Upper South Platte Watershed Protection Association

Strategic Plan

Adopted
February 2001

Vision

A Healthy Watershed—Now and in the Future

Mission

The Upper South Platte Watershed Protection Association seeks to protect the water quality and ecological health of the Upper South Platte Watershed, through the cooperative efforts of watershed stakeholders, with emphasis placed on community values and economic sustainability.

Participants in Planning Process

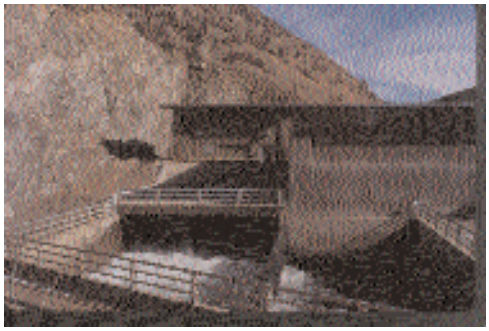
Members of the General Public and Representatives from:

Alma
Aurora Water Resources
Bureau of Land Management
Centennial Water & Sanitation District
Center of Colorado Conservancy District
Colorado Department of Public Health & Environment
Colorado Department of Transportation
Colorado Division of Water Resources
Colorado Division of Wildlife
Colorado State Forest Service
Colorado State Trust Land Board
Colorado Trout Unlimited
Denver Regional Council of Governments
Denver Water Department
Douglas County
Environmental Protection Agency (US)
Fairplay
Fairplay Sanitation District
Forest Service (US)
Jefferson County
Jefferson County Soil Conservation District
Park County
Park County Advisory Board on the Environment
Pikes Peak Area Council of Governments
Sierra Club
Teller Park Soil Conservation District
United States Geological Survey
Upper South Platte Conservancy District
USDA Natural Resources Conservation Service

History

Two issues contributed to the initial interest in getting this group together. First, in 1994/95, the USFS did a study of segments of the South Platte within Forest Service boundaries to assess whether any river segments within the boundaries might qualify for designation under the Wild and Scenic Rivers Act, based on Outstandingly Remarkable Values (ORVs).

The Denver Water Board and other Front Range water providers were concerned that designation would require the abandonment of some senior water rights, and that designation would give the USFS operational control of the river, negatively impacting their ability to operate their water rights.



Robert's Tunnel brings water from Dillon Reservoir in Summit County into the North Fork of South Platte between Bailey and Grant. The South Platte supplies water to 75% of Colorado's residents, either from native supplies or transmountain diversions.

Secondly, EPA guidelines on Source Water Assessment Programs (SWAP) require water providers to look at areas that impact their water quality.

Based on these two issues, Denver and Aurora pulled together interested parties to assess if there were ways to protect the ORVs without Federal designation, and to begin to look at source water in the watershed. The plan was to bring "all" interested parties to the table.

Out of these meetings, came several subcommittees, including one on water quality. Denver and Aurora hired facilitators to work with the subcommittees.

As this group began discussing alternative scenarios to Wild and Scenic designation, "up-river" entities became concerned that such an alternative proposals would lead to long-term financial burdens on them for pollution abatement, without protecting the ORVs. At that time, some up-river entities would have preferred designation over an alternative they felt only represented the interests of Front Range entities.

The water quality subcommittee intensified its efforts, and sought direct involvement with other South Platte entities, including the up-river entities. In early 1998, this group began working on a Memorandum of

History...continued

Understanding (MOU) and Bylaws. Under the MOU, everyone agreed that whatever came out of the newly created "Upper South Platte Watershed Management Program" should be looked at as voluntary, not regulatory.

By August of 1998, Park, Jefferson, Teller and Douglas Counties, the City of Aurora, Denver Water, the State Trust Land Board, the Soil and Water Conservation Districts, and the Center of Colorado and the Upper South Platter Water Conservancy Districts signed the MOU, and began working on incorporating as a non-profit entity.

Under the MOU, the parties agreed to the following preliminary list of water quality goals:

1.) Protect water quality in the Upper South Platte River and its tributaries to support beneficial uses, which could include drinking water supply and cold water fisheries.

2.) Sustain the productivity and diversity of the ecological systems within the watershed.

