
Little Frying Pan WQ Improvement (FFY08)	Colorado Mountain College Natural Resource Management	Lower Arkansas River Basin	Abandoned Mine Reclamation BMPs	\$172,500
Upper Animas Mine Drainage Control (FFY06)	San Juan Resource Conservation & Development Council	San Juan River Basin	Abandoned Mine Reclamation BMPs	\$187,440
Gilson Gulch Orphan Mine Remediation (FFY06)	Division of Reclamation, Mining & Safety	Clear Creek	Abandoned Mine Reclamation BMPs	\$255,000
Technical Assistance (FFY04 and 08)	Division of Reclamation, Mining and Safety	Statewide	Abandoned Mine Reclamation BMPs	\$150,000

Project Title	Project Sponsor	Watershed	Project Type	NPS Award
I-70 High-Priority Structural BMPs above Straight Creek (FFY 06)	Town of Silverthorne	Colorado River Basin	Urban / Stormwater BMPs	\$277,590
Fountain Creek Water Quality Improvement (FFY08)	City of Pueblo	Arkansas River Basin	Urban / Stormwater BMPs	\$250,000
Measurable Results (FFY05 and 07)	Colorado Watershed Assembly	Statewide	Water Quality / Results Assessment	\$129,582
Watershed Planning Support (FFY09 and 10)	Colorado Watershed Assembly	Statewide	Information Dissemination	\$158,400
Colorado Clean Marinas (FFY09)	Colorado Marinas Association	Statewide	Information Dissemination	\$203,260
Edwards - Eagle River Restoration (FFY09)	Eagle County	Colorado River	Stream Restoration BMPs	\$600,000
Peru Creek Water Quality Improvement (FFY09)	Northwest CO Council of Governments	Snake River	Abandoned Mine Reclamation BMPs	\$170,250
Sugarloaf Mountain Mining District BMP Performance Monitoring (FFY09)	CO Mountain College - Natural Resources Management	Arkansas River	Water Quality / Results Assessment	\$163,953
Watershed Restoration Planning - Lake Fork Gunnison River (FFY09)	Hinsdale County	Gunnison River	Watershed Plan	\$235,475

4) Watershed-based Plans Summary:

Watershed Plans Being Developed or Already Developed	Watershed Plans Being Implemented
Lower South Platte River	Animas River above Silverton
Lower Gunnison River (Selenium)	Barr-Milton Watershed Plan
Uncompahgre Basin	Black Gore Creek, Upper Colorado River Basin
Mancos River	Straight Creek, Upper Colorado River Basin
Dolores River	Clear Creek, above the mouth of the canyon
Lower Animas River	Coal Creek and tributaries
Watershed Restoration Planning - Lake Fork Gunnison River	Eagle River, Upper Colorado River Basin

Watershed Plans Being Developed or Already Developed	Watershed Plans Being Implemented
Kerber Creek	Fountain Creek
	Lake Fork of the Gunnison
	North Fork of the Gunnison
	Cherry Creek, South Platte River Basin
	Upper Rio Grande to Alamosa County line
	San Miguel River
	Upper Yampa River Basin
	East Fork of the Dolores River (at town of Rico)
	Upper Pine, Upper San Juan
	Big Dry Creek, South Platte River Basin
	Big Thompson
	Upper South Platte River
	Alamosa River
	Willow Creek
	Roaring Fork
	Snake River, Upper Colorado River Basin
	Lefthand Creek, including James Creek and Little James Creek
	North Fork of the Republican River
	Lower Arkansas River
	Lake Fork of the Arkansas

5) The following table summarizes the project proposals approved for funding during the FFY10 Project Solicitation process:

The process for 2010 Nonpoint Source project funding officially started on September 2nd 2009 with the release of the project solicitation announcement letter describing proposal priorities and guidance. Deadline for proposals submittal was December 4th, 2009 at which time the Division received 27 proposals and a total request for \$3,938,170.00. After reviewing and ranking all proposals, WQCD Nonpoint Source staff developed a draft funding recommendation list which was presented to the Colorado Water Quality Control Commission (WQCC) in March of 2010. The WQCC approved the NPS program's recommendation without amendments.

Watershed	Project Title
South Platte River	Upper South Platte Nonpoint Source Initiative
South Platte River	Lower South Platte Watershed Plan – Phase II
Kerber Creek	Upper Kerber Creek Watershed Plan
Rio Grande Basin	Rio Grande Riparian Stabilization – Phase IV
Coal Creek	Coal Creek Restoration
Gunnison River	NFRIA Midway Stabilization and Riparian Improvements
North Platte River	North Park Watershed Plan
Uncompahgre River	Agricultural Efficiency and System Optimization Plan
Uncompahgre River	Supporting Selenium Control Efforts
St. Vrain Creek	St. Vrain Watershed Plan
Statewide	Characterizing Bioaccumulation of <i>Mercury</i> in Sport Fish
Statewide	Nonpoint Source Connection Newsletter
Statewide	Watershed Planning Support
Statewide	Nonpoint Source Outreach Education

III - - NPS Program Strategic Approach

Colorado continues to implement the revised strategies for the NPS program. CWA Section 319(h) funding sources are allocated under two categories: 1) incremental allocation: for projects that address impaired waters requiring TMDL development, including watershed-based plans; and 2) base allocation: all other activities, including education and information dissemination. The first category, nonpoint source activities addressing impaired waters requiring a TMDL, is now being implemented in tandem with the Triennial Review Regulatory Basin rotation schedule, as adopted by the Water Quality Control Commission.