3.) Address water quality impacts related to water quantity management.

4.) Manage nonpoint pollutant sources including grazing, forestry, transportation corridors, mining, erosion, and septic systems.

5.) Minimize impacts of disastrous events, such as the Buffalo Creek Fire.

The list of preliminary objectives agreed upon by the group to attain these goals included:

- Develop a Coordinated Watershed Management Program to coordinate planning and development, optimize data collection, involve the public in planning, and give first priority in planning to cooperative projects among members.
- Understand the watershed by identifying current and future contamination trends that jeopardize water quality, use the best scientific information for resource allocation and land management discussion, incorporate the effects of growth and development in the basin, and protect historic and cultural resources.
- Prioritize watershed issues to incorporate diverse community values, incorporate desired ecosystem conditions based on historic and current considerations, and prioritize contamination concerns using water quality standards as preliminary objectives.
- Implement effective management strategies and practice adaptive

Events like the Buffalo Creek Fire helped bring watershed stakeholders to the table. Here a burned over area, five years after the fire; grasses have returned, but trees are not expected to return naturally for hundreds of years.

History...continued

management to bridge the gap between science and management, and to blend the objectives of the Clean Water Act and Safe Drinking Water Acts.

• Maintain and improve water quality and related resources to achieve of streams, and sustain or improve habitat for valuable renewable resources.

Federal agencies, including the Forest Service, opted for limited participation as members of the Watershed Advisory Group (WAG), instead of full membership. Some agencies have remained active through the WAG, while others have not participated very much.

The Upper South Platte Watershed is home to several endangered and threatened species, like the Pawnee montane skipper, a butterfly that lives no where else in the world.

Members of the group met repeatedly with the Forest Service, the largest landowner in the watershed, to convince the Agency that it should be a voting member. The Forest Service continues to decline participation at that level, in part because it feels its participation might be in conflict with the Federal Advisory Committee Act. However, Forest Service participation has been increased recently, with the inclusion of the Forest Service's Upper South Platte Restoration Project as a subcommittee of the Association.

In August 1998, Lisa McVicker, an attorney and Board member of the Center of Colorado Water Conservancy District, prepared Articles of Incorporation for the Upper South Platte Watershed Protection Association to submit to the Secretary of State's Office. In September, Lisa prepared an application for determination of nonprofit, exempt status by the Internal Revenue Service, which the group received in October, 1998.

Once the Association received determination from the IRS, it began applying for grants. The first grant to the Association was a Regional Geographic Initiative Grant from the EPA for development of a DATA INVENTORY AND ASSESSMENT (DIA). The Association hired Brown and Caldwell to perform the inventory and assessment.

The DIA was designed to:

1.) Identify and document available data and responsible entities related to watershed land use activities, water quality, environmental quality, and Geographic Information System (GIS) information.

History...continued

2.) Identify and rank existing and potential sources that can affect water quality and ecological health within the watershed.

3.) Assess water quality and stream health conditions in the watershed.

4.) Prioritize areas for potential protection or restoration activity and areas requiring further study.

The DIA was completed by reviewing existing studies and information, and by making contact with a variety of entities and agencies. Brown and Caldwell found that only one stream segment—Craig Creek in the Lost Park Wilderness—in the entire 2600 square mile watershed is "not impaired".

In late 1999, the Association applied for and received a Sustainable Development Challenge Grant from EPA. This grant provided funding to hire a coordinator and undertake a major watershed protection and monitoring planning process.

A hiring committee advertised for the position in October 1999, and interviewed five applicants in November. Based on the committee's recommendation, the Association's Board approved a one year contract with Carol Ekarius, effective January 1, 2000.

Thus far the Association and its members have:

A.) Brought parties to the table, and provided a forum where parties who have not traditionally worked together can identify and work on mutually beneficial and agreed-upon projects.

B.) Educated members about what is going on in the watershed. For example, members have learned more about the Total Maximum Daily Load (TMDL) process and its possible impacts on the watershed and member entities.

The Association works to educate stakeholders through meetings, seminars, field-days, and by supplying educational materials to schools within the watershed. Here interested citizens participate in a tour of the Trumball demonstration area on Denver Water lands near Deckers. The demonstration is a cooperative effort of the USFS, CSFS, Denver Water, the Association, and others, designed to to evaluate sustainable forestry techniques.

C.) Provided members with a method of pooling resources for better use of limited funds.

D.) Undertaken an education and information initiative with Colorado Department of Public Health and Environment 319 funding

E.) Worked on the development of a strategic plan, which includes four major components:

1.) An overall operational plan;

2.) A watershed protection plan;

3.) A nonpoint source plan; and

4.) A monitoring plan.

SWOT Analysis

Strengths, Weaknesses, Opportunities & Threats

SWOT analysis is designed to help clarify the current condition of a group. Once strengths, weaknesses, opportunities and threats are defined and prioritized, action strategies can be identified to enhance strengths and opportunities, and to minimize or eliminate weaknesses and threats. Strengths and weaknesses are internal issues, while opportunities and threats are external. Some issues can be seen from both the positive and negative side simultaneously. For example, growth is seen as both an opportunity because many people come to the area because they love it, and want to protect it. But growth is also a threat, because it creates impacts like more roads, commercial development, higher concentrations of septic tanks, etc..

Strengths	Weaknesses
We are creating a dialog	Funding (what we have now is, in part, crisis initiated.)
We are bringing diverse groups of people to the table	We need action projects
We have a strong vision	We need to fine tune organizational operations
We are picking up steam	Others: Not all stakeholders are engaged, lack of authority, better volunteer commitment.

Opportunities	Threats
We can build alliances with other groups	Competition for funding
Regulations, like SWAP & TMDL	Divisive issues, like the South Park Conjunctive Use Project
Volunteers	Growth
Others: Funding & Growth	Others: Laws like Colorado water law & regulations like SWAP

SWOT...continued

Over the course of several meetings, the Association developed goals, strategies, and objectives to enhance our strengths, take advantage of our opportunities, minimize our weaknesses, and mitigate our threats. Our goals are broad-based ideas, our strategies are implementable techniques that will move us toward our goals, and our objectives are measurable criteria we will use to evaluate our success.

Goals	Strategies	Objectives
Develop strong and diverse funding structure. Create a strong enough base so that we can hire help as needed to implement the strategies we develop without placing undue burden on our volunteers. Promote our message to a wide audience. Develop a visible presence in and around the watershed. Build strong participation from our partners and stakeholders. Bring other stakeholders into the group, especially private citizens. Become involved in outside regulatory processes related to our mission. Work collaboratively with all stakeholders and those from other areas that will help us succeed with our mission. Build recognition of the Association and what it is doing.	Create a "development plan" for fundraising that includes individuals, businesses, entities, organizations, foundations, etc. Create an information outreach program that includes brochures, newsletters, dog & pony show, web presence, etc. Include a monitoring program as part of our planning. Create a telephone tree for outreach to members who do not have e-mail. Get "programs" going, including SWAP (source water assessment). Outreach to political players in watershed. Do Board training. Provide direct and indirect support to our collaborators and their projects. Create a delegate system for members to attend meetings, speakers, etc. Create a volunteer system.	Have 100-200 individual members within one year. Have 300-500 individual members within three years. Develop contact data for "strategic alliances" with at least 20 prospective sponsors within two years, have at least one in negotiations within three years. Have at least ten members listed in our delegate system within one year. Have an annual operating fund of $100,000-150,000 within three years. Contact all "basin" entities personally within two years. Meet legislative aids when they are in our area. Take dog & pony show to meetings of each of our member's boards within two years. Have a list of at least 20 volunteers for work projects in one year.