The Water Quality Control Commission has adopted a revised schedule for the Triennial Review, affecting only SFY2010 and 2011: both years will have Rule Making Hearings addressing Regulation № 31 – The Basic Standards and Methodologies for Surface Water. The regular Triennial Review Regulatory Basin rotation schedule will resume after 2011. This will require an adjustment in the NPS Target Basin rotation as well: 2011 and 2012 will address statewide projects, watershed plans, implementation projects anywhere in the state and there will not be a Target Basin for those years. See Appendix A for the updated Colorado Target Basin Rotation Schedule.

a) 2010 Funding Cycle

For the 2010 funding cycle, the South Platte and Republican River basins were the *Target Basins* for project funding. Development of watershed plans, implementation projects in non-impaired water bodies and other statewide water quality preservation and/or restoration activities were also allowable project types. Additionally, approximately 60% of the funds available were from the incremental allocation and fund projects in impaired segments anywhere in the state; the remaining 40% were from the base allocation and funds all other projects.

1. Nonpoint source activities in impaired watersheds identified by the Clean Water Act Section 303(d) listed waters (listed is several years) – (Incremental Funds).

Project Title	Watershed	General Project Description	Funding Amount
Upper South Platte NPS Initiative	South Platte River	Stream Restoration	\$557,857
Characterizing Bioaccumulation of Mercury in Sport Fish	Statewide	TMDL Development	\$286,365
Supporting Selenium Control Efforts	Colorado River	Agriculture	\$26,171
TMDL-related Legacy Mine Reclamation	Statewide	Mining	\$272,741
Coal Creek Restoration	Coal Creek (Crested Butte)	Mining	\$166,583

2. Nonpoint source activities anywhere else in the state – Base Funds.

Project Title	Watershed	General Project Description	Funding Amount
Upper Kerber Creek WS Plan	Kerber Creek	Watershed Plan	\$25,000
Lower South Platte WS Plan	South Platte River	Watershed Plan	\$79,587
Midway Stabilization and Riparian Improvements	Gunnison River	Stream Restoration	\$40,000
North Park WS Plan	North Platte River	Watershed Plan	\$69,186
Agricultural Efficiency and System Optimization Plan	Uncompahgre River	Watershed Plan	\$37,500
St. Vrain WS Plan	St. Vrain	Watershed Plan	\$61,046
Watershed Planning Support	Statewide	Education and Outreach	\$68,162
NPS Outreach Education	Statewide	Education and Outreach	\$193,940

b) Integrating TMDLs and NPS Activities: Priority Watersheds

The NPS program prioritized watersheds in the state using the water quality standards segmentation of waterbodies as approved by the Water Quality Control Commission. The criteria for selecting *Priority Watersheds* were: 1) identify segments listed in Regulation № 93 – Section 303(d) List of Water Quality Limited Segments Requiring TMDLs and 2) identify watersheds containing those segments that are or have in the past used 319 funds for nonpoint source activities. Priority Watersheds are defined at the 8 or 10-digit Hydrologic Unit Code. In the future Colorado anticipates revising the List of Priority Watersheds using the 12-digit Hydrologic Unit Code basin map. See Appendix B for a Map of Colorado’s List of Priority Watersheds.

The following is the list of priority watersheds, which are grouped using the waterbody segmentation adopted by the WQCC and defined in the water quality regulations for Colorado's river basins. Each impaired segment has been identified according to Regulation #93. There is also a short description of the NPS program potential or current contribution to the restoration of the impairment.

Arkansas River Basin

Upper Arkansas R.: NPS program contribution: there is a watershed restoration plan being developed for this area, with an anticipated outcome being a prioritization of potential restoration projects. The following segments will be incorporated as priorities in the watershed plan. This could potentially result in incremental money supporting future restoration work. These segments are the California Gulch to Lake Fork (excluding the area designated under Superfund), Lake Fork to Lake Creek and Lake Creek to Pueblo Reservoir.

303(d) listed segments: COARUA02b (Cd and Zn), COARUA02c (Zn), COARUA03 (Zn)

Lower Arkansas R.: NPS program contribution: there are several projects being implemented in this area – a watershed plan, a large source identification and quantification study and model development with the collaboration of Colorado State University and projects in conjunction with the Southeast Conservation District. This segment extends from John Martin Reservoir to the Kansas stateline.

303(d) listed segment: COARLA01c (Se)

Purgatoire River: NPS program contribution: this is an area with potential for restoration projects, but there is a need to develop a watershed restoration plan. This segment is from I-25 near Trinidad to the confluence with the Arkansas River.

303(d) listed segment: COARLA07 (Se)

Gunnison River Basin

Uncompahgre River: NPS program contribution: currently, there is a 319 restoration project that is starting to address some of the Selenium loading into the Gunnison River. Selenium loading in surface waters is of concern throughout this area of the state and the solution will require coordinated efforts and a statewide strategy. These segments include the Uncompahgre Valley below Montrose. There is an existing Watershed Plan for the reach below Montrose to the confluence, and a Watershed Plan being developed for the reach above Montrose to headwaters.