SWOT...continued

Stakeholders

The following list represents potential stakeholders that have been identified by our group, but have not been actively participating. These are interests that we need to try harder to reach out to:

Realtors and Developers
Private Landowners
The Governor's Task Force on Fire
Road & Bridge Personnel
Planning, Zoning & Building Personnel
Point Source Dischargers
Fish and Wildlife Service
Utility Companies
Insurance Companies
Nurseries
Environmental Defense
Colorado Native Plants Society
Colorado Herptilogical Society
Trust for Public Land
Colorado Extension Service
Colorado Mountain Club
Colorado Trail Association
Colorado Cattlemen
Colorado Coalition of Land Trusts
Colorado Horse Council
Colorado Water Conservation Board
River Network/River Watch
Other Watershed Groups
Other Environmental Groups

Watershed Plan

The Watershed Plan serves as the Association's plan for programs. It is designed to guide Association decisions. The Watershed Plan is divided into several sections:
A Protection section, a Nonpoint Source Restoration section, a Monitoring section, and an Issue section for subjects that the Association has identified. These sections are dynamic and interrelated.

Watershed Description

The Upper South Platte Watershed is located southwest of the Metro Denver region in Colorado. It cover's approximately 2600 square miles (Hydrologic unit 10190001 and most of unit 10190002). It represents approximately 26% of the entire South Platte Watershed within Colorado. About 75% of Colorado's residents count wholly or in part on water that comes from the watershed (either native or transmountain diversion waters) for drinking, industrial, and agricultural use.

The watershed begins at Strontia Springs Reservoir, and reaches the Continental Divide. It varies in elevation from about 6000 feet to over 14,000 feet above sea level. There are five major municipal reservoirs within the watershed and several smaller reservoirs.

Under Colorado's "Unified Assessment" the watershed is considered a high priority watershed in need of restoration. It is currently targeted under Colorado's TMDL process, with the first TMDL just completed for metals in Mosquito Creek (segments COSPUS02B & 2C). Other segments targeted for TMDLs in the future are the main stem of the South Platte from Eleven Mile to Cheesman (COSPUS01A) and Tarryall to the North Fork of the South Platte, including Trout and West Creeks and tributaries (segment COSPUS03) for sediment; the North Fork in Hall Valley and Geneva Creek areas (COSPUS04); and Geneva Creek (COSPUS05B) for metals. Numerous segments are also listed on the State's Monitoring and Evaluation list for further study.

Watershed Plan...continued

Overall Goals for Watershed Plan

1.) Create a water literate culture that understands where water comes from, what the water quality concerns are, and how water relates to the greater ecological good.

2.) Develop watershed education programs for students so they will go on to be water literate as adults.

3.) Act as a clearing house for information, and a trustworthy link between citizens, government entities, environmental organizations and others who wish to participate in a dialog about watershed issues.

4.) Provide expertise to other groups that need technical information (for example, BMP's, SWAP, etc.).

5.) Develop and implement restoration projects that will begin restoring the water quality and ecological health of the watershed.

6.) Coordinate monitoring and maintenance of data developed by the Association or other entities and organizations.

Contaminants of Concern

1. Sediment—Both natural conditions and human activities contribute to sediment loadings. Natural conditions that contribute to this problem include the results of wildfire, steep terrain and geological characteristics. Sediment from human activities is impacted by:
   - Land use and development
   - Transportation
   - Agriculture
2. Nutrients, in particular phosphorous—Phosphorous is a concern because the Colorado Water Quality Control Commission's Chatfield Reservoir Control Regulation places an annual allocation on the upper watershed. The allocation is flow adjusted, but base allocation is 17,930 pounds per year. Nitrogen compounds are also a concern because many of the watershed's residents utilize septic systems, and these systems are often old, usually unmaintained, and frequently located in close proximity to flowing streams.
3. Metals/acid mine drainage—Traditionally a great deal of mining took place in the watershed. Several mines, such as the London Mine, are still licensed and have NPDES permits. The Association is also aware of 84 abandoned mines within the watershed (though more may exist that are undocumented).
4. Microorganisms—Though less of an issue than the others, coliform bacteria and other microorganisms may be a concern. These may come from natural sources (wildlife), livestock, septic systems, and/or wastewater treatement plants's.

Watershed Plan...continued

Issues

Association members have ranked issues within the watershed into two categories, ***High Priority*** or ***Low Priority.*** All these issues are of concern to the Association; however, members feel the items ranked as high priority are either environmentally most critical, or something upon which the Association can make progress in a reasonable time. Items listed as low priority are those we either feel we cannot do anything about at this time, or that have adequate regulatory controls for the time being. Within these two categories, issues have not been further prioritized.

High Priority

- Agriculture—Traditionally, ranching was a major industry in the watershed. Today, ranching plays less of a role; however there's been a significant increase in "ranchettes". Both ranching and ranchettes contribute heavily to erosion. Unlike other areas of the country, agriculture operators within the watershed don't tend to use heavy applications of herbicides, pesticides or chemical fertilizers.
- Fire—Two major wildfires have occurred within the last five years. These fires have burned at very high heats, resulting in high erosion incidents. Almost all forested areas within the watershed are considered to be "red-zones", or areas that are susceptible to more high intensity burns.
- Land use and development—All counties within the watershed are experiencing very high growth rates, which contributes to erosion, nutrient loading, etc..
- Mining—Mining contributes metals, which impact aquatic life and drinking water.
- Recreation—The watershed is one of the State's most utilized recreation areas. Fishing, hunting, mountain biking, off road vehicle use, and cross country skiing are all popular pursuits. Trails are often primary contributors to sediment, especially those used by off road vehicle enthusiasts.
- Transportation—Road construction and maintenance contribute a great deal of sediment to the watershed.
- Water rights—Colorado's water rights laws may hinder many activities that would improve water quality--for example, a rancher cannot fence out the creek and then pump water for his stock to a tank above the creek.
- Water system operations—Several major transmountain diversions bring water into the basin. This water will have some impact; for example, it will increase total pounds of phosphorous. Also, operations of reservoirs can impact the quantity of water in the stream, flushing flows, streambank stability, etc..
- Weeds—Noxious weeds are reducing the vitality of natural ground covers, and are often dealt with through the use of herbicides.

Low Priority

- Natural Sources—Natural sources of pollution include contributions of sediment from undisturbed slopes, coliforms and other pathogens from wildlife waste, and sources of nutrients from animals and plant breakdown. In certain areas background radiation is a concern.
- Solid/Hazardous Waste—There are no permitted landfills in the watershed; however there are some closed facilities within the watershed that could contribute contamination. Two of these are known to have impacted ground and surface water. Four transfer stations are permitted within the watershed. There are no known hazardous waste sites within the watershed. Household hazardous waste programs are not readily available to citizens within the watershed.
- Spills/Illegal Dumps—Three major highways (US 285, US 24, and CSH 9) run through the watershed and carry moderate to heavy truck traffic, so most spills would be associated with vehicle accidents. There are no known industries within the watershed that might be expected to have a "spill".
- Stormwater Runoff—There are no municipalities within the watershed that are slated for stormwater permits; however, Jefferson and Douglas Counties will be subject to permits under Phase II of the stormwater permitting system.
- Underground Storage Tanks—There are 15 known to leak, or to have leaked in the past, that are still considered "open" cases by the Oil Inspection Service at the Department of Labor and Employment. Open cases are either still in the process of being cleaned up, or have an unstable plume of contamination impacting ground or surface waters.
- WastewaterTreatement Plants (WWTP's) and Septic Systems—There are seven community WWTP's within the watershed operating under NPDES permits. Generally these are in compliance. None are currently treating wastewater at levels beyond secondary, but as the upper watershed approaches its total phosphorous allocation, they could be forced to add phosphorous treatment. Failing or inadequate septic systems are a problem.

Watershed Plan...continued

Watershed Protection Segment

This portion of the plan identifies goals, strategies and objectives for protecting resources at least at the present level. The goals in this section will also be supported by goals, strategies, and objectives covered in the sections that address specific issues. South Park Wetlands Focus Committee is an active partner, for wetlands/riparian protection, and we'll incorporate their strategic plan when it is complete.