303(d) listed segments: COGUUN04b, COGUUN04c (Se)

Upper Gunnison River: NPS program contribution: there is a watershed restoration plan being developed for this area, with a potential to prioritize restoration projects. The following segment will be incorporated as a priority in the watershed plan. This could potentially result in incremental money supporting restoration work. This segment is Palmetto Gulch.

303(d) listed segment: COGUUG31 (Cd, Zn)

Rio Grande Basin

Kerber Creek: NPS program contribution: there is a watershed restoration plan for this watershed, but it needs updating. The Kerber Creek watershed plan has a high potential to identify and implement appropriate reclamation activities. These segments include Kerber Creek and almost all tributaries.

303(d) listed segments: CORGCB09a (Ag, Cd, Pb, pH), CORGCB09b (Cd, Cu, Zn)

San Juan River Basin

Dolores River: NPS program contribution: this is an area with potential for restoration projects. This segment includes Silver Creek below the town of Rico.

303(d) listed segment: COSJDO09 (Zn)

Mancos River: NPS program contribution: there is a watershed restoration plan being developed for this area, with a potential to prioritize restoration projects. The following segment will be incorporated as a priority in the watershed plan. This could potentially result in incremental money supporting implementation and restoration work. This segment includes the Mancos River and tributaries above Hwy 160.

303(d) listed segment: COSJLP04 (Cu)

South Platte River Basin

Boulder Creek: NPS program contribution: this is an area with potential for restoration projects, with a need to first develop a watershed restoration plan. These segments are Coal Creek and Gamble Gulch.

303(d) listed segments: COSPBO07b (E. coli), COSPBO04a ((Cu, Zn, pH)

Clear Creek: NPS program contribution: the watershed restoration plan has been developed. The watershed plan has a high potential for identifying priorities that would support restoration work throughout this part of this watershed.

303(d) listed segments: COSPCL02, COSPCL03a, COSPCL03b, COSPCL06, COSPCL09a, COSPCL09b, COSPCL11 (metals)

Saint Vrain River: NPS program contribution: past work with a local entity; existing watershed restoration plan for the Lefthand Creek. This segment is for Lefthand Creek.

303(d) listed segment: COSPSV04a (metals and pH)

Upper South Platte: NPS program contribution: this is an area with potential for restoration projects; existing watershed restoration plan.

303(d) listed segments: COSPUS02a (sediment)

Upper Colorado River

Peru Creek: NPs program contribution: this is an area with potential for restoration projects; existing watershed restoration plan. This segment is the Peru Creek to the Snake River.

303(d) listed segment: COUCBL07 (metals)

Eagle River: NPS program contribution: this is an area with potential for restoration projects, but there is a need to update the watershed restoration plan. This segment is from Belden to Lake Creek and some tributaries.

303(d) listed segment: COUCEA06 (sediment)

c) Colorado Nonpoint Source Alliance

The Colorado NPS Alliance (Alliance) continues in its role of providing advice and support to Nonpoint Source Management Area staff in the technical aspects of implementing the NPS program. The Alliance also supports the NPS program staff in preparing and maintaining the state's Nonpoint Management Area program documents and in encouraging the public to become involved in nonpoint source activities. Members of the Alliance, in coordination with the NPS program staff, also work with interested project sponsors to help prepare projects for funding consideration under Section 319(h) of the Clean Water Act. The goal of the NPS Alliance is to provide support and technical advice in nonpoint source activities designed to preserve and restore water quality in Colorado. Each Alliance representative's primary duties and responsibilities include the following:

1. provide technical and area-of-expertise advice on nonpoint source issues and activities
2. serve as a liaison from member organization/agency to the Alliance;
3. serve as a liaison from the Alliance to member organization/agency;

4. actively represent nonpoint source water quality issues and provide input from member organization/agency for the benefit of Colorado water quality;
5. promote the nonpoint source program within the member organization/agency;
6. participate in the technical evaluation of nonpoint source project proposals submitted each year;
7. participate in NPS Alliance policy development;
8. work with a multitude of agencies and organizations to build cooperation and collaboration;
9. approach resolution of challenges through teamwork;
10. stay informed and inform others about nonpoint issues and water quality concerns; and
11. participate in statewide meetings and seminars on nonpoint source pollution.

2010 Organizational Membership of the Colorado NPS Alliance

U.S. Bureau of Land Management
Colorado Association Stormwater and Flood Plain Managers
Colorado Department of Transportation
Chatfield Watershed Authority
Colorado Cattlemen’s Association
Colorado Livestock Association
Colorado Farm Bureau
Colorado Lake & Reservoir Management Association
Colorado Mining Association
Colorado River Water Conservation District
Colorado Division of Wildlife
Colorado Division of Reclamation, Mining and Safety
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
Colorado League of Women Voters
USDA Forest Service
Lefthand Watershed Oversight Group
Colorado Water Quality Control Commission
U.S. Environmental Protection Agency, Region VIII
Colorado Watershed Assembly

d) Load Reduction Reporting

Colorado regularly reports on load reductions associated with the regulations that govern loading of nutrients (total phosphorus and total nitrogen) into lakes and reservoirs. Colorado also reports on sediment loads into rivers and streams that are reduced or minimized based on BMPs implemented by the Colorado Department of Transportation (CDOT).