Goals	Strategies	Objectives
Protect Craig Creek—Of 41 sub-basins identified in the Data Inventory and Assessment, Craig Creek is the only one considered to be unimpaired by human activities.	Craig Creek signage—Since a good deal of the Craig Creek sub-basin is located in the Lost Creek Wilderness Area, targeted signage for recreators should be a valuable educational tool.	Have signs at each Craig Creek trail head within three years.
Protect riparian/wetland areas—The watershed is known for some extremely valuable wetlands (fens), and healthy riparian areas are critical to watershed health.	Partner with South Park Wetlands Focus Committee, Upper South Platte Restoration Project...	Have at least two "demo" fencing projects within three years and a program in place so other ranchers can become involved.
Conservation easements—Easements are an excellent way to protect the watershed, and the Association will collaborate and support the efforts of groups working to acquire easements.	Fencing—work with ranchers to fence riparian and/or wetland habitats to control grazing.	Work on changes to NRCS rules over two years. Have at least two "demo" plantings (three years).
Ground cover—Adequate ground cover (grasses, legumes, forbs, brush, trees) protects the land from soil erosion.	Water transfers for livestock—Colorado's water law makes it difficult for ranchers to pump from the stream to a tank. With our partners we will work to create a mechanism that enables ranchers to do this.	Host one workshop on conservation easements every other year. Host a meeting within the next year of groups working on conservation easements.
Educate school children.	Tree planting demonstrations—Work with ranchers to do clump planting in riparian areas.	Have "water's ways" kits in all schools within two years.
Educate general public.	Host conservation easement workshops	Publish newsletter quarterly.
	Facilitate the work of the groups working on conservation easements.	Host at least two workshops per year.
	"Water's Ways" kits—These kits teache elementary students about the watershed and water cycle.	Establish web page within two years
	Educate through newsletter, seminars and workshops, webpage, etc.	

Watershed Plan...continued

Nonpoint Source Restoration Plan Segment

This portion of the plan identifies goals, strategies and objectives for minimizing or eliminating the impacts of nonpoint sources on water quality and ecological health. The goals in this section will also be supported by goals, strategies, and objectives covered in the sections that address specific issues.

Goals	Strategies	Objectives
Work from the headwaters downstream to the extent that it is practicable, or on stream segments that are currently slated for TMDLs, or that are on the State's monitoring and evaluation list. Foster partnerships that make improvements through restoration work on both private and public lands along impaired stream segments. Develop an "Adopt-a-stream" program. Improve vegetative cover in areas that have been damaged by grazing, off-road vehicles, or other impacts.	Sheep Creek and Spring Creek were identified in the DIA as being in need of restoration. These streams are located in the southern extent of the Mosquito Range, and drain to the South Fork. They combine private and public lands. These are the first two segments for general restoration work. Use Adopt-a-stream program to accomplish restoration, plantings, monitoring, clean-ups, etc. Seeding—Work with private and/or public landowners to seed areas that have disturbed vegetation. Where grazing is still occurring, work with livestock owners to feed pelleted native seeds.—	Develop a specific restoration plan for Tarryall, Spring and Sheep Creeks within two years. Have some restoration projects underway within four years on both private and public lands. Have at least one stream segment adopted within two years; at least three stream segments adopted within three years. Seed at least 5000 acres over five years.

Watershed Plan...continued

Monitoring Segment

This portion of the plan identifies goals, strategies and objectives for monitoring water quality and ecological health within the watershed.

Goals	Strategies	Objectives
Focus on phosphorous and sediment. Establish a program that can answer the question: Do we have problems other than phosphorous and sediment, and if so what are they and where do they occur. Establish monitoring stations on segments that don't have adequate information. Fill in gaps in current riparian and habitat assessments. Perform trophic status analysis on reservoirs. Develop a sustainable and reasonable data collection and maintenance system. Monitor restoration projects. Support monitoring in areas of high development, particularly where septic systems and wells are the only option.	Basin-wide reconnaissance sampling with trophic scan. Take over maintenance of data-base that USGS developed for monitoring data. Review status of assessments to identify gaps in assessments. Collaborate with USFS, CSFS, DWD and others on Upper South Platte Restoration Project monitoring. Develop a volunteer monitoring team in cooperation with river watch program.	Facilitate bi-monthly meetings of federal/state/local entities that are currently doing monitoring in the basin. Submit grant application to 319 funding in 2001 application period. Have an employee online and capable of inputting and maintaining data within three years. Have at least three volunteer teams ready for training this fall.

Watershed Plan...continued

Issue: Agriculture

There are two distinct audiences for agriculture: the larger-scale ranchers, and the small-scale “ranchettes”. Both of these types of agriculture contribute to sediment loading within the watershed. To a lesser extent, agriculture brings up concerns relating to fertilizers, herbicides and pesticides. At the same time, the Association supports ranching as a way to protect large tracts of land.

Goals	Strategies	Objectives
Educational program for both commercial ag and ranchette interests. Work with ranch community to develop sustainable practices planning and implementation, including developing exclusionary fencing for riparian areas and pasture subdivisions for managed grazing. Provide information exchange with regards to funding, sustainable practices, and other activities. Restoration in ag areas. Support conservation easements for ag lands. Develop concrete information on the impacts of agriculture.	Ranch tours/grazing network. Work with Extension Service in hosting educational meetings for ranchette owners. Rancher workshops on managed grazing. Identify funding sources for ag community, like EQUIP, and provide technical support in obtaining funds for restoration and fencing. Work with ag groups to prepare newsletters for ag community that discusses holistic management, conservation easements, etc. Work with various interests on conservation easement education and development. Survey and prioritize watershed for areas of agricultural impacts.	Host at least two ranch tours per year at ranches that are practicing managed grazing/holistic management. Assist interested ranchers in forming a grazing network. Host at least one workshop per year for ranchette owners. Host at least one workshop per year on managed grazing.... Develop and distribute a funding info packet for ranchers. Publish and distribute a semi-annual newsletter for ag community. Identify one sub-basin with willing landowners, and develop a restoration plan for that sub-basin. Perform the survey and prioritize within 4 years.

Watershed Plan...continued

Issue: Fire

Most forested areas are highly susceptible to intense and large scale fire. The Association is actively working with our members through the Upper South Platte Restoration Project. That group has done extensive planning, and their plan is incorporated into this plan by reference.

Goals	Strategies	Objectives
Reduce risk of large catastrophic fire. Reduce the risks to human life and property. Protect water quality for all users. Create a sustainable forest. Integrate research, monitoring and management.	Continue being active participants in USPRP. Work with USPRP members to expand funding so that more area can receive treatments. Work with local fire districts to educate public about defensible space. Educate students about forest health and fire ecology.	Seek at least one grant or other major funding source in the next three years designed to expand the USPRP treatment areas. Develop and distribute a pamphlet on defensible space within three years. Develop and implement a program for high school science students, including field trips to burn areas and restoration areas.

Watershed Plan...continued

Issue: Land Use and Development

High growth will continue to create problems, and local governments may not always have the best information for addressing water and ecological issues within their regulations. We support good land use regulations and will work with local governments to address growth-related problems.

Goals	Strategies	Objectives
Land use planning that protects watersheds through use of setbacks, Best Management Practice (BMP) techniques for construction, etc. Create dialog with public lands managers/elected officials about requiring conservation easements on public lands transferred to private hands.	Research BMP's, model ordinances, etc, and provide information on these topics to all local governments within watershed. Attend meetings with elected officials and/or public land managers to discuss the use of conservation easements on transfers. Participate in public process for land transfers.	Complete research on BMP's and model ordinances within one year. Facilitate work of a "Land Use Committee" to review BMPs and model ordinances. Develop and distribute info packet to local governments within two years.

Watershed Plan...continued

Issue: Mining

Our watershed is impacted by 84 identified abandoned mines, as well as some mines that are still permitted.

Goals	Strategies	Objectives
Identify abandoned mines that have potential to impact aquatic life/human health. Develop restoration plans for mines that have potential impacts on aquatic life/human health.	Participate in the Army Corp of Engineers *Restoration of Abandoned Mines Program*—The Corp's program is fairly new, but will provide significant Federal funding if the Corp finds through a reconnaissance that there are projects that it can do. Encourage work by the Colorado Office of Abandoned Mines to perform restoration on mines in the watershed	Pursue an appropriation from Congress for the RAMS reconnaissance. Contact COAM and invite to meeting.

Watershed Plan...continued

Issue: Recreation

The watershed is an intensively used recreation area. The impacts from recreation are growing as Colorado's population grows.