In order to enhance and expand on current load reduction reporting, the NPS program has established a new task force to develop protocols to capture load reduction data and meet the required GRTS

reporting minimum elements in a more comprehensive manner. This task force is made up of NPS program staff and members of the Alliance. The objectives of the task force are 1) to develop protocols to capture sediment and nutrients load reduction data associated with NPS BMPs implemented with Section 319(h) funds; and 2) to develop a simple system that allows project sponsors and other users to capture and submit those data to the NPS program. These data will be used to fulfill the minimum reporting requirements in GRTS and to help the NPS program evaluate success, through measurable results. Colorado has started using the enhanced load reduction reporting for a few selected projects for this reporting cycle and will continue to expand the reporting capability.

e) Sampling and Assessment Activities

U.S. EPA limits the amount of grant funds that may be used for monitoring and assessment. Specifically, use of NPS funds is limited to:

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

The NPS program supports the development of TMDLs by supporting local organizations such as watershed groups involved in collecting data and characterizing watersheds with impaired segments. These efforts are supported mostly via the development of watershed plans. The program also implements TMDLs, especially in watersheds dominated by nonpoint sources of pollutions (Load Allocations) and in areas dominated by impacts from legacy mines.

In 2010, Colorado expanded the Sampling and Assessment activities associated with on-the-ground BMP implementation projects to emphasize documenting measurable results. This was accomplished with the creation of the Measurable Results project (MRP) and also with more emphasis placed on NPS project sponsors' requirements in conducting project-associated sampling, analyses and assessment. Project sponsors are required to conduct, at a minimum, water quality sampling, analysis and assessment. The MRP project supplements the minimum sampling requirements by also providing pre and post contracting data, sampling for aquatic macro-invertebrates and associated evaluation of physical and aquatic habitat. The NPS program follows the framework described in the newly promulgated Methodology to Determine Aquatic Life Use Attainment for Streams and Rivers.

All NPS water quality and aquatic macro-invertebrates data generated by the NPS program are uploaded to STORET via the Colorado Data Sharing Network; this includes data generated by project sponsors and data generated by the MRP. Those data are incorporated in the State Water Quality data analysis and assessment conducted by the Environmental Data Unit and incorporated in the biennial Integrated Report (IR) and in the Standards Triennial Review process.

IV. Outreach Activities

Keep It Clean Neighborhood Stewardship Program

The Keep it Clean Partnership (formerly known as the Watershed Approach to Stream Health or WASH Project) is comprised of the following: Boulder County; the cities of Boulder, Longmont, and Louisville; and the towns of Erie and Superior. Individually, they are referred to as "Partners." These Partners have contracted with the City of Boulder's Stormwater Education Program to support and expand delivery of stormwater education to the public and school-aged children in Keep it Clean Partnership communities.

The Keep it Clean Partnership Education Program provides school-based education and community based outreach programs that meet state requirements for Minimum Control Measures (MCM) 1 and 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 over 1,500 schools in the state. An electronic newsletter exists and an online watershed game. More information can be found at <http://www.growingyourfuture.com>

AWARE Colorado

AWARE - Addressing Water And natural Resource Education (AWARE) is the Colorado statewide program designed to educate local decision makers about the impacts of land use choices on water quality. The Colorado outreach effort is based on the University of Connecticut's Nonpoint Education for Municipal Officials (NEMO) program. Although this outreach program is not active anymore, the NPS Outreach Coordinator is prepared to answer questions as a member of NEMO, and written materials and information is available at <http://www.npscolorado.com/AWARE.html>

Colorado NPS Connection

The nonpoint source newsletter, *Colorado NPS Connection*, now publishes as an electronic-only newsletter. Past issues of the newsletter are available at <http://npscolorado.com/econnection.html>

Information and Education Outreach Grant Program

For several years, the nonpoint source program has set aside a small percentage of funds from the regular Section 319(h) allocation for small, highly focused educational efforts. These small-scale projects typically leverage the modest amounts of money into major community-outreach efforts with statewide applications. Fund availability is marketed to schools, nonprofit organizations and local watershed groups.

Watershed Conference: *Sustaining Colorado's Watersheds*

About 250 people from all parts of Colorado, representing many different interests attended this conference in October 2010. Attendance included individuals representing local watershed groups, scientists from many disciplines, federal, state and local agencies, several water conservation districts, water user associations, private industry, and environment groups.

Data Sharing Network

The Colorado Data Sharing Network provides a mechanism to integrate data from many different sources, in a geo-spatial manner. Those data can either be shared directly or information is provided on how to access selected data. It can be used by watershed groups or any entity that is collecting water quality data. DSN conducts basins outreach activities for the dissemination of data, monitoring and assessment information and training. DSN also provides the ability to share data with other monitoring entities. This statewide data-sharing network allows all interested parties to manage their data for a minimal cost and with the ability to share the data with other monitoring entities, state agencies and the USEPA.

NPSCOLORADO.COM

The Nonpoint Source Program web page has several sections devoted to outreach activities materials and guidance. There are specific outreach materials for Colorado found at <http://npscolorado.com/ColoradoI&Eresource.htm>; Community Based Social Marketing information for

Colorado at <http://npscolorado.com/cbsm.html>; National educational links and resources at <http://npscolorado.com/nationalresources.htm> and links to other programs and educational resources about water within Colorado at <http://npscolorado.com/otherco.htm>. The website also has information regarding the Colorado Water Protection Project which eventually grew into AWARE and the NPS Connection. During its life, it produced a number of brochures and tool kits, a prize-winning Public Service Announcement, and a radio advertisement. All of the information is available for use at <http://npscolorado.com/ourwater.htm>.

V -- State Programs Contributing to NPS Management

In FFY10, the following activities were conducted to assess and implement land management practices and water quality protection:

a) Source Water Assessment and Protection Program

The Source Water Assessment and Protection (SWAP) program works closely with public water systems and stakeholders to protect groundwater based sources of drinking water. A statewide grant funding program provides financial assistance to help facilitate the technical development of protection plans that result in Best Management Practice implementation. Approximately, seventy seven (77) groundwater systems have either completed a protection plan and/or have a strategy in place to complete a plan. The population served by these groundwater systems with protection plans is approximately 118,721 people that represent 25% of the state population served by groundwater community water systems.

The SWAP and Non-Point Source programs are collaborating on strategies to leverage statewide planning efforts to minimize impacts to groundwater. The top four categories of dispersed (non point source) contaminants to potentially impact groundwater sources in Colorado are roads, septic systems, evergreen and deciduous forest practices, and agricultural (pasture and hay) impacts. Future spatial analysis of source water and non-point source watershed plans should help guide the programs to leverage planning and funding resources to collectively protect and restore groundwater quality. The Source Water Assessment and Protection program is administered and implemented by CDPHE Water Quality Control Division.

b) Groundwater Protection Program

The Agricultural Chemicals and Groundwater Protection Act took effect on July 1, 1990 and established the Groundwater Protection Program. Its purpose is to reduce agricultural chemicals' negative impacts on groundwater and the environment. Agricultural chemicals covered under this legislation include commercial fertilizers and all pesticides. The goal is to prevent groundwater contamination before it occurs by improving agricultural chemical management. The Agricultural Chemicals and Groundwater Protection Program is administered as a joint effort between the Colorado Department of Agriculture (CDA), the Colorado Department of Public Health and Environment and Colorado State University Cooperative Extension (CSUCE).

The program employs three primary functions to protect groundwater in Colorado:

1. Regulation and inspection of agricultural chemical bulk storage and mixing/loading areas;
2. Groundwater monitoring; and
3. Education and training.

The Groundwater Protection Program accomplished its 20th year of groundwater monitoring responsibilities in 2010; a summary of the 2010 results is shown below:

2010 Groundwater Monitoring Results for the Groundwater Protection Program

	Number of Samples Collected	Samples Exceeding Nitrate Standard	Pesticides Detected
Front Range Urban Network	64	10	35
Weld County Long Term Monitoring Network	64	47	76
Lower South Platte River Basin	22	7	47
Arkansas Valley River Basin	19	1	12
Total	169	65	170

More information on the Groundwater Protection Plan can be found at:
<http://www.colorado.gov/cs/Satellite/Agriculture-Main/CDAG/1167928159328>

c) Division of Reclamation, Mining and Safety

DRMS provides for the reclamation and restoration of land and water resources previously degraded by the adverse effects of past mining practices through the characterization of environmental problems associated with mine waste, mill tailings and acid mine drainage and provides reclamation options to address these environmental problems.

The NPS program and the DRMS have created a list of priority abandoned mine lands (AML) sites proposed for characterization and remediation designs and reclamation construction. Those sites are currently included in Colorado's Section 303(d) List of Impaired Waters and Monitoring and Evaluation List. Dissolved metals and acidity (pH) from legacy mining (AML-Abandoned Mine Lands) and background sources comprise 89% of the total number of impaired stream segments in Colorado.

The AML sites are being addressed and reclaimed with funds from the NPS program (CWA Section 319 funds), from the Colorado Water Resources Power Development Authority (SRF Administrative Fees funds), with DRMS Severance Tax Funds, federal partners (BLM, EPA, USFS) and watershed groups.

d) Department of Transportation

CDOT works in partnership with the NPS program addressing sediment load reduction associated with roads maintenance and runoff. As stormwater becomes more regulated, the partnership has developed additional mutual support including, the exchange of technical information, data regarding BMP selection and implementation, and other forms of support. CDOT participates actively in the Alliance collaborating with document preparation and review, basin outreach activities and with review and advice on project implementation.

e) Division of Wildlife

CDOW participates actively in the Alliance collaborating with document preparation and review, basin outreach activities and with review and advice on project implementation.

f) Water Conservation Board

The CWCB supports watershed protection and restoration efforts through the administration of several grant programs. The Colorado Watershed Restoration Program, which provides grants for

watershed/stream restoration and flood mitigation projects throughout the state. The Colorado Healthy Rivers Fund, which helps support local watershed organizations in their efforts to provide clean water, protect habitat and improve recreation and accessibility. The Fish and Wildlife Resources Fund, which provides grant money to mitigate the impacts of existing water supply facilities and help preserve a balance between development of the state's resources and the protection of the state's fish and wildlife resources. All of these grant programs include objectives that address similar goals as the NPS program.

g) Colorado Basin Roundtables

To facilitate discussions on water management issues and encourage locally driven collaborative solutions, nine basin roundtables were established by the "Colorado Water for the 21st Century" Act. These roundtables represent each of the state's eight major river basins and the Denver metropolitan area.

The basin roundtables bring more than 300 citizens into water discussions across the state. The broad-based, collaborative nature of this process is reflected in the basin roundtable membership – a set of designated members, 10 at-large members, non-voting members, agency liaisons and the CWCB Board member from each basin. The roundtables currently are undertaking Phase II of the nonconsumptive needs assessment (NCNA) process, which seeks to identify projects or methods to address the basins' nonconsumptive (environmental and recreational) needs.

VI -- Federal Consistency Activities

Federal agencies manage or otherwise influence a significant portion of Colorado's land area. In fact, nearly 37 percent of the 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?

A Federal Consistency Review was conducted in the Kerber Creek watershed on August 3, 2010. Kerber Creek is in the northern area of the San Luis Valley, northwest of Villa Grove, Colorado. A mining boom occurred in the late 1800's and continued intermittently to the 1970's in the headwaters area, resulting in over 1,500 prospect holes and mines. The tailings and waste were brought downstream to pile or spread in the lower basin. The lower segment is listed on the 303(d) list of impaired segments for cadmium, copper and zinc.

Best management practices (BMPs) reviews were conducted with the US Forest Service (USFS) and Bureau of Land Management (BLM), whose offices are in Saguache, CO. USFS manages the headwater area of Kerber Creek while the lower reaches are a blend of BLM and private parcels. Natural Resources Conservation Service (NRCS) have provided landowner assistance and cost-share match on BMP implantation for many private parcels. Trout Unlimited is a partner with these two agencies and

local landowners and serves as the contracting entity for NPS funds to implement BMPs in the watershed.

BMP implementation reviewed included the following techniques:

- Install erosion control with straw wattles protecting against sediment and acidic runoff;
- Install or plant sedge mats, willows, rock structures to increase sinuosity;
- Reduce width-to-depth ratio for channel improvement;
- Install gradient control rock structures to improve stream depth and aquatic life habitat with better sediment transport and deposition;
- Improve upland vegetative cover with invasive weed control, reseeding and mulching desirable species, and monitoring native species;
- Stabilize streambanks by reshaping to a 3:1 slope and revegetation to minimize erosion and down-cutting; and,
- Reduce mobility of metals by identifying the proper mix of compost, lime and/or limestone for introduction on the streambanks with tailing pile remnants.

Volunteer involvement was significant in many of the tasks for BMP implementation throughout the watershed. A sustained effort and dedicated partnership to implementation of measurable improvements have resulted in restored and protected habitat, as acknowledged by the project's receipt of BLM's highest mine restoration award in 2010.

VII -- Federal Agency Contributions to NPS Management in Colorado

In FFY10, the following activities were conducted to review and coordinate land management practices and water quality:

1 -- U.S. Bureau of Land Management (contributed by Ed Rumboldt, Colorado Office)

BLM is contracting with USGS to monitor streamflow and water quality in the Piceance Basin. Data can be accessed at <http://co.water.usgs.gov> BLM continues to work with Shell and the USGS to collect groundwater data in the Piceance basin. Continuous pH, conductivity, dissolved oxygen, and temperature data are also being collected on the Roan Plateau. This is part of an overall regional monitoring strategy to assess potential effects of oil and gas development on water resources. BLM continues to work with the USGS in Utah to assess potential grazing impacts on salinity, biological soil crusts and sediment delivery in Badger Wash near Mack, CO. Moreover, this project is also documenting potential windblown effects on the area.

BLM has completed a comprehensive hydrologic analysis and instream flow recommendations for the newly designated Dominguez – Escalante wilderness area. Data and analysis will be provided to the CWCB in order for them to determine an instream flow in FY 2010.

Another 1,000 feet of the San Miguel River near Placerville, CO was stabilized by installing Rosgen “J-hooks”, armoring stream banks with a combination of rock, mulch and willow plugs. The river was eroding a portion of the scenic highway. Cross sections, HEC RAS modeling and survey-grade GPS were used to map and design purposes. Stream restoration continues to progress on Kerber Creek near Villa Grove, CO on a 17 mile reach. BLM has been a significant cooperator in providing funding, in-kind expertise, and acquiring stormwater/404 permits. Trout Unlimited and local stakeholders have also contributed large amounts of time and effort.

BLM is continuing watershed land health based assessments, as well as associated water quality and proper functioning condition (PFC) surveys on approximately 200,000 acres. BLM worked with the Colorado Water Conservation Board (CWCB) to acquire in-stream flow water rights on six streams to maintain aquatic habitat. Invasive species, primarily tamarisk, were treated within riparian areas in order to restore native vegetation, and approximately 110 miles of riparian areas were completed. 320 miles of PFC surveys were completed.

BLM continues its long relationship with the Division of Reclamation, Mining and Safety (DRMS) and EPA to remediate abandoned mine land sites in Colorado. The table shows projects that are currently being implemented:

Project Name	Amount
Ute-Ulay Mine/Mill	\$145,300
Wyoming Mine	\$66,000
Dinero Tunnel	\$30,800
Querida	\$17,600
Milsap Gulch	\$13,200
Tiger Tunnel	\$132,425
Lark/Joe & John	\$17,600
Upper Joe & John	\$176,100
Eveline	\$4,400
Mogul Dump	\$8,800
Gladstone	\$220,100
North California Mt.	\$44,000
Animas O & M	\$88,000
Bats	\$8,800
AML Project Leader (Term) for Mine Safety Closure Projects	\$68,000
Anvil Points Mine Safety Closure Project	\$87,300
Browns Pass/Park County	\$39,000
Houghton Mt Mine Safety Closure Project	\$39,000
California-Burrows Park Mine Safety Closure Project	\$39,000
Placer Gulch/Animas Forks Mine Safety Closure Project	\$50,200
Wedding Bell Mine Safety Closure Project	\$47,500
Cochetopa Mine Safety Closure Project	\$67,000
Soda Springs Mine Safety Closure Project	\$19,400
Uravan Mineral Belt Mine Safety Closure Project	\$78,100
Cultural Clearances for Mine Safety Closure Projects	\$48,500

2 -- U.S. Department of Agriculture Forest Service: (contributed by Joan Carlson, Colorado Office)

The general approach to nonpoint source pollutant management for the Rocky Mountain Region of the USDA Forest Service, which includes all National Forest System (NFS) 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 staff conduct formal and informal monitoring of these practices and adjust 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.

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 2009, there were three fires on NFS lands in Colorado that qualified for BAER treatments. All total, approximately 1,950 acres of treatments were completed on NFS lands.

Healthy Forests and Rangelands – Hazardous Fuels Reduction and Landscape Restoration

The purpose of this program is to treat the excessive accumulation of hazardous or unusually flammable fuels in the forests and rangelands that are the root cause of an unprecedented fire risk on national forest lands. Fuels treatments occur both inside and outside the wildland urban interface (WUI). Treatments inside the WUI are designed to reduce fuels around homes, communities and other resources, such as municipal water supplies and infrastructure, to slow or stop wildland fires from threatening these high-value areas. Treatments outside the WUI help protect communities by creating conditions that enable firefighters to more successfully suppress fires before they enter the WUI and reduce fire severity and impacts on valued landscapes and natural resources. In 2009, the Forest Service completed fuel treatment projects on 47,252 acres inside the WUI and another 27,204 acres outside the WUI for a total of 74,456 acres.

Watershed Restoration

The purpose of this program is to improve watershed conditions using upland and in-stream 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. National Forests in Colorado reported accomplishments of about 1,450 acres of soil and water improvements in 2008.

Road Maintenance

The regular road maintenance program includes inventory for maintenance needs, actual maintenance of roads to improve travel-ability and reduce resource damage, and road decommissioning. Road decommissioning activity encompasses a range 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. National Forests in Colorado reported accomplishments of about 6,740 miles of road maintenance in 2009.

Legacy Road and Trail Program

This was a continuation of a funding program initiated in FY 2008 and developed through a transfer of purchaser election funds and from the Ten Percent Road and Trail Fund. These funds combined with partnerships were to be used for road decommissioning, road and trail repair in environmentally sensitive areas with water quality issues. In stream and water bodies which support TES and community water systems. In 2009 in Colorado, 37 stream crossings were reconstructed, 47 miles of stream habitat

was restored, 62 miles of roads and 470 miles of trails were maintained or improved, 105 miles of roads were decommissioned and 140 acres of watershed were improved.

Abandoned Mine Program

In 2009, National Forests in Colorado closed 81 abandoned mines features (adits, and shafts etc.) for physical safety and remediated 19 features related to environmental problems such as mine dumps, tailings piles, etc, that were affecting water quality.

3 -- U.S. Department of Agriculture NRCS (contributed by Jason Peel, Colorado Office)

Typically, resource issues the NRCS assist landowners with have a positive impact on water quality, either directly or indirectly. For example, grazing land improvements promote improved rangeland condition, which reduces excess surface runoff, and provide a potential improvement to water quality due to the reduced loading of sediment and organics to surface waters. Improvements to wildlife habitat, riparian management, and forest management will often have a similar effect. Soil erosion control practices on cropland reduce water and wind borne sediment, which carry nutrients, organics, and other pollutants to surface waters. In addition to incentives for these types of conservation treatments, the NRCS Environmental Quality Incentives Program also offers incentive payments to irrigators that focus on reducing water application and use, which have a direct positive impact to water quality.

4 -- U.S. Geological Survey: (contributed by Tracy Yager, Colorado Office)

The U.S. Geological Survey (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 groundwater 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).

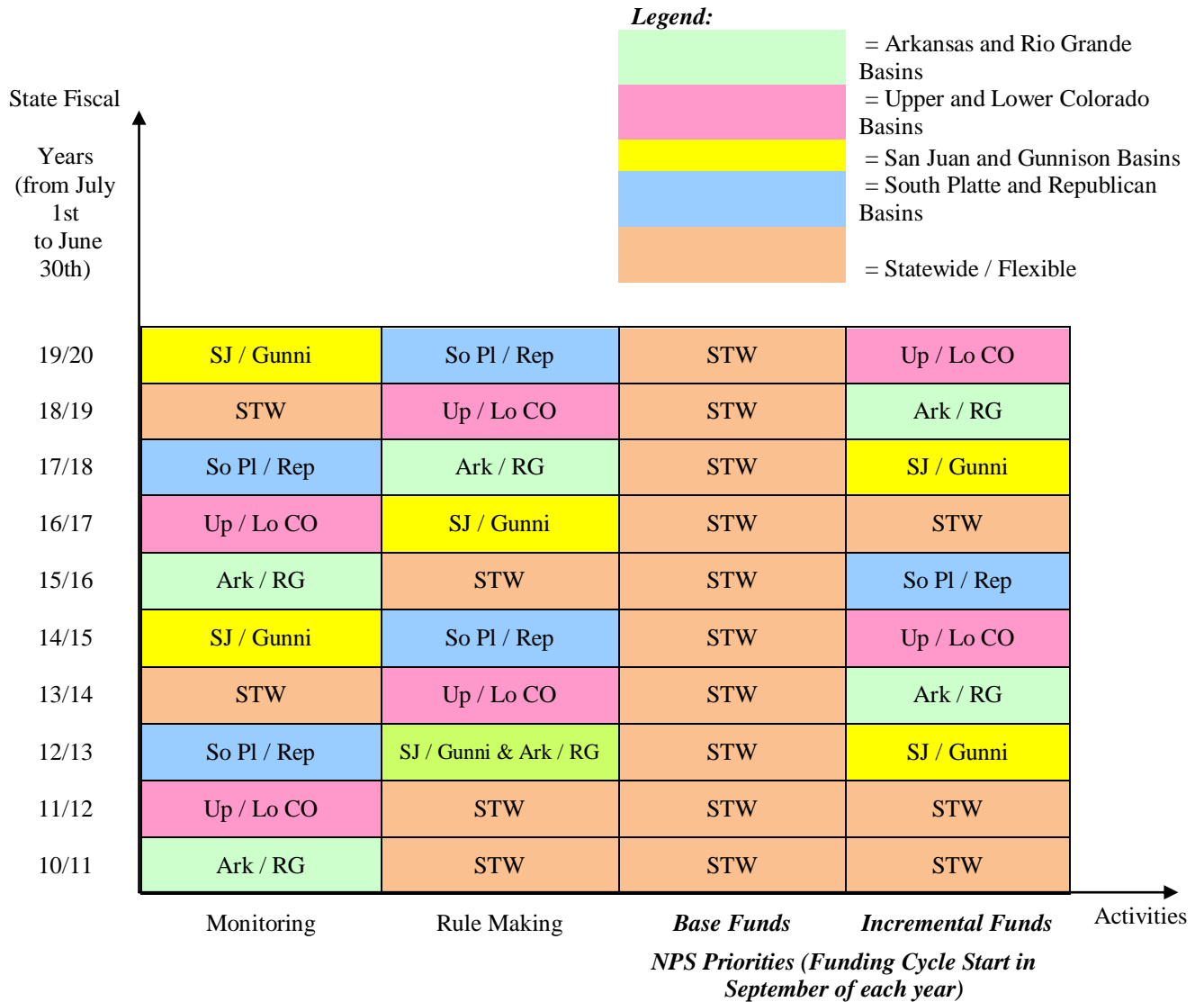
USGS Activities Relevant to Nonpoint Source Pollution:

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

Appendix A:
Target Basin Rotation Schedule

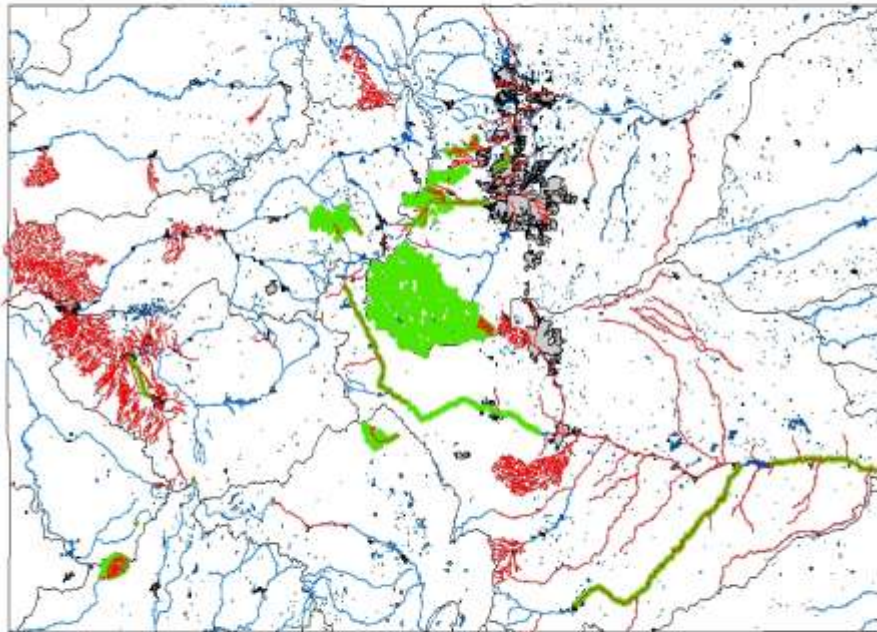
Nonpoint Source Management Area - Target Basin Rotation Plan



Appendix B

Priority Watersheds: Integrating TMDLs and NPS Activities

Priority Watersheds: Integrating TMDL and NPS efforts



Red indicates water quality impaired segments requiring TMDLs
Green indicates priority watersheds