Goals	Strategies	Objectives
Trails—The watershed is a major recreational area. Trails require good design and adequate maintenance once constructed. Recreational uses need to be compatible with the geology and landscape of the area where its taking place. Identified Trail Projects—Two sections of trail have been identified to date as in need of definite work: Three Mile Creek Trail and Ben Tyler Gulch trail. Three Mile Creek trail runs along the river for about a mile, and has severe erosion taking place. Ben Tyler Gulch trail has severe gullying (up to two feet) that carries water from several seeps and springs. Campgrounds—There are dozens of publicly owned campgrounds within the watershed. These facilities need adequately designed and maintained sewage facilities.	Trail maintenance funds—Work with our partners to obtain funds for trail projects. Work with land owning partners (USFS, BLM, STLB, DWD, CSPARKS...) to develop a complete trail assessment which identifies and prioritizes all trails within the watershed for repairs & maintenance. Repair Three Mile, Burning Bear Creek, and Ben Tyler Gulch Trails Campground assessment—Work with our partners to assess their campground facilities. Work with USFS staff to identify parters and priorities within the recreation area.	Raise 15,000 per year for general trail maintenance and repairs within four years. Trail assessment complete within five years. Repair Burning Bear within two years. Repair Ben Tyler Gulch or Three MileTrail within four years. Campground assessment complete within three years. Outreach to recreational groups through newsletter, pamphlets, etc.

Watershed Plan...continued

Issue: Transportation

Erosion from poorly constructed and maintained roads and driveways is a major cause of sediment loading within the watershed.

Goals	Strategies	Objectives
Education program for road maintenance personnel, contractors, etc. on BMPs for road construction and maintenance. Restoration on worst offending roads.	Make BMP's information available to the public, road crews, contractors. Identify list of worst offending roads and work with Colorado Department of Transportation to acquire funding for restoration of these.	Collect and distribute BMP information within three years. Prepare a list of worst offending roads within three years. Use list to seek funding through TE21 and other highway funding pools for restoration.

Watershed Plan...continued

Issue: Water Rights

Goals	Strategies	Objectives
Identify water rights issues that we can do something about, like water rights interfering with ranchers abilities to fence out riparian areas.	Work with partners and general public to identify the full gamut of water rights issues through a series of public meetings, press releases, etc.	Have staff member participate in “Colorado Water Trust” Board. Host at least five meetings within three years to identify the issues.
Create a dialog about water rights issues and their connection to ecological health.	Literature review for how water issues are being handled in other states.	Perform literature review within three years.
Educate public about Colorado water law.	Use our newsletter to create dialog and educate public.	
Create dialog about the feasibility of “Bill Gordon’s ‘use tax’” for Front Range water providers.	Attend meetings of state level elected officials, Colorado Water Congress, etc. to dialog water rights issue, “Bill’s use tax,”....	

Watershed Plan...continued

Issue: Water System Operations

Goals	Strategies	Objectives
Manage flows for multiple uses. Determine impacts of trans-mountain diversions. Restore stream-banks in areas where bank integrity has been compromised by water system operations. Minimize the impacts of transfers that do occur from agriculture to municipal use.	Literature review on water system operations for multi-ple use. Develop flow management plans—Work with our part-ners to develop plans that manage for multiple use if plans don't currently exist or do not adequately address multiple use. Conduct a study/assess-ment of the impacts of transmountain diversion on the phosphorous allocation. Establish a demonstration site where flows have been operated to protect multiple uses—The area between Spinney and Eleven Mile is highly visible and has been managed to protect fish & wildlife, recreation, etc. This would be a good site for interpretive programs, signage, etc. Work with various parties to assure good revegetation when ag water transferred.	Complete literature review within two years. Have flow management plans complete within five years. Develop study plan for phosphorous impacts from transmountain diverted waters within one year. Conduct phosphorous study within five years.

Watershed Plan...continued

Issue: Weeds

Goals	Strategies	Objectives
Establish revegetation standards and define “weed”, “native”, and “wildflower” within the standard. Weed education	Facilitate watershed approach to weeds. Create “model” standard for revegetation with native plants, and encourage local adoption. Create a weed page on a website, with links to information and pictures about weeds.	Seek funding to bring all “weed” interests to the same table to work on integrated pest management. Have model developed within two years, and present to all local governments within three years. Add weed page to web-site within one year of web-site start-up